Ragpicker's Guide to the Digital:
Materiality, Objecthood and Ownership of Art After the Internet

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Abstract

The dissertation titled “Ragpicker’s Guide to the Digital: Materiality, Objecthood and Ownership of Art After the Internet” explores how materiality and objecthood of art changed, after the Internet became a dominant system for communication and networked information resources in the 2000s, and how this change impacted art production and ownership. First chapter sketches out a critical framework of theories about the materiality of art since the 1960s. Chapter two presents the idea of “the artist as ragpicker” arguing that artists whose works are driven by digital networks can be similar figures to Walter Benjamin’s ragpickers in the 19th century Paris. It elaborates on artists’ approach to waste and value relationship. Chapter three consists of three case studies: artists Christopher Kulendran Thomas, Timur Si-Qin and Simon Denny are presented as examples of artists rag-picking and materializing the current digital visual culture. The final chapter explores the technological advancements like blockchain’s potentiality as a new exchange platform as well as a medium for art, and traces how it can contribute to the materialization of the dematerialized.

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Introduction

Ragpicker's guide to the digital is an imaginary guide for the Internet users who question digital junk accumulation, and the implications of dematerialized routines on the materiality of art.

As the Internet became a dominant mode of communication and information source starting from the 2000s, its contents got copied, pasted, multiplied, circulated and spread multiple times among multiple networks. These digital contents keep piling up and the data accumulates. Thus, re-using or re-cycling an image does not help reducing the junk on the Internet, instead it adds to the pile. This contradicts physical ragpicking or art-making with found materials. Artists whose works are driven by digital networks can be considered as similar figures to Walter Benjamin's ragpickers in the 19th century Paris. At the time, the ragpicker's function was to collect the debris of the city, to gather and recycle the day's refuse in the capital. Similarly, artists whose works are a residue of digital content collect the day's refuse on the Internet. Their works build on the information on the Internet: they make use of available images, audio, video footage and code. These are often "poor images", meaning they are heavily compressed and they travel quickly. According to the artist Hito Steyerl, "poor images are the contemporary Wretched of the Screen, the debris of audiovisual production, the

trash that washes up on the digital economies' shores."[1] Thus waste is a prominent starting point of artists who make use of the Internet's piled up stuff: they make use of waste but this adds more to the pile.

The rather ambiguous term post-Internet art, coined by artist Marisa Olson, refers to works that are driven by digital networks, but can be produced in various media or take physical forms. These works that take the Internet as source material were described as "Internet aware" by the artist Guthrie Lonergan. If the medium of the work is digital, it can be circulated on the Internet. If it has a materiality, then an image of it circulates and contributes to the accumulation on the Internet. Curator Christiane Paul coined the term neomateriality to describe the embeddedness of the digital in the objects, images and structures.[2] These works incorporate the digital visuality but they have a physical materiality.

Alongside objects that materialize the digital, digital itself has a materiality that is often invisible or imperceptible: electricity, power, cables, data farms. Machines are the interfaces between the Internet and its users. Some exemplary works depicting this materiality pose questions about the changing nature of consumer culture through technological developments. The World Wide Web was developed as a mode of communication between high-energy physicists in the beginning of 1990s.[3] The system soon opened to public easily because it was never intended as a secure system. While the Internet as an open system allowed access to data and information, new ways of patching the system for improved security have constantly been explored. For example

[1] Hito Steyerl, "In Defense of the Poor Image" *e-flux* journal 10 (2009), accessed October 2, 2017, http://www.e-flux.com/journal/10/61362/in-defense-of-the-poor-image/.
[2] Christiane Paul, "From Immateriality to Neomateriality: Art and the Conditions of Digital Materiality," Proceedings of the 21st International Symposium on Electronic Art (2015), accessed July 7, 2017, http://isea2015.org/proceeding/submissions/ISEA2015_submission_154.pdf
[3] T.J. Berners-Lee, R. Cailliau, J-F Groff, B. Pollermann, CERN, "World-Wide Web: An Information Infrastructure for High-Energy Phsyics," presented at "Software Engineering, Articicial Inteligence and Expert Systems for High Energy and Nuclear Physics" at La Londe-les-Maures, France (January 1992), accessed October 2, 2017, http://www.ic.unicamp.br/~celio/inf533-2005/information_infrastructure.pdf

blockchains, which are distributed databases where each chain created by a user is secure and transparent because participants validate each entry, can materialize digital objects by forcing scarcity and authenticity. They can securely make time-restricted access possible, enabling a self-governed digital ownership and exchange. First conceptualized in 2008, the blockchain is explained frequently as the technology behind cryptocurrencies. However, it also has an impact on art's distribution and ownership, as well as carrying a potential for becoming a new medium for art.

As McKenzie Wark argues, "The collectable artwork is now less about being an object that stores value because of its special qualities as a rare thing made by a special kind of worker, the artist. The artwork is now collectible because it is a financial instrument in a portfolio that manages and hedges risk."[4] For example, Maecenas, a company that sells art on a blockchain platform, recently made it possible to trade art as stock exchange. Buyers can own parts of different artworks, which stay in warehouses at free ports and are never seen by their stakeholders.

Going back to theories about objecthood of art is useful for making sense of the current state of the art object, its exchange and its materiality. The rise of conceptual art in the 1960s introduced the idea that immaterial aspects (ideas and concepts) of an artwork matter more than its physical form. One of the important figures writing about the changing paradigm in the 1960s was the critic Michael Fried who introduced the idea of art-object in his renowned essay "Art and Objecthood" on minimalism. Lucy Lippard was another influential figure, who co-wrote with John Chandler "The Dematerialization of Art", an important text which elucidated the departure from the physicality of the artwork. Theoreticians like Mittenzwei and Christine Buci-Glucksmann wrote about the immaterialization of art, theorizing materialism differently from the traditional Marxist view, which emphasizes production. Jean-François Lyotard and Thierry Chaput's exhibition "Les Immateriaux" in 1980 showcased new approaches to the immateriality of art. Later, the emphasis on relations between objects paved the way to immaterialist

[4] McKenzie Wark, "My Collectible Ass," *e-flux* journal 85 (2017), accessed October 2, 2017, http://www.e-flux.com/journal/85/156418/my-collectible-ass/.

approaches like object-oriented ontology. In the late 1980s and early 1990s, different ways of thinking about materiality emerged because of the digital framework that began dominating the culture. The following chapters will explore the changing nature of art's materiality from the '60s to today.

The first chapter will talk about how theories regarding the materiality of art evolved since the 1960s. Chapter two will introduce the idea of "the artist as ragpicker" arguing that artists whose works are driven by digital networks are similar figures to Walter Benjamin's ragpickers in the 19th century Paris. It will elaborate on artists' approach to waste and value relationship. Chapter three will describe the works of three artists Christopher Kulendran Thomas, Timur Si-Qin and Simon Denny, as examples of artists ragpicking and materializing the digital and current visual culture. The final chapter will explore the blockchain both as a new exchange platform and medium for art. It will talk about its implications on the materiality of art.

Centralizing the artist as ragpicker figure and considering the relations between waste and art, the dissertation will trace the shifts in the definition of materiality through artworks (case studies) in which materiality is a residue of digital processes. It will also explore the potential of the blockchain materializing digital objects as a decentralized and autonomous digital system.

Chapter 1

Shifting Paradigm of Materiality

Michael Fried discusses the transition in the 1960s, from understanding a work of art as just an object to considering a possibility that a work of art could be more than an object.[5] The exhaustion of painting in the early '60s marks an important change in the perception of artworks, opening many possibilities from experimentation with mediums to conceptual gestures. The idea of the work of art as something that projects objecthood and has a presence, could be the first attempt of paving the way to the idea that anything can be art, regardless of its medium or objecthood. Fried talks about minimalism, which he calls "literalist art", and outgrows it by discussing the importance of theatricality. According to Fried, the condition of non-art is objecthood. He makes a distinction between the demands of art and the conditions of objecthood. The conditions of objecthood contrast art because art object includes the beholder, it has an indefinite duration and what matters is the experience of it. By distinguishing art and object, Fried introduces the idea

[5] Michael Fried, "Art and Objecthood," in *Art and Objecthood: Essays and Reviews*, (Chicago: University of Chicago Press, 1998), 148-172.

of an art-object, which functions as a precursor of art as a meme or a podcast on the Internet in contemporary context.

What could be the real difference between artworks and everyday objects? The lines were blurred beginning from the 1910s when some works —for example: Marcel Duchamp's ready-mades— problematized and complicated the relationship between art and object. Readymade weakened the exchange value of the art object coded by labor, and replaced it with sign value. Sven Lütticken argues that in the context of the early 1960s, the readymade has become its own image, that capitalism has turned itself into a forest of signs: "Duchamps's ready-mades refrain from a Surrealist flirt with the obsolete, with outmoded commodities, with the debris of Walter Benjamin's Second-Empire Paris, with the refuse of modernity's myths."[6] As Lütticken mentioned, David Joselit argued that readymade oscillates between a thing, and a sign, between a material commodity and an immaterial network. John Roberts also phrased readymade as a way of allowing immaterial labor and the labor of those other than the artist to enter the aesthetic sphere.[7] Readymade marks a transition in 'thingness' of an artwork, as well as the rise of conceptual art and immaterial labor.

If art is not just an object, where does its materiality lay? What could be said about object's place in materialist culture and did anything change after the network era, regarding its place in materialist culture? According to Marxist literary theorist Terry Eagleton, historical materialism began to give way to cultural materialism in the 1960s.[8] The perception of art-objecthood changes as theories around materialism change. There is a similarity between the idea that art is not an object but more likely an embodied

[6] Sven Lütticken, "Art and Thingness Part 1: Breton's Ball and Duchamp's Carrot," *e-flux* journal 13 (2010), accessed July 1, 2017. http://www.e-flux.com/journal/13/61327/art-and-thingness-part-i-breton-s-ball-and-duchamp-s-carrot/

[7] John Roberts, *The Intangibilities of Form: Skill and Deskilling in Art after the Readymade* (London: Verso, 2007), p. 24.

[8] Terry Eagleton, *Materialism*, (New Haven: Yale University Press, 2016), p. ix.

experience, and the idea that its materiality is something more abstract than the raw matter.

In their influential essay "The Dematerialization of Art" published in the 1968 issue of the Art International, art critics Lucy Lippard and John Chandler talk about the transition towards art as idea and action, where matter is denied, sensation has been converted into concept, or matter has been transformed into energy and time-motion.[9] "As the object becomes merely the end product, a number of artists are losing interest in the physical evolution of the work of art. […] Such a trend appears to be provoking a profound dematerialization of art, especially art as object, and if it continues to prevail, it may result in the object's becoming wholly obsolete. […] If the object becomes obsolete, objective distance becomes obsolete."[10] Lippard and Chandler used the term dematerialization to refer to conceptual art, which would, in theory, free art from its material qualities like uniqueness or free art from commodification.

