

The London School of Economics and Political Science

The Financialization of Art

A Sociological Encounter

Christopher Upton-Hansen
20092986

Thesis submitted to the Department of Sociology of the London School of Economics and Political Science for the Degree of Doctor of Philosophy, London, January 2018.

Declaration

I certify that the thesis I have presented for examination for the MPhil/PhD degree of the London School of Economics and Political Science is solely my own work other than where I have clearly indicated that it is the work of others (in which case the extent of any work carried out jointly by me and any other person is clearly identified in it).

The copyright of this thesis rests with the author. Quotation from it is permitted, provided that full acknowledgement is made. This thesis may not be reproduced without my prior written consent.

I warrant that this authorisation does not, to the best of my belief, infringe the rights of any third party.

I declare that my thesis consists of 91,632 words.

Gratitude

My work is indebted to my supervisor Mike Savage for his intellectual generosity, warmth, and ongoing support. I owe my gratitude to the ideas, work and direction provided in the early stages by Juan Pablo Pardo-Guerra and Fabien Accominotti, and in the final stage for the attention and willingness to engage with my work of my viva examiners Nigel Dodd and Julian Stallabrass. I also owe my gratitude to the support of my good friend Eric Topham, my partner Gayatri Padmanabhan, who helped me carry on with my studies for all these years, and the broader Upton-Hansen family – my parents in particular. Finally, my thanks to my fantastic peers in the Department of Sociology of the London School of Economics and Political Science.

The Financialization of Art: A Sociological Encounter

Abstract

The financialization of art describes a diffuse series of changes in how the art market operates, how it is rendered visible and thinkable, why buyers and firms enter and exit it, and how they profit from it or not. It is a proliferation of the nodes through which the value of art can be circulated as capital; an elongation, diversification, and acceleration of its life as such. This research, proceeding from a half-decade immersion into the ‘artworld’ and its interpreters ‘in the wild’ (through press articles, reports, conferences, art events, published interviews, corporate white papers & documents, art data, industry publications, and econometric research on art) is an attempt to come to terms with this plurality. It stages a sociological encounter with the substance of art and finance across a series of key contexts: the financialization of the late capitalist economy and dynamics of wealth and income inequality; changes in the traditional art market such as the rise of contemporary art, the privatization of the endorsement cycle, the industrialization of cultural capital, and the emergence of the online art market; and longue durée shifts in dominant conceptions of art and artistic work which continue to avec the configuration of the market in important ways. Doing so, it posits key links between financialization, inequality, and taxes; between the devaluation of institutional means of assessment and the rise of a financial episteme; and between post-modernity and the mollification of ‘hostile worlds’ positions. Throughout, this thesis also draws on sociologies of markets, quantification and worth to suggest that, given the partiality and contested nature of financialization’s empirical and practical foundations (not to mention its lacklustre track-record), the real import of financialization may be epistemic and ontological. Indeed, its shortcomings notwithstanding, it has nevertheless succeeded in creating new communities of interest and roping in expanding fields of expertise to its cause, thereby orienting real intervention. These various dynamics contribute to a sociological mapping of art’s financialization.

Table of Contents

Table of Contents	4
List of Figures.....	6
Introduction.....	7
Part I – The Financialization of Art.....	18
 Chapter 1. Calculating Art.....	18
Introduction	18
The Hedonic Pricing Method	19
The Repeat Sales Method.....	23
Other Approaches.....	27
Other Limitations	31
Conclusion.....	37
 Chapter 2. Four Easy Pieces.....	39
Introduction	39
1. Wealth Management, Advisory, Collection Management	40
2. Art & Debt.....	55
3. Art Investment Funds.....	63
4. Freeports.....	73
Conclusion.....	77
 Chapter 3. Reflections on Calculation	79
Introduction	79
Quantification: Communication / Orientation	85
Quantification: Embodied Capacity for Action	89
Quantification: Radical Disruption?	92
Conclusion.....	95
 Chapter 4. Financialization & Inequality.....	97
Introduction	97
Financialization of the Global Economy in Academic Research.....	98
Echoes in the Artworld.....	101
Financialization's Link to Inequality	103
Inequality at Large	105
Inequality as Channel for Art's Financialization	107
Conclusion.....	111
Part II – Contexts / Effects.....	113
 Chapter 5. Taking the Long View: Vertical & Horizontal Forces.....	115
Introduction	115
1. Vertigo: Persistence & Recurrence	117
2. Agoraphilia.....	127
Conclusion.....	134
 Chapter 6. Reflections on the Contemporary Art Market	140
Introduction	140
Auction Records – Dispersion	140
1. Expansion of Museum Sector & Turn to the Experiential	144
2. The Artist-Entrepreneur	148
3. The Privatisation of the Endorsement System	152
Conclusion.....	163
 Chapter 7. The Online Art Market.....	165
Introduction	165
The Online Art Market.....	165
Intermediation & Escape in Circulation.....	166
The Limits of Flatness.....	168
Data & Screen	170

Conclusion.....	173
Conclusion	175
Bibliography	181
Arts, Culture, Society: History, Theory, Criticism, Philosophy	181
Indexes	195
Economy, History, Theory, Sociology, Philosophy.....	199
Quantification and Objectivity.....	205
Methods.....	207
Reports	209
Podcasts.....	211
Art Market Agency	216
ArtBanc	217
News Articles	219

