Equity for Artists

Reflections on the Political Economy and Sociology of Ownership

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Abstract

This PhD by publication synthesises eight years of work investigating economic sustainability for artists, a body of work begun experientially fifteen years ago through social-practice teaching. The unifying theme across the works is an exploration of property and value by considering shared ownership and equity as a mode of distributing resources more fairly and inclusively. The direct submission for the PhD comprises the three fractional equity papers as well as two additional papers that show the fractional equity work in application to intellectual property law and to cultural heritage restitution, respectively. This thesis refers to other writings undertaken in the past decade—in particular the books *Art Thinking* (2016) and *Economics of Visual Art* (forthcoming, 2021) as well as further papers on blockchain, financial records in artists' archives, and artists' community investment trusts.

The first chapter places the work within a thematic context of how market value is defined across art and economics, especially when the value of art often comes to be known only over time. The second chapter offers a treatment of the submitted papers, lacing them together as an inquiry into property. The third chapter distills the themes investigated in the course of the PhD—notably valuation, commensuration, and performativity—and offers related contextualization and reappraisal of my own work. Because these papers traverse a broad set of methods across disciplines, the conclusions also offer some reflection on interdisciplinary research.

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List of Submitted Papers

1. Whitaker, A. (2014). Ownership for artists. In Pablo Helguera, Michael Mandiberg, William Powhida, Amy Whitaker, and Caroline Woolard (Eds.) *The Social Life of Artistic Property* (Hudson, NY: Publication Studio), pp. 100-121.
2. Whitaker, A. (2018). Artist as owner not guarantor: The art market from the artist's point of view. *Visual Resources,* 34(1-2): 48-64.
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4. Whitaker, A.,* Bracegirdle, A., De Menil, S., Gitlitz, M.A. and Saltos, L. (2020). Art, antiquities, and blockchain: New approaches to the restitution of cultural heritage. *International Journal of Cultural Policy.* Published online in advance: https://doi.org/10.1080/10286632.2020.1765163
5. Whitaker, A. (2019). Shared value over fair use: Technology, added value, and the reinvention of copyright, *Cardozo Art and Entertainment Law Journal, 37*(3): 635-657.

Optional Supporting Documentation / Books and Publications (for reference only)

Books:

1. Whitaker, A. (2021). *Economics of Visual Art: Market Practice and Market Resistance.* Cambridge, UK: Cambridge University Press.
2. Whitaker, A. (2021). *Art Thinking.* New York: Harper Business.

Papers:

1. Whitaker, A.* and Grannemann, H. (2019). Artists' royalties and performers' equity: A ground-up approach to social impact investment in creative fields. *Cultural Management: Science and Education,* 3(2): 33-51.
2. Whitaker, A. (2019) Art and blockchain: A primer, history, and taxonomy of use cases in the arts. *Artivate: A Journal of Entrepreneurship in the Arts,* 8(2): 21-46.
3. Whitaker, A. (2019). Economic provenance: The financial analysis of art historical records. *Journal of Contemporary Archival Studies,* 6(27). https://elischolar.library.yale.edu/jcas/vol6/iss1/27
4. Whitaker, A.* and Glick A. (2020). Object impermanence: Ethics, endowments, and museum deaccessioning. In Mark S. Gold and Sefanie S. Jandl, eds., *Deaccessioning in a Post-Pandemic World* (Boston, MA: MuseumsEtc).

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Introduction

This PhD by Publication—under the supervision of Dr. Will Davies in the Political Economy Research Centre (PERC)—takes as its subject "Equity for Artists." The word "equity" is intended in its multiple meanings of both ownership and fairness, as part of a broader inquiry into the difficulty of valuing early stage creative work in any field.

Art is emblematic of this difficulty because not only does it have many forms of value—including social, cultural, and financial value—but also those understandings of value can changes substantially over time. Works of art wax and wane in popularity, break forms and require time to understand, or alter the "world" in which those attempts to understand value are being made. Following from Martin Heidegger's (1947) essay "On the Origin of the Work of Art," a work of art is something new in the world that changes the world to allow itself to exist. Thus, if one is making a work of art, one is not going from a known point A to a known point B but inventing point B.

As argued in the book *Art Thinking* and the paper "Artist as Owner Not Guarantor" (*Visual Resources,* 2018), it follows that one must invest resources in the point A world, without knowing what value, if any, will be created until the point B world. To focus specifically on economic or financial value, this structure of investing in a point A world to create value in a point B world is at odds with a theoretical alignment of price and value, a bedrock principle of economic theory and area of study in economic sociology (e.g., Beckert and Aspers 2011). While it is extremely difficult to place a price on a work of art at a given point in time, it is easier to assign a fraction or ownership share in the point A world. That fraction can still represent the same share of the work of art, however one decides to price it financially. Various jurisdictions, including the European Union and the United Kingdom, have developed legislated systems of “resale royalties” to represent an artist’s continued claim on their work when it circulates financially in art markets. A key exploration in my research has been to ask what would happen if, instead of receiving this governmentally assigned royalty, artists retained a fractional share of ownership in their work contractually when it is first sold. That ownership stake could co-exist with other continued rights claims, such as exhibition rights. The financialization of the equity share could be conceptualized as individual—owned solely by the artist—or collective—owned in trust by a group of artists, promised to charity, or otherwise employed as a theoretical vehicle of redistribution.

The larger philosophical framework of this project engages strongly with the Coase Theorem of property rights in economics, while also expanding to consider that economic lens alongside other considerations chiefly informed by concepts of valuation and commensurability, as considered within literatures of political economy and economic sociology. Various entrepreneurial interventions and policy frameworks follow from this research, spanning the adoption of blockchain technology to the taxation of artists’ estates. At its most speculative, this line of argument posits nation states as equity investors in future revenue streams of creative work (paper in collaboration with Will Goetzmann), and artists as economic and political citizens of a decentralized blockchain world. Systems of fractional equity in art could also possibly be generalized to equity-based (rather than bond-based or cash-payment based) systems of redistribution and reparations.

The disciplinary framework of this inquiry combines my home discipline of “arts administration” with the above-mentioned literatures of economic sociology with focus on valuation and commensurability. According to the cultural economist David Throsby, arts administration is a “proto-discipline” made up of a number of sub-disciplines including: sociology, art history, law, finance, economics, entrepreneurship, and policy. In addition, artists and art workers have written using essayistic forms or ‘social practice’ and ‘research-based’ forms of fine art, and political economists have proposed ‘economic science fictions’ as a means to empower ‘the critic and the radical to see the present as amenable to conscious transformation’ (Davies 2018: 16). In this work, I rely on an interdisciplinary set of these methods, occasionally delving into essayistic and speculative forms, in order to consider different ways of ascertaining value.

Part of the significance of this interdisciplinary approach to method within the work is that traversing disciplinary boundaries also engages sometimes competing sets of political orientation around art, art markets, and questions of value. As Stark has written, ‘*value* is almost always bound up with *values’* (2011: 322). Those political environments of thought span Marxist and solidarity-economies to the most efficient-market-hypothesis-accepting parts of finance. (I have written papers with finance professors who not only believe in an efficient market hypothesis but perhaps do not see that belief as anything but objective. I have also worked in groups adjacent to the Occupy Wall Street movement.) It is particularly in this range of engagement that this work has benefitted from the course of study in political economy and economic sociology, fields that give language and structure to that very terrain across disciplines. Writings on valuation and commensuration—whether by markets and in money or by people or in judgment—situate this body of research in complex questions of value in the arts. Art might be valued as, in turn, beautiful, difficult, politically important, conceptually incisive, obscene, elitist, popular, status-conferring, positional, exceptional, investible, divisibly securitizable, collective, decorative, personal, or critically acclaimed. While the focus in this body of work tends more toward economic and financial definitions of value, the purpose of the work is to explore novel uses of financial structures in order to create sustainable supports for artists to engage in autonomous practice on their own terms.

If one were to define the art market by a neoliberal logic, the art market would then immediately violate the assumptions of both economics and finance. On economics's own terms, the art market violates the assumptions of economics by the "inventing point B" exception to price representing value. Within finance theory, the art market violates assumptions of efficient markets because of the, by definition, singularity of art (Karpik 2010). The inquiry in this work into equity is not so much to extend a neoliberal reach over other forms of value so much as to ask if a market tool—property—can be used to solve a social and artistic problem of supporting cultural and creative labour into being. I ask whether equity or property can create a membrane that protects something from needing to be understood as priced but being able to remain intact regardless.

The main papers presented here and especially expanded upon in Chapter 2, have been published in an array of related disciplines including finance, art history or visual culture, archival studies, arts entrepreneurship, law, and cultural heritage. The books whose framing concepts are discussed in Chapter 1 have been published by both popular and academic presses, thus occasionally complementing academic forms of writing and argument with more writerly tools even including story and essay form.

The following chapter lays out some of the core ideas if this work, including the idea of "inventing point B" in more detail and the idea of economics itself as an emergent, which is to say, artistic discipline. The aim for this work is to present a coherent exploration of equity for artists and, in the process, a woven thread of the various methods. To engage with recasting definitions of value, one necessarily confronts the questions of how to combine analysis and imagination as ways of knowing—whether ascertaining value or comprehending even broader ideas such as truth or reality.

Chapter 1: Intersections of Art and Economics

Over the past eight years, I have been engaged in research regarding what property means to artists. In particular, I have tried to describe, evaluate, and imagine structures that support the peculiar nature of property—or value—in the arts, especially in ways that dignify the difficulties of artistic labour. Valuing art is complex *at a point in time*—owing to many forms of unquantifiable social, cultural and aesthetic value. Valuing art is difficult *over time,* because it can take time for the value of art to become legible, in general and within markets particularly. Artists are asked to invest in making work before value is known (Gerber 2017), and that artistic value is emergent or changeable over time.

Both of these problems take root in the idea that art is discovered rather than produced. By looking at fractional equity in art, one can try to bridge these problems of valuation and create more sustainable and flexible supports for artists. In the set of papers that comprise this PhD submission, I propose and explore fractional equity in art as a way to respond structurally to these challenges. This investigation of equity for artists encompasses equity in the financial sense and in the broader conceptual senses of both ownership and inclusion. It is my hope and intention that this work generalises outside the arts to equity-based labour compensation and equity-based systems of redistribution and reparations.

This body of research begins with an argument that resale royalties—the payments to artists when their work is resold at a gain—in art are property rights under the Coase

Theorem in economics; therefore, they can be trade anytime changing artists' access to 'market-driven patronage' and collectors' possible diversification of art investing. This first paper, 'Ownership for Artists,' (2014) was published in an artists' book *The Social Life of Artistic Property.* Recognizing the ethical and political complexity of these market-engaged proposals—even incubated in a working group of Marxist and solidarity-economy artists—I continued developing the ideas within a second paper, 'Artist as Owner Not Guarantor' (2016-2018) which was first presented in an art history context. Then a third paper, 'Fractional Equity, Blockchain, and the Future of Creative Work,' considered what would have happened if artists retained equity in their work by using newly sourced archival records of primary-market art gallery sales from the 1950s and 1960s and comparing them to later auction returns. That paper was published (with co-author Roman Kräussl) in 2020 in *Management Science,* an interdisciplinary business journal, under a finance editor.