In the sixties, during when theories around conceptual art flourished, German literary scholar Werner Mittenzwei has also written about *Materialasthetik*: a materialist aesthetic which would ask what revolutionary potential the contemporary materials produced by society might bear in the realm of art.[11] Later on, in the late eighties, philosopher Jean-François Lyotard and curator Thierry Chaput, in their exhibition "Les Immateriaux" at the Centre Pompidou, Paris, in 1985, extensively discussed materiality of an artwork. (Fig. 1). The exhibition asked questions about how the technical development of information systems changed perceptions about the materiality of things. Although both this question and Mittenzwei's question regarding the materiality and art relationship are similar, due to the fast pace of technological developments, these questions remain relevant and it is meaningful to explore how materiality changed over the course of thirty years following Lyotard and Chaput's exhibition.

[9] Lucy R. Lippard and John Chandler, "The Dematerialization of Art," *Art International* (February 1968): 34.
[10] Ibid.
[11] Petra Lange-Berndt, "How to Be Complicit with Materials," in *Materiality*, ed. Petra Lange-Berndt (London: Whitechapel Gallery, 2015), p. 15.

To explain why 'immaterials' was chosen as a title, Jean François-Lyotard gives two reasons in the exhibition catalog. First reason is because the model of language increasingly replaces the model of matter and the principle on which the operational structure is based is not that of a stable 'substance', but that of an unstable ensemble of interactions. The second reason is the scale on which the structure is operational in contemporary techno science and artistic experimentation is no longer a human one.[12] Software takes command. With the technological advancements up until the 1980s, there was a transition from material to immaterial, from substance to dynamism, language and code. Another contributor to the catalog, philosopher Christine Buci-Glucksmann stated, "Matter is no longer what it was… Due to the impact of science and technology it has shed its classic criteria of identity: solidity of matter, materiality of constituent parts, temporal and spatial fixity, stability of supports, self-evident reality."[13]

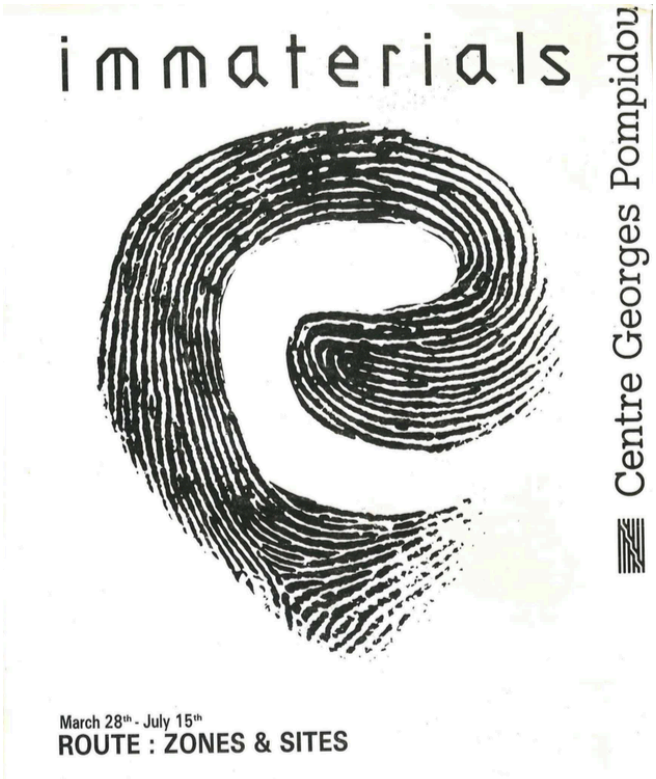

Fig. 1 Cover for *Immaterials: Route: Zones & Sites*, audio program, English translation, 28 March-15 July 1985.

[12] Jean François Lyotard, *Les Immateriaux. Epreuves d'ecriture,* ed. Jean François Lyotard and Thierry Chaput (Paris: Centre Pompidou, 1985).
[13] Christine Buci-Glucksmann, "Dematerialisation," in *Les Immateriaux. Epreuves d'ecriture,* ed. Jean François Lyotard and Thierry Chaput (Paris: Centre Pompidou, 1985), p. 42, trans. Ian Farr, 2015.

As the definitions of matter as well as materiality become phenomenological, the identity of materialism culture also changed. Cultural historian Raymond Williams associates two main problems with this change: mythologizing the received presumptions all that which we do not yet understand and seeming to know in advance the changing materialist content of materialism.[14] Do these problems persist today or do we still make possibly false predictions about the changing materialist content of materialism?

It is useful to approach materiality and the problems associated with its change, by analyzing the transition from matter, to material, to materiality. Material is conventionally understood as the raw and essential state of a matter. Traditional Marxist material culture sees materials dead until someone touches or shapes and makes use of them. There is no human trace in the word material, because it can be naturally present. However, it expands its meaning in time to signify something more flexible and abstract than its initial meaning. Gilles Deleuze and Felix Guattari speculated about a new relationship to matter, which is characterized by motion, flux and variation, a 'matter-flow' that 'can only be followed'.[15] Jacques Derrida also theorized the relationship between matter and material in his contribution to the catalog of the exhibition *Les Immateriaux.* According to him, m*ateriel* is matter informed by a technique, the matter of an instrument. He asks: if we proceed from the opposition between matter and form, should this opposition proceed to the 'post-modernity' of 'immaterials'?[16]

There is a strong similarity between French post-modernist philosophers Deleuze, Guattari and Derrida's writing in the eighties, and the new materialists of the 2000s. As Eagleton suggests, where thinkers like Derrida says 'text', new materialists say 'matter'.

[14] Raymond Williams, "Problems in Materialism", in *Materialism and Culture*. London: Verso, 1980, p. 122.
[15] Gilles Deleuze and Felix Guattari, *A Thousand Plateaus: Capitalism and Schizophrenia* (Minnesota: University of Minnesota Press, 2004), p. 377.
[16] Jacques Derrida, "'Dematerialisation', 'Materiau', and 'Materiel'," in *Les Immateriaux. Epreuves d'ecriture,* ed. Jean François Lyotard and Thierry Chaput (Paris: Centre Pompidou, 1985).

Otherwise, not much has changed.[17] According to the editors of *New Materialisms* Diana Cook and Samantha Frost "materiality is always something more than "mere" matter: an excess, force, vitality, relationality, or difference that renders matter active, self-creating, productive, unpredictable."[18] Karlheinz Barck interestingly shared their point in an article that he has written twenty years before Cook and Frost stating "materiality points to the whirling complexity and entanglement of diverse factors in the digital age, in which 'material', which like sound or language can now also be something that is not physical, is an effect of an ongoing performance."[19] This idea connects back to Fried's emphasis on theatricality. New materialism moves away from physicality and defines material in terms of its impact.

Material has increasingly been theorized as a language, as something in flux and formless after the rise of the global Internet in the late 1980s and early 1990s. Monika Wagner explains material as a medium. "Material is understood as an information carrier; in this interpretation, material is a medium. Because this medium, in its most recent manifestation as digitally generated codes, is no longer haptically graspable and no longer incurs tactile differentiation, […] immaterial properties are attributed to it."[20] How do we interpret the immateriality of the material? Why does material change meaning dramatically? According to this description anything can be material. The idea that material is a medium rather than a raw starting point of an art object builds on Michael Fried's premise that there is something more to art than an object. How does art make use of material as a medium? "Material needs no longer to be understood as a detachable carrier for a form or an idea, but can be regarded as indissolubly interwoven with it… In the twentieth century attention to the medium was almost automatically drawn

[17] Terry Eagleton, *Materialism*, (New Haven: Yale University Press, 2016), p. 11.
[18] Diana Cook and Samantha Frost, *New Materialisms: Ontology, Agency, and Politics* (Durham, NC: Duke University Press, 2010), p. 9
[19] Karlheinz Barck, "Materiality, Materialism, Performance," in *Materialities of Communication,* eds. Hans Ulrich Gumbrecht and Karl Ludwig Pfeiffer (Stanford: Stanford University Press, 1994), p. 258-72.
[20] Monika Wagner, "Material", in *Materiality*, ed. Petra Lange-Berndt (London: Whitechapel Gallery, 2015), p. 27.

to the material."[21] This idea raises questions concerning future materials/media for art like the blockchain and its materiality. This will be further developed in the fourth chapter.

Although materialism is relevant even in digital context, has the object truly become obsolete? The ideology of new materialism requires no objects but language or motion. As Eagleton summarizes, it is a post-industrial capitalist era, in which labor and capital are dematerialized into signs, flows and codes; social phenomena are mobile, plural and ceaselessly mutable; and images, simulacra and virtualities hold sway over anything as grossly simplistic as material objects."[22] French philosopher Bernard Stiegler coined the term hypermaterialization, a term that embraces everything as material: "I call hypermaterial a complex of energy and information where it is no longer possible to distinguish its matter from its form […] a process where information –which is presented as form– is in reality a sequence of states of matter produced by materials and apparatuses, by techno-logical devices in which the separation of form and matter is totally devoid of meaning."[23] Stiegler's term hypermaterial is an all-encompassing approach to material. However, it does not account for materials that reflect digital processes, frequently categorized as post-Internet art. Curator Christiane Paul suggests the term neomateriality to describe the embeddedness of the digital in these works. Neomateriality is an objecthood that incorporates networked digital technologies and embeds, processes, and reflects back the data of humans and the environment, or reveals its own coded materiality and the way in which digital processes perceive and shape our world.[24]

What is the new role of objecthood and thingness? How does object-oriented approach play a role in reshaping our relation to objects and how does this affect art's objecthood?

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[21] Ibid.

[22] Eagleton, *Materialism*, p. 17.

[23] Bernard Stiegler, *Economie de l'Hypermatériel et Psychopouvoir* (Economy of hypermaterial and psychopower), Paris: Mille et une Nuits, 2009.