List of Figures

Figure 1 - Mei Moses Index - Last 50 Years (Deloitte & ArtTactic, Art & Finance Report, 2016: 107)	26
Figure 2 - ArtTactic - Facebook Post (2017)	26
Figure 3 - Correlation Matrix of Art vs. Financial Indexes (JPMorgan / ECJ Capital Research) ..	35
Figure 4 - Deloitte Global Impact Model: Bourdieu-type Taxonomy Allows Broad Subsumption Under Finance (Deloitte & ArtTactic, Art & Finance Report 2016: 75)	42
Figure 5 – Cadell + Co: Portfolio Management Software	54
Figure 6 - Tiroche DeLeon Collection – Quarterly Fund Report (Q2 2017)	64
Figure 7 - Le Freeport Luxembourg (Top Left: Interior / Top Right: Exterior); Le Freeport Singapore (Bottom Right: Exterior / Bottom Right: Internal Atrium)	78
Figure 8 Lorenz Curve (Artist Auction Record Prices)	142
Figure 9 - London Galleries (n = 152)	143
Figure 10 - Cross-Representation of Artists by Galleries	157
Figure 11 - Cross-Representation of Artists by Galleries, (red = top bracket; blue = the rest)	157
Figure 12 - Cross-Representation of Artists by Galleries (detail; red = top bracket; blue = rest) ..	158
Figure 13 – Cumulative Distribution Function of Degree Distribution	159
Figure 14- Average Number of Relations per Gallery per Group	159
Figure 15 - London Map of Galleries (Node Size Contingent on Number of Relations)	161

The following images have been redacted as the copyright is owned by another organisation.

Page 42, figure 4

Page 54, figure 5

Page 64, figure 6

Page 78, figure 7

Introduction

In the course of the last decade and a half, the unprecedented expansion in capital transacted in the art market and invested in individual artworks has made this ‘last big unregulated industry’ the object of increasing attention from the institutions of high financial capitalism (Paumgarten, 2013: 47), and has led collectors to consider alternative factors than aesthetic or emotional ‘dividends’ in the purchasing, holding and selling of art. In 2014, it is claimed by the annual report of The European Fine Arts Fund (McAndrew, 2015), the market for fine arts reached a total value of just over €51 billion – its highest recorded level.¹ According to TEFAF, this represents more than a doubling in the value of the market over the course of the preceding decade, and an 81% increase since the lowest point of the art market post-recession, in 2009. The readerships of growing numbers of news outlets have become accustomed to new headline records. Christie’s sold Picasso’s *Les Femmes d’Alger (“Version O”)* (1955) for \$179 million on May 11th, 2015, and half a year later Modigliani’s *Nu Couché* (1917) for \$170 million. In that same week, Christie’s also beat the all-time record for highest total ever brought in at a single auction, a record it had itself set but six months prior. Across only 75 lots, it sold art for \$853 million. That same year, privately this time, Gauguin’s masterpiece *Nafea Faa Ipoipo (When Will You Marry?)* (1892) was sold for an estimated \$300 million. This has led to extravagant predictions: ‘I am certain’, said Francis Outred, the head of post-war and contemporary art at Christie’s Europe, ‘I will live to see a work of art be sold for \$1 billion’ (Adam, 2014: 22). Extravagant, that is, until an Emirati prince secured Leonardo da Vinci’s *Salvator Mundi* (c. 1500), at the Christie’s auction of November 15th, 2017, for \$450 million.²

Such stories, though they tell us little of the market’s internal dynamics, have alerted cocked ears to art’s potential as source of outsized profits, and created ready interest in the possibility of rationalised means of achieving them. Yet record prices, and their attendant dreams of systematic capital gains opportunities, are not the sole, or even the most remarkable, way in which finance has penetrated the art market’s infrastructure.

~

The financialization of art describes a diffuse series of changes in how the art market operates, how it is rendered visible and thinkable, why buyers and firms enter and exit it, and how they profit from it or not. If capital is ‘value in motion’, as Marx put it, then financialization is a proliferation of the nodes through which the value of art can circulate as capital; an elongation, diversification, and acceleration of its life as such. Art could during most of Western civilization be produced, acquired, and disposed of.³ Since at least the Renaissance it could also be sold, bought, re-sold, and re-bought, as secondary markets and expanding wealth created profit

¹ This number was revised downwards in their 2017 report, as a result of the replacement of author Clare McAndrew with Rachel A. J. Pownall, who applied a different method of calculation and sampling. See Karabell, 2017; in Bloomberg.

² To give an order of magnitude that might have baffled Leonardo, who was among other things also an engineer and astronomer, this is six times the cost of India’s Mars Orbiter Mission of 2014.

³ Among its social functions, it could be gifted, appreciated, consecrated, and copied, or reviled and stolen. It could elevate social standing, serve as heirloom, naturalise inequality, or fortify national identities. It could launder souls and later, money. It could eventually be curated or stored away.

opportunities for intermediaries. Today, among other functions, art can satisfy tax liabilities, defer them and render them ‘efficient’; it can produce credit, cost interest, and debt-finance other investments; it can be rented; it can be deposited, securitized and, in derivative ownership claims, traded; it can be arbitrated; it can be stored in freeports; it can be managed and traded in special legal vehicles, such as blind pool funds, on behalf of investors; it can be used to reduce (diversify) the investment risk of other assets in a portfolio; it can elicit and thus allocate indirect government funding; it can be pooled into pension schemes; it can serve as life insurance pay-out.

At the root of this, something else of note has changed. Millions of artworks can today be linked together in chains by algorithms that capture specific sets of their discrete features and, relating them to their prices, can produce graphic representations that summarise the totality or subsets of these metadata linkages. By aggregation, the millions of actors which comprise the market are reified as a distinct, visible entity, definable as a fluctuation over time. Data is the bedrock of the art & finance industry insofar as it is its primary source of legitimacy; the expression of its (superficial) philosophical disagreement with the primary art market; and, to a great extent, its principal good. Through data, attention is drawn to what the primary market obscures, and an asymmetry is potentially bypassed. While the primary art market continues cultivating opacity as if appropriate to the properties of art itself, its ‘older gentlemanly models of cultural superiority’ to use a phrase from Savage & Prieur (2013: 261), are being challenged by ‘models of technocratic and scientific claims to expertise’ that emphasize ‘scientific expertise, technology, information systems, and more generally the capacities to handle methods of various kinds’ (see also Savage, 2010).

