



Helen Knowles

Trickle Down, A New Vertical Sovereignty

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- arebyte Gallery are pleased to present *Trickle Down,* A New Vertical Sovereignty, a new body of work by
 UK based artist Helen Knowles.
- The exhibition seeks to explore and provoke questions about labour, automation, value in art, decentralised sharing economies and distribution of wealth. Through sculpture, video and sound, the exhibition draws on technological and financial power structures which traditionally scaffold the disparity between a wealthy elite and everyday working people, and looks to re-imagine our vertically stacked digital ecosystem to horizontally distribute wealth.



Helen Knowles

By Dave Beech

Trickle Down – A New Vertical Sovereignty confirms the place of Helen Knowles within contemporary debates on art and financialisation. For economists and sociologists the study of the relationship between art and the prevailing condition of global financialisation has focused mainly on the analysis of art's financialisation, changing patterns of art funding and art sales, the changing role of banking in the art market and so on. For at least one curator, however, financialisation is a key factor in the periodisation of art. Writing in 2009, Nicolas Bourriaud claimed that a new era began the previous year, saying "the collapse of the globalised financial system in Autumn 2008 appears to mark a definite turning point in history". The credit crunch, for Bourriaud, announced the end to postmodernism just as the 1973 oil crisis allegedly signified the end of modernism.

For Costas Lapavitsas, one of the leading theorists of financialisation, the crisis of 2007-8 "cast light on" the anatomy of contemporary financialised capitalism, but "financialisation is the outcome of historical processes that have taken place across the world since the

1970s". It is the bypassing of national regulations on finance and the collapse of the Breton Woods agreement in the first years of the 1970s that led to the simultaneous decline of Keynesianism and the rise of financialisation. Prior to this, what Lapavitsas calls the "first wave of financial ascendancy" transformed industrial capitalism between the 1870s and the 1920s, when giant monopolistic corporations and the banks dominated global economic activity. This is the longer historical trajectory of finance capital within which to measure the claim that financialisation supersedes industrial capitalism by supplanting profit with rent, wages with debt, capitalists with shareholders, commodities with money, and so on.

When we note, also, that the first joint stock companies were established in the seventeenth century to finance and profit from colonial trade, and that the first financial crash - the South Sea Bubble - took place in 1720, not to mention the importance of brokers and lenders in the Renaissance, it is clear that the rise and rise of finance has been an ever-present in the economic history of art from the Medicis to So-

theby's Mei Moses index. At the same times, the subjective, cultural and ethical consequences of credit, debt and speculation have been depicted throughout this period from Botticelli to Thomas Gokey's "Total Amount of Money Rendered in Exchange for a Masters of Fine Arts Degree to the School of Art Institute of Chicago, Pulped into Four Sheets of Paper".

And, as the history of art shows, the rise and rise of financialisation is also, at the same time, the spread and spread of financialisation from the profiteering of a moneyed elite to the colonisation of everyday life. As such, when artists engage in finance, they do so by implicitly stressing one stage or other of the spread and spread of financialisation. When, for instance, in the 1970s, Christo and Jean-Claude sold sketches of public works as shares in the work-not-yet-produced (partly to liberate their practice from the problems associated with the commodification of the artwork), they invoked a model of finance as entrepreneurial speculation not dissimilar from the financial techniques adopted by Hogarth and his peers who attempted to over-

come the problems of aristocratic patronage by producing multiples paid for by subscription by the general public.

When Andreas Gursky photographed stock exchanges around the world throughout the 1990s, he focused on the official centres of financial institutions rather than the spread of finance into the workplace, consumption and the home. Melanie Gilligan, who satirised financial institutions in her four part film "Crisis in the Credit System" in 2008, also sought out finance in its official centres. A different locus for finance was identified when Rose Finn-Kelcey, in the 1980s, made a picture of Van Gogh's infamous "Sunflowers" painting out of coins, presenting finance as the storage of value in art as an asset, a trope of finance that resonates with the Renaissance depiction of money-lenders. Different again, the art duo Vermeir & Heiremans converted their home into a financial index, or at least appeared to do so. In this example, financialisation is spectacular and fictive and engulfs the real world through an elaborate series of media representations which finds its equivalent in art through their use of data and graphs which mimic the financialisation of their own home.



There is, therefore, another difference that cuts through the history of art's engagement with finance. Consider the difference between Cornford & Cross's mountainous landscape image derived from graphs of financial performance, on one hand, and David Cross's campaign for his workplace, the University of the Arts, London to divest from banks that profit from the carbon fuels industries, on the other hand. One depicts finance whereas the other modifies financial transactions directly. Politically, the contrast between the two is striking today, but at the time of the South Sea Bubble it was not. For instance, despite Hogarth's objections to financial speculation (expressed in his "Emblematic Print on the South Sea Scheme"), he was innovative in the use of lotteries, auctions and subscriptions to sell his prints.