[24] Christiane Paul, "From Immateriality to Neomateriality: Art and the Conditions of Digital Materiality," Proceedings of the 21st International Symposium on Electronic Art (2015), accessed July 7, 2017, http://isea2015.org/proceeding/submissions/ISEA2015_submission_154.pdf

Curator Joshua Simon connects materiality to social relations, stating that our very social relations constitute it. According to him this composition gives the commodity a subjectivity that is not particular to any one of us, but is rather one in which we all participate in forming. This matter is first and foremost one of presence, not of representation.[25] His idea follows the object-oriented ontology because it gives the objects subjectivity and emphasizes relationality. Philosopher Graham Harman takes on a similar approach, he also distinguishes object-oriented ontology from materialism stating that according to materialism, objects are what they are made of, but for object-oriented approach, objects are not paraphrased in terms of what they do or what they are made of.[26] Harman also introduces Actor Network Theory and one of the first developers of this theory Bruno Latour's ideas about defining objects according to what they do, in terms of "matters of concern" rather than "matters of fact". He argues against this approach by stating that there are relations between objects that have no direct involvement of people. "In an age when all the intellectual momentum belongs to context, continuity, relation, materiality, and practice, we must reject the priority of each of these terms, focusing instead of an *immaterialist* version of surprise and opacity.[27] Thus, he offers the term immaterialism to argue that objecthood is neither how a thing is defined nor what it does. Instead it is the object's irreducibility to a definition or an act.

As Levi Bryant, who coined the term object oriented ontology suggests, materialism has become a term of art, which has nothing to do with anything material[28], but does the term immateriality do a good job of covering the current situation? Although there is a transition towards a phenomenological, relation oriented description of materiality, some artists working with digital sources still produce concrete objects in physical spaces. Artist Hito Steyerl on the other hand, argues that all that is digital already transitions to a

[25] Joshua Simon, "Neo-Materialism, Part Three: The Language of Commodities," *e-flux* journal 28 (2011), accessed July 1, 2017, http://www.e-flux.com/journal/28/68041/neo-materialism-part-three-the-language-of-commodities/
[26] Graham Harman, *Immaterialism: Objects and Social Theory*, Cambridge and Malden: Polity Press, 2016), p. 14-16.
[27] Ibid., p. 20.
[28] Levi R. Bryant, *Onto-Cartography: An Ontology of Machines and Media*, Edinburgh: Edinburgh University Press, p. 2.

material state: Data, sounds, and images are now routinely transitioning beyond screens into a different state of matter. They surpass the boundaries of data channels and manifest materially. They incarnate as riots or products, as lens flares, high-rises, or pixelated tanks.[29] Thus the manifestations of the changing nature of materiality are two-fold: as the new materialism suggests, the term "material" does not necessarily point to a physical object, or as immaterialism suggests, an object does not necessarily have a physical existence, and something digital can carry materialistic features.

[29] Hito Steyerl, "Too Much World: Is the Internet Dead?" *eflux* journal 49 (2013), accessed October 2, 2017, http://worker01.eflux.com/pdf/article_8974420.pdf.

Chapter 2

Materialism and Waste: Artists Rag-picking Digital Debris

Artist as Ragpicker

Charles Baudelaire's "Le Vin des chiffonniers" ("The Ragpickers' Wine") was published in *Les Fleurs du Mal* in 1857, while urban commodity capitalism was emerging in Paris. In this poem Baudelaire described the ragpickers as a figure who was "harassed by domestic worries, ground down by their work, distorted by age, worn-out, and bending beneath a load of debris, the commingled vomit of enormous Paris." This figure who collected the debris of the city was first mentioned one year before Baudelaire wrote "Le Vin des chiffonniers", when he published a prose description of the figure: "Here we have a man whose job is to gather the day's refuse in the capital. Everything that the big city has thrown away, everything it has lost, everything it has scorned, everything it has crushed underfoot he catalogues and collects. He collates the annals of intemperance, the capharnaum of waste. He sorts things out and selects judiciously: he collects like a miser guarding a treasure, refuse which will assume the shape of useful

or gratifying objects between the jaws of the goddess of Industry."[30] This figure is very relevant in contemporary context because Internet users all ragpickers collecting the digital debris, sorting it out and recycling. In this chapter, I will develop the idea of 'artist as ragpicker' by referring to Baudelaire's and later Benjamin's writing about the figure of the ragpicker. I will then discuss waste and abundance in relation to materialism, and argue that the 17th century still life paintings and post-Internet art can be similar in terms of how they reflect material culture.

Benjamin's text on Baudelaire is useful in contextualizing the figure of the ragpicker: "When the new industrial processes gave refuse a certain value, ragpickers appeared in the cities in large numbers. The ragpicker fascinated his époque… A ragpicker cannot, of course, be considered a member of the *bohème*. But from the *litterateur* to the professional conspirator, everyone who belonged to the *bohème* could recognize a bit of himself in the ragpicker. Each person was in a more or less blunted state of revolt against society and faced a more or less precarious future. At the proper time, he was able to sympathize with those who were shaking the foundations of this society."[31] After Baudelaire, Benjamin portrays the ragpicker as a more relatable and ordinary figure.

Benjamin's writing emphasizes the use value of objects and the idea of useful against wasteful. He draws a parallel between the poet and the ragpicker by situating Baudelaire as someone who uses the debris of the society as source material, seizing that which seems useful in part because society has found it useless. Benjamin states, "ragpicker and poet: both are concerned with refuse, and both go about their solitary business while other citizens are sleeping; they even move in the same way. [...] Baudelaire the ragpicker who collects urban detritus only to turn it into poetry."[32] In this sense, there is a similarity between the poet and the ragpicker: the poet strolls the city and searches for

[30] Charles Baudelaire, *Oeuvres complètes de Charles Baudelaire*, vol 1 (Paris: Conard, 1952), p. 249.
[31] Walter Benjamin, "The Paris of the Second Empire in Baudelaire," *The Writer of Modern Life: Essays on Charles Baudelaire* (Cambridge and London: The Belknap Press of Harvard University Press, 2006), p. 53-54.
[32] Ibid., p. 108.

inspiration while the ragpicker gathers up the refuse he encounters. There is a political aspect of picking what the society labeled as useless. This very political aspect creates value, which will be discussed later in this chapter. Artist and curator Gillian Whiteley also argues that the figure of the ragpicker is a useful model for thinking about current artistic practices. "Since the early nineties, the dominant visual model is closer to the open-air market, the bazaar, the souk, a temporary and nomadic gathering of precarious material and products of various provenances…With the nomadic gathering of precarious materials and products; using 'recycling' (a method) and chaotic arrangement (an aesthetic), the ragpicker and the bricoleur […] present powerful models for recent and current artistic practice."[33] While Baudelaire was writing about ragpickers, collector Edmond de Goncourt coined the term 'bricabracomania' the accumulation craze that was emerging at the end of nineteenth century. It was described as the collection of items for the sake of collecting, for obsessively acquiring objects that had some aesthetic quality, became a possibility for the bourgeois.[34]

Waste and Value

How does the materiality and value of an object change when it up scales to an artwork? Before moving on to artists' appropriation strategies for using waste to make new works and to transform waste to value, I will elaborate more on what waste (or other words that can be used instead like garbage, residue, refuse, rubbish, leftover, debris, junk) stands for. Whiteley defines waste as an adjunct of luxury and she states by which name we call it, it depends on economic wealth and excess production.[35] Abundance or redundancy creates waste, and in turn waste is used to reflect this abundance creating a vicious circle. The materialist culture creates waste as it motivates for accumulation of objects in excessive amounts. According to theoretician Maurizia Boscagali, garbage is the most characteristic object-hoard of consumer

[33] Gillian Whiteley, *Junk: Art and the Politics of Trash* (London: I.B. Tauris, 2010), p. 12.
[34] R. G. Saisselin, *Bricabracomania: The Bourgeois and the Bibelot* (London: Thames and Hudson, 1985), p. xiv.
[35] Gillian Whiteley, *Junk: Art and the Politics of Trash* (London: I.B. Tauris, 2010), p. 6.

culture, and its outlaw underside. Thus, it occupies a dangerous, potentially disruptive position. Stuff is always on the verge of becoming trash; composed of commodities destined to be trash, it is trash's natural ally.[36] What becomes garbage is relative to what becomes valued, and things fluctuate constantly between being wasted and being valued. This oscillation creates a tension. In the digital realm, this oscillation is even faster and we are allowed to collect, hoard, consume more things. Thus, the artists who work with digital junk have an immense variety of still and moving images and sounds to collect, use, re-use. All data on the Internet is constantly archived: nothing gets thrown away, nothing gets lost. The unpicked portion of big data is already very big, and it gets bigger. Hoarding on the Internet is encouraged because the materiality of the digital (electricity, power, data farms, etc.) is not easily perceptible.

Revisiting what has already been created or used, to make use of it in a different way, is not a novel idea. Re-contextualizing an object, theorized as appropriation, is a strategy that is frequently used by numerous artists going back to Duchamp's ready-mades. Appropriation is now one of the ways in which online debris is used and digital junk is reconsidered. As Nicolas Bourriaud argues, "since the early nineties, an ever increasing number of artworks have been created on the basis of preexisting works; more and more artists interpret, reproduce, re-exhibit, or use works by others or available cultural products. [...] These artists who insert their own work into that of others contribute to the eradication of the traditional distinction between production and consumption, creation and copy, readymade and original work. The material they manipulate is no longer primary. Notions of originality (being at the origin of) and even of creation (making something from nothing) are slowly blurred in this new cultural landscape marked by the twin figures of the DJ and the programmer, both of whom have the task of selecting cultural objects and inserting them into new contexts."[37]

[36] Maurizia Boscagli, *Stuff Theory*. *Everyday Objects, Radical Materialism* (New York and London: Bloomsbury Publishing, 2014), p. 228.
[37] Nicolas Bourriaud, *Postproduction. Culture as Screenplay: How Art Reprograms the World* (New York: Lukas & Sternberg, 2002), p. 5.

Another issue is the reproducibility of a work. What was once defined as unique and handmade is now numerous and machine made. Benjamin argues that the artworks have always been reproducible in theory because objects could be copied as they were made. However, he differentiates between reproducing an object and technological reproduction. He states that around 1900, the technological reproduction captured a place of its own among the artistic processes.[38] The main difference that Benjamin brought to the table was that the here and now, the authenticity of the artwork changed drastically. He introduced the idea of discarding art object's unique existence. "[The work's] history includes changes to the physical structure of the work over time, together with any changes in ownership. While the changes to the physical structure of the work are traceable by chemical or physical analysis, the changes of ownership form the tradition, which necessitates the original work and its location."[39] Benjamin believed the changed circumstances devalued the here and now of the artwork in the 1900s. The current situation where original brand products and their imitations are made in the same sweatshops is an interesting way of thinking about what the mechanical reproduction means for the value of artworks. The artist group Raqs Media Collective argues that the more things multiply, the more they tend towards similarity, in form and appearance, if not in function.[40] According to media historian James Knapp, the uniqueness gets lost because we are unable to trace the transformation from original to the copy. "What Benjamin saw as the effect of a virtual lack of an original is actualized as a real lack of origin (the master and copy are identical); where analog reproductions can be traced back to an original point at which a material translation occurred, digital reproductions lack this intermediary step. The most obvious implication of the shift to digital technologies is the complete loss of material authority."[41]

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[38] Walter Benjamin, *Selected Writings Volume 3 1935-1938*, ed. Howard Eiland and Michael W. Jennings, trans. Edmund Jephcott, Howard Eiland, et al. (Cambridge and London: The Belknap Press of Harvard University Press, 2002), p. 102.