In addition to these three core papers, I submit two additional papers that show these ideas in application—first to intellectual property law and second to the restitution of cultural heritage. I also submit as appendix materials various other journal articles and books completed within the time frame of this PhD.

This first chapter aims to introduce the overarching themes of the work, notably the metaphor of 'inventing point B' to describe art's emergent value, as well as tensions between art and economics and the approach to economics itself as an emergent discipline. In chapter 2, I offer a closer reading of the papers submitted for the PhD in order to synthesise a coherent argument across the development of the work. In addition to situating the work in its key literatures, I offer the what might be called an 'autobiography of research' in order to situate the work within its academic engagement born of interdisciplinary applied work across art, economics, technology, and law. In chapter 3, I reflect, hopefully with some critical scrutiny, on what I have learned in the PhD process by studying with my advisor and by placing my work in the context of economic sociology and political economy. I offer some appraisal of my work from that experience and consider research directions that follow.

The remainder of this chapter is organised into three sections: (1) Inventing Point B, (2) The Intersection of Art and Economics, and (3) Economics as an Emergent Discipline. The notion of 'inventing point B' comes from my 2016 book *Art Thinking.* The treatment of art and economics draws substantially on my 2021 (in press, Cambridge) book *Economics of Visual Art: Market Practice and Market Resistance.*

Inventing Point B

As mentioned in the introduction, one of the main framing devices across my research is the idea of 'inventing point B', a metaphor central to my 2016 book *Art Thinking.* The idea of 'inventing point B' is an adaptation of the philosopher Martin Heidegger's definition of art. In a 1947 essay 'The Origin of the Work of Art', Heidegger writes, 'Whenever art happens—that is, whenever there is a beginning—a thrust enters history; history either begins or starts over again' (Heidegger 1947: 201; Whitaker 2016, *Art Thinking*: 7 and 318). To paraphrase Heidegger, a work of art is something new in the world that changes the world to allow itself to exist (*Art Thinking,* 2016: 7). Thus, if one is making a work of art, literally or figuratively, one is not going from a known point A to a known point B but *inventing point B.* In the process of making space for itself, the work of art changes the world and creates a new one. An example of inventing point B from *Art Thinking* is Sir Roger Bannister's running of the first sub-four-minute mile in 1954. He broke a barrier and then only held the record for forty-five days before someone saw that it was possible and bested his effort incrementally (*Art Thinking:* 102-112). Bannister leaned into a frontier of possibility and created a new normal—a point B world—within which someone saw what was possible and improved upon it slightly.

This idea of 'inventing point B' is consequential for the application of economic theory. The economic ideal of a market is based on a belief that price can represent value. But in the case of a work of art—whether literally as an artwork or metaphorically as a process of invention and discovery—the artist is investing resources in the point A world without any certainty of producing anything of value in the point B world. Thus price and value are out of alignment. Value only comes to be known once the point B world is invented.

This idea of inventing point B connects strongly to Richard Caves' (2000) concept of "nobody knows" in his landmark study of creative industries. Caves conceptualizes creative work, not only in fine art but in a broader set of applied industries encompassing film, music, television, and publishing, among others. In analyzing the market for books and albums, he articulates the problem of 'nobody knows' (Caves 2000: 147) in which even for authors or musicians of some repute—and especially for those without established record—it is very difficult for the creators themselves or for their editors and music producers to know ahead of time what will succeed commercially. This difficulty is endemic, Caves argues, to the nature of creative work itself. The idea of ‘inventing point B’ echoes this aspect of Caves’ categorization of creative industries.

Fine art practice especially has this structure of ‘nobody knows’ or of value only becoming known over time, in a point B world: An artist can work for many years, supporting their practice with a day job or other source of income. To take as an iconic example, the American artist Robert Rauschenberg worked for several years in the 1950s before he was granted an exhibition at the Leo Castelli Gallery in 1959. At that exhibition, his work was still not recognised. One work sold and only because Castelli, the dealer, bought it himself (Cohen Solal, 2009). Around that time, Rauschenberg did sell one other work, called *Thaw,* which was bought by the collectors Robert and Ethel Scull for $900. By customary arrangement, the dealer and artist split the proceeds 50-50. Rauschenberg was paid $450. In 1973, the Sculls sold a substantial portion of their art collection at auction. In that 1973 auction, *Thaw* sold for $85,000. Rauschenberg did not receive any of the proceeds. Rauschenberg had invested time, resources, and ingenuity to make the work of art in the point A world. The work’s value only came to be known later over time, connected to the continued development of his career. Had Rauschenberg still owned a share in the artwork, he would have been able to benefit from the upside his labours helped to create (Petty 2014; Whitaker and Kräussl 2020, Fractional Equity).

This idea of inventing point B is the basis of considering fractional equity in fine art. In the point A world, it is easier to assign a fraction than a specific amount. It is easier to say that Rauschenberg might retain 10% of his artwork than to know what that 10%

would be worth monetarily at any given point in time. Speculatively, this idea of inventing point B could be extended to any form of labour. For instance, a worker who is paid a salary could also be given equity shares—stock options, employee ownership. For art, resale royalties attempt to address this problem, but have challenges in execution (Whitaker 2018, Artist as Owner*).*[1]

In this research into fractional equity in art, I have specifically considered the conservative case of the fine artist—such as the painter or sculptor. In some of the work, I have considered how this tool of fractional equity in art could generalise far outside the arts and creative industries to support a method of compensation by hybrid salary and equity. I have even considered the generalization of fractional equity in fine art to speculative equity-based systems of redistribution on par with universal basic income (UBI) via equity rather than disbursements methods. It is important to clarify, however, that this study within the fine arts only represents a subset of creative labour. As Throsby has written (2004: 192), it is possible to analyse the creative industries as a whole or as a set of standalone sub-industries, for instance, 'movie production, publishing, visual arts, music, and so on'.

Governmental agencies as well as individual researchers have offered classification schemes for understanding the creative industries. The UK's Department of Culture, Media and Sport (DCMS) put forward a classification system for creative labour (DCMS 1998). In a report sponsored by NESTA, an innovation foundation originally endowed by

[1] Resale royalties have also created meaningful funding for artists. For instance, in 2018, DACS distributed £18 million in resale royalty-related payments to artists, while at the same time Arts Council England's direct grants to artists to totaled £12 million (Whitaker and Grannemann 2019; DACS 2019).

the UK National Lottery, Bakhshi, Freeman and Higgs (2013) argue that the DCMS system is internally inconsistent and instead use a lens of 'creative intensity' to define the creative industries more broadly. By studying creativity within all industries, they include many facets of the software industry in addition to the more standard industry classifications of music, film, television, visual and performing arts, books, and design.[2]

Creative labour is commodified or specifically made for a market context to different degrees in different areas of the creative industries. For instance, advertising may still be beholden to Caves' 'nobody knows' framing of uncertainty, but it is generally created with a commercial, or at least functional, purpose in mind, especially relative to a more romantic notion of the fine artist. This romantic notion of the artist is also complicated by Becker's foundational work on 'art worlds' as groups of collaborative actors rather than myth of the lone artistic genius (Becker 2008). At the same time that fine art is a collaborative enterprise, creativity itself is enormously widely distributed across societies; as John Howkins (2013) writes, the process of turning ideas into assets has been more expansive in the past twenty years than before. Howkins advises owning one's ideas, a concept from the broader creative economy which I apply here to fine art.

In this work, I have focused on fine artists and on traditional kinds of artworks for two reasons.[3] First, fine art can generally be framed as having some kernel of the work that

[2] The creative industries categories in the DCMS (1998) classification scheme are: advertising, antiques, architecture, crafts, design, fashion, film, leisure software, music, performing arts, publishing, software, and television and radio.

[3] In my teaching, I have focused on much broader and experimental art forms and on entrepreneurship across design and other creative industries. I share Howkins' ethos of broadly distributed creativity, in contrast to, for instance, Mihaly Csikszentmihalyi's (1996: 8) notion of distinguishing big 'C' from little 'c' creativity.

is non-commodified even if the work circulates in markets. Hyde (1982) frames this non-commodified core as the ‘gift’ of art. For Hyde, the work always has some nature that cannot fully be overtaken by markets. Second, focusing on fine art, and even more particularly, on traditional types of works such as paintings, allows this work on fractional equity to engage directly with research methods in finance and cultural economics. The fractional equity paper presents a novel method of art market analysis using primary sales records from auctions together with the public auction data on which most financial and economic studies of art market rely. This relationship of fractional equity research and the larger financial study of art as an asset class is covered in more depth in Chapter 2.

These questions of equity and redistribution in fine art offer an entry point into broad questions concerning the intersection of economics and politics. Economics is based on two paradoxical values: efficiency and innovation. Theoretically, a worker or a firm is meant to produce with Taylorist efficiency (Taylor 1911) but in order to do so one must first go through the messy and generally inefficient process of discovering what will later be efficiently produced (Whitaker 2016, *Art Thinking:* 10). Art is emblematic of discovery rather than production—of emergence or effectuation not analytic decision-making within known artifacts of markets (Simon, 1996 [1969]; Sarasvathy, 2001). To distribute equity is to have the option to distribute based on an economic logic—for instance, a portion of an artwork made by an artist—or on a political logic—a share to each person within a defined group, for example for a process of reparations. Equity can be distributed by both economic and census mechanisms. Thus, at a time politics has been disenchanted by economics (Davies 2014), these equity structures can have significant impact on the revitalisations of the social contract and the redistribution of income and wealth. I came to understand that distinction more through reading in economic sociology and return to those themes in chapter 3.

The Intersection of Art and Economics

To consider equity in art, it is necessary to consider the ways in which the intersections of art and economics are inherently political and to give some context for these political debates. The economics of art is political both in a personal sense—an artist's belief about how much the market should come into, or be firewalled from, their practice—and in a larger structural sense of social, economic, and racial exclusion. Art institutions also are steeped in histories of colonialism (Ansari, 2019, 2020) and in complex class critique given the economic treatment of artists (Abbing, 2002; Townley, Roscoe and Searle 2019) and the broader economic perception of the arts and culture relative to 'creative industries' (Banks and Oakley 2016; Oakley 2009).[4]

The research on resale royalties and fractional equity sits across this uncomfortable relationship between art and markets. This divide has been modeled by sociologists including Viviana Zelizer and Olav Velthuis. Zelizer's (2000; 2001) work on the relationship of intimate and commercial spheres—such as related to the economics of children—was generalised by Olav Velthuis (2005: 24-28) to the relationship of art and markets. Velthuis describes two approaches: 'Hostile Worlds' and 'Nothing But.' In the

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[4] Economic precarity for artists has been studied for decides. See for example Alper (1996) on artists' salary in the 1970s, or more recent studies including Arts Council England et al. (2018) and The Creative Independent (2018).

Hostile Worlds view, art and commerce are irreconcilable and must be kept separate. In the Nothing But view, there is nothing but economic value, and eventually all forms of value—aesthetic, cultural, social (Klamer 2009)—are legible in economic terms.