Calculative agencies provide market-oriented information about the performance of market segments or artists in quantitative formats that are recognizable to the financial industry, and which are geared towards enabling specific forms of economic action. Econometric analyses using repeat-sales or hedonic price functions serve to empirically ground risk-return expectations. Once the market is visible in this manner, new ideas, by becoming communicable in the language of finance, can credibly be marketed. Art funds and managed accounts emerge. More ambitiously, so do art certificate exchanges where shares in individual art works can be transacted on the model of a financial market. These have so far failed in China, Luxembourg and Paris – but efforts are being renewed (Deloitte, 2013) and the apparent appeal of the notion refuses to perish: SplitArt has disappeared (see presentation by Chevion, 2011; Robertson, 2016: 219); My Art Invest, founded in 2011, came to London in 2014, and was dissolved in 2015⁴; Feral Horses, founded in late 2016, is working on an improved business model – so are Maecenas and ArtWallet, both bringing blockchain technology and cryptocurrencies to their assistance in doing so. It remains to be seen if the model will survive, and if so, whether it can enter the mainstream of the art market. Secondary services, such as providing asset-backed loans with art as collateral; or offering art collection management and art advisory; or climate-controlled storage in freeports; or succession planning relating specifically to art, or art valuation services; or even – remarkably – providing art education, are increasingly in the purview of private banks and wealth management companies. Major auction houses, attentive to a shifting market, have followed suit and further monetised their internal expertise by creating financial services capabilities in-house. Industry advocacy groups become viable (e.g. PAIAM - Professional Advisors to the International Art Market; LAFA - Luxembourg Art Law and Art & Finance Association; ARTFA – The Art Fund

⁴ See <https://beta.companieshouse.gov.uk/company/08674986/filing-history> (accessed 04/04/2018).

Association), and attempt to make the field coalesce around established standards and best practices. Art enters the core textbooks of finance accreditations (e.g. CAIA Level II: Kazemi, Black, and Chambers, 2009); and art & finance courses are created at higher education establishments (e.g. Sotheby's and Christie's short courses; the Écoles d'Arts et de Culture's 'Art Market Management MBA'; 'Finance and the Art Markets' at Columbia Business School; the Master in Art Finance program at TIAS, together with Fudan University, China, and the Van Gogh Museum). Finally, this whole ecosystem becomes itself subject to a secondary layer of calculation, some of it more formal (key industry reports by reputed global firms and academics), and some of it less so (by non-specialist journalists or bloggers). Taken together, the informational sphere of the art market, and the prepotency of price in understanding art, is massively expanded

This research proposes that the increasing and wide-spread propagation of indexes in spite of their severe practical and empirical limitations shows that the value of art indices is *not* in their truthfulness, which is a fiction of numbers, but in their capacity to suggest, and therefore legitimise, certain courses of action. The financialization of art is therefore particularly ideological, hinging on the spread of a totalizing financial episteme that has found both a supply and a demand drive (Deloitte and ArtTactic, 2013: 10). It is promoted on the one hand by a wealth management industry that is afflicted by competition and decreasing profit margins, and which therefore needs to capture ever more assets under management from existing or new clients (under the pretence of their services becoming 'holistic'); and on the other hand by investor appetite for alternative tangible assets that can protect from geopolitical upheavals, balance risk exposure, or provide superior returns. Art, however, has no intrinsic monetary value: it is created discursively in interactions between the social, cultural, political and economic spheres and is permanently contested by various market stakeholders (see institutional theories of art: Danto, 1964; Dickie 1971 & 1974; and most sociology of art, e.g.: White & White, 1965; Becker, 1982; Mulkay & Chaplin, 1982; Zolberg, 1990; Wolff, 1993; Peterson & Kern, 1996; Abbing, 2002; Schinkel, 2010). This has posed challenges to quantitative analyses, already handicapped by the lack of transparency and data, that remain largely unchanged since the mid-twentieth century (see Chapters 1 & 2) and which hamper their practical use too. Developing metrics and calculative methods that can claim a certain descriptive authority over the art market has thus instead depended significantly on perceived 'procedural' legitimacies connected to making art *systematically* calculable, visible and knowable in particular ways that are amenable to being communicated, and to entering rational investment logic, including comparability to other elements of a traditional portfolio, such as gold, equities, bonds, collectibles, currency (Suchman, 1995; Coslor & Spaenjers, 2016). Persuasiveness, or 'effects of truth' (Rose, 2001) are central to this legitimacy, and are often achieved by pandering to 'institutional myths' that equate certain organizational choices to more effective outcomes (Meyer & Rowan, 1977), that is seeking to limit uncertainty by imitating 'peers perceived to be successful and legitimate' (Cyert & March, 1963; Cialdini, 1993; DiMaggio & Powell, 1983; in Rao, Greve & Davis, 2001: 70).

Where we speak of investment, the difference between an incidentally profitable art trade and a financial investment thus partly has to do with original intent, and partly with systematicity: process-based legitimacy exhibited through the production and documentation of procedures, norms, regulations and frameworks for investing in, accounting for and thinking art, and, therefore, the use of systematic and consistent information on the value of art. Consistency and systematicity are in this instance used as descriptors of social behaviour – the acceptance, by a

community and eventually by regulatory bodies, of common behaviours and common metrics and benchmarks, for example, around which a field can be structured – rather than assertions of their empirical and practical validity, which turn out to in reality be irrelevant (see Chapters 1 & 2).

Beyond motivations and structures for buying and selling, financialization is about intermediation – the nodes, mentioned above, plugging new structural holes, and changing the framing and access points to art. Financialization means that the primary and secondary art markets are no longer the sole operators that give access to art; they are merely the market's ground zero. While emotional reasons retain primacy in art collecting, economic and geopolitical volatility provide an incentive to exercising them through institutions that claim they can better safeguard their value. Not least, for a finance-savvy segment such as are likely to possess the capital to collect art (Savage, 2013), it will reduce the transaction cost by advantaging prepossessed informational and technological capital over the cultural and social capital investments demanded of the primary art markets especially.