[39] Ibid.

[40] Raqs Media Collective, "X Notes on Practice: Stubborn Structures and Insistent Seepage in a Networked World," Geoff Cox and Joasia Krysa, ed. *Engineering Culture: On 'The Author as (Digital) Producer'* (New York: Autonomedia, 2005), p. 211.

[41] James A. Knapp, "Essayistic Messages: Internet Newsgroups as an Electronic Public Sphere," *Internet Culture*, ed. David Porter (New York: Routledge, 1997), p.190.

How about contemporary practices of reproduction in the form of re-using the Internet debris, found footages, found images, or any kind of digital found-material? Physical found materials have a certain authenticity, they might be reproducible as objects, but they have a "here and now" to themselves. However, infinitely many different sources or users on the Internet reuse online found materials. Perhaps a distinction between ragpicking the real waste versus online material is the inefficiency of the latter: No matter how intense Internet users make use of the digital debris, it will keep increasing. Ragpicking on the Internet therefore does not decrease the amount of waste. On the contrary, any act on the Internet contributes to the incremental growth of the data, which has arguably no functionality unless it is sorted. Today the Internet is Paris' modernity, where artists are ragpickers: the poets and ragpickers of the 19th century who were symbolic figures of decline, dirt, waste, refuse and debris are now creating value out of the found material on the Internet. Vito Campanelli also argues that contemporary forms, knowledge, creative acts and social formations are all temporary configurations of an endless flow of data.[42] These configurations become waste and they are reconfigured in no time. Where does the value of artwork lay in this cycle of waste-value?

According to Benjamin "the unique value of the "authentic" work of art always has its basis in ritual. [...] As soon as the criterion of authenticity ceases to be applied to artistic production, the whole social function of art is revolutionized. Instead of being founded on ritual, it is based on a different practice: politics."[43] Anthropologist Arjun Appadurai also considers politics as the link between exchanged commodities because found art objects stand for great examples of commodification by diversion. By decontextualizing the found object, its value is enhanced. "Politics (in the broad sense of relations, assumptions, and contests pertaining power) is what links value and exchange in the social life of

[42] Vito Campanelli, *Web Aesthetics: How Digital Media Affect Culture and Society* (Rotterdam: NAi, 2010), p. 201.
[43] Benjamin, *Selected Writings Volume 3*, p. 105.

commodities."[44] Benjamin's writing was pivotal because it structured future thinking on authenticity and politics as a generator of value.

Baudrillard also theorizes that there can be an authentic form of simulation, and the object needs two features to be categorized as art: the signature of the artist and a series of works bearing the same signature, the oeuvre.[45] Placing value on a work, also phrased as the commodification of artwork, is directly connected to the fact that the work is being made by an artist. This idea emphasizes the artist as creator of the market rather than the materiality of the outcome. As art critic and theoretician Isabelle Graw also puts it, for an artwork to be considered valuable it must first be attributed to an author. Value not in the sense of "price" but in the sense of a symbolic worth that is attested to it once it circulates as a commodity.[46]

Marx's definition is similar in terms of placing value on labor rather than the material itself. He defines value as "labor in its congealed state," and for him value is the material realization of human labor. Value can only be generated in a material thing if labor (and therefore lifetime) has been stored in it."[47] But labor, for Marx, can encompass immaterial labor as well —no physical labor needs to have been expanded, no concrete material used, for value to come into existence. This means that conceptual or performative art practices are also value-generating forms of labor. In terms of waste-value scale, where do we place the value of immaterial labor? Immaterial labor can also be transformed into waste, or its value can emerge from waste. In this sense, the immaterial labor can also be commodified.

[44] Arjun Appadurai, "Introduction: commodities and the politics of value," *The social life of things: Commodities in cultural perspective*, ed. Arjun Appadurai (Cambridge: Cambridge University Press, 1986), p. 57.
[45] Jean Baudrillard, For a Critique of the Political Economy of the Sign (St Louis, MO: Telos Press, 1972), p. 102.
[46] Isabelle Graw, "The Value of Liveliness," *Painting beyond Itself. The Medium in the Post-medium Condition,* ed.Isabelle Graw and Ewa Lajer-Burcharth (Frankfurt am Main: Sternberg Press, 2016), p. 97.
[47] Karl Marx, *Price and Profit* (New York: International Co., Inc, 1969).

Abundance and Need

In “Material Culture in the Social World”, sociologist Tim Dant discusses how needs are mediated by culture, distinguishing between basic needs and ‘excessive needs’.[48] Thinking about abundance in relation to the categorization of needs is a useful method in terms of differentiating between abundance and waste. Can we talk about art as an excessive need? If so, how much of it is excessive? It is useful to search for an answer in a different discipline. For example, curator Joshua Simon draws parallels between obesity culture and culture of abundance by introducing the figure of the hoarder and comparing this figure to a collector. “The figure of the hoarder has likewise become prominent in contemporary culture. Political theorist Jane Bennett has discussed the character of the hoarder as a person who answers the call of things.” She claimed that in relation to things, the hoarder could be situated on a spectrum opposite the collector. While the latter uses judgment and choice in relation to things, subordinating them to her will, personality, and possession, the hoarder subordinates herself to the will and personality of things, and is possessed by them.”[49]

Similarly, art historian Norman Bryson talks about abundance as essential for the industry and discusses depictions of abundance in the 17th century Dutch still life paintings. The Dutch still life paintings reflect the 17th century European society’s attachment to material things. The paintings of dinner tables with incredibly varied selections of food show how abundance easily turns into waste. The desirable food on the table turns into debris and the relationship between abundance and waste is fluent. Also, in other types of paintings from the same period, we witness depictions of objects that are bought with abundant wealth. This strange urge to display possessions in paintings —while things themselves are also on display in the house— presents a double

[48] Tim Dant, *Material Culture in the Social World* (Philadelphia: Open University Press, 1999), p. 25.
[49] Jane Bennett, “Powers of the Hoard” (lecture delivered at the Vera List Center, New School, New York, September 2011.)

layer of consumerism: an urge to possess and to display. How did this idea evolve from the 17th century to today?

Pictures of possessions are trivially taken and effectively shared with networks today. There is an abundance of objects as well as an abundance of pictures of objects. The 17th century depictions of abundant objects and excessive food may be no different than today's post-Internet paintings and digital collages that feature expensive possessions. Attachment to material things and the urge to display them in various ways has not changed much. The differentiation between need and abundance is blurred in these paintings. According to Bryson, "Dutch still life painting is a dialogue between this newly affluent society and its material possessions. It involves the reflection of wealth back to the society which produced it, a reflection that entails the expression of how the phenomenon of plenty is to be viewed and understood.[50] Similarly there are many visual examples among post-Internet works, which feature objects of materialist culture.

Greek artist Miltos Manetas' *SELFIE* painting series of iPhones and MacBooks is a fitting visual example. (Fig. 2) Manetas paints iPhones with empty screens or with images on them. The painting *SELFIE II* has a very raw depiction. It is sketch-like with simple lines, and almost an unfinished look. The rawness of the painting contrasts with what the object in it stands for: a sleek, futuristic, clean and minimal technological device. Scottish artist Morag Keil's computer paintings are similar to Manetas' paintings in their sketchy depiction of technology. (Fig. 3-4) The way both Manetas and Keil depict these objects makes a case about the temporality of technology and how fast value becomes waste when it comes to technological advancements.

[50] Norman Bryson, "Abundance," *Looking at the Overlooked: Four Essays on Still Life Painting* (Cambridge: Harvard University Press, 1990), p. 96-185.

Fig. 2 Miltos Manetas, *SELFIE II*, 2010.

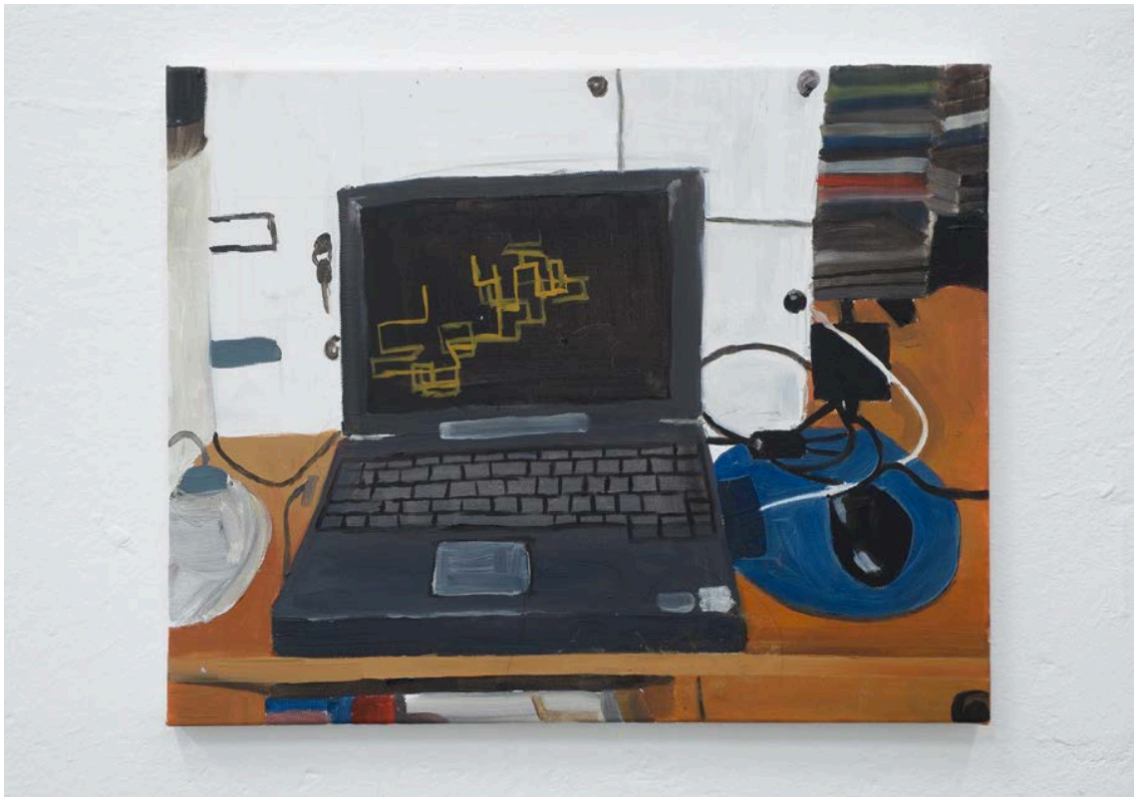

Fig. 3 Morag Kiel, *Computer 3*, 2016.