The Nothing But view maps onto neoliberal assumptions that all forms of value can be reduced to price.[5] That is to say, the Nothing But school activates Fourcade et al.'s observations that economics is a 'superior' discipline, more likely to be cited than to have economists cite scholars in other fields (Fourcade, Ollion and Algan 2015). The Nothing But school is also to ignore or flatten the broader consideration of value and evaluation of which pricing is only a part (Aspers and Beckert 2011: 4). If the Nothing But view places neoliberal calculation onto art and artists, then the Hostile Worlds view reads as a self-assertion by artists to define value on their own terms and to hold legible many other forms of knowing value. In this way, the Hostile Worlds view reads as market resistance. Yet at the same time, that resistance can sometimes entail disempowerment, in the form of resisting market so much that artists can be taken advantage of or, in the case of equity, not included in upside that their work helps to create. That is not to place a market structure of equity *on* artists but to create an option that gives artists a dignity and autonomy position and choice over whether to participate.

[5] The archetypal treatment of the 'Nothing But' world view is William Grampp's 1989 book *Pricing the Priceless,* which suggests not only that artistic value is reduceable to price or that artists need a source of income to function in modern market economies but also, more problematically, artists are *motivated* by price.

This power dynamic between the superiority of the Nothing But view and the resistance of economics from the Hostile Worlds side calls to mind Bourdieu's writing (1984, 1993) as particularly applied to contemporary art in a 2018 essay by Andrea Fraser. In trying to understand why she was resistant to some petitions circulated after the 2016 US Presidential election, Fraser explained her reaction via Bourdieu's description of the dynamic between an economic and a cultural elite. Together, the financial elite or 1% and the cultural elite form a dominant class in an overall society. Yet within that dominant class, the financial elite is *dominant* and the cultural elite is *dominated*, causing what Bourdieu terms a 'logic of resentment' (Bourdieu 1993: 50; Whitaker 2021, *Economics of Visual Art,* in press).

This relationship of art and economics is not so much a 'both sides' debate between markets and those who resent them but rather a set of often structurally unjust systems that can be considered through lenses of class and hierarchies of power in the arts. In Nancy Hartsock's feminist critique of Foucault, she rebuts Foucault's claim that power is everywhere by arguing that domination, when viewed from above, looks like cooperation (Deveaux 1994). That is to say, economics as a discipline may try to frame art as fully legible within economic value, but to do so is an act of domination of art, not of simply describing it.

Although this thesis engages primarily with bodies of literature in sociology and political economy, it is important to note the substantial and increasingly independent discipline of cultural economics, and also to place the work in this thesis within the context of that field. The first international conference in cultural economics took place in 1979 in

Edinburgh (ACEI, n.d.). The hosting organization, Association for Cultural Economics International (ACEI), continues to convene an international conference every other year and to oversee the *Journal of Cultural Economics*. Leading scholars of cultural economics include Ginsburgh and Throsby, whose two-volume *Handbook of the Economics of Art and Culture* was published in 2006 and 2013. Other leading scholars of cultural economics include Ruth Towse who has edited a *Handbook of Cultural Economics (*2nd ed. 2011), as well as written *A Textbook of Cultural Economics* (2010). Towse's work particularly frames cultural economics in relation to intellectual property. Heilbrun and Gray also published an edited survey of *The Economics of Art and Culture* (2nd ed. 2001). Because my work has centered artists within the larger arts ecosystem, I have also drawn on works such as Nathalie Moureau's (2000) *Analyse Économique de la Valeur des Biens d'Art: La Peinture Contemporaine,* and Xavier Greffe's (2002) *Art and Artists from an Economic Perspective.*

Many of the key books in cultural economics tend to employ the research methods of economics in order to study culture. Common in these methods is econometric analysis of data sets around art, whether related to the microeconomics of ticket pricing or price elasticity of demand (e.g., with regard to droit de suite), or to field-wide questions related to cultural policy design. During the time of this PhD, I wrote a cultural economics text for Cambridge University Press. That book, *Economics of Visual Art: Market Practice and Market Resistance,* represents the relationship of my own work to the broader field of cultural economics. While I practice as a cultural economist (with work published in the *Journal of Cultural Economics* and accepted for presentation at ACEI's next convening), I tend to take the tact of general microeconomics textbooks, which is to treat economics as a process of decision-making in which the “firm” is a gallery, museum, auction house, or art studio. This approach presents economics as a set of politically engaged tools rather than a set of empirically informed issues.

Importantly, these foundational texts in cultural economics exist in the fraught political space between art and economics. Bakhshi, Freeman, and Hitchen (2009) helpfully explicate this tension within cultural economics between utility and intrinsic value. Stoneman (2010) has also proposed ‘soft innovation’ to create more nuanced treatment of aesthetics, intellectual labour, and the development of ideas, theorising the complexity of measurable outcomes to innovation. These texts often modulate economic assumptions of profit and utility maximization in consideration of the multiple values being managed in the arts. At the same time, they often prioritise economic methods, especially the statistical treatment of economic data. For instance, in the treatment of market failure, economists such as Doug Noonan (2003) present contingent valuation methods—the attempt to quantify a public good such as the British Library.

Reading cultural economics texts through Fourcade et al.’ ‘The Superiority of Economists’ (2015), one sees a thread of the legitimation of the study of art and culture within economics. In this way, cultural economics is a home discipline of my work, and also, at the same time, the study of sociology and political economy has been important to some form of resistance of the norms of economic *method* of data analysis not only of economic *assumptions* of profit. Many researchers cross over these questions of method and assumption. Notably, Throsby’s *The Economics of Cultural Policy* (2010) articulates this belief in the usefulness of economic principles in informing, not directing, the design of arts policy. Others still have made counterintuitive arguments, using economic theory as an agent of cultural values. For instance, Michael Rushton (2003) has used the economic analysis of transaction costs to argue for market-driven rather than governmental support for program diversity in the arts.[6]

In addressing this relationship between art and economics, Leigh Claire La Berge has written that 'It will not do to read only from economics to art. We must be able to read from art to economics as well' (La Berge, 2019: 3). In my work, one of the main ways to read from economics to art is to consider economics itself artistically—not only as a design medium but as an emergent discipline—one, no matter how calcified in self-perceived orthodoxy, is actually constructed through ongoing acts of inventing point B.[7]

Economics as an Emergent Discipline

The overarching idea of 'inventing point B' applies to economics itself. In *Art Thinking,* I wrote about Adam Smith's founding of the discipline of economics as an act of inventing point B. Smith was a Scottish moral philosopher who, prior to the publication of *The Wealth of Nations* (1776), had authored *The Theory of Moral Sentiments* (2002 [1759]) on the role of sympathy as a glue in the social fabric. In an essay by Walter Bagehot, the

[6] See also Yuja Jung's (2017) literature review of methods in art administration. Rushton uses economics to argue against government funding while Noonan (his colleague at Indiana University) uses a method of contingent valuation—itself controversial within economics for a time—to try to address the same market failures quantitatively.
[7] Regarding markets as a medium, I wrote in the 2016 book *Art Thinking* about the design constraints of capitalism—areas in which market economies do not work well and where regulation or other structural interventions are needed (Whitaker 2016, *Art Thinking*: 255-264). Many of these constraints or failures of market come about because of concentrations of power and might be open to more market-based solutions, such as, for example, requiring companies to pay for customers' time in service calls deemed the company's fault.

founding editor of *The Economist,* entitled 'Adam Smith as a Person', Bagehot describes Smith as deeply awkward and impractical and as 'one of the most unbusinesslike of mankind' (Bagehot 1899: 247). Bagehot cites anecdotal moments such as Smith being asked to sign a document and making an elaborate imitation of the signature on the line above. Bagehot writes that Smith was 'an awkward Scottish professor, apparently choked with books and absorbed in abstractions. He never engaged in any sort of trade and would probably never have made sixpence by any if he had been. His absence of mind was amazing' (Whitaker 2016, *Art Thinking*: 295).

In *Art Thinking,* the process of inventing point B is question-driven. If one is inventing the world, one does not have full visibility on a possible definite solution and thus moves forward without a template or known destination by the act of asking questions. In Smith's case, according to Bagehot, *The Wealth of Nations* did not result from a desire to write about economics. Smith had a question about wishing to understand the progress of humankind. As Bagehot writes:

> [The Wealth of Nations] *was in the mind of its author only one of many books, or rather a single part of a great book, which he intended to write…. He wanted to trace not only the progress of the race, but also of the individual; he wanted to show how each man being born (as he thought) with few faculties, came to attain to many and great faculties. He wanted to answer the question, how did man—race or individual—come to be what he is?* (Whitaker 2016, *Art Thinking*: 295-296; Bagehot 1899: 268-269).

As it happened, Smith was writing against a backdrop of mercantilism, that is, the belief that countries could best maintain their wealth through closed borders—the macroeconomic equivalent of hoarding. Smith argued instead for the importance of trade. That inquiry and the resulting book formed the point B world of economics itself.

Cultural economics has this emergent character of disciplinary formation as well. As mentioned in the section above, the professional body formed in 1979. Throsby's 2001 book, *Economics and Culture* is regarded as one of the core early texts to consider culture through an economic lens. Throsby's 1994 article in the *Journal of Economic Literature* laid the foundation for that book. For a longer history of economic thought around art and culture, see Crauford Goodwin's (2006) contribution to Ginsburgh and Throsby's first volume. Many of these scholars served in leadership positions of the Association for Cultural Economics International and as editors of the *Journal of Cultural Economics.* Towse joins Ginsburgh and Throsby as early editors and officers of ACEI who were recognized by the organization as Fellows (ACEI, n.d.).

I strongly noticed this emergent view of economics in the process of researching my third book *Economics of Visual Art* (Cambridge 2021, in press, written during the PhD). At a surface level, some of the scholars who founded the field of economics drew and painted or otherwise had strong connections to artists. Stanley Jevons, credited with the concept of marginal utility, painted delicate watercolours of world commodity price movements over time (see Figure 1). Alfred Marshall, credited with the first diagram of supply and demand, drew calligraphic shifts in demand with taxation and also constructed vast mural-like teaching aids drawn in marker (See Figures 2 and 3). John Maynard Keynes, the founder of macroeconomics, was a well-known member of the Bloomsbury group and was tasked with collecting art on behalf of the nation (Chambers, Dimson, and Spaenjers 2020). Keynes also served as the inaugural Chairman of the Arts Council of England (Arts Council England, n.d.).[8]