However, the implied stability of the difference between fact and fiction is itself called into question by the history of financialisation. The birth of financial speculation in the stock market is the birth of fake news. In fact, the South Sea Bubble in 1720 both depended on fake news for the exponential growth of its financial ascent and led inexorably to a moral panic about fake news when the bubble burst. Finance arose in the eighteenth century out of speculations on colonial trade combined with the new dominance of paper money and the publication of news. Coffee houses fostered both banking and publishing. In fact, the best - or at least the most conspicuous - way to manipulate prices in the stock market was to spread false reports in the press.

In the immediate aftermath of the first crash, the problem of financial speculation seemed, primarily, to be a moral problem with a moral solution. This approach was taken up again in the 1960s and 1970s when the post-war recalibration of advanced capitalism, which used new forms of credit to fuel the mass consumption of mass produced goods, was attacked primarily from the perspective of the consumerist behaviour of people mesmerised by advertising.

"Any account of the new world of finance runs the risk of neo-Luddism — of treating finance itself as necessarily a domain of delusion and chicanery", warns Robin Blackburn. Historically, the problem was quite different. Mary Poovey points out that popular publishing in the eighteenth century did not draw a firm line between fact and fiction so the problem of press reports of false hopes of financial gain in speculative investments was usually blamed on the character of its victims rather than through demands for tighter restrictions on publishing and financial markets, repeated today in unheeded demands to prevent billionaire news magnates from broadcasting fake news. As important as this is, the core threat of financialisation is not eliminated by the regulated decline of lies.

Finance is the economics of risk. According to Niklas Luhmann, the opposite of risk is not safety or security but danger. For him, risk is future damage produced resulting from our own decisions whereas danger is future damage attributed to external events. Modernity, in Luhmann's account, corresponds to the "remarkable shift from danger to risk perspectives". However, Luhmann adds, in complex modern societies, risks taken by others become dangers to everyone else. Writing in 1990, Luhmann gives us a perfect picture of both the financial crisis and the climate emergency when he said "the real dangers in modern society are the decisions of others". Jeremy Deller comes closest to this when he invited visitors to his Hayward exhibition in 2012 to emboss their own books or bank notes with the statement "Hell is other people's money".

Finance is the epitome of the Feuerbachian concept of alienation. "Religion is the disuniting of man from himself", he said, in which God becomes subject and 'man' becomes object. Indeed, for Feuerbach, the nature of humanity becomes evident only through its products, but in doing so the human is alienated from itself within a world of ob-





jects and objective relations. Finance is the living embodiment of the dialectic in which human beings alienate themselves by constructing a world that subsequently confronts them as an alien power.

There is a strong psychological aspect to financialisation. "Just as risk management underwent a populist migration from boardroom to living room", according to Randy Martin, "other models of self-hood have come tumbling out of financial markets". Marina Vish-midt borrows the idea of 'human capital' from neoliberal economist Gary Becker to characterise the subjective and structural condition of workers and consumers remodelled as investors in themselves, a condition that Vishmidt sees as exemplified in "the speculative subjectivity of the artist".

Finance is more remote from production, exchange and lived experience than any other form of value extraction. It is also more mobile and fluid than land-owning capital or commodity owning capital. The ideal of the individual who makes decisions based on rational self-in-

terest is replaced with a psychological profile based on risk, speculation, uncertainty, arbitrage and opportunism.

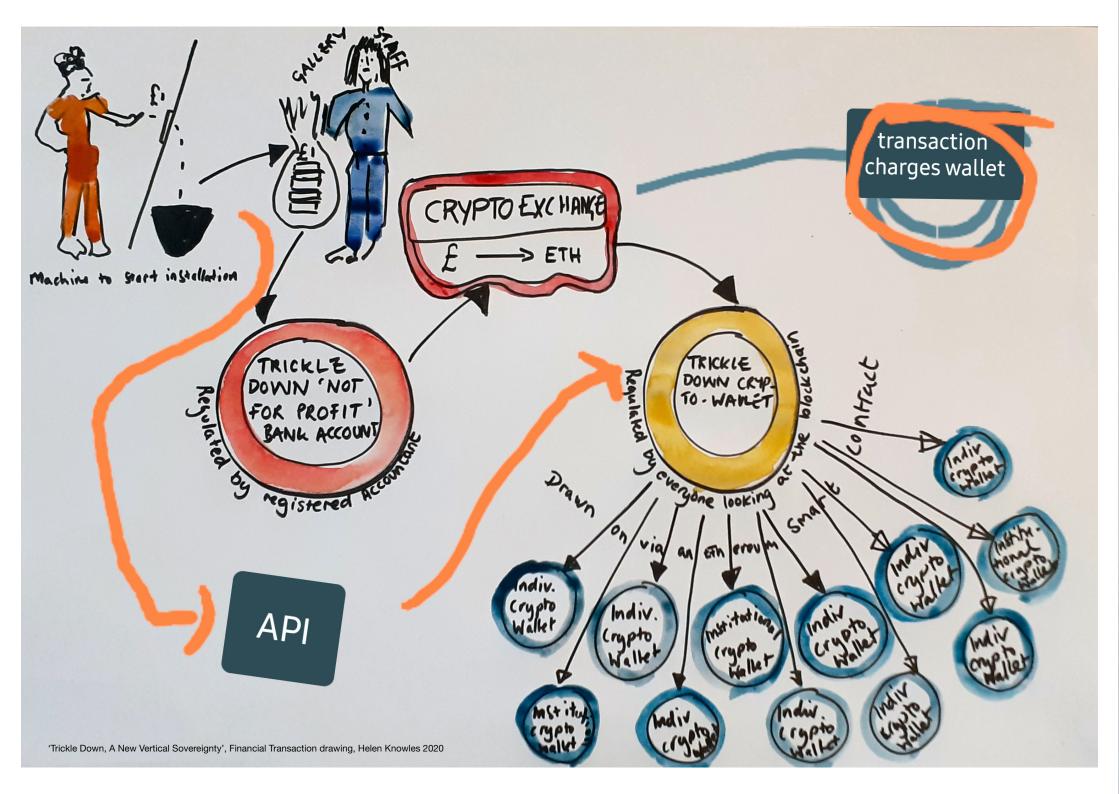
This is the social basis for interpreting Pil and Galia Kollective's "Asparagus: A Horticultural Ballet" staged in 2007. In this work, Oscar Schlemmer and Karl Marx provide a dual logic for the choreographed movement of six performers in asparagus costumes in three acts entitled 'The Commodity', 'Labour' and 'Capital'. Jonathan Griffin, writing in Frieze magazine, described the asparagus ballet as having a "cheerfully blasé attitude to meaningfulness and a taste for the redeeming power of the absurd". The cultural logic of financialisation sheds a different light on this.