Fig 4. Morag Kiel*, Computer 4*, 2016.

Another artist who makes compositions with technological devices is Rachel Wolfson. Her *Material Paintings* are very similar to the idea behind 17th century Dutch still life paintings because there is a parallel between the objects in these paintings and our relationship with computers or phones. (Fig. 5) As Wolfson states "I felt it was necessary to consider the personal and physical aspects of a MacBook acquired in 2008 prior to its imminent replacement. To characterize the nature of my relationship to this device, and further reflect the ritual of its use, I was drawn to the structure of an archive and the sentiment of memento mori."[51] These examples feature technological objects of value, which have become symbols of status, just like ivory on a table or a lobster on a dinner table in still life paintings. For example, Jan Davidsz de Heem's *Still Life with Fruit and Lobster* depicts a table full of food and some objects like a silver jug and seashell. Apart from its religious references, it portrays the abundance of food symbolizing wealth and power to possess. (Fig. 6) It puts the owner of the painting in a position of power and places him/her together with their peers who are as wealthy.

Fig. 5 Rachel Wolfson, *Material Paintings*, 2014.

[51] Rachel Wolfson, "Material Paintings," Rachel Wolfson Personal Website, accessed August 7, 2017, http://rwolfson.com/material.

Fig. 6 Jan Davidsz de Heem, *Still-Life with Fruit and Lobster*, 1648-49.

As Wolfgang Fritz Haug argues, in late capitalism, appearance or form of commodities becomes detached from the objects themselves.[52] When the image becomes detached from the material object, the image itself becomes the carrier of value, which means there is no longer an interest in the objecthood of the work, but there is an increased engagement with the idea or image attached to them. This particular way of thinking introduces the idea that the digital culture is about an embedded value system which no longer is materialist in the sense that there is no carrier of value in material. However, it is still capitalist because there is a value generated by the sense of belonging among the peers who place similar values on similar images.

[52] W. F. Haug, *Critique of Commodity Aesthetics: Appearance, Sexuality and Advertising in Capitalist Society* (Cambridge: Polity Press, 1986).

Chapter 3

Case Studies: Christopher Kulendran Thomas, Timur Si-Qin, Simon Denny

This chapter will present the artists Christopher Kulendran Thomas, Timur Si-Qin and Simon Denny's works, in terms of their approach to material culture and discuss how they restructure material objects within the post-Internet context. The three artists share an interest in capitalism and refer to technological start-up companies as tools to communicate contemporary approaches to materialism. Through the projects mimicking start-up companies or new materialist/capitalist models, they belong to a generation of artists who use the material on the Internet as a starting point and digital found materials as building blocks for producing physical works.

Christopher Kulendran Thomas

London and Berlin based artist Christopher Kulendran Thomas was born in 1979 in London. Thomas' works contemplate new ways of making art in relation to accelerated capitalism. His works are not only a critique of the current status of global economy and materialist culture. He recognizes and even embraces the notions of technology-based moneymaking strategies, as a conscious decision to deal with them. First exhibited at the

9th Berlin Biennale and then at then at the 11th Gwangju Biennale, The *New Eelam* project, a mixed media installation including a video that he developed in collaboration with the curator Annika Kuhlman, introduces the idea of a start-up company as an artwork. (Fig. 7-10)

Fig. 7 Christopher Kulendran Thomas, *New Eelam* installation view, 2016.

Thomas creates a start-up company that pushes the boundaries between state/private and collective/individual in today's economy. He imagines a collectively-owned housing system as opposed to the current network of private house-owners. He also challenges the idea of the government in a corporate form, deconstructing the idea of government. Thomas' approach in forming *New Eelam* is very similar to what the blockchain technology and the cryptocurrency companies promise their users today. As discussed in the Introduction, blockchains are distributed databases. The chain that is formed by its users is secure and transparent because participants validate each entry to this virtual ledger. Blockchain is the technology behind cryptocurrencies like Bitcoin and Ether, pieces of software that runs on computers spread across a network. Its users communicate with each other to reach a shared consensus on the current state of a

cryptographically secured ledger.[53] The chain itself creates a system where all the participants rely on each other equally. It is a collective solution to deactivate a party like the government; it is a way that makes it possible to make monetary transactions with currencies that are not governed by any state, but rather governed collectively by a peer-to-peer system. Christopher Kulendran Thomas' *New Eelam* project offers a similar system for housing. New Eelam is the name of the start-up company, it is a brand, and it might have monetary value, as well as artistic value. Thomas' project blurs the lines between different value systems that we use for different commodities. What Thomas offers is possible, because he is not denying art's commodified status, nor does he ignore the fact that start-up companies are leading the economy. He manages to combine these facts to create a communally owned commodity (both the "fictional" company, and the installation itself).

Fig. 8 Christopher Kulendran Thomas, New Eelam installation view, 2016.

[53] Rob Myers, "(Conceptual) Art, Cryptocurrency and Beyond," *Furtherfield* (2014), accessed September 5, 2017. http://furtherfield.org/features/articles/conceptual-art-cryptocurrency-and-beyond.

Fig. 9 Christopher Kulendran Thomas, *New Eelam* installation detail, 2016.

On another level, Eelam is a place that no longer exists. Thomas' family was from this Sri Lankan island, which was an autonomous state until 2009 when the independence movement was destroyed by an authoritarian government. In the "New" Eelam, Thomas imagines a place that is free of nationalistic tendencies that are limiting for people: no territories, but a "distributed network", like the blockchain system. In this sense, *New Eelam* sheds light onto reimagining the materiality of art in today's context where there is a tendency to embrace an object-oriented approach to commodities. What can be said about *New Eelam*'s materiality? In a sense, the distributed network share and the communal aspect of ownership refer to a futuristic approach to commodity. It is not as naive as utopian communism, while it is not as harsh as the accelerated capitalist economy. As curator and critic Jeppe Ugelvig argues, in Thomas' work, the future of the

political Left lies in a mutation of capitalism's own accelerated state of being.[54] Although it is a mixture of many things every time it is set up, the work itself has a value, which could be exchanged with other commodities. It is flexible and adaptable, but the idea itself (the "fictional" start-up company") is fixed, and Thomas even presents a promotional video of the company. The installation is branded with the company's pseudo-futuristic logo and other types of advertisement material. Also, the project is ongoing, evolving and taking a different shape every time it is exhibited. In this sense, every exhibition is another contribution to the chain. This idea is a reminder of the immaterialist way of thinking about an art object where there is room for development and the work itself is a never-ending process. As Bourriaud phrases, the artwork is no longer an endpoint, but a simple moment in an infinite chain of contributions.[55]

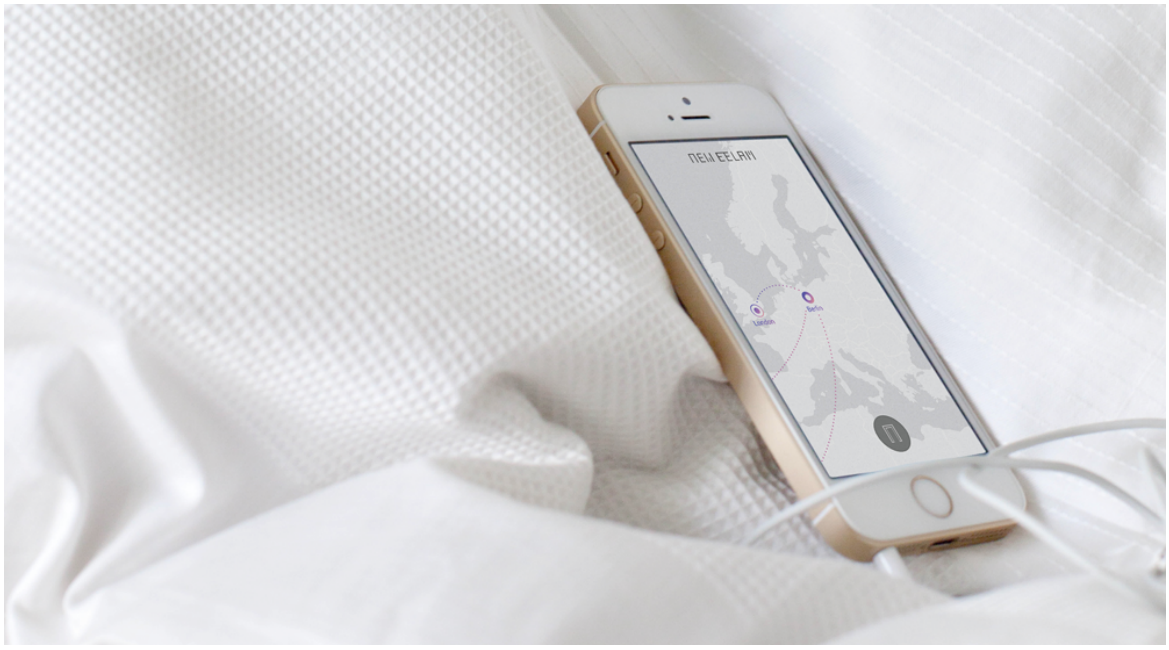

Fig. 10 Christopher Kulendran Thomas, *New Eelam* advertising detail, 2016.

An earlier work of Christopher Kulendran Thomas, titled *When Platitudes Become Form*, which he continues to work on since 2012, is at first glance a play on the significant exhibition "When Attitudes Become Form" curated by Harald Szeemann at Kunsthalle

[54] Jeppe Ugelvig, "New Eelam and the dispersion of critique," *Dis Magazine* (2016), accessed September 7, 2017. http://dismagazine.com/discussion/83299/new-eelam-and-the-dispersion-of-critique/.
[55] Nicolas Bourriaud, *Postproduction. Culture as Screenplay: How Art Reprograms the World* (New York: Lukas & Sternberg, 2002), p. 5.

Bern in 1969. This exhibition introduced the idea that in exhibition making, the sum is greater than its parts. The exhibition as a whole is what matters, rather than the individual artworks. Thomas, on the other hand, plays with the word ‘attitude’ and alters it to ‘platitude’ to refer to the objects that he uses in this ongoing installation project. In this project, Thomas produces a variety of objects with the works of Sri Lanka’s young contemporary artists. He restructures these artists’ works and circulates them in a different art market as part of his project – art as network. (Fig. 11)

Fig. 11 Christopher Kulendran Thomas, *When Platitudes Become Form*, 2013.