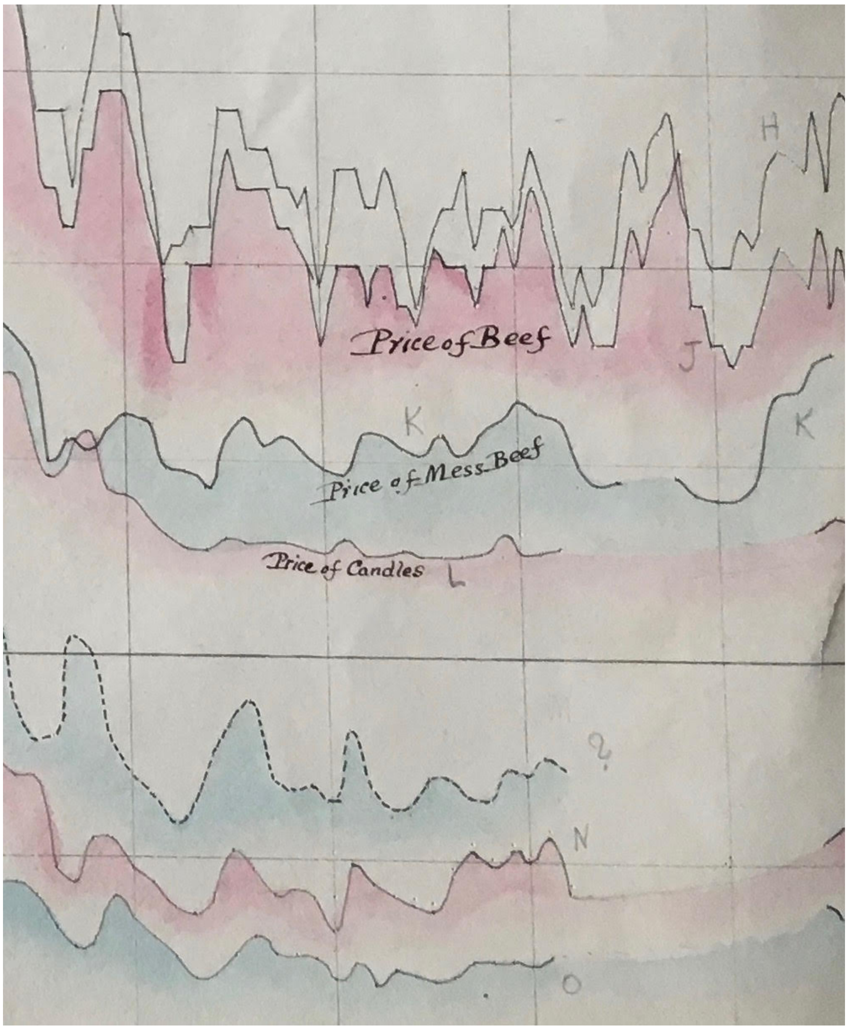

Figure 1. Stanley Jevons, detail of untitled watercolor showing world commodity prices. Marshall Library, Cambridge University. Reproduced with the kind permission of the Marshall Librarian.

[8] Keynes was appointed chairman of the Committee for Encouragement of Music and the Arts (CEMA), the precursor to the Arts Council England, in 1941. Keynes died in 1946; the formal charter of the Arts Council was drafted after his death (Arts Council England, n.d.).

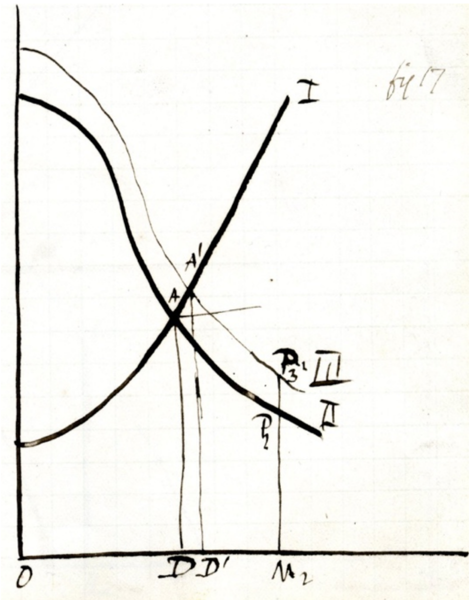

Figure 2. Alfred Marshall drawing of supply and demand. Marshall Library, Cambridge University. Reproduced with the kind permission of the Marshall Librarian.

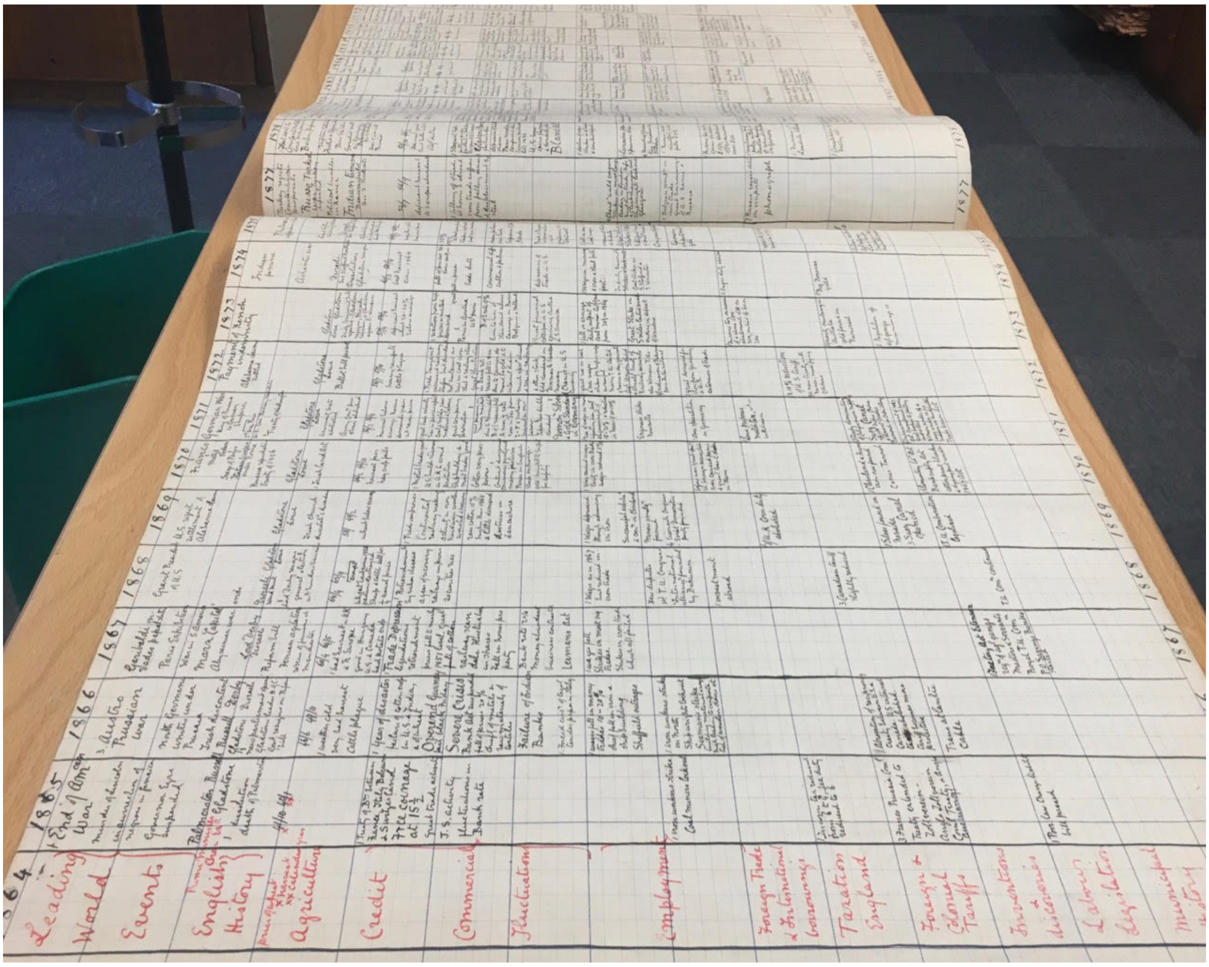

Figure 3. Alfred Marshall teaching aids. Marshall Library, Cambridge University. Reproduced with the kind permission of the Marshall Librarian.

Beyond these surface-level connections to art, the scholars' substantive economic work has this 'inventing point B' characteristic of art as an emergent process, despite more modern economic orthodoxy. For example, in Jevons' preface to the first edition (1965 [1871]) of *The Theory of Political Economy,* he implores fellow scholars to stop using the term 'political economy' and to shift to the more compact but newly coined 'economics' (Jevons 1965 [1871]: vi). In the preface to the second edition, Jevons employs the term 'economists' and then comically insults his colleagues:

> *E]conomists have long been mathematicians without being aware of the fact. The unfortunate result is that they have generally been bad mathematicians, and their works must fall…. Ordinary language can usually express the first axioms of a science, and often also the matured results; but only in the most lame, obscure, and tedious way can it lead us through the mazes of inference.* (Jevons 1965 [1879]: xxiii-xxiv).

This passage shows a wrestling with questions of whether economics is a social science or wishes to see itself as a natural science—questions that still permeate the discipline today.

Keynes' work also has this characteristic of ideas in formation, which is to say that he failed his dissertation at Kings College Cambridge the first time he turned it in. For work that laid the foundation for modern international monetary systems, Keynes' PhD advisors called his 1908 dissertation 'muddled and of very mediocre value' (Whitehead and Johnson 1908: 204).[9]

[9] The longer version of the report reads: 'Some of the exposition of conflicting views and of the critical discussion in [Keynes' dissertation] appears to me to be excellent. But as a contribution of fresh knowledge to the philosophy of the subject, I think it muddled and of very mediocre value…. As a consequence of Keynes' uncritical assumption of [various thinkers'] statements, his own theory of probability seems to me to be involved in a hopeless fog' (Whitehead and Johnson 1908: 2-4). The author thanks David Chambers, fellow of Clare College and Reader in Finance at the Judge Business School for

Nowadays, the field of economics has less of this work-in-progress, van-Gogh-circa-1890 feeling, despite groundbreaking creative work that exists in the field, for instance Darrick Hamilton's work in baby bonds for reparations (Hamilton and Darity 2010). The economist and Nobel Laureate George Akerlof addressed this problem of creativity in the discipline in his 2020 essay 'Sins of Omission and the Practice of Economics' (Akerlof 2020). Akerlof writes that the field has been prioritising hard skills over soft skills, and that because of the narrow focus on publishing in the 'top five' journals, junior scholars likely feel pressure to follow peer-reviewers' advice to focus on hard-skilled or quantitative analysis. The cost of this approach is in failing to foresee and synthesise responses to large economic crises or questions such as climate change. In the context of art as a broader frame for emergent value, Akerlof's work underscores a calcification of economics that seems to forget that the field was developed from scratch and can be changed going forward.

This framing of economics as still in formation is probably antithetical to the Nothing But school of thought: If all kinds of value can be understood economically, the implication is that economics itself is a fixed calculative device.[10] Instead, one can view art as a process—and therefore economics also as a work in process—offering both skepticism and hopefulness for a creative engagement with markets as, following from Winston

sharing these specific Papers of John Maynard Keynes, King's College Archives, Cambridge University, as part of his research in progress.

[10] By this same argument, sociological theory is also in formation: I was struck learning that Bourdieu had not started his career studying cultural consumption and patterns of taste formation but instead as a self-professed 'blissful structuralist' studying Algerian peasants (Johnson, 1993: 3).

Churchill's famous quotation about democracy, the worst form there is except all the others.[11]

These interactions of art and markets also take form in the methods and forms of argumentation within the subsequently discussed work. These methods include case study, conceptual framework, and quantitative analysis. The organizational form and bibliographic style also varies across the work depending on the dominant discipline within which each paper was published. In working across some divides—between art and money, quantification and story, disciplinary methods of econometrics and critical theory—I have occasionally used story as a bridge.