The predominance of intermediaries as a defining characteristic of general financial markets, much addressed in corporate finance literature (Fang, Ivashina & Lerner, 2014: 161), relates first to transaction costs (the efficiencies of sharing assessment and execution costs) and secondly to the information advantages of intermediaries, both of which can increase investment returns and minimize downside risks. As Fang *et al.* note, the power of intermediation is therefore especially evident in 'information-sensitive environments' (2014: 162), of which art, like private equity or real estate (assets with which it is often compared), is clearly one. The centrality of data and information as a new form of expertise on art possessed not by traditional art market players but by new players who already have the tools to analyse and operationalise such information; and its basis as the redress to asymmetries in the traditional market, which are reinforced by the unwillingness of traditional art market participants to cater their knowledge to the investment goals of potential buyer; is therefore central in this research (see Part I). Analytics provide the hermeneutic by which one social object or practice is mediated, in a new epistemic frame, in the terms of another.

Technology is therefore also a key factor in art's financialization. New calculative practices and agencies, new forms of expertise or the extension of existing expertise to encompass new services and products relating to art, often depend on technological infrastructure to be effectively canalized. While wealth management services may still be initiated on the back of relations developed in person, the services provided in relation to art are optimized by the existence of web-based portfolio platforms and collection management software where valuations, data, insurance documentation, market movements and storage details are centrally kept. As noted in the 2017 special report on the online market produced by TEFAF: 'Consider that serious collectors, using multiple devices, can turn to technology today to build their collections, obtain provenance and valuable information, finance and insure their newly-acquired piece, digitally fingerprint it and actively manage their collection' (2017: 8). Via such technologies financial management rationale can be fused with traditional endeavours, like collecting, and serve as 'metagovernance structure' (Lin and Tomaskovic-Devey, 2013) to subsidiary services – which as a result cater to protecting the value represented by the art as an asset rather than the artwork per se – such as conservation, restoration, packing, shipping, and logistics. With finance dominating the increasing mediation which technology enables, and by which long-standing niche boundaries

are eroded, it secures itself as the narrative bind, the liminal fixative that sutures it together, and, therefore, its dominant episteme.

As process, the phenomenon of art's financialization is a direction, rather than a stage that the traditional art market, invaded by finance, has arrived at. To speak of financialization is not to say that the market *is* fully financialized, that art is a legitimate and undisputed asset class in the eyes of investors, or that an entire finance ecosystem is up and running: in practice, its products and direct clientele remain niche, and its quantitative modalities have not rendered pre-existing others obsolescent. To speak of financialization is rather to speak of a pattern of field formation that remains substantially embryonic, but whose suffusing – rather than displacement – of pre-existing modes of knowing art, engenders wide changes in the ontology of art as a social object, in terms of its trajectories, resting places, representations, and – importantly, for something as socially defined – the ambitions held on its behalf. Thus the notion of art as a financial asset, has come to form a kind of 'baseline conceptual identity' which recurs across 'chains, paths, threads, conjunctions' (Marcus, 1998: 90), and even 'multiple contexts of social reality' (Kusenbach, 2005).

Indeed, the process of definition that economic agents have been involved with in order to fit art into the notion of an asset with investment characteristics, making art visible in various novel and numerical ways, *is* a kind of conceptual reformulation that must be taken seriously as both illustrative and constitutive of art (Callon, 1998; Espeland & Stevens, 1998; Beunza & Ferraro, 2011; Fourcade, 2011; Muniesa, 2011; Sandel, 2012). 'Thinking art' through prices, charts, predictions and portfolios is a reconfiguration of the hermeneutic space within which exegesis takes place. It makes us attune to different properties of the good and shifts focus from knowledge to information, from trust to Knightean risk, from difference to magnitude, from quality to quantity (Karpik, 2010). The devices with which we make a judgment change, and in turn transform judgment into decision, a process integral to desingularisation (*Ibid*: 36). Walter Benjamin claimed that communication technology (which includes new ways in which information is communicated in the market) means that an object of history breaks down into images rather than narratives (Kang, 2011: 79). Those images, in our case, are numbers.

Financialization is not productive: more artworks are not produced as a result of it; it does not render society as a whole more wealthy (finance can, when it is used to allocate capital to successful new endeavours – but this is uncommon in the case of art). Nor does it benefit the original makers who, by and large, are rewarded only the very first time the artwork leaves the gallery, typically when it is the least costly. Once it is in the system, the artist becomes broadly irrelevant. It is designed to proceed without their intervention. Financialization is accretive to an existing subset of goods and the market which distributes them. It develops, on top of these, derivative contractual relations that shift capital allocations (e.g. from private banks or auction houses to borrowers, and back, via art-backed loans), risk (e.g. insurance products, investment funds, or other tax efficient vehicles), revenue, and, consequently, entrepreneurial and labour opportunities in the nascent industry, and, finally, wealth and income distributions. Indeed, individuals with enough wealth to take advantage of the art and finance industry can monetize their art assets and increase their chances of capital protection utility or investment returns – others cannot.

Structure

Fundamentally financialization depends on the following precepts. First, that conceiving of art as an investable asset class is credible – including relative to the risk-return and market covariation characteristics of other asset classes – and that incentives for investors to invest in art therefor exist. Second, that finance experts have an informational advantage in delivering these returns or intermediating other forms of finance related activity (e.g. credit, advisory). This rests on the claim that their tools and methods of analysis can overcome existing market asymmetries as well as 'cognitive deficits' among collectors – which result from the qualitative and esoteric nature of traditional 'judgment devices' – in part because their tools are tailored to working with price data. Third, that price is therefore a meaningful summation, at any given time, of the market position of artworks (which, given it reflects the social esteem in which the art is held, is also implicitly posited as the *only* summation). Fourth, that efficient structures are in place that enable the pursuit of financial interventions. Fifth, that artworks with sufficiently large and rapid upside potential are available to satisfy and support an art and finance community, much of which will depend, for intermediary positions, on the fact that the value of the benefits they provide their clients is superior to the cost of their compensation in doing so. Sixth, that art & finance is socially sanctioned, especially by the existing art market, as a legitimate area of activity.