His manipulation of existing works raises questions about the value of the artwork: how are things commodified, valued, devalued, revalued, and exchanged with other things? Thomas' intervention to existing works from Sri Lankan artists, is to present them together with certain objects of materialist culture like Nike shirts and bags. This strategy also functions as a reminder of the production conditions of these products. With this strategy Thomas raises questions about the post-Internet aesthetic that dominates the contemporary art world, without really moving away from it. He criticizes by repeating the leading trends which almost turn into formulas for success in the Western oriented global art scene. Thomas' works are double layered (individual parts of the installation). On a surface level the framed Nike shirts combined with Sri Lankan artists' works can be placed in line with post-Internet works which reflect a certain shared aesthetic: reflecting on material culture and materializing the digital visual culture. However, at a deeper level there is an overt criticism of the current global art economy and the way it is materialized.

Timur Si-Qin

Another artist who deals with similar issues by structuring works around an imaginary brand is Timur Si-Qin, who was born in 1984. He is a Berlin-based artist of German and Mongolian-Chinese heritage, who grew up in Beijing and the United States. His works make use of the commercial language. Similar to the works of Christopher Kulendran Thomas, he created a brand called "New Peace". He researches materialism and how new technologies shape the materiality of art. He states that virtual has a materiality and should not be classified as immaterial. "No longer is material (actual or virtual) an inert and lifeless substance that forces act upon to create forms and patterns, but rather, materials have self-organization, form and pattern immanent to them. This understanding brings the most conceptual or immaterial art back into the realm of material research."[56]

[56] Timur Si-Qin, "Metamaterialism", *Pool* (2011), accessed September 7, 2017. http://pooool.info/metamaterialism/.

The artist showed the installation *A Reflected Landscape* in 2016 at the 9th Berlin Biennale. (Fig. 12-14) He ridicules the common type of reflected landscape photographs with the title, but the installation features a different take on the idea of "landscape". The green natural elements, installed plants and soil are combined with videos branded with the reimagined version of the artist's imaginary fashion brand "Truth by Peace": the logo of "New Peace", which the artist calls a materialist-spiritual institution. Small forest-like parts of the installation are enhanced with waste products like plastic covered with soil. The branded, advertisement-like panels contrast with the trees around them, but the sleek, clean and futuristic appearance feels like we are on an earth-like planet in the future.

Fig. 12 Timur Si-Qin, *A Reflected Landscape* installation view, 2016.

According to the press release of the installation, Si-Qin suggests that humans and nature are mutually symbiotic agents that represent and construct each other.[57] His object-oriented ontology approach extends nature's capabilities in a new and creative way. As we constantly consume the language of materialist culture through the marketing

[57] 9th Berlin Biennale for Contemporary Art, accessed September 7, 2017. http://bb9.berlinbiennale.de/participants/si-qin/.

strategies, advertisements, conventional media and social media feeds, Si-Qin not really critiques, but embraces what is impossible to escape from. The anthropocene age's scary prediction about the planet's end, is the motivation behind Si-Qin's installations where he places the work in a non-indicated near future. According to Si-Qin, technology and culture are also products of nature. In an age of the post-subject, an image cannot comment or re-present, but only present the culture that begets it.[58]

Fig. 13 Timur Si-Qin, *Mirrorscape Effigy 1*, 2016.

[58] Pablo Larios, "Review: Timur Si-Qin," *Frieze* (2014), accessed August 8, 2017, https://frieze.com/article/timur-si-qin.

Fig. 14 Timur Si-Qin, installation view of *A Reflected Landscape*, 2016.

Over time, Si-Qin's work evolves and the brand changes accordingly. The continuity of his projects shows a similarity to Thomas' approach. Si-Qin evolves his installations in time, each time extending or building them in various different ways. His *New Peace* project is an example to his continuous approach to art-making. In his 2016 exhibition *A Place Like This* at Team Gallery, Si-Qin imagines different areas an office space that is more like a showroom, a glass desk, chairs and a branded wall with New Peace logo. An installation featuring a topological box with a screen branded with its logo, half a tree trunk lying on the floor connecting to another screen featuring post-Internet futuristic imagery. The materiality of the technological environments intertwines with the natural elements, and the lack of human presence underlines the dichotomy between the two, as well as questioning object-nature relationships. According to the press release of the exhibition, New Peace takes form through the imagined-trappings of a cult that worships matter and believes that reality and its cosmic, biological and cultural evolutions exist to create the greatest variation of form possible in the universe, and for matter to experience all variations of itself. This principle is summarized by the text found in the crest form of the logo, *replicatio variationi servit*, Latin for "replication serves variation" in

the exhibition.[59] Si-Qin states that he rebranded PEACE to become NEW PEACE, structuring it as a kind of materialist cult from the future.[60]

The artist's previous fictional brand Truth by Peace was presented in his solo show *Biogenic Mineral* at Magician Space in Bejing. (Fig. 15-16) The brand appears in his installations as a fashion label. Rocks, led lights, and fashion photo shoot photographs featuring Asian models are dominant in the exhibition. Assigned value of a brand or the perceived value of a label is materialized in the rocks that become structures to hold the futuristic fashion imagery. As the artist states, his work revolves between the transformation of material and matter.[61] Si-Qin transforms the material from popular culture or material culture, to create an environment where these images are in a dialogue different from their previous contexts. For him, the adaptation of the influential brand Hood by Air (founded by the designer Shayne Oliver, who now suspended the brand to focus on a special collection for Helmut Lang), into Truth by Peace is similar to transformational processes in the nature.

[59] Team Gallery, "A Place Like This," Timur Si-Qin Personal Website (2016), accessed August 7, 2017, http://timursiqin.com/a-place-like-this/.
[60] Dylan Kerr, "Is Art Just Another Ad? Timur Si-Qin on Why Artists Need to Embrace Their Brands," *Artspace* (2016), accessed August 7, 2017, http://www.artspace.com/magazine/interviews_features/qa/timur-si-qin-interview-53906.
[61] Magician Space Bejins, "Biogenic Mineral," Timur Si-Qin Personal Website (2015), accessed August 7, 2017, http://timursiqin.com/biogenic-mineral/.

Fig. 15 Timur Si-Qin, *Biogenic Mineral*, installation views, 2015.

Fig. 16 Timur Si-Qin, *Biogenic Mineral*, installation view, 2015.

In his work *Premier Machinic Funerary: Part I* shown at Taipei Biennial "The Great Acceleration" in 2014, Si-Qin uses his brand Truth by Peace again, and marks it with

logos for an imagined funeral of 3d printed replicas of proto-human bones. As Si-Qin states, “I’ve heard arguments against New Materialism that say it’s missing the subjective or human side of things, but I think ultimately this is the only way to get to that human side.”[62] The way Si-Qin approaches materialism is considerate of the relationships between objects. He brings together an imagined brand with natural rock formations to suggest that technology start-ups are part of the global economy. His work recognizes the current situation and responds to it.

Simon Denny

Simon Denny was born in 1982 in Auckland and is based in Berlin. Denny’s work explores possible outcomes of the future of the blockchain technology. The artist believes that the blockchain offers a free governance system, which can be used in different fields, not just finance. Denny often uses existing tech start-ups, blockchain foundations, or successful tech companies in his work. His approach differs from those of Christopher Kulendran Thomas and Timur Si-Qin because he takes real companies as his subjects, and materializes their presences, rather than creating imaginary start-ups. Denny renders these companies and their technologies more accessible by visualizing them using popular and known visuals from games like Pokémon or Risk.

[62] Dylan Kerr, “Is Art Just Another Ad? Timur Si-Qin on Why Artists Need to Embrace Their Brands,” *Artspace* (2016), accessed August 7, 2017, http://www.artspace.com/magazine/interviews_features/qa/timur-si-qin-interview-53906

Fig. 17 Simon Denny, *Blockchain Future States* installation view, 2016.

Blockchain Future States is an installation based on three blockchain platforms: Ethereum, 21 and Digital Asset. (Fig. 17-18) With large cutouts, Denny portrays the economist Blythe Masters, CEO of blockchain tech company Digital Asset to represent a capital markets perspective, investor Balaji Srinivasan, CEO of Bitcoin start-up 21 Inc. to represent the Silicon Valley, and programmer Vitalik Buterin, co-founder of the cryptocurrency called Ether and its company, Ethereum. Denny reimagines the game Risk for each of the three companies. Blockchain, as a decentralized transaction system and a new and efficient way of governance, is translated into a Risk game —strategy board game of diplomacy, conflict and conquest— and a visual representation of the people who are in charge of it. With this strategy, Denny emphasizes the future potential of this technology, and makes it easier to grasp for people who are not familiar with the blockchain. Denny also uses the image of Pokémon's hero Ash to visualize the story behind the founder of this technology. Satoshi Nakamoto, a mysterious figure, invented the Bitcoin in 2008, so far eight people have been arrested with the claim of impersonating him. *Satoshi* is the Japanese for ash, and Denny uses this connection to visualize the complex situation. "'Ash' rises from the ashes of the current currency

system, he becomes the savior of how the cryptocurrency saves us," says Denny in an interview.[63] He explores how the blockchain can shape the future beyond cyrptocurrencies, and what can be the consequences of having this technology available.

Fig. 18 Simon Denny, *Bitcoin/Blockchain Founder Myth Oversized,* 2016.

Simon Denny and Linda Kantchev's *Blockchain Visionaries* (2016) is a different version of his previous work described above. For this work Denny uses the three companies and how they are branded to create information booths and postage stamps related to each company. The stamps describe each company's future goals and potential. Denny materializes the blockchain companies through these stamps and the branding of the information booths. His crafted installation creates a contrast with the high-tech profiles and hard-to-grasp technological concepts like blockchain. Jacob Proctor states "Denny

[63] Nadja Sayej, "Simon Denny: the artist explaining blockchain with Pokemon," *The Guardian* (2016), accessed Augusy 7, 2017, https://www.theguardian.com/artanddesign/2016/aug/26/simon-denny-artist-blockchain-pokemon.

translates cultural systems into material objects, documenting previously unexcavated histories and lending tangible form to what are often ephemeral events."[64]

Another work where Denny materializes the technology companies' futuristic language and visuality is *All You Need is Data – The DLD 2012 Conference Redux* (2012). (Fig. 17) Denny's site specific installation at the Kunstverein Munich was created after the conference titled "All You Need Is... DATA?" Denny installed 89 works representing the conference in a metallic structure that connects all works together, forming a network between the figures featured in each poster. Each work brought to fore a speaker from the conference. Speakers included Twitter's CEO Jack Dorsey, Wikipedia's co-founder Jimmy Wales, Chief Operation Officer of Facebook Sheryl Sandberg, founder of 4chan Chris "Moot" Poole, and founder and CEO of Tumblr David Karp. Each work displayed a speaker's profile: photos, conference staging and quotes. The artist reduced the futuristic identity of these companies to printed, non-technological representations. The installation materialized the high-tech digital promise of the conference.