Goldin and Senneby describe their practice as exploring "the structural correspondence between conceptual art and finance capital, drawn to its (il)logical conclusions". Their work constructs curious narra-

tives around value and labour that endow the real with fictional and speculative qualities.

Helen Knowles makes works that engage with the contemporary condition of financialisation in ways that fuse fact and fiction in a complex construction of unstable meanings. Her work underscores the point made by Fredric Jameson when he argued that financialisation has created "a new cultural realm or dimension that is independent of the former real world, not because as in modern (or even the romantic) period culture withdrew from that real world into an autonomous space of art, but rather because the real world has already been suffused with culture and colonized by it".

Trickle Down – A New Vertical Sovereignty does not withdraw into a sphere of fantasy and imagination or aesthetic experience but mixes actual economic transactions with a four-screen video installation and soundscape to build a complex picture of financialisation as social structure, subjective experience and cultural logic.



Hey! member of *Trickle Down* community,

I am writing this letter to request that you set up a crypto-currency account, so that you can receive payment(s) for taking part in the *Trickle Down - A New Vertical Sovereignty* project.

This is to compensate **YOU** for your **TIME**, **EFFORT**, **IMAGINATION**, **EXPERTISE** and **INVENTIVENESS** and **OTHER** individuals, institutions and mechanical entities which form part of the ecosystem of the artwork.

Perhaps you sang, performed, or contributed your knowledge in a workshop, or spoke about the blockchain in an interview? You have, perhaps, also helped the artwork grow and develop, networked or forged relationships with people and institutions, helped to apply for funding and fixed opportunities for others to contribute to the work. And/or you may have enabled it's journey to public exhibition.

The process of your receiving an even split for your contribution via the ethereum network is, in fact, a vital part of the artwork itself. This is because we want to see if we can build new ways to use our **vertically** stacked digital ecosystem to horizontally distribute wealth, and in so doing, lay bare the invisible infrastructure behind the artwork.

I invite you to set up **YOUR OWN** Ethereum Crypto Wallet, so that every time the artwork is played (and someone drops a coin in the machine to trigger the videos and audio to play), we all receive a share of that transaction in ETHS (Ethereum cryptocurrency). These will be called a cryptocurrency airdrop. It works via a smart contract attached to the blockchain.

Setting up an account is very simple. Here's how to do it:

STEP ONE

Download, install and follow instructions to make your wallet here;

https://wallet.coinbase.com/

- It supports iPhone and Android, and it is maintained and backed by a large company.
- Remember that there is no 3rd party to recover the funds if the keys are lost, so it is advisable to write down your password and store it in a safe place.

STEP TWO

All I will need from you is your **Ethereum** address, which is where your portion of the funds will be sent each time the machine receives a coin.

This is what an Ethereum address looks like. 0xaa1fb4dD515FA75f0D0F5f77c7F0DFE6cfe3dcF1

STEP THREE

Please email YOUR address to helenknowles@yahoo.com by the 1st December 2019.

I will set up two accounts;

- Account 1 -Trickle Down 'not-for-profit' bank account accepts UK Pounds -Regulated by a human being (registered accountant)
- Account 2 -Trickle Down Crypto Wallet accepts ETHS Regulated by the blockchain

Using Block Explorer (I will send you a link and instructions to this once the smart contract is set up) you will be able to trace the following;

- 1) The deposit of crypto from an exchange into the wallet
- The crypto being split and paid out to the Trickle Down Community set in the smart contract

This is because everything on the blockchain is **public and verified by the network of decentralised computers** so we can trust the transactions are real.