This research is firstly about how members of the art and finance industry are attempting to secure these precepts, and secondly about the dynamics in the broader 'artworld' which I esteem to be directly or indirectly abetting, facilitating, or diminishing resistance to art's financialization.

Chapter 1 – 3, of Part I, are an analysis of the art and finance sector proper. Chapter 1 looks in depth at the creation of quantitative modalities to deal with art, starting in the mid-twentieth century: their conceptual premise, drawbacks, and usages. Chapter 2 then explores the four parts of art's new ecosystem – wealth management and advisory services relating to art, art loans and securitization, art investment funds, and art freeports – that are the outcome of financial modes of thinking about art, and are enabled by the quantitative research explored in the previous chapters. Chapter 3 builds a sociological interpretation of Chapters 1 & 2, and makes inferences (such as are mentioned above), about the emergence of the art and finance industry in spite of its lack of resolution of fundamental empirical problems. This is taken to suggest that the new discourse, or nomenclature, provided by financialization to reconceptualise art, has trumped quantitative fallibilities, enabling it to serve as social legitimisation for new positions of expertise; providing a new tool to enlist clientele that responds to technocratic forms of knowledge over those of traditional elitism; acting as a new means of communication which elicits a new community of interest; and embodying new capacities for action.

The remainder of the dissertation brings the preceding into dialogue with a series of key contexts, aimed at deepening existing understanding of art's 'financialization'.

The final chapter of Part I embeds the foregoing analyses of the critical components of the art & finance ecosystem into the context of the growing body of literature on the financialization of the late capitalist economy and dynamics of wealth and income inequality. Broadly speaking, it makes the argument that the financialization of the economy in general, which has a deep causal relation to the rise of wealth and income inequality, is extended into the art market in particular by that inequality, and, in turn, itself extended. The principal conduits for

this process include taxation, and the use of wealth managers and other advisors to consolidate existing social stratifications. It draws on the important work of Harrington (2012; 2017) in doing so. In Part II, this chapter resonates with accounts of the exacerbation of the oligopolistic structure of the art market and the growing dominance of financial rationality as a result of the emergence of ‘something like a new financial “artistocracy”’ in the US and Britain (Deutschmann, 2011: 380).

Part II takes a different tack and elaborates on the two sets of art market contexts which help ‘thicken’ the account of financialization. Chapter 5 examines long-term shifts in dominant conceptions of art and artistic work since the Renaissance in order to provide an art historical and theoretical context for art’s financialization, without which this research would be incomplete. It proposes that in a historical perspective, the contemporary art market can be productively read as the confluence of two different modalities of conceiving and valorising artistic work: the vertical, hierarchizing force of romanticism, and, through it, modernism; and the spatializing momentum of post-modernism. It suggests that the valorisation of art today, particularly within private galleries, is heavily indebted to romantic thought. At the same time, it suggests that, in combination with the erosion of institutional authority and assessment frameworks, this has produced a highly unstable value system in which the price mechanism has emerged to reproduce a new totality out of the post-modernist fragment.

Chapter 6 explores dynamics that impact the traditional core of the art market, namely artists, galleries, auction houses, and museums; and which consequently intervene and participate in the project of financialization, giving it both space and credibility. It makes a series of discrete observations on the industrialisation of cultural capital creation; the emergence of the artist-entrepreneur; and the privatisation of the endorsement system. It then expands on this latter point by drawing insights on the configuration of the gallery ecosystem, looking at the network of cross-representations of artists in London. Throughout these reflections, structures of inequality reticulate and are drawn attention to which echo those in the wider economy highlighted in Chapter 4, to which they are linked in important ways.

Chapter 7 – a shorter and final analysis – looks at the growing online art market, key mediator between buyers and sellers and locus of art’s abstraction, which has lowered search and information costs, increased the velocity of the art trade, and provided a key technology for the synthesis of art and finance. Perhaps most importantly, it promises entirely new sources of consumer and price data, giving visibility to previously imperceptible behaviours, which in turn can feed into and strengthen art’s financialization.

Methods

In a 2010 paper Callon & Caliskan wrote that ‘to speak of economization is to consider that economies, in all of their diversity, depend heavily upon divergent and often controversial analyses – both scholarly and lay – that define, explain and enact economic forms of life’ (2010: 2; see also Vosselman, 2014). This research has proceeded on the basis that the same is true of financialization, and has thus similarly strived to be attentive to its ‘plurality’ and ‘open-endedness’ as it is brought into being (*Ibid*). It conceives of financialization widely. A project still relatively in its infancy, it merits attention to the broader field out of which it is being constructed.

Financialization was thus understood to comprise the development of financial products, the development of econometric and other forms of quantification, and the broader rise of financial modes of organization in the art market.

Given that art & finance as an ‘industry’ was particularly then – and is still now – in process of field formation, only barely ‘a recognized area of institutional life’ (DiMaggio & Powell, 1983: 149), few sources have treated of it comprehensively, least of all from an academic perspective. At inception, the sparseness of directly relevant sources of information, and the scarcity of non-economic or non-econometric studies of the subject rendered impracticable the specification of geographical, sectoral, or social parameters within which to participate or upon which to apply sets of tools, as required by various methods of enquiry. Research was therefore guided instead by a principle of radical openness, and thereupon a disposition borrowing from the ‘open ended emergent learning process’ of grounded theory (Whitehead, 2002: 5), in which sampling and theory building co-evolve until ‘theoretical saturation’ is reached. The goal was ultimately to provide a series of theoretical elaborations that can, like tools, be used to think about art’s financialization, and thus to ensconce the phenomenon in sociology.