To make the point about story, I will allow myself one. When I first went to business school, my aunt, a retired professor of performance studies and a masterful storyteller, had asked why I wanted to study numbers instead of stories. At the time, we were visiting a retirement center where she was teaching an intergenerational class between university students and pensioners. As we spoke, Vera—a sprightly then eighty-year-old woman with warm brown saucer-like eyes—was performing 'New York, New York' with high leg kicks and in a leopard-print leotard. (At the time of writing, Vera just turned 101 and received the Covid vaccine.) My aunt, Beverly, had secured grant funding on the basis of a one-page story about Vera.

[11] From Churchill's November 11, 1947, speech in the House of Commons, possibly quoting an earlier speech of his own (Langworth 2008: 574).

I went to business school thinking of Vera. I noticed the stories in all of the numbers. There is almost always, in every financial spreadsheet, a number that is made up—or based on some exercise in human judgment. Quantification looks heuristically true but is often actually based in a story—stories about risk, about the future, or about the predictive power of the past. Thus, even in the most quantified parts of the research summarized in the following chapter, a histogram or regression sometimes sits next to a story, and the story is often an at least equal tool in knowledge formation. This inclusion of story—up to and including speculative science fictions—is perhaps an active attempt in this body of work to consider imagination and analysis simultaneously.

Chapter 2: Analysis of the Submitted Papers

The central concern of the submitted papers to explore how equity in art can include artists in value they have created. This chapter develops these concerns across three fractional equity papers: 'Ownership for Artists' (2014), 'Artist as Owner Not Guarantor' (2018), and 'Fractional Equity, Blockchain, and the Future of Creative Work' (2020). In addition, I address two papers applying these ideas, one in cultural heritage (2020) and one in law with regard to fair use and intellectual property (2019). These papers have been published across disciplines ranging from research-driven studio art to visual culture to management (finance).

What began as an investigation of resale royalties and droit de suite—the regulatory systems that prevail in the United Kingdom and the European Union and under which artists receive a share of proceeds when their work is resold at higher sums in secondary art markets—developed into a conceptual proposal for and empirical analysis of retained fractional equity in art. In evaluating the resale legislation in the UK and EU as well as the proposed legislation in the United States, I proposed that as an alternative fractional equity or shares could be retained by private contract. This work came about around the beginnings of a broader awareness of blockchain technology and cryptocurrency, leading to writing about blockchain as a means of registering title and fractional ownership of art.

Ownership for Artists (2014)

The work on fractional equity began more specifically in 2012 as part of an artists' working group I affectionately referred to as 'Marxists and Cynics' on account of having had to introduce myself as a MBA working at an educational institution founded by an auction house in a room mainly full of Marxists, one of who made a very funny and cynical joke at my introduction. Convened by the social practice artist Caroline Woolard, the group's purpose was to look at what 'property' meant to artists. I had met Caroline a couple of years earlier, around 2010, when she co-founded an experimental barter-economy school, Trade School. I had taught 'Business School for Artists' at Trade School, around the time I was also teaching 'Stock Market Basics' outdoors at the original Occupy Wall Street in Lower Manhattan's Zuccotti Park.[12]

The significance of Trade School as a beginning for the fractional equity work was the situation of an inquiry into property or ownership within a micro-culture of generosity. Trade School—which ran for a decade and open-sourced its software so that there were fifty chapters and over 22,000 students worldwide—was technically about exchange but exchange that had a starting point in the generosity of a gift economy. Caroline was always pouring cups of tea. People brought food. The environment was imaginatively yet austerely constructed—a large open suitcase repurposed as a dish-drying rack, and chairs made of upturned plastic paint buckets ringed with donated toolbelts. It all felt hosted, an environment held and convened. The environment enacted Lewis Hyde's (1983) idea that a work of art begins in a "gift."

[12] My work teaching business to artists had begun circa 2003 during the MFA course in painting at the Slade when an assignment to give a talk about "the ideas behind your work" led to a series of lunchtime talks on the foundational theories and structures of markets.

The property group that Caroline convened met for two and half years, dwindling to a core of five people. When we published a book together, *The Social Life of Artistic Property* in 2014, we joked that we had to write a book so that we could stop meeting. That book represented a community of research-based artists, each with a different topic related to property. While some sections of the book included speculative proposals, such as William Powhida's essay proposing a building that owned itself, other sections chronicled case studies such as Michael Mandiberg's essay on the dwelling that the artists' collective Group Material bought together or Caroline's inquiry into an intentional co-living community called Ganas on Staten Island, New York. Alongside the group, Caroline had also started a project 'BFAMFAPHD' asking why artists went into such debt to attend art school when they could take $100,000, pool it, and buy a building they could work in the rest of their lives. Around this time, my social-practice teaching shifted from business school for artists to student debt and 'the economics of education', which I taught at Trade School at the Museum of Arts and Design.

My essay for the book, 'Ownership for Artists,' begins with a provocation from a *New York Times* column, 'The Ethicist'. In the scenario presented to the columnist, an art collectors wanted to purchase a share in an artist's future work and asked if this purchase constituted indentured servitude. In considering this question, I began by observing that people invest in people all the time, just usually either at intimate closeness (family or parental investment) or at legally structured distance (via venture capital).

I returned to the archetypal story of Robert Rauschenberg, covered in chapter 1, in which the artist sells a work for $900 (keeps $450) and watches the work be sold again about 15 years later for $85,000 without owning any of the proceeds. I contrasted the more recent experience of the artist Jasper Johns watching an artwork sell from the estate of the writer Michael Crichton (e.g., *Jurassic Park)*. The artwork sold for $28.6 million at auction. The source of Crichton's wealth was the sale of books, or television rights and related script writing. The ways Johns and Crichton were paid were structurally different. If Crichton's third book did well and established a reputation, readers could go back and purchase his first book, which would bring the author royalties. For Johns, if his third painting did well, it would benefit the owner of his first painting and not the artist. I found it interesting that Johns and Crichton had been friends—Crichton had written for one of Johns' exhibition catalogues. (Johns and Rauschenberg were also friends and, for a period of time, lovers.) Also noteworthy in Johns' case, as artists go, he had been successful at the outset—selling work directly to the Museum of Modern Art from his first solo show at the Leo Castelli Gallery. It was also likely that Crichton had not even bought the Johns that was being auctioned off so much as been gifted it or purchased it at a friends-and-family rate (Whitaker 2014, Ownership for Artists: 71-72). I distinguished artworks from books. The artworks were singular. And I distinguished artworks from investments in operating companies. The artworks were collectibles that did not have cash flows.

I then shifted to the point of view of investors and the specific difficulties of art investment. (The Marxists and Cynics were very generous first readers of this argument, especially given that the argument took some time to work out.) There were problems of diversification and liquidity, owing to not being able to take scissors to a Cézanne painting. Here, resale royalties could make artworks divisible and portfolio diversification possible. I employed the Coase Theorem in economics (p. 74) to reframe resale royalties as property rights. In turn, these property rights served an important function around early stage investment, themes I later developed in the book *Art Thinking.* (One case in *Art Thinking* that is particularly illustrative of this role of property or equity is the story of Andy Bechtolscheim, the first investor in Google and whose ability to found Sun Microsystems was dependent on his having been paid a royalty working as a teenager in Germany. Royalties were *generative.* Their proceeds could be paid forward (Whitaker 2016, *Art Thinking*: 162).)

In 'Ownership for Artists', I then turned to the ways in which resale royalties were dependent on the design of legislation. The legislation was often badly designed from an economic standpoint. In the European Union, the resale royalty was capped at €12,500. There was no cost basis meaning if there were three intermediaries in a transaction, they all paid a royalty on the total purchase price, not on the mark-up since the last intermediary. This problem was documented as a 'cascade effect'. It also caused the royalty to function less like an equity share and more like a surcharge or tax.[13]

The proposed U.S. federal legislation was especially full of transaction costs. Royalties could only be collected by an agency bearing uncanny similarity to copyright clearance agencies which were relatively inefficient (e.g., clearing copyright by fax in some cases).

[13] This topic is covered in more depth in the following paper 'Artist as Owner Not Guarantor' (p. 53). For a discussion of art world intermediaries, see Khaire (2017).

Of a proposed U.S. resale royalty, up to 18% could go to administration—seeming to lead to exactly 18% in administration—and the remainder was split between the artist and a fund, also with high administration costs. The fund was intended to support US museums to purchase artworks but only artworks by U.S. artists.

I had not yet imagined fractional equity fully, and I so criticised the legislation sharply because I was afraid it was the only option. In the conclusion of the paper, I emphasised the necessity of imagination when anything is securitised. I argued that before any system was implemented in the arts it needed to be discussed within finance so that traders—those with sophisticated understanding of market transaction, whether Reddit day-traders or vaunted hedge-funders—could troubleshoot ways in which a bad actor might take advantage. I also acknowledged that resale royalties or equity laid groundwork for a 'cathedral business', (p. 55) one that would take many years to assemble and to know the value of, something not well supported by venture capital investment aims.

Artist as Owner Not Guarantor (2018)

The second paper in this series was the first time I proposed fractional equity itself instead of resale royalties. I developed the paper for a panel on art markets that was held at College Art Association, the academic gathering of art historians and artists held in the US each February. Although I gave the paper during my first year on the New York University faculty, the basis of it had started the year prior. The connection of this work to blockchain technology occurred fortuitously when I was asked to advise someone on a new art-related venture that ended up being a blockchain company circa 2014.

The blockchain company in question, Bitmark (bitmark.com) was building a digital property registry using blockchain. This collaboration brought the decentralized ledger of blockchain into the work as a means of registering fractional equity and, hypothetically, developing a marketplace over which artists could trade shares. Other experience had informed this work including a research post for Professor Jonathan Zittrain in internet law (2001, 2004-2005) and a position in an economic mapping company that developed taxonomic aspects of my work, particularly in designing classification systems. Working with Zittrain on Internet law books and then with the Bitmark team, I was around people whose relationship to technology was so obvious, pure even, that they were not trying to prove anything to anyone. Their ethos brought me into the technology as a generalist rather than programmer or programmer-attorney.

That new understanding of blockchain permeated the 2017 paper given at College Art Association. I still had not given myself over to, or really fully understood, the structures or formats of academic writing. The paper still started with the story rather than a literature review. The story was of an unusual case involving the Scottish artist Peter Doig. In 2016, Doig had been ensnared in a lawsuit in US federal court. An art dealer and a man owning a painting had suited Doig for failing to authenticate the painting. The work in question was described in the 2018 paper as ‘an earthy desert landscape with twin buttes off to the right, a row of red ricks receding in near perfect single-point perspective, a smattering of cactus plants, and a lone incongruous or symbolic flowering tree’ (Whitaker 2018, Artist as Owner Not Guarantor, p. 1-2). The painting was signed

‘Pete Doige,’ one letter off both the first and last name. The art dealer, Peter Bartlow, alleged that Doig made the work but didn’t want to admit to it because admitting to it was tantamount to admitting the artist had been in prison. The collector and owner of the work for sale, Robert Fletcher, was a former prison guard. He had purchased the work from an inmate in what Fletcher said was an avuncular attempt to help the young man incarcerated on LSD charges to make his way.

Doig, whose works commonly sell in the tens of millions of pounds, eventually proved in court that he had not made the work in question, but what was asked of him was astonishing. He produced correspondence between his mother and grandmother and all manner of other evidence that he was in school plays and not in prison at the time. As Doig said, ‘That a living artist had to defend the authorship of his own work should never have come to pass’ (Whitaker 2018, Artist as Owner: 3). I was struck by Doig’s being asked to spend so much time and resources to perform labour for others’ financial gain.