UK TAX LAW

It is the responsibility of every participant to declare earnings. If the contribution you made is not your usual "day job" the receipts will not be taxable up to £1000 of miscellaneous income.

Who Pays The muse?

By Ruth Catlow

"You are bidding on a piece of history" cries the auctioneer amidst whooping, cheering, laughing and gasping from the ecstatic conference delegates. The hammer comes down at \$140K and former hedge fund manager, Mike Novogratz, becomes the proud owner of a very special Cryptokitty.

Helen Knowles was at the infamous New York Ethereal Summit auction in 2018. She captured the moment on video.

I was also there. This was the moment that I realised that collectors can use the auction to insert themselves into art history — acquiring an artwork that is also a souvenir of an epic art moment that they have created with their purchase.

Auction participants are Knowles's muses and she thinks they should be paid.

Her artwork *Trickle Down — A New Vertical Sovereignty*, is a tokenised, four-screen video installation and soundscape attached to the blockchain. "Composed of auction scenes, auction performances and choral interludes", the artwork features different auction "communities", — from prison inmates (who auction the right to send plants to their loved ones in their absence) to market shoppers, to buyers at Sotheby's auction house. The videos reveal their different attitudes, access to money, markets and art; exploring value systems and wealth disparity.

Knowles is making a conceptual artwork that is a machine that vends access to this installation as an art experience.

Perhaps the artworld cousin of the blockchain enabled Brave browser, her machine also allows audiences to decide who, among those people involved in the creation of her work, should receive micro payments resulting from the division of the inserted coins — including the subjects of the videos.

As she builds her art machine Knowles is also considering who else might qualify for payment including: anyone who has contributed to her thinking about the machine and all the employees of the funding bodies and galleries involved in its creation, exhibition, and circulation, now and into the future.

This is a curious thought experiment.

Imagine a machine that draws back a curtain on Leonardo's Mona Lisa only when you purchase and feed a token to the machine. Now imagine being asked to make a decision about who you would like to receive the proceeds of that token: The artist (or their estate), the descendants of Ms del Giocondo, the studio assistants, anon, anon, and anon, and of everyone who ever worked at any of the palaces or galleries that ever displayed it: including all those who contributed to its upkeep at Fontainebleau, the grand Palace of Versailles, Le Louvre, etc, etc.

Why stop there? Should we not be paying the people (the architects and the workers) who built the road and bridge that appear in the background of this priceless artwork?

Knowles's work challenges two untested artworld assumptions: that attention is reward enough for an inspiring subject, and that the accumulated wealth of a few, is a boon for the masses.

Trickling Down Hide and Seek

By Irini Papadimitriou

Rather than money issued by a nation and administered by central banks, art is a networked, decentralized, widespread system of value. It gains stability because it calibrates credit or disgrace across competing institutions or cliques.

Hito Steyerl, 'If You Don't Have Bread, Eat Art!: Contemporary Art and Derivative Fascisms'

'INSERT COIN HERE'; a flickering light shows visitors to a coin slot-machine, part of an electronics panel framed in a large glass sculpture in the middle of the dark gallery space. The large glass sculpture and adjacent vessel, where all pound coins are collected, form one of the elements in Helen Knowles' new art installation *Trickle Down: A New Vertical Sovereignty.*

'Trickle Down, A New Vertical Sovereignty', Film still, Helen knowles 2020

The rhythmic repetition of ascending numbers, cheering, crowd voices, applause, excitement, and sometimes laughter, come and go around the room. The sounds accompany projections of video stills captured at different environments, or rather auction scenes that artist Helen Knowles attended and got permission to film. On one side of the gallery space, images reveal details of expensive fabrics, fur, silk, designer clothes and extravagant accessories; the auctioneer leads on a careful choreography with information from across the room and bids, while the numbers are moving up at a dizzying pace. This is the Important Russian Art Auction at Sotheby's afterall.

In another instant we experience moments from a different kind of auction, this time at the close of the Ethereal Summit - a global conference about blockchain technology - in May 2018.² This was also the first auction to issue blockchain provenance titles for all artworks sold, and hosted by Codex Protocol, a platform that uses the Ethereum blockchain to register and certificate art creating a decentralised ecosystem that captures information about artworks such as provenance, sales, copyright and so on. The art auction at the Ethere-

al Summit closed with a \$140,000 record-breaking - and headlines grabbing - sale of a specially commissioned CryptoKitty, a unique digital collectible³, with the proceeds benefiting an art and blockchain charity. The closing bid price announcement as captured by the artist here, gets a wave of cheering and applause from an adrenaline-high crowd of entrepreneurs, blockchain enthusiasts and digital art collectors witnessing the event. Does the Ethereal Summit auction and subsequent sales hype mean blockchain

¹ Steyerl, Hito. Duty Free Art. Verso, 2017.

² A blockchain is a decentralised ledger of transactions across a peer-to-peer network. Using blockchain technology, participants can confirm transactions without the need for a central authority. Cryptocurrencies are the tokens used within these networks to send value and pay for transactions. Blockchain has applications far beyond bitcoin and cryptocurrency.