[64] Simon Denny and Jacob Proctor, "1000 Words: Simon Denny Talks About Secret Power," *Artforum* (May 2015): 336-341.

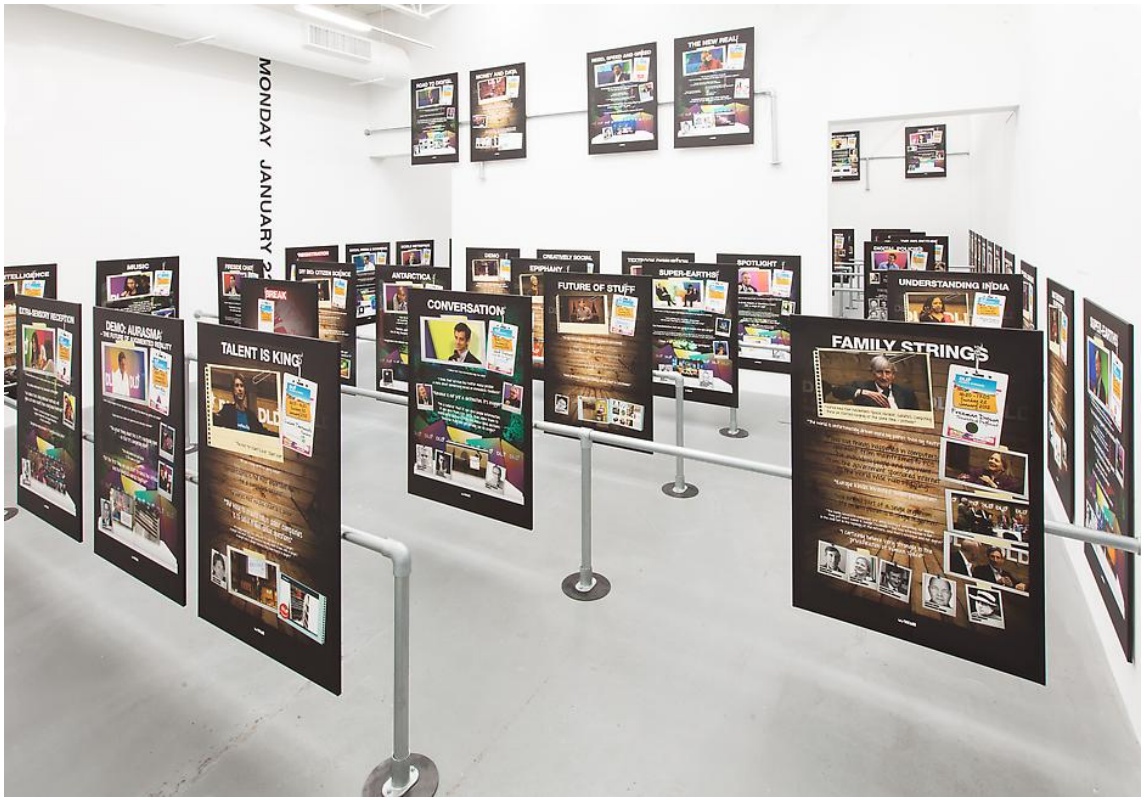

Fig. 19 Simon Denny, *All you need is data: the DLD 2012 Conference REDUX rerun*, installation view, 2013.

Simon Denny focused on Samsung as one of the most successful tech companies in sales in his exhibition *New Management* (2014) at Portikus in Frankfurt am Main. (Fig. 20) The name referred to Samsung's meeting held in Frankfurt in 1993. Denny re-imagined the meeting setup in this installation and created a drawing of the room based on his research. Denny used many Samsung products, even an air-conditioning unit with phrases like "Defects are like cancer" and "Change towards 100% quality" printed on it. Samsung, a global tech giant, is contained in a room as more than just a technology company —as the creator of the global future.

Fig. 20 Simon Denny, *New Management* installation view, 2014.

Although it is not an imagined start-up, *New Management* visually resembles Timur Si-Qin's *New Peace* and Christopher Kulendran Thomas's *New Eelam.* All three artists materialize digital concepts like technology, blockchain, virtual reality, cloud computing and artificial intelligence. They offer new ways to understand what these technologies undertake and how they can shape future endeavors. Our idea of the future is constantly shaped and updated by the technological advancements and the companies that lead technology. These works are a way to visualize and materialize what is hard to perceive otherwise. It is useful to remember Christiane Paul's term neomateriality, which describes a materiality that is shaped by digital data. Christopher Kulendran Thomas, Timur Si-Qin and Simon Denny embrace this strategy in their works. Why is there a need to materialize the dematerialized? It may suggest that the technological advancements have faster pace than humanity's intellectual growth, or that materiality persists by transforming itself.

Chapter 4

Re-Defining Materiality by Temporal Means

What does it mean to define materiality by temporal means rather than physical means? American artist Brad Troemel who uses the Internet as a source material in his works, asks, "What are the implications of artists being limited by time, as opposed to more physical limitations like space and material resources?"[65] Troemel formulates this question in response to the artists working and exhibiting on digital platforms. Although Troemel's question is interesting, when the limitation is time, the importance of material resources can manifest at the machine level: better material resources can mean better technology to work with. On the other hand, if we assume that materiality of an art object relies on the premise that it exists once at a given time and is unique, what are the implications of having a platform, in this case the blockchain, which can make this possible?

The blockchain as a secure, transparent, self-governed and decentralized database, promises scarcity and authenticity on digital platforms, which can have two important implications on art: it can have a profound impact on the way we think about ownership of art, and it can change the materiality of art when used as a medium.

[65] Brad Troemel, *Peer Pressure: Essays on the Internet by an Artist on the Internet* (Brescia: Link Editions, 2011), p. 27.

Blockchain and Art Ownership

Blockchain is more dominantly used for transaction, ownership, and distribution of goods. Therefore, its impact on art in these areas is foreseeable. Before moving onto how the blockchain can be used by collectors or dealers, I will briefly introduce influential critic of capitalism Thorstein Veblen's 1898 text on ownership because it sheds light on how we can think about and understand ownership in today's context.

Veblen argues that the idea of property was introduced by the subjectivity of objects. He defines ownership as an accredited discretionary power over an object on the ground of a conventional claim; implying that the owner is a personal agent who takes thought for the disposal of the object owned.[66] For example, the blockchain book, which will be discussed in the upcoming part of this chapter, grows on this idea: each owner of the book takes thought for the disposal of the book. Thus, every copy is unique and can be owned by only one person at a time. Veblen also argues that the thing owned has a consciousness of its own, which can be read as similar to an object-oriented approach.

The impacts of technology on collecting and the embedded urge to possess can be profound. It is interesting to go back to the 39th President of the United States Jimmy Carter's talk where he states, "Human identity is no longer defined by what one does, but by what one owns. But we've discovered that owning things and consuming things does not satisfy our longing for meaning. We've learned that piling up material goods cannot fill the emptiness of lives which have no confidence or purpose."[67] Almost forty years later, this idea is still in effect. Piling up material goods is common and our digital routines seem to fit into the consumer culture, which encourages collecting and

[66] Thorstein Veblen, "The Beginnings of Ownership," *The American Journal of Sociology* Vol. 4 (1898), p. 358.
[67] Jimmy Carter, "Crisis of Confidence," (speech presented at the White House, Washington, DC, July 15, 1979), accessed July 26, 2017, https://www.youtube.com/watch?v=_lHplhMChZQ

ownership. However, the nature of ownership changed in ways that Carter would not be able to imagine back then. As introduced in the beginning, the idea of art turning into shares on the blockchain has been put on practice. Buyers can have a share of an artwork, which is bound to stay in a warehouse. The stakeholders make profit if the work's market value increases.

The changing nature of ownership and collecting is connected to the changing nature of materiality. As Diana Coole and Samantha Frost state in their introduction of the book New Materialisms, materiality is always something more than mere matter: an excess, force, vitality, relationality, or difference that renders matter active, self-creative, productive, unpredictable. "New materialists are rediscovering a materiality that materializes, evincing immanent modes of self-transformation that compel us to think of causation in far more complex terms; to recognize that phenomena are caught in a multitude of interlocking systems and forces, and to consider anew the location and nature of capacities for agency."[68] How does the artistic production reflect this new materiality?

As David Joselit states, "The art world, in all of its formats, has become a vast accumulation of potential energy whose enormous reserves are beyond the capacities of any individual to consume. It is a giant reservoir of deferred experience."[69] According to Joselit, art is about the future potential, or the "futurity" of an object. It is an accumulated potential, which cannot be consumed in its entirety. The social and political aspect of it creates value, which can materialize the immaterial. Thus, artists sort and compile data that is collectively accumulated. "A radical realization of art, then, would be the deposition of the sovereign producer and a return of the shared wealth of creativity to its true owners: the multitude. For this reason, an appropriation and

[68] Diana Coole and Samantha Frost, "Introducing the New Materialisms," *New Materialisms: Ontology, Agency, and Politics, ed.* Diana Coole and Samantha Frost, (Durham, NC: Duke University Press, 2010), p. 9.
[69] Davit Joeselit, "Marking, Scoring, Storing, and Speculating (On Time)," *Painting beyond Itself. The Medium in the Post-medium Condition,* ed. Isabelle Graw and Ewa Lajer-Burcharth (Frankfurt am Main: Sternberg Press, 2016), p. 11-20.

transformation of the artistic means of production comes to the fore - an opening up of cultural source codes to an undetermined end."[70]

Starting from the 1990s, the Internet, as an open source, had a revolutionary impact on art production as well as challenged its users about owning, licensing and exchanging the digital. While the Internet is open source, the blockchain secures the transactions through its system of chains. Some obvious implications of the blockchain's secure transaction promise are: better functioning licensing systems, controlled circulation, digital collection management, and digital ownership where the history of previous owners is digitally embedded on the artwork. The blockchain as a medium for art, on the other hand, can have more complicated effects on art production.

Blockchain as Medium for Art

What does it mean to make art on the blockchain? Blockchain technology makes it possible to create a system that has total autonomy in itself, and it guarantees uniqueness by authenticating digital objects. Thus, an art project on the blockchain could be conceptualizing a system that would function without an authority, which would log each response on itself. For example the community for networked and new media art Further Field's recent blockchain art commission call gives examples of what they are looking for: it can be a smart contract that sits on the blockchain for interaction by an art audience via a web browser, a visualization of blockchain activity, whether famous hacks or daily coffee purchases, a set of complex scripts or transactions that make the blockchain itself into art, crypto tokens, assets or trading cards that make a game of blockchain value thought experiments.[71]

[70] Berry Slater, "Introduction to 'The Author as (Digital) Producer'," *Engineering Culture: On 'The Author as (Digital) Producer',* ed. Geoff Cox and Joasia Krysa (New York: Autonomedia, 2005), p. 20.