The paper began with Doig’s story and then expanded into proposing a conceptual framework for fractional equity. I imagined the percentage of a work of art that an artist could keep. Not only the artist but also the dealer or another third party could theoretically retain shares. A table (p. 4) shows possible splits of the proceeds. Rather than equity just being granted to artists, I proposed that the artist pay, in opportunity cost, to retain equity so that I could avoid criticisms of resale royalties as a form of welfare for artists (e.g., Rub 2014, Sprigman and Rub 2018). For example, if a work of art were priced at $100, the collector now paid $90, with the dealer keeping $50 and the artist receiving $40 and retaining 10% ownership.

In the paper, I both worked around the the criticism of resale royalties as welfare and argued against it. To say artists receive welfare while not necessarily experiencing any of the economic precarity associated with being an artist felt problematic to me positionally, as well as debatable on the merits. On the merits, as already argued in 'Ownership for Artists' (2014), artists were disadvantaged relative to writers or actors whose work existed in multiple copies. One could frame resale royalties not as welfare but as a correction for artists' disenfranchisement from markets. The paper developed the ideas much further than 'Ownership for Artists' by exploring blockchain specifically (in a section called 'Blockchain Technology Provides Cheap Accounting and Automatic Provenance' (p. 56)) and more explicitly addressing the vulnerability of bad actors somehow disadvantaging artists whose equity was for sale (in the conclusion titled 'Risky Financialization or Stabilizing Portfolio Diversification?' (p. 58)).

The paper had a normative thread about the importance of governance and autonomy. I did not want to make artists participate in resale royalties or equity, but I did want the royalties or equity to be on offer if artists themselves wanted to participate. I also wanted artists to be protected by understanding the financial structures they were participating in. The risk of predatory financial offers dependent on fine print seemed too high. I believed artistic labour needed a dignity orientation—that it was hard to be an artist and a choice to be an artist, and that designing for artists' economics required awareness of structural inclusion in markets not only symbolic presentation of market resistance. In the paper, I tried to approach economic supports for art as a design problem based on needing to rectify a misalignment of price and value.

Over time, it felt necessary to test these ideas quantitatively and to write about them within fields of economics and finance, so that the paper would be legible within a larger history of art market study. I thus set out, with Roman Kräussl, a professor finance from the University of Luxembourg, to model retained equity quantitatively.

Fractional Equity, Blockchain, and the Future of Creative Work (2020)

Here, the methodology became very interesting. The two prior papers were future oriented, speculative even. In order to create a finance paper, we needed empirical evidence. There is a large body of research within finance and economics on returns to art as an asset class. Most of these studies employ large data set of publicly available auction returns. The first studies used a 'repeat sales' method, isolating artworks that went to auction twice and inferring a rate of return between the two sales (Baumol, 1986; Goetzmann, 1993; Mei and Moses, 2002, 2005). These studies dovetailed with the publication of historical sales data and the computing power to analyse them. Later studies introduced a method of hedonic regression (e.g., Renneboog and Spaenjers 2013; Korteweg et al. 2016). That method relies on different characteristics of a work of art (e.g., medium, size). The method connects which variables are most determinative of the price (hence 'pleasing' to the buyer). Some other studies have also taken specific historical data sets, for instance, Bayer and Page's (2014) study of the art market in England in the 19th century, Ekelund et al.'s (2009) study of the 20th century US art market, or Vermeylen's study (2003) of the development of the market in Antwerp in the 16th century. Greenwald (2021) has used data analysis to study 19th century markets for paintings in France. The quantitative studies have been revisited by later scholars, e.g., Buelens and Ginsburgh (1993), confirming the findings that there is a positive return on investments in art, though at a relatively low rate of return (on par with corporate bonds) and a relatively high level of risk or volatility. Other papers have shown that there is substantial variation or heterogeneity in returns among different works of art. In financial terms, art markets tend to have a winner-take-all superstar effect (Rosen, 1981). More theoretically, art is very difficult to value, including because of its inherent singularity (Karpik 2010).

The innovation of the 'Fractional Equity' paper was to combine data from primary market gallery sales with data from public auction results. It is worth discussing briefly the difficulty of obtaining data and the reliance on trust ties or on idiosyncratic reasons for data publication. The initial data came from correspondence files because the invoices were embargoed from the archive. Other datasets were available because the dealers had had no heirs who wanted to control access. Matching the data from archival records to auction results involved comparison of date, dimensions, medium, and provenance from a variety of sources including catalogues raisonnés.

Bearing in mind we did not know what the analysis would bring, it was actually sort of embarrassing when we realised how much those artworks outperformed other investment markets. We found that Jasper Johns outperformed U.S. equities markets by up to 1000 times, and that Johns and Rauschenberg tended to return an average of 20 to 40% every year from the early 1960s to the mid 2000s. We expanded the study to include all of the artists from the Green Gallery and Betty Parsons Galleries which ran in

New York in the mid-twentieth century.[14] For the main analysis, we modeled the galleries as if they were investment funds that had bought all of the works they sold, or rather bought 10% equity in all of the works they sold. There is a method in finance, Public Market Equivalent (PME) (p. 4601), that it was suggested we use, but that method requires a short and finite time frame of investment, for instance a seven-year private equity fund. We were looking at a long time horizon of gallery operations, and so every time an artwork sold at auction, we reinvested the proceeds in the US S&P 500. The 'fund' substantially outperformed US equities as represented by the US S&P 500 index.

The analysis also allowed observations about the other methods of art market analysis and about patterns of racial and gender inclusion in art markets. Regarding methodology, we were able to see that in our sample, only about 2% of works sold in the primary market went to auction. Thus, although the repeat sales method has been important foundationally to financial studies of art markets, it is also likely true that a small percentage of overall sales—those that go to auction twice—is generalised to describe the overall art market. Secondly, we also saw how few women and BIPOC (Black, indigenous, people of color) artists were included in that group whose work went from primary market to auction market.

[14] Robert Scull, the apparent villain of the Rauschenberg *Thaw* story, was actually the silent financial backer of Bellamy's Green Gallery. See Betty Parsons Papers, Archives of American Art, Smithsonian, Washington, D.C.; Richard Bellamy Papers, Archives of the Museum of Modern Art, New York, and Leo Castelli Gallery Papers, Archives of American Art, Smithsonian, Washington D.C..

Even if auctions were hypothetically a more objective reflection of the works circulating in the art market, auctions are themselves subjective and performative events. What appears to be a neutral price clearing mechanism (Klemperer 2004; Ashenfelter and Graddy 2003) is deeply embedded in specific social interactions (Heath 2012), types of underlying contracts that can skew price, and bidding behaviours including bidders who have a broader interest in propping up the prices of an artist's work. That is to say, some sociological studies of markets pertain to the arts in that there are calculative devices (Callon and Muniesa 2005) comingled with judgment devices (Kharchenkova and Velthuis 2017) arriving at valuations that are taken to create the price themselves, in that way becoming performative.

The paper ended with a human story:

> *…[T]he starting point of the data in this study…was a handwritten notebook. In cursive handwriting, in a small personal notebook, Leo Castelli recorded $300 sales that would go on to become multimillion-dollar auction results. Before that, in poorly heated studios, the artists developed the work itself. That moment of value creation is, in its idiosyncrasy, markedly different from the moment of value capture as the artwork is later resold. The fractional equity model bridges the idiosyncratic starting point and the possible stratospheric returns while offering tools for diversified investment and democratised access to markets for art* (p. 4608).

In its way and within a very different disciplinary and relational context, this paper ended where 'Ownership for Artists' began, attempting to hold space for dignity of artistic labour and for a perhaps quixotic idea of market democratization and artistic support.

As a coda to the presentation of these core papers, this work in fractional equity touched on different disciplines—law and technology—in application to copyright law and heritage restitution, papers described below.

Shared Value over Fair Use

Published in the *Cardozo Arts & Entertainment Law Journal* (2019), this analysis of copyright forms a conceptual and practical application of fractional equity in terms of shared ownership stakes in copyrighted work. Intellectual property shares some of the characteristics of emergent value, while also having added complexities of the collaborative—or additive—nature of much creative work. In the United States, fair use—the term for acceptable repurposing of a copyright-protected image, comparable to 'fair dealing' in the UK—is typically evaluated by a 'four factor' test which was defined in the case *Folsom v. Marsh* (1841) and codified in the U.S. Copyright Act of 1976. The four factors are: the purpose and character of the use (e.g., commercial or educational), the nature of the copyrighted work (e.g., satire or political commentary), the amount of the work used, and the effect of the new work on the market for the original work (Whitaker 2018, *Shared Value:* 641).

The fourth factor is often referred to as a 'market' test. In the actual phrasing, it is 'the potential market for or value of' the original work (p. 641). In this paper, I proposed that fair use could be reconsidered using a 'value' test. The importance of this argument was with regard to scholarship on fair use at the time. A prominent art law professor Amy Adler (2016) had argued that fair use should be dismantled and copyright should cease to exist. In a general argument espoused by Adler and others, the digital age had made copyright messy, and it seemed that cleaning up the application of fair use was tempting from the perspective of legal clarity yet deeply unfair to artists, in the same way that fractional equity sought to be fairer in reflecting change in value of artists' work.

Much of the interpretation of fair use drew on a highly influential 1990 article 'Toward a Fair Use Standard,' written by the judge Pierre N. Leval in the *Harvard Law Review.* Leval put forward a concept of 'transformative use.' While influential, the definition of transformative had become a moving target. Many copyright cases began to depend on statements artists made about their intention or the cases were settled. I became interested in two art-related cases: that of Shepard Fairey, the graphic artist who designed the Obama 'Hope' poster and Richard Prince, the appropriation artist who made large-scale canvas prints of other people's Instagram posts to which he had added minor comments.

The 'Shared Value' paper begins with the story of Fairey. The artist wanted to help the Obama presidential campaign and, upon receiving the campaign's blessing in early 2008 (p. 637), set to work making the image. Fairey used an underlying Associated Press photo and then volunteered two days of his own time making the poster. At the time that Fairey made the work (in a point A world), no one knew whether it would have any value. It was only later, once the artist had earned $1 million in revenue, that the Associated Press sued him for using the photo. There were complexities to the case, namely that Fairey lied under oath because he realised partway through that the photo in question was different from the one he thought. It would be hard to win any ambiguous case in which one had lied. The two sides ultimately settled. The settlement seemed a suboptimal outcome: Lawyers were paid, and everyone else spent a lot of time and anguish.