³ CryptoKitties is one of the most popular applications of the blockchain's digital ledger technology and one of the earliest blockchain games allowing players to purchase, collect, breed and sell cute digital animated cats.

art and collectibles - from CryptoKitties and Cryptopunks to virtual worlds' Cryptovoxels and Decentraland crypto-art - get an artworld nod of approval?

From the clamorous announcement of prices and participants bidding against each other with each subsequent bid being higher that the previous one, to auction houses splashing on marketing costs, flying in valued clients or offering sellers advantages and sales guarantees, auctions are all about theatricality and spectacle. They are in a way a performance of a ledger. As the recent example of the act of shredding of Banksy's Girl with Balloon painting at the Sotheby's auction shows, the spectacle with attached social media frenzy serves also to enhance the market value of the work. In this specific case, what is first thought of as critique of the commercialisation of an anti-establishment artist, to borrow the late Mark Fisher's words, "what

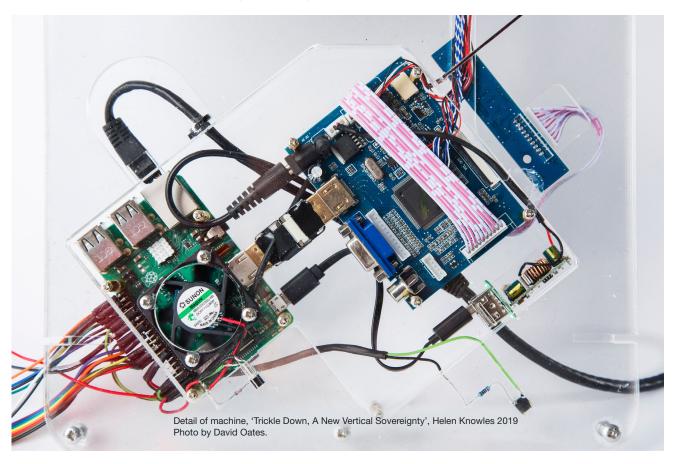
we are dealing with now is not the incorporation of materials that previously seemed to possess subversive potentials, but instead, their precorporation: the pre-emptive formatting and shaping of desires, aspirations and hopes by capitalist culture."⁴

The capacity of the blockchain to create digital scarcity, the idea of digital files that could be infinitely copied, but can now be verified, tokenised, encrypted and commodified, couldn't be framed in a more memorable way than with the CryptoKitty sale at the Ethereal Summit. It potentially also fulfils the art market and capitalism's desire for new, bold art that is ahead of its time.

Apart from spectacle, auctions serve also as demonstration of power. From the über wealthy Sotheby's clients bidding on iconic Russian artworks to Ethereal Summit investors spending thousands of dollars on blockchain-based digital art, the stage of the auction demonstrates their financial power, but also philanthropy - investing on and supporting culture, and in the case of the Codex auction, benefiting a charity.

In discussing the financialisation of art, Max Haiven draws an interesting link between cryptocurrencies, encryption and freeports or 'Palaces of Encypted Culture', "a kind of architecture of global financialized capitalism that encrypts art within its walls" and "encrypt art as a kind of money: the art exists in the world as a kind of financial code, a digitally manipulated asset to be transferred and parlayed. Like an encoded word transmitted in a public broadcast, financialized art still transmits meaning and value, but only to those who bear the keys of decryption, in this case those with enough wealth to buy the work, ship it to elsewhere and uncrate it again as art." Similarly, Rachel O'Dwyer mentions how "much of the art collections of High

- 4 Fisher, Mark. Capitalist Realism; Is There No Alternative? O Books, 2009.
- 5 Haiven, Max. Art after Money, Money after Art. Creative Strategies Against Financialization, Pluto Press, 2018.



net worth individuals (HNWIs) now reside in freeports, liminal tax-free spaces that bypass National sovereignty."

Trickle Down includes two more auctions, which couldn't be more contrasting than the Sotheby's and Ethereal Summit auction. One, involves Mancunians bidding on bric-a-brac and basic everyday commodities at Openshaw Market in North Manchester. In stark contrast to the previous ones, the setting here is basic with most of the bidding carried out of the back of vans bringing the goods into the market. The second auction was staged by the artist with prisoners at HMP Altcourse in Liverpool, during an artist residency there in association with FACT. During conversations with the inmates, it was decided to stage the auction as a performance to try and explore the prison economy and ideas of value. In one of her talks at the Whitworth, Helen mentioned that the inmates wanted to bid for plants to keep and look after in their cells. However, since this request was overridden as a security risk, it was agreed they could bid for plants to send to their relatives as Christmas presents instead. It was also the inmates' decision to bid with their labour. Here, as in previously mentioned auctions, the artist documents the people's attire rather than revealing their identities.