The art & finance ‘industry’ is, as mentioned above, a fragmented community of overlapping organizations, products, technologies, calculative agencies, expertise, clients and other interested parties, whose theoretical boundaries lie where the common interest ends. As such we can think of it as one part, albeit partially new, of the ‘System of Art’ (Schinkel, 2010: based on Danto, 1964; G. Dickie: 1974; Becker: 1982). The ampersand of ‘art & finance’ also highlights its nature as linkage between ecologies (Abbott, 2005; also MacKenzie, 2014), whose elements are partially mutually constrained and independent. To be sure, while financialization is a globally networked phenomenon (finance, in a sense, happens between things – as does the internet on which it depends), this research has an unmistakable Western-centrism, in spite of a geographically agnostic approach. This reflects partly the fact that financialization is concentrated, as are art markets (with the exception of China) in Western Europe and the US, not coincidentally the countries where the financialization of the broader economy is the most advanced and neoliberalism the most salient policy framework. It is also owed to the fact that the enormous growth of the market that has multiplied the sources of art news has done so principally in major Western newspapers and online news outlets. Finally, it is part of a linguistic limitation of the author to European languages.

The downsides of such an open approach were, inevitably, its inefficiency. The research was originally conceived as depending on a series of in-depth unstructured interviews. Ten were conducted, with participants from a range of roles including art data providers, art fund managers, art insurers, art storage & logistics companies, and the head of a behavioural finance research group with an expertise in the field. Doing so without any moorings, without a comprehensive socio-theoretical sense of art & finance as an entity (however diffuse), was soon found to be putting the cart before the horse. Furthermore, constraint to a meaningful sample or community, or to a systematic analysis of the resulting interview data was considered an unproductive structure without the necessary coordinates for orientation, the creation of which then became this dissertation’s purpose. Finally, I found that these interviews yielded mainly insights themselves based off the source material I eventually used directly. In fact, direct participants in this field often are interviewed or publish their thoughts across a number of publications or conferences, which in turn they were referencing in the interviews. The experience, carried out early in the

research, did nevertheless serve the purpose of orienting my thought and the sourcing of my material. The advantages of the method, which I hope make up for its inefficiency, was its flexibility to take into account a wide diversity of information sources, and the originality of theories built with limited preconceptions.

New exhibitions, auction sales results, specific record-breaking purchases or the entrance of new (especially young and wealthy) collectors into the competition for high-end art, exclusive interviews, as well as novel market insights or lay analyses, the release of market reports, noteworthy pronouncements or actions by market participants, all are hooks for the continuous press coverage which art and its market receives. The task of this research was to posit the connections between various relevant segments of this knowledge production and build them out into a set of overarching conceptions. Given the artworld is, aside from the art, an arena of constant deliberation, narrowing the field of source material was both crucial & problematic. It was achieved by using as information funnels specific purveyors and aggregators of art & art market news who produce and select publications into a recurrent daily or weekly digest, and some of which participate in art's financialization. For nearly five years, I have been subscribed to the daily email news feeds and followed the social media postings of 1858 Art Advisory Ltd, artpiece.com, ArtTactic, BlouinArtInfo, Art Market Monitor, Art Media Agency and ArtBanc, alongside those of a multitude of major galleries (Gagosian, Hauser & Wirth, Marlborough Fine Art, Victoria Miro, and others), auction houses (Sotheby's, Christie's), and companies operating online (Paddle8, SaffronArt, SaatchiArt, Art.sy). In doing so, I compiled a body of press articles from the following outlets, in addition to the distributors themselves, for many of which the incorporation of art into their journalistic remit was clearly facilitated by the proximity of art and finance, as it meant art could be introduced into their market coverage: *The Atlantic, CNBC, Bloomberg, Financial Times, Forbes, Fortune, the Observer, New York Magazine, The Economist, The Guardian, The Huffington Post, The New Yorker, The New York Times, The Wall Street Journal, The Washington Post, the Boston Globe*, among others; as well as the more industry specific papers such as *The Art Newspaper*, online news outlets *ARTnews, artnet News, Artspace*. Over 500 articles were thus compiled and used as source material (see Bibliography), alongside 39 issues of Art Media Agency's *AMA Newsletter* (a weekly magazine), predominantly focused on the period 2014-2017.

In addition, 55 reports and white papers, many published annually on the art market (by artpiece.com, Deloitte & ArtTactic, TEFAF); on aspects of the art market (e.g. by Skate's on the loan market, Hiscox & ArtTactic on the online trade, AXA Art Insurance on collection patterns); or on culture (UNESCO) were utilised. Also included were reports on the luxury goods markets, which encompass art (Barclay's, Knight Frank), on global wealth dynamics and the consumption patterns of the rich (Capgemini, Credit Suisse, UBS, Wealth-X), or directly on inequality (IMF, OXFAM, World Bank, World Inequality Lab). Finally, were included one-off white papers and studies published by organisations on aspects of the market (Deloitte, Fine Art Wealth Management, Tutela Capital, The Art Fund Association). Taken together, these comprised over 2,500 pages of important and wide-ranging analysis, often backed by wide-ranging surveys and access to proprietary data and carried out with significant institutional support, and therefore constituted rich source material.

Complementing this were video recordings and notes from five years of the Deloitte Art & Finance Conference (4th to 8th Conference: 2011-2015), typically comprising one or two full

days of multiple keynote speeches and panel discussions among prominent stakeholders of the art & finance market, as well as over 20 of ArtTactic's publicly available interviews with key art market participants. I also attended a Sotheby's 'Finance and the Art Market' short course (two weeks), evening seminar series on the art market organised by ArtInsight at the London Business School, and a host of other public lectures and seminars on contemporary art and the art market at various venues across London. In addition, as has been my habit since before this research, I frequented monthly private gallery openings, exhibitions and art fairs / biennales in London and other parts of Europe. For full disclosure, my past degrees in History of Art from the University of Cambridge (BA) and the Courtauld Institute of Art (MA) have been a strong formative force in this research (as well as having provided me with social circles that include gallerists, curators, art historians and other market participants, conversations with whom indirectly contributed to this thesis), while its additional lens was furnished by my encounter with economic sociology and social scientific research during my MSc in Management at the London School of Economics & Political Science.