In the other case, the artist Richard Prince saw Instagram posts by the Suicide Girls, 'alt pin-up' photos of women in intentionally sexualised poses. Prince would add comments and then print the images on large scale—roughly four-by-six foot—canvases. These works sold for $90,000. (The Suicide Girls did not sue Prince but instead printed replicas of his work and sold them for $90.) Within the series were Instagram posts by two artists, Donald Graham and Eric McNatt. Graham had taken a photo of a Rastafarian man. McNatt had taken a picture of Kim Gordon, the lead singer of Sonic Youth. Both Graham and McNatt sued Prince for infringement. Represented by preeminent intellectual property attorneys pro bono after discovering the case via a university legal clinic, Graham and McNatt sued Prince and his dealer Gagosian.[15]

The core argument of *Shared Value over Fair Use* spoke to both the Fairey and Prince cases. I argued that the reality of creative work is some degree of collaboration, some degree of reliance on work that has come before, and some degree of using input material before value is known. In the case of Fairey, I imagined that if there had been a blockchain registry of the AP photos, Fairey could have known the source and also, speculatively if such a system existed, been able to clear rights beforehand. What I mean by clearing rights is different from the way rights are currently cleared. He would not have paid a fixed amount but paid nothing out of pocket and agreed to give the AP a

[15] I served as an expert, pro bono, in the litigation, writing a rebuttal report with some similarities to the 'Shared Value' argument.

share of future proceeds, should they come to exist. The agreement over fractional shares in future proceeds would be made a moment in time when those proceeds were hypothetical. It would even be possible to automate such a trade-matching system. In this ideal world, the underlying AP photographer would have received a percentage of the upside too.[16] The thread to the argument was one of added value, the game theory concept of subtracting oneself out to see what changes in a situation. The AP and Garcia had added value, but Fairey had most of it. The photo contributed to Fairey's work but without Fairey the poster would clearly not exist.

In the case of Prince's work, the artist had added value in that he had an established market for his work. Yet this take could be applied in a way that was somewhat cynical, arguing that Prince had added value by sheer fact of being able to mint art into money. In writing an expert rebuttal report (pro bono) on the case, I argued that McNatt and Graham were also artists, and that their current realised market was not determinative of the 'potential market' and 'value.' I also argued that one could look at the labour input and the investment of the first artist and the cost savings to the appropriator or borrowing artist. Graham and McNatt had saved Prince a lot of time and effort. I did not think that the current market price could automatically be taken to prove the value of the work. This was because value of art becomes known over time and because art has many forms of unquantifiable value. As I will cover in the next chapter, I am now able to place these observations in a sturdier context of commensurability, as put forward particularly by Fourcade (2011).

[16] Mannie Garcia, who had taken the AP photo, was not originally hired to photograph Obama himself but to document a press conference with him, another senator, and the actor George Clooney concerning humanitarian crises in Darfur (p. 636).

Antiquities and Restitution

In a separate paper, I explored the applications of blockchain to the issue of restitution of cultural objects. In 2018, the French prime minister Emmanuel Macron had commissioned Felwine Sarr and Bénédicte Savoy to write a report on the enormous number of African cultural objects in French museums. Hundreds of thousands of objects reside in museums across Europe, with more than 90% of African cultural objects residing outside of Africa (Sarr and Savoy 2018: 3). Writing with a group of practitioners (and taking the role of lead author and main drafter), I explored the nature of art and cultural objects as bundles of rights. Only in an artist's studio is a work fully intact and bundled. Once sold, the rights stack 'splits' with copyright retained by the artist. Looking at cases of restitution, some were zero-sum: the Elgin Marbles reside in London or Athens. But others could be split apart into ownership, exhibition, cash flows, and so on.

We took inspiration from a case from the 1980s in which the art collector Domenique de Menil was offered frescoes that had been stolen from a chapel in Turkish occupied Cyprus. In an elaborately interesting story—shown work by candlelight in a Munich apartment not for ambiance but lack of electricity, pretending not to know they were stolen and expressing interest before turning around and hiring the former US attorney general to research the rightful owner, fictional drawings of the frescoes in situ—Mrs. de Menil had entered into an unprecedented contract with the Church of Cyprus.

The two parties—the Church of Cyprus and a newly formed Byzantine Fresco Foundation—agreed that the Menil Collection could display the frescoes for fifteen years and then they would be returned to Cyprus. By clarifying the ownership rights, the exhibition rights could be negotiated. The circumstances were not directly replicable: Mrs. de Menil had funded the restoration and purchase of the frescoes, a kind of *deus ex machina* to the negotiated outcome. Still, we imagined scenarios in which ownership and exhibition could be split so that objects could be returned, cash flows could be returned, and importantly governance over the decisions could include a broader set of participants. Blockchain's distributed governance structure seemed to enable still imperfect but somewhat more egalitarian negotiating platforms.

Chapter Conclusions

The thread across these papers is the idea of property rights. Property is unusual in the arts because of the different kinds of rights. In addition, value is unusual in the arts because it is so subjectively held yet sometimes objectively studied. Art is an unusual asset class in that it does not have cash flows—just purchase price and sales price. Equity seemed to create a protective membrane. The value existed within that membrane without having to be priced.

Chapter 3: Art Through a Lens of Valuation Studies

In this chapter, I have the opportunity to place the submitted works in the context of the readings I have undertaken, predominantly in economic sociology, at the suggestion of my advisor and in the general process of undertaking the PhD. The readings that have most reframed my work concern value—especially the difficulties of valuation, the processes of commensuration, and the performativity of financial markets. I focus primarily on the financial value or price of art, recognizing the many other forms of valuation described in the literature.

This chapter is organised first as a reflection on texts in economics sociology and the ways in which these readings contextualise my work on emergent value, art's lack of cash flows, and the idea that economics itself as an emergent discipline. In particular, I consider limitations of my prior work in sometimes collapsing a broad conception of value into the single application of value to price and the ways in which economic sociology offers a broader conceptual scaffolding. I then consider some of the ways in which the relationship of these texts and my work has also led me to consider broader themes of interdisciplinary research, what constitutes knowledge formation, and what new directions of research emerge—in particular exploring science fictions to extrapolate from equity for art to societal redistribution and repair.

Economic sociology has offered extremely helpful frameworks of thought around the social and performative situation of art markets. Granovetter's idea of embedded markets (1985) and Polanyi's work on the specific historical and political context of markets (2001 [1944]) have been particularly influential, as has the treatment of this work by later scholars (e.g., Townley, Roscoe and Searle 2019: 8). The entire body of literature in valuation studies, particularly works on performativity (e.g., Callon 1998; Callon and Muniesa 2005; Muniesa 2014; MacKenzie 2006a, 2006b) has wholly recast my understanding of valuation within financial markets. Valuation studies enlivens the landscape of financial research with a sense of constantly moving plate tectonics that move in accordance with performativity and embedded social structures as much as any natural science of efficient markets. Velthuis and Coslor (2012) and Coslor and Spaenjers (2016) have particularly complicated readings of valuation with regard to art markets.

Art presents interesting challenges to valuation studies because art is such a peculiar asset class, one that lacks cash flows. Leyshon and Thrift (2007) isolate cash flows as the source of the widespread 'capitalisation of almost everything' based on the securitisation of anything with an income stream. Interestingly, both art and crypotokens lack this cash flow and are instead effectively valued as collectibles or currencies, though this is debated (see, e.g., Yermack 2013). Art and cryptocurrencies still undergo what Doganova and Muniesa (2015: 120) called the 'asset-becoming process' becoming invested with value if not a constantly knowable or reliable price.

In some ways, art represents a paradoxical kind of valuation process. Already, numerous forms of valuation exist in the arts including critical praise, prizes, and scholarly regard (Stark 2010). From a narrowly financial or pricing lens, art's valuation is not easily knowable because it continues to emerge over time. At the same time art's insularity from cash-flow analysis using financial theories insulates it from the kinds of calculative performativity described by scholars such as Callon (1998), MacKenzie (2006a), Muniesa (2014). Instead, the lack of cash flows opens more complicated readings of art markets as deeply socially embedded market constructions (Coslor and Spaenjers 2016). In Callon and Muniesa's (2005) work, calculative devices are performative, and whole economic markets are collective calculative devices. Even Nobel-Prize-winning financial theories can serve as choreography whose rightness is established by followers, reified by enactment of theories not fixed as natural law (MacKenzie, 2006b). As MacKenzie has shown, the Black-Scholes options pricing model is an example of an equation that did not work initially but then did over time as market actors started to follow its choreography, making the equation performative in Muniesa's sense of enacting the its own logic (Muniesa, 2014; MacKenzie, 2006b). The equation was influential without necessarily mapping a truth. One indication of the equation's social embeddedness—and its importance to individual market actors—is that although Fischer Black never received the Nobel Prize because he died before it could be awarded (and the Nobel is not given posthumously), when Black was alive, if he and Scholes ever went on the floor of the Chicago Board Options Exchange, all of the traders stopped what they were doing to give them a standing ovation (Henriques, 1995).

Although art is not generally seen to be valued performatively in the enactment of an equation, from a pricing or financial standpoint, it could be said to be valued performatively in the act of an art auction, in which a price is set in a room (Klemperer, 2004; Heath, 2012).[17] The theatricality of art auctions is distinct from the role of

[17] There are attempts in the literature to apply equations to the valuation of art, but these equations tend to include a holdall term for an 'irrational premium' (Skaterschikov, 2006: 92).

retained equity in art, which is not intended to calculate value but simply to maintain a connection to the property itself so that changes in value ascribed to the artwork at the various times still flow back to the artist. That is to say, the artist has property rights to benefit in upside of art's valuation in markets, whether that process of commensuration is accurate in calculated value at any point in time.

Commensuration may be the concept in economic sociology with the biggest impact on my work. Espeland and Stevens (1998: 315) define commensuration as 'the expression or measurement of characteristics normally represented by different units according to a common metric.' Fourcade (2011: 1731) writes of 'money as a yardstick'. In many areas, something—land, people, privilege—it is easier to label as having value categorically than to peg that value quantitatively. Ancestral land joins other peculiar and intangible objects that for moral, cultural, or other reasons are hard to value. In this category, Zelizer (2000) has notably studied children, and Fourcade (2011) human organs as uncomfortable to think of as owned or made commensurate.

Something may become financially knowable or tradeable through the aforementioned process of 'asset-becoming' (Doganova and Muniesa, 2015: 120), or it may exist in a liminal or inchoate state of known but incalculable value. Harris (1993) argues that Whiteness is a form of property because of its advantages within structurally racist societies. Espeland and Stevens (1998) consider land ownership among the Yavapai community. The ancestral lands are owned but not in ways that are made commensurable with money. The land is claimed and stewarded but not commodified. Even to contemplate valuation is, as Zelizer writes in her pioneering study of life insurance policies in the nineteenth century, representative of a core problem of 'establishing monetary equivalence for sacred things' (Zelizer 1978: 593). These 'assets' seem to function with a shell of commodification—Polayni's 'fictitious' commodities—that is, using the protective membrane of commodification without necessarily having been produced with the intention to be sold or priced by supply and demand (Polanyi 2001 [1944]: 72).

These ideas interestingly contextualize the art historical area of deaccessioning, the sale of art from museum collections, a topic on which I completed a book chapter in 2020 ('Object Impermanence', with Glick, 2021). Art museums have very strict policies around deaccessioning—selling artworks. Typically, museums are only allowed to sell artworks in order to acquire other artworks. That is, artworks are never allowed to be made commensurate with operating expenses. In addition, artworks are held on museum balance sheets at acquisition cost. This marking of artworks at book value—in some cases works acquired for $1,000 now worth $100 million—also separates artistic from commensurable financial value. During the coronavirus pandemic, the rules around deaccessioning have been temporarily loosened, and museums are, for the next two years, allowed to sell artworks to use money for overhead expenses (Gold and Jandl, 2020). Museums were already beginning to sell artworks in order to diversify representation by BIPOC artists in their collections. Now museums can sell artworks to, for example, endow funds to pay living wages so that their workforces can also be more representative (Whitaker and Glick, 2021, Object Impermanence). At stake is having to treat an artwork as an artistic *and* a financial object simultaneously. This commensurability of artworks radically expands the complexity of museums' ethical responsibilities—and powers—to make decisions around equity and inclusion.