[71] "Blockchain Art Commission," Furtherfield, accessed September 17, 2017, http://furtherfield.org/projects/blockchain-art-commission.

On a more phenomenological level, using blockchain as a medium could mean to strip art from its concept. Bjorn Magnhildoen, who runs the production site Noemata for digital and netbased art, argues that being and time have a different relation in the context of the blockchain: they are conflated. He suggests that after the dematerialization of the art object, via conceptual art, perhaps now we might, through the blockchain, deconceptualize the artwork. “Art is not even immaterial: if conceptual art detached the material object from art, we are considering a type of post/non-conceptual art detached from the concept also.”[72] His approach problematizes conceptuality of art, rather than its materiality, because this hypothetical object can also be proved to exist without being produced. In his words, “this object is provable but disentangled from existence and concepts.”[73] It is critical to think about how art could continue in the given circumstances.

The book titled “A Universe Explodes” and originally written by T. L. Uglow, is a recent example that can explain the idea of using the blockchain as a medium for art. Created on the blockchain, the book only exists digitally. Each copy is unique, because in order to own a copy of the book, one needs to add one word and take out two words from each page. The book will be owned collectively by the people who reduce the book to only one word per page. The hundred versions of the book are each owned by one person at a time, and then they are passed on. Thus, the book can be owned by a limited number of people, and everyone can read its different versions. The book presents a hybrid model where owners are privileged to intervene and own a unique copy, meanwhile all copies are accessible to the readers. Baudrillard argues that objects have two functions to be put to use and to be possessed.”[74] Although it only exists digitally, the same can be said for the blockchain book, an object that can be put to use and be possessed.

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[72] Bjorn Magnhildoen, “Aphantasia – Blockchain As Medium for Art,” in *Artists Re:Thinking the Blockchain*, ed. Ruth Catlow, Marc Garrett, Nathan Jones and Sam Skinner (Liverpool: Liverpool University Press, 2017), p. 312.
[73] Ibid., 316.
[74] Jean Baudrillard, *The System of Objects*, trans. James Benedict (New York: Verso, 1996), p. 86.

Another ongoing art project titled *terra0* is also a conceptual project that functions on the blockchain. The idea is to create a self-owned augmented forest, which sells licenses and markets its resources to extend and eventually buy itself from the project initiators and expand its territories. According to its creators Paul Seidler, Paul Kolling and Max Hampshirethe, the project exemplifies non-human ownership, and it is a step towards post-human futures.[75] In this case, the blockchain enables an autonomous agent and experimentation with self-governance in art.

Examples of art on the blockchain illustrate a time-specific uniqueness to the digital object or the action. The artist group Raqs Media Collective states "the value of a good lies especially in that aspect of it which makes it imperishable, eternally reproducible, and ubiquitously available. Information, which distils the imperishable, the reproducible, the ubiquitous in a condensed set of signs, is the true capital of this age. A commodity is no longer only an object that can be bought and sold; it is also that thing in it which can be read, interpreted and deciphered in such a way that every instance of decryption or encryption can also be bought and sold. Money lies in the meaning that lies hidden in a good. A good to eat must also be a good to think with, or to experiment with in a laboratory. This encryption of value, the codification and concentration of capital to its densest and most agile form is what we understand to be intellectual property."[76] The idea that every instance of decryption or encryption can be exchanged, is what lies behind the blockchain and what makes the blockchain transactions unique. The encryptions of value in every transaction —be it monetary or adding a word to each page of a digital book— is unique and therefore time-specific. This time-specificity makes it possible to materialize a digital action or an object by temporal means. In the '90s, Maurizio Lazzarato coined the term "informational economy" to refer to valorization of digital actions. In his terms, Capital is obliged to turn 'immaterial

[75] Paul Seidler, Paul Kolling and Max Hampshire, "terra0 – Can an Augmented Forest Own and Utilize Itself?" in *Artists Re:Thinking the Blockchain*, ed. Ruth Catlow, Marc Garrett, Nathan Jones and Sam Skinner (Liverpool: Liverpool University Press, 2017), p. 63-72.
[76] Raqs Media Collective, "X Notes on Practice: Stubborn Structures and Insistent Seepage in a Networked World," Geoff Cox and Joasia Krysa, ed. *Engineering Culture: On 'The Author as (Digital) Producer'* (New York: Autonomedia, 2005), p. 211.

products' into 'material products' to protect its logic —the logic of the 'immaterial economy', to use his term for the informational economy.[77] Information is materialized because it is capital. Thus, it is likely that the art on the blockchain will be subjected to the commodification.

The changing nature of materialism is responding to the changing nature of the digital. According to Raymond Williams, the special character of materialism, which by itself gives its value, is its rigorous openness to physical evidence.[78] The changing physicality of materialism lies in the changes and advancements in technology. Media theoretician Oliver Grau differentiates two types of artworks as material artworks and open works. According to him, materiality is limited to an individual pixel. "Material works of all epochs have served as points where memories and recollections are crystallized... For only fixed artworks are able to preserve ideas and concepts enduringly."[79] In an open work the work of art as a discrete object disappears. Thus, the interactive open work is unable to last as memory; its changing nature does not allow it to become a discrete object.

Although technological improvements and systems like blockchain authenticates the digitally owned object, some artists exemplified previously by the case studies, are rag-picking the Internet and producing works that have a materiality. They are inclined to produce works that can be possessed because as the artwork's materiality marginalizes, it becomes harder to find a market for it. As curator and researcher Martin Zeilinger argues, the art market has a tremendous capacity for assimilating art practices that had been designed to challenge commodification, such as conceptual art.[80] Thus using blockchain, a self-sufficient, self-governed and decentralized system as a medium for art could also contribute to materialization and commodification of art.

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[77] Geoff Cox and Joasia Krysa, "Introduction to 'The Author as (Digital) Producer'," *Engineering Culture: On 'The Author as (Digital) Producer'*, ed. Geoff Cox and Joasia Krysa (New York: Autonomedia, 2005), p. 11.
[78] Raymond Williams, "Problems in Materialism", in *Materialism and Culture*. London: Verso, 1980, p. 122.
[79] Oliver Grau, *Virtual Art: From Illusion to Immersion* (Cambridge, Mass.: MIT, 2007), p. 207.
[80] Martin Zeilinger, "Everything You've Always Wanted to Know About the Blockchain*," in *Artists Re:Thinking the Blockchain*, ed. Ruth Catlow, Marc Garrett, Nathan Jones and Sam Skinner (Liverpool: Liverpool University Press, 2017), p. 293.

Conclusion

This research departs from the idea of the contemporary artist as “ragpicker figure”, and explores the relations between waste and art by tracing the shifts in the definition of materiality in the context of post-Internet art. Regarding the terms dematerialization, immaterialism, hypermaterialism or new materialisms, the word material does not necessarily point to a physical object, and an object does not necessarily have a physical existence as the digital can carry materialistic features. Yet, the digital is materialized through art and there is a rapid oscillation between waste and value. The blockchain, as a decentralized and autonomous digital system, has a potential to materialize digital objects by ensuring scarcity. It can also control access and ownership of immaterial matters.

The artists discussed earlier, Christopher Kulendran Thomas, Timur Si-Qin and Simon Denny, represent a wider group of artists –ragpickers of the Internet– who develop strategies to embed the digital in works that have materiality. It is important to discuss materiality, objecthood, value and ownership of art today, within the context of technological advancements, because computational and digital processes are increasingly more involved with the production and exchange of art. The research on

Artificial Intelligence strengthens the predictions that AI will make autonomous art in the near future.[81] There is also a possibility that through the blockchain, artworks might turn into invisible shares, or that the blockchain could function to eliminate existence entirely.

Will the blockchain become a platform that challenges the commodification of art through its autonomous and decentralized system, or will it share the same fate with conceptual art and become subjected to the commodification of art? This can perhaps be answered at a later stage when there are more exemplary artworks using blockchain as a medium for art.

Word Count: 13,170

[81] The idea that AI will make autonomous art has been discussed by several people including Andrew Blake, Venki Ramakrishnan, Jaan Tallinn, John Brockman and Jimena Canales at The Serpentine Gallery marathon that took place on October 9, 2017, titled “Guest, Ghost, Host: Machine”. It was also briefly discussed by Hito Steyerl in conversation with Nina Power about her book *Duty Free Art: Art in the Age of Planetary Civil War* on October 10, 2017 at the Somerset House Studios.

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Fig. 12 Timur Si-Qin, *A Reflected Landscape*, installation, 2016, Berlin, Studio Ramos, photography: Timo Ohler, accessed August 7, 2017, http://bb9.berlinbiennale.de/participants/si-qin/.

Fig. 13 Timur Si-Qin, *Mirrorscape Effigy 1*, powder coated aluminum, steel, electronics, plaster, sand, plastic botanicals, vinyl, 2016, Team Gallery, New York, accessed August 7, 2017, http://www.teamgal.com/artworks/1416.

Fig. 14 Timur Si-Qin, *A Reflected Landscape*, 2016, installation, 2016, Berlin, Studio Ramos, photography: Timo Ohler, accessed August 7, 2017, http://bb9.berlinbiennale.de/participants/si-qin/.

Fig. 15 Timur Si-Qin, *Biogenic Mineral*, installation, 2015, Magician Space, Beijing, accessed August 7, 2017, http://timursiqin.com/biogenic-mineral/.

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Fig. 17 Simon Denny, *Blockchain Future States,* installation, 2016, Petzel Gallery, New York, accessed August 7, 2017, http://www.petzel.com/exhibitions/2016-09-08_simon-denny/.

Fig. 18 Simon Denny, *Bitcoin/Blockchain Founder Myth Oversized,* Nintendo DS Pokemon Game Cartridge Case and Pokeball Globe, 2016, Petzel Gallery, New York, accessed August 7, 2017, http://www.petzel.com/exhibitions/2016-09-08_simon-denny/.

Fig. 19 Simon Denny, *All you need is data: the DLD 2012 Conference REDUX rerun*, installation, 2013, Petzel Gallery, New York, accessed August 7, 2017, http://www.petzel.com/exhibitions/2013-06-20_simon-denny/.

Fig. 20 Simon Denny, *New Management,* installation, 2014, Portikus, Frankfurt, accessed August 7, 2017, http://moussemagazine.it/simon-denny-portikus-2014/.

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