As an artist traversing across different economic spaces and communities, moving between the fashionable art openings and art gallery world of west end London, and the neglected streets around her art studio in Gorton in the north west of England, Helen Knowles is well aware of the great disparities between the capital and the provinces. The auctions she is depicting in *Trickle Down* are portraying staggeringly different communities showing a gap in wealth and equality, and how financial power structures govern value and distribution of wealth. In *Capital in the 21st Century*, Thomas Piketty claims that reduced inequality in the 20th century due to public policies following the two world wars, the Great Depression, organised labour and taxation, was an anomaly rather than a lasting change, and the past few years this is being reversed.⁷

There are systems, within systems, within systems... the chorus of the inmates participating in the auction have been recorded singing for *Trickle Down.* Other auction participants, such as ConsenSys employees - the company behind the Ethereal Summit, sellers at the Openshaw Market and a Sotheby's client, have also contributed to the art installation with their singing. These recordings along with sounds from the environments of all auctions make part of the installation soundscape. Sensors across the gallery space pick up the proximity of visitors to the screens in the room and the data generated effects the sound diffusion within the gallery, so the soundscape is always different.

Going back to the coin slot machine in the glass sculpture, in order for the visitors to experience the installation, a pound needs to be donated to the artwork through the coin slot. This transaction is captured via a sensor in the glass sculpture and stored in a blockchain by deploying a smart contract on Ethereum.8 Every pound payment to the slot machine automates crypto payments to a group of people, who have been involved in Trickle Down. These people include the auction participants who have gifted a song or performance, people who provided their skills to make, write, design, program, organise and every other step needed in order to make the installation happen. So all *Trickle Down* contributors will be receiving payments via Ethereum coin airdrops every time the artwork is exhibited. This process is obviously reliant on people setting up a cryptocurrency (Ethereum) wallet - for which they received instructions from the artist. The inmates are obviously not allowed to set up a wallet, so a wallet will be set up for them in trust and shared once they are released and able to access it. Decisions such as who should be receiving payments; how the payments will be distributed; what the donations process should be like; but also what the glass sculpture and coin slot ma-

⁶ O'Dwyer, Rachel. 'The work of art in the age of CRYPTography: the tokenisation of art on the blockchain', http://www.rachelodwyer.com/blog.html

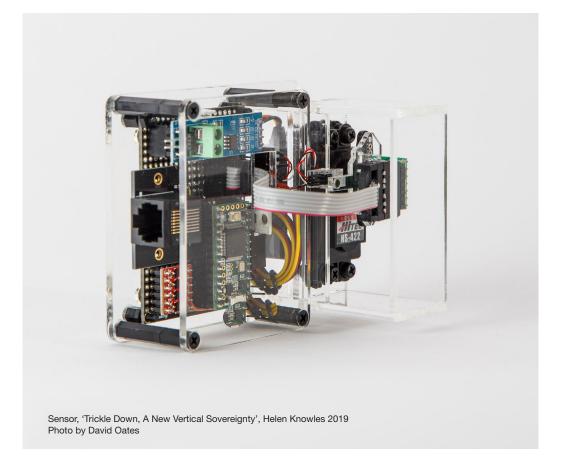
⁷ Piketty, Thomas. 'Part Three: The Structure of Inequality', Capital In The Twenty-First Century, Harvard University Press, 2014.

⁸ A smart contract is an agreement between buyer and seller in the form of computer code and running on the blockchain. This means that transactions are processed without the need of a central authority mechanism and are stored in a public database, therefore are trackable and irreversible. 5 Haiven, Max. Art after Money, Money after Art. Creative Strategies Against

⁹ Airdrop is a distribution of a cryptocurrency coin or token to numerous wallet addresses.

chine design should look like, were taken during public workshops at the Whitworth, part of the University of Manchester. ¹⁰ I assume, for Helen Knowles, opening up the decision making process to contributors and other members of the public is an integral part of *Trickle Down*, but also, if we think of all process layers as transactions in the project, *Trickle Down* draws a parallel to how blockchain transactions are processed in the public rather than through a central authority.

Visitors donate a pound coin to experience the artwork and compensate those who worked to bring the artwork into being; in that way *Trickle Down* addresses the inequality and exploitation also present in the art world, which is fuelled by a big number of low paid and many times even unpaid workers, not to mention only the small number of artists making a living from their work.



Here, people from vastly different worlds, such as Sotheby's buyers, blockchain entrepreneurs, market sellers, prisoners, art professionals, institutions and so on, receive equal shares from an artwork as an acknowledgement for their invisible labour. Hoping that the artwork will have opportunities and demand to be continuously exhibited, trusting that people would want to experience it and make a donation, and that the Ethereum price will continue to rise, its value will keep increasing and consequently the payments to the contributors. But will the prospect of receiving - most probably - small amounts of Ethereum coins be a good enough incentive for people to take part and contribute to this experiment? Not to mention the blockchain technology barrier, inaccessibility for some, and effort in setting up a crypto wallet. Or is it maybe the experience of taking part in the performances, singing, sending plants to families - in the case of prisoners - and being part of conversations about value, offer more of an incentive than Ethereum coins?

In 2018, artist Jonas Lund launched a cryptocurrency - the *Jonas Lund Token (JLT)* - creating 100,000 shares in his artistic practice and giving shareholders voting power over future proposals and his career moves. As the artist's career and market value increased so did the value and demand of the tokens. In the Romanian Pavilion at the Venice Biennale, Dan Mihălţianu presented *Canal Grande: The Capital Pool and The Associated Public*, a black pool used as a wishing well for visitors to throw coins, while establishing an autonomous art fund with members of the public to manage the funds and decide on how to use them for social or humanitarian projects.