If commensuration, in a financial context, is the process of or threshold across which things of value come to be legible in markets not just comparable one to another, then commensuration becomes that much more complicated not only for works that are difficult to value at a point in time but those, like art, whose value becomes known *over* time. If, as I have argued in Chapter 2, fractional equity can offer an interesting intervention into commensuration by providing a share that does not need to be priced, then it follows that equity shares can be explored as speculative, even science-fiction based tools to reconsider the financial life of value. Equity could be used to address misallocations of value or extractions of or violence and injustice toward labour over time. For instance, the U.S. economy is built on slave labour that occurred in the founding centuries and which remains un-repaid and of continuing consequence in the line drawn from slavery to mass incarceration and in ongoing legacies of radically unequal wealth distribution among Black and White families (Oliver and Shapiro 1995). When these costs and foregone payments are valued, estimates hover in the trillions of dollars (Coates 2014).[18] To make these costs commensurate with flows of money in the present is analytically and politically difficult.

[18] One could arrive at more inclusive and speculative numbers that are higher by quantifying the more difficult and incommensurable costs in life expectancy, in poorer maternal outcomes for Black mothers, and in opportunity costs that are nearly impossible to engineer in the imagination without toppling societal superstructures (Villarosa, 2018).

Although strongly speculative as a thought process and essayistic as a method, the writing of science fictions offers an interesting path to consider these ideas more radically. As Davies writes (quoted in part in the introduction) (2018: 16), '[s]cience fiction…is…a political resource, as it empowers the critic and the radical to see the present as amenable to conscious transformation.' With regard to fractional equity, proposing equity-based systems of societal redistribution may be possible by using an 'economic science fictions' approach to past examples of lack of ownership and equity.

One can particularly consider the case of Henrietta Lacks (Skloot, 2010), a Black woman in Baltimore, Maryland, whose cancer cells were cultured without her permission and then used without compensation in research leading to such a wide array of world-changing scientific discovery that it would be interesting—and from a commensurability standpoint interestingly impossible—to value. After Lacks's death from cervical cancer in 1951 (Skloot 2010: 3), her cells continued to grow so robustly in petri dishes that they were sold to other research labs. Seventy years later, literally trillions of her cells—called HeLa cells—are stored in medical research facilities all over the world. By one estimate, all of the HeLa cells ever cultured would together weigh 50 million metric tons even though a single cell is essentially weightless. By another estimate, if placed in a line those cells would extend 350 million feet, or more than three circumferences of the Earth (Skloot 2010: 2). Those cells have been used materially in the processes of curing and treating diseases (polio vaccine, chemotherapy), in fertility treatments (in vitro fertilisation), and in various still experimental but potentially revolutionary areas of exploration (gene mapping, cloning) (Skloot 2010: 2). One could value the economic impact of those treatments and then the non-economic impact—for instance children who would not exist but for in vitro fertilization or lives saved from cancer. If Lacks were to own even a small percentage of the value her cells had created she, or her heirs, would, reduced to dollar terms, potentially surpass Jeff Bezos, the Amazon founder, in wealth.

Within a lens of commensuration, this science-fiction approach to equity-based redistributive repair offers the opportunity to think about value in nonquantifiable and quantifiable terms simultaneously. The reduction to dollar wealth itself reifies a neoliberal project. Or as Davies writes (2018: 18), 'The grim achievement of neoliberalism is to produce an overarching calculative infrastructure—namely finance—to harness and channel these hopes and dreams for the future, and to render them mathematical and computational in the process'. Even though markets offer such calculative devices, and therefore offer the appearance of true computation of price, markets do not easily recognise and reward this kind of value. It is easier to know the calculated residuals from pharmaceuticals than the value of the life saved through cancer treatment. The spreadsheet calculation of price gives way to the Clarence Oddbody—the angel from *It's a Wonderful Life*—revelation of alternate universes.

The conceptual grounding of economic sociology, in tandem with an enlarged ranged of methodological tools, creates the opportunity to apply imagination and analysis simultaneously to specific problems of representing value in the economic determination of price. These equity-based proposals might be considered in the context of current policy proposals in the US for debt-based systems of reparations for slavery. Hamilton and Darity (2010) have proposed the issuance of baby bonds to Black children upon birth. Equity-driven proposals, developed through systems in the arts and pay for creative labour, may complement debt-based systems of redistribution and reparation, or broadly, creative repair.

Critically with regard to the relationship of economics and politics, redistribution via equity can be designed to rely on the democratic processes of counting people and not on the economic processes of counting how much. A property right—such as an equity share in HeLa cells or in reparations—can be identified by census or understood as akin to a vote. It is only the original assignment of the property right that relies on equality or equity or, more generally, care (Knight, 1923). That is, we need to know Lacks' percentage share or, if reparations are paid pro rata or by person. But the distribution of share has more in common with a membership in a body politic than the distribution of an amount.

Distribution via a census mechanism still encounters problems of commensuration. In the case of reparations for slavery, the total number of shares need to be able to grow to a size that is comparable to the scale of the foregone value, including everything from enslavement itself to lack of wealth accumulation from housing discrimination (Coates 2014) to lack of economic gains from innovation owing to racial terrorism (Cook 2014). The distribution itself then faces issues of apportionment—who is included, whether everyone receives equal numbers of shares. These questions are not uncomplicated to answer, but they may potentially benefit from the structural nature of equity or property right as a protective membrane that can hold forms of emergent or buried value. That membrane can arguably be subjected to pricing while also still holding a structural integrity as property whether the owner chooses to make them commensurable with price in general or for purposes of sale. Distribution by census can, if not completely then more easily, be made to be agnostic to questions of value and evaluation (Lamont, 2012; Muniesa, 2019). In this sense, with care, systems of property rights open up the possibility of reverse engineering what Davies has called the disenchantment of politics by economics (Davies 2014).

From a policy realism standpoint, because equity is an assignment of upside not an expenditure of a pool of funds, it is a tool that can make policies of redistribution more politically palatable by avoiding the behavioural finance problem of loss aversion (Kahneman and Twersky, 1979). In Kahneman and Twersky's work, loss aversion describes the tendency for people to derive more disutility from a loss than utility from a gain. That is, losing feels proportionately worse than winning. Thus, policies that take money and give it to others can invoke disproportionate feelings of loss. While that is not reason to avoid those policies wholesale, equity can avoid loss aversion because it is a distribution of gain—or option toward the future not subtracting from the present. Regardless of how policies are eventually formulated and enacted, the key point is that equity can depend on counting not commensuration or valuation, thus invoking structures of democracy more than those of markets. The speculative fiction of Henrietta Lacks as richer than Bezos holds to the idea that '[f]ictions…can counter capitalist realism by rendering alternatives to capitalism thinkable' (Fisher, 2018: xiv).

Whether we continue to use market structures, abandon them, or follow from Polanyi (2001 [1944]) and Feher (2009) to use tools of markets without becoming *of* markets, it seems difficult without market education to move beyond the impasse of the creep of neoliberalism over society and the relegation of market critique to a sideline area of commentary that is symbolic rather than structural in its outcomes. One can win a symbolic argument about the nature of markets without changing markets at all. Those critiques inform this research into the design of equity-based systems as itself an art project concerning the design of markets and the political and societal systems around them.

I find it hopeful to see economics and finance as artistic disciplines in formation. This idea of economics or finance as an emergent discipline is arguably reinforced by seeing the relative recency of theoretical advances: Markowitz's (1952) portfolio diversification and abstract expressionism of the 1950s, the efficient market frontier (Sharpe 1964) and 1960s pop art, and Black and Scholes's (1973) options pricing framework and conceptual art of the 1970s. Those works appear true within finance but they are as newly formed as those works of art. Sharpe's 1964 paper of the efficient market frontier, the ideas are so new to the author that he has flipped the axes. The way the diagram is canonically drawn inverts the X-Y axes from the original paper (Sharpe 1964: 426).

This newness of research is noticeable in other fields. For example, Daniel Bernstein, the person who invented Curve25519, the elliptical curve that Apple's cryptography is based on (Bernstein 2016) once presented at a conference the original comments he received when he first submitted the paper for peer review. One reviewer said, What's the big deal? It's just a curve. Another reviewer commended the paper on its relative lack of grammatical error. In another instance, the co-inventors of the blockchain, Stuart Haber and Scott Stornetta (whose work is cited in three of eight footnotes in the Satoshi Nakamoto Bitcoin white paper), developed a time stamping tool for digital documents in 1990, published in 1991. They were far enough ahead of their time that, if only for a lapsed patent maintenance payment, the entire underlying structure of blockchain would have been under U.S. patent during the first year of the Bitcoin blockchain.[19]

These intersections of practical research, academic knowledge formation, and market footprint of creative work themselves benefit from reframing within theoretical ideas of valuation, commensuration, and performatively. These examples might constitute an academic equivalent to market performativity while perhaps also falling into an interdisciplinary illegibility between fields.

To return the original question of equity for artists, property arguably offers a means of protecting what is ultimately the definitional incommensurability of early-stage creativity work. Perhaps these same tools will offer inroads to new economic systems for redistribution and repair. By generalising from shared equity structures around artworks, new answers appear to vital questions of democracy: how can everyone be equitably included? By framing equity in the sense of inclusion and fairness as well as in the sense of ownership, one can imagine shared economic structures and political participation, recognising democracy itself as an art project.

[19] Whitaker 2018, The Eureka Moment That Made Bitcoin Possible.

Throughout that process of considering equity for artists writ large, some of economic theory's core neoliberal assumptions of motivation toward profit as an organising principle are called into question. Art offers endless examples of a decoupling of motivation from work—artistic resourcefulness, willful inefficiency, and commitment to the questions of the work itself. In effect, artists strip economics down to its underlying structures. Without visibility into a point B world in which value is known, one is reduced to a more basic resourcefulness which is perhaps a first principle underneath economics' assumptions toward profit or efficiency. From a standpoint of resourcefulness, economics is not a vector toward profit but a structural algebra. In that context, the assumption of profit-seeking is normative and casts a shadow in which empirical and quantitative methods are normatively embraced as ways of knowing. Instead, efficiency is a choice and a tool not a normative assumption of goodness.

Leigh Claire La Berge writes (as cited in Chapter 1), 'It will not do to read only from economics to art. We must be able to read from art to economics as well' (La Berge, 2019: 3). Perhaps her statement identifies the political project underneath this work. This project is not to engage in economics or in art but to make visible the power dynamic between the two, particularly in regard to who constructs a definition of value, who benefits from it, and how we might all benefit from it collectively. To bend economics to support artists through the designation of equity or property is also to bend a profit motive to a more idealistic notion of progress as a pursuit not of growth per se but of betterment. By contributing to systems of equity, individually and collectively owned, creators are structurally entitled to personal and public benefit in the design of a world, with equity used not to represent profit but value.

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