'About us' pages, 'How to' guides published as marketing material, services descriptions, introductions to the art & finance market, or other sections on tax and investment regulations were furthermore consulted from across dozens of companies in the field, including but not limited to: Art Media Agency; Art Vantage; Arthena; ArtInsight; ArtTactic; Beautiful Art Advisors; Capital Art Group; Citi Private Bank; Collé, Hochberg & Grey; Collectrium; Collins & Kent International; Dean Art Investments; Emigrant Bank; Emotional Assets Research Management; Feral Horses; Fine Art Asset Management; Fine Art Wealth Management; Maecenas; Mischcon de Reya; National Suisse; Saatchi Art; Seymours; The Art Fund Association LLC; The Art Trading Fund; The Fine Art Fund Group; UOVO; and Willstone Management.

Finally, the analysis of indexes as tool and quantitative endeavour was carried out using in addition over 60 papers by economists and finance academics.

~

I should clarify that the below analysis is not an art historical analysis – though it has elements of one in Part II. It is an analysis of the art market. It makes no claims, and indeed no attempt, at making sense of or representing the enormous diversity of contemporary arts practices, least of all those which feature only marginally in the art market limelight. It therefore contains few references that would acknowledge the genuine breadth of alternative practices, participants, ambitions, materialities, and operative spheres and geographies of post-war and contemporary art, including participatory, documentary, and technologically infused art.

My empirical focus on the intermediaries between art and the broader context – that which people use to 'think' art, value it, and how they do so in the marketplace – inscribes my project obliquely within the 'new sociology of art' (Hennion & Grennier, 2001; DeNora, 2005; De La Fuente, 2007; etc.) which understands art as a socio-cultural formation that is 'coproduced', 'conjectural and hence changing' (Hennion, 2007; Hennion and Grennier, 2001: 350-51; quoted in Tanner, 2010:242). At the same time it remains importantly rooted elsewhere, embracing one of economic sociology's central theoretical principles: Polanyi's suggestion – building on Granovetter – that the market is 'ideationally embedded', and that therefore are important in a general sense the 'ideas, public narratives, and explanatory systems by which states, societies and

political cultures construct, transform, explain and normalize market processes' (Polanyi, 2001; then Somers & Block 2005: 264; see also Stark, 2000; Granovetter, 1985; Fligstein, 1996; Myers, 2002).

Part I – The Financialization of Art

Chapter 1. Calculating Art

Introduction

This chapter looks at the lay and expert contributions of ‘economists in the wild’ (Callon, 2008: 336) who work in the aggregate – but not in tandem and in different ways, to different ends – to bring about the saturation of art with finance, fabricating its calculative world from a deeply heterogeneous and qualitative field. In doing so it is attentive to the polycentric, multi-directional work of trying to establish common grounds upon which a market can be built and sustained, recognizing that ‘to value is a highly creative process’ (Muniesa, 2012: 28), an empirical practice (Kukla, 2008: 287) defined by ‘variety, limits, and artfulness’ (Espeland & Stevens, 2008: 432), of which claims to objectivity and impartiality are but ‘an ever-evolving aspiration’ (Samiolo, 2012: 399). Given the wide production and much wider use of quantitative tools and data in the art market, and consequently the indirect support such work lends to a variety of objectives – such as the financialization of art, the disruption of the art market, and the ‘democratization’ of art expertise – looking at how these calculative agencies are construed is crucial. The view taken in (and as a result of) this research is that calculation is ‘work that makes other work possible’ (Espeland & Stevens, 2008: 411). At the same time, by configuring new relations with the calculated object, calculation also orients and limits what type of work that might be. While this chapter is concerned with calculative practices themselves, Chapter 2 is focused on the ‘other work’ they make possible, while Chapter 3 is, in part, on the means by which this idle agency is channelled. This account of different practices is the foundation for the elaborations that follow, much as the practices themselves are to financialization – a structure this research mirrors.

Social-scientific research has traditionally conceived of markets transactionally, that is as ‘collections of symmetrical, short-lived transactions engaged in willingly by economic agents’ (Pardo-Guerra, 2013: 8). Sociological enquiry has consequently sought to identify the factors that enable and constrain, elicit and format such transactions: the embeddedness of markets in culture, institutions and interpersonal networks for example (Fligstein, 2001; Pardo-Guerra, 2013: 10; Zelizer, 1978), or, conversely, the embeddedness of economic theory in markets (Callon, 1998; MacKenzie & Millo, 2003; MacKenzie, 2006). The analysis of competing calculative agencies in this chapter, and – in the rest of this section – of the ecosystem which utilises them, sits in between two intellectual strands. On the one hand the work of Callon (1998) and MacKenzie (2006), insofar as it is invested in instances of econometricians developing calculative practices and diffusing economicist epistemologies into the market. On the other hand – insofar as the work of econometricians ultimately functions not merely by ‘performing’ the market in its image but as its foundation and legitimization – the intellectual project defined by Pardo-Guerra as seeking to account for ‘artifacts crafted by [...] specialists and amateurs involved in creating the technological infrastructures of the marketplace’ (2013: 12; see also MacKenzie, 2014). It is as social fact, it will be argued, more than as empirical technology that calculation is important.

~

The development and use of models for evaluating the market of art has primarily sought to bring art into the fold of asset pricing theory by enabling analyses of its investment returns and volatility, their covariance with other market metrics, and therefore art's function in a mean-variance efficient portfolio. Reitlinger's three volume study of *The Economics of Taste* (1961-1970), was a seminal moment in this history due to the dataset of past auction prices it rendered available to subsequent research, including Baumol's 1986 influential analysis 'Unnatural Value, Or Art Investment as Floating Crap Game' and half a dozen further field-foundational papers by Anderson (1974), Goetzmann (1993), Frey and Pommerehne (1989), Buelens and Ginsburgh (1993), Renneboog, Goetzmann and Spaenjers (2010) and others. The *American Economic Review*, the *European Economic Review*, and the *Journal of Cultural Economics* were instrumental in providing an outlet for such research in the 1990s. Today, nearly a hundred articles have been published on the subject, focusing on a range of statistical and econometric issues, or various subsets of the art market – aboriginal art, African art, pre-Raphaelite art, Old Master drawings, photographs, prints, sculpture, paintings from the USA, Belgium, Canada, Italy, Latin-America and more (Ginsburgh and Moses, 2006). Two models have essentially been used, refined, and specified in research on art indexes: the Hedonic Pricing Method and the Repeat Sales Method. Their principal features, advantages and limitations are outlined below. Along with these are considered a number of other quantitatively-driven endeavours on various aspects of the art market, which partake, in different ways, of the same quantification effort. In discussing the conceptual and practical limitations of these practices, a picture emerges that emphasizes the localized and contingent features of calculation.