Could blockchain technology possibly help reduce social gaps and enable more equality in society or does it only benefit those who can control and navigate it? A decentralised blockchain technology that allows transactions to be transparently verified and encrypted might be enticing and offering many possibilities, but doesn't automatically create equality. After all neither technology nor money are neutral. Earning cryptocurrency requires computing power. Gilles

¹⁰ The Whitworth supported the commissioning of the machine/sculpture as part of their current research strand Economics the Blockbuster. As part of this commission, Helen delivered three workshops tracking the development of the machine and its operation.

Deleuze, in his short essay 'Postscript on the Societies of Control', discusses how Societies of Control - operating with computers - are replacing the Disciplinary Societies "operating in the time frame of a closed system" - as described by Michel Foucault. For Deleuze, Societies of Control are organised with codes - passwords "that mark access to information, or reject it."

In *Trickle Down*, Helen Knowles is not looking to present us with an equitable financial system or suggest that contributors having equal shares from the artwork means they become equally powerful. Instead Trickle Down engages with economic issues from the inside, inviting us to rethink value and imagine the possibility of equal distribution of wealth. To borrow Lewis Hyde's words, "works of art exist simultaneously in two economies, a market economy and a gift economy. Only one of these is essential, however: a work of art can survive without the market, but where there is no gift there is no art." 12

Trickle Down, A New Vertical Sovereignty is an artwork by Helen Knowles, supported using public funding from Arts Council England. The artwork is produced by FutureEverything with additional support from The Whitworth, The University of Manchester, arebyte Gallery and FACT.

Photography, Film and Sound Editing:

Helen Knowles

Recordings:

Helen Knowles, Denis Jones, Damien Mahoney and Arone Dyers

Machine Design:

Daniel Dressel

Composition, Coding and Sound Diffusion Design:

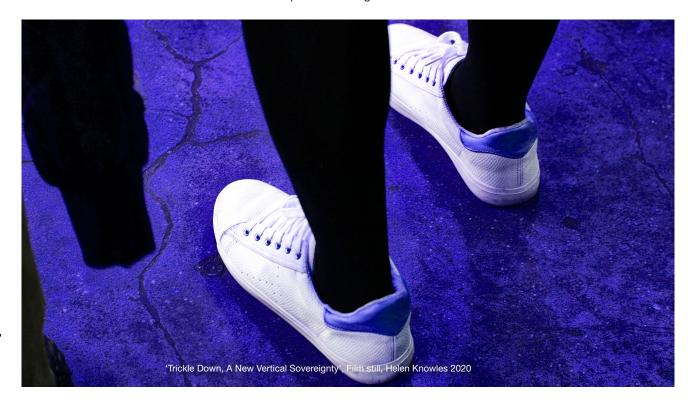
Pablo Galaz Salamanca

Interaction Design:

Lewis Sykes

Thanks to BlockRocket, Howard Kennedy LLP, Ethereal Summit, ConsenSys, Known Origin, Metamark and The University of Salford.

A two-part edition of the *Trickle Down* work is available to purchase on the blockchain via Known Origin's website: https://knownorigin.io/



¹¹ Deleuze, Gilles. 'Postscript on the Societies of Control', October Vol. 59 (Winter, 1992)

¹² Hyde, Lewis. The Gift. Random House New York, 1983.

Helen Knowles

www.helenknowles.com

Helen Knowles (b.1975) is an artist and curator of the Birth Rites Collection. She has a BA Hons from Glasgow School of Art and MFA Fine Art from Goldsmiths University. Knowles' practice stems from an interest in the new sovereign territories of the internet and the digital world. Her most recent film work, The Trial of Superdebthunterbot, is a 45 minute doc-fiction where she put a debt collecting algorithm on trial at Southwark Crown Court. The defence and prosecution was written and performed by real lawyers and a real jury deliberated to find whether the algorithm was guilty or not.

She lectures widely around the UK and abroad. Recent and forthcoming shows include; 'Future and the Arts: AI, Robotics, Cities, Life - How Humanity Will Live Tomorrow' The Mori Art Museum, Tokyo, NEMO festival, Paris, The Ministry of Justice and Consumer Affairs, Berlin, 'Artistic intelligence' Hannover Kunstverein (2019) 'Impakt Festival, 'Los Algorithmos Suaves', Centro del Carme, Valenica, Potsdam Film Museum (2018) 'Zero Recoil Damage', FolkestoneTriennial, 'OpenCodes', ZKM Karlsruhe, Germany, 'Codex' D21, Leipzig, The Trial of Superdebthunterbot, Zabludowicz Collection, London (2017) and more. Her work is held in private and public collections including The Whitworth Art Gallery, Gallery Oldham, Tate Library and Archive, The National Art Library, Joan Flasch Artist Book Collection, Museum of Motherhood, NY, Birth Rites Collection and MMU Special Collection. Residencies include; Trelex Residency, Switzerland (2019), Fault Lines, Future Everything (2017-2019), HMP Altcourse, Liverpool, (2017) Moscow ICA, (2015) Santa Fe Arts Institute, New Mexico (2013 Jodrell Bank Science Centre and Arboretum (1999-2001). A recipient of awards from Arts Council England international Development Fund and The Amateurs Trust, in 2012 she won the Neo Art Prize, Great Art Prize for two works from the Youtube Portraits Series.

arebyte Gallery

www.arebyte.com

arebyte is a London-based art organisation which supports the development of contemporary artists working across digital and emerging artforms. Following in the long tradition of artists experimentation with new technologies, arebyte Gallery, has led a pioneering programme since 2013, to much acclaim. The gallery commissions new works from emerging, as well as more established artists, across the UK and internationally, supporting multiple voices in digital culture, and bringing innovative perspectives to art through new technologies.

Dave Beech

Dave Beech is Reader in Art and Marxism at the University of the Arts, London. He is the author of Art and Value: Art's Economic Exceptionalism in Classical, Neoclassical and Marxist Economics (Brill 2015), which was shortlisted for the Deutscher Memorial Prize. His most recent book *Art and Postcapitalism: Aesthetic Labour, Automation and Value Production* (Pluto 2019) is out now. *Art and Labour* (Brill 2020) is forthcoming. Beech is an artist who worked in the collective Freee (with Andy Hewitt and Mel Jordan) between 2004 and 2018. His current art practice translates the tradition of critical documentary film into sequences of prints that combine photomontage and text art.

Ruth Catlow

Ruth Catlow is an artist, curator and researcher of emancipatory network cultures, practices and poetics. She is co-founder and artistic director of Furtherfield, a not-for-profit international community hub for arts, technology and social change founded with Marc Garrett in London, in 1996. She is co-editor of Artists Re:Thinking the Blockchain (2017); curator of the touring exhibition *New World Order* (2017-18); she runs the award winning *DAOWO arts* and blockchain lab series in collaboration with Ben Vickers in partnership with Goethe Institut- London and Serpentine Galleries; and is principal investigator for the blockchain research lab at Serpentine Galleries. She is director of DECAL Decentralised Arts Lab, a Furtherfield initiative which exists to mobilise research and development by leading artists, using blockchain and web 3.0 technologies for fairer, more dynamic and connected cultural ecologies and economies.

Irini Papadimitriou

Irini Papadimitriou is a curator and cultural manager, whose practice draws on interdisciplinary and critical discourse to explore the impact of technology in society and culture, and the role of art in helping us engage with contemporary issues. Currently Creative Director at FutureEverything, an innovation lab and arts organisation in Manchester, she was previously Digital Programmes Manager at the V&A, where she initiated and curated the annual Digital Design Weekend festival and Digital Futures among other programmes; and Head of New Media Arts Development at Watermans.

Her exhibition, Artificially Intelligent, was on display at the V&A in 2018 and she has been a co-curator for the Arts & Culture experience at Mozilla Festival. She is a co-founder of Maker Assembly, a critical gathering about maker culture, and has been a recipient of curatorial research programmes including MOBIUS (Finnish Institute), Art Fund, Mondriaan Fonds and British Council. She has served as a jury member for Ars Electronica, Lumen Prize, EU STARTS and ACM Siggraph.

SYSTEMS

arebyte's 2020 programme takes the notion of Systems as its point of departure. Systems discusses the erratic interplay between the systems we encounter on a daily basis, and how we might use parts of these systems to reconfigure our understanding of the world. From global infrastructures of economics and finance, to organic and environmental systems of growth and reproduction; from computational and technological systems, to collaborative and interdisciplinary systems of discourse and pedagogy, the way our world functions will be brought into conversation, opening up a dialogue for critique and exchange.

Continuing from the 2019 theme Home, Systems invites artists to respond to the networks and structures at play in the digitised world. The networks which have become carriers for emotional, political and ecological agendas are critiqued through group exhibitions, residencies, off-site projects and newly commissioned work.

The networks we live among are "sites of exchange, transformation, and dissemination...conveying a sense of a spare, clean materiality" *, but they're also part of a larger world-system, convoluted and undefined through the proliferation of information and opposing agendas. These networks that have become so entangled and entwined with everything we buy, consume, read, think and act upon are broached in Systems through cryptocurrency and sovereignty with Helen Knowles; through critique on data packets, point-to-point latency and internet protocol with Olia Lialina; through software subculture and open sourcing with Alan Warburton; through emergent technologies, creative Artificial Intelligence and algorithms with Luba Elliott; and through discourse surrounding the artist residency and intervention within the physical and virtual gallery space with Going Away.tv, Goldsmiths University Computational Arts Department and AOS (arebyte on screen).

The artists in Systems confront our current world systems of varying scales, and posit alternative ways of thinking about the underlying systems present throughout our histories, presents and futures.

^{*} N. Katherine Hayles, *Cognitive Assemblages: Technical Agency and Human Interactions* (Critical Inquiry Vol 43, no. 1 Autumn 2016) p32-55