The Hedonic Pricing Method

Hedonic regression, or the Hedonic Pricing Method (HPM), is a valuation method that understands price as the sum of the prices of its contributory factors. Based on this assumption, it is used to estimate the marginal willingness to pay, also called the shadow price, for each of these factors. The whole is assumed to be the sum of its parts, and the parts are induced from the whole. In this respect it is understood as a 'revealed' preference method of valuation: it measures the value to the market of particular characteristics that cannot be transacted individually, by assessing their statistical influence on the price of the good that they describe, which thus acts as a surrogate market by proxy.

The model depends entirely on defining standardized quantifiable explanatory variables (i.e. variables applicable to an entire body of data) the difference along which accounts for measurable price differences not attributable to market fluctuations (Bocart, 2014; Ginsburgh, Mei, and Moses, 2006; Oosterlinck, 2011). As such it assumes a categorical homogeneity – the good measured is always valued based on the same set of criteria – but allows for internal variation. This enables it to cope with markets for heterogeneous goods, for example where quality and size differs, in a generic manner, constructing bundles of relevant attributes from secondary market data. As Bocart explains, 'it consists of eliminating heterogeneity by regressing a function of price (generally the logarithm) on common predictors in order to extract a single

trend in prices of different goods' (Bocart, 2014: 5). By regressing price on specific variables, HPM can provide a constant coefficient indicating the contributory value of such a variable on the price. After the subtraction of implicit prices from the actual prices, the residuals of the regression thus in theory represent 'characteristic-free prices' with which a 'pure time trend' index can be computed (Ginsburgh et al., 2006: 948; Kräussl, 2010: 67). This trend in turn is the imprint of changes, as the market sees it, in the value of the 'psychic', 'emotional' or 'aesthetic' dividends given by art. Though Hedonic modelling cannot define what art consists of – since the 'artfulness' of art is cannot in fact be separated from its material manifestation – it can by its own theory isolate its value locus. Unlike the Repeat Sales Method (see below), it has the advantage of comprehensiveness: it can use most sales data (Ginsburgh and Moses, 2006). As a result, however, it is information intensive, and thus, costly.

Given these properties, HPM has principally been used to construct housing market and consumer price indexes (in the US and UK), as well as indexes for automobiles, computers and dishwashers in academia. In the former case, hedonic characteristics such as property size, location and proximity to amenities are regressed against sale prices (Noland, 1979; Meese and Wallace, 1997; Hansen, 2009) to estimate on the one hand the willingness to pay differential for a unit difference in a given characteristic, and on the other hand to obtain a neutral property market trend; it helps to both construct valuations and to deconstruct prices.

As applied to art, where it has mainly been used to understand market movements, predict prices, and assess the volatility of prices, such a method attributes a weighting and a price to various standardized characteristics of the work, typically including dependent variables such as signature, size, medium, condition, provenance, date, subject-matter, as well as independent variables: artist's birthdate, sales date, the city where the sale took or is due to take place, the weekday of the sale, auction theme, etc. Other variables have included presence of an illustration in the catalogue (Agnello, 2010); technique (Atukeren and Seçkin, 2009; Nahm, 2010; Scorcu and Zanolla, 2011); presence in catalogue raisonnés and position in the sale (Campos and Barbosa, 2009); number of past exhibitions, number of expert assessments, number of citations, and nationality (Collins, Scorcu and Zanolla, 2009); presence of date (Hodgson, 2011; Renneboog and Spaenjers, 2011); logarithm of a constructed reputation score (Kräussl and Logher, 2010); whether the artist was alive or not at time of sale; authenticity (Marinelli and Palomba, 2011); and logarithm of mean of historical prices (Taylor & Coleman, 2011; see Bocart, 2014, p. 7 for details).

Taking the example of size, such research shows that artworks tend to be more expensive when they are larger, but that the price doesn't move in a linear fashion: there is a decreasing marginal value to each additional size unit (a concave function) preventing large works from becoming unaffordable, and protecting the value of smaller works, given they 'demand just as much creative talent as large works' (Eckstein, 2013: 11; see also Ginsburgh et al., 2006: 961). Olav Velthuis has shown that in practice galleries actually do price 'wet paint' works according to size primarily (Velthuis, 2007), and we have found such strategies to be standard fare in the recommendations of online platforms for self-starting artists faced with pricing their works, such as Saatchiart.com. The hierarchy of media is also generally respected within an artist's body, with oil paintings on canvas commanding higher prices than drawings, themselves being more expensive than serialised prints, and so on. Additional findings include that prestigious auction houses are statistically different from other ones in terms of their effects on price; that untitled

artworks are valued less; and that mention of a collection in the title of the sale leads to higher prices, no doubt because it signals good provenance (Bocart, 2014: 46). According to Horowitz, HPM thus manages to account for the heterogeneity of assets by using the identifiable variables of artworks and is a useful step in accounting for product differentiation (Horowitz, 2011).

By attempting to reverse-engineer an ontology of art through its transaction prices, building art's universe of constitutive variables by saturating its past prices with correlating shadow prices, the method is forced to make certain peculiar conceptual propositions about art and collectors.

The sheer variety of factors utilised, in as many different bundles as there have been papers on the subject, indicates that so far no commonly accepted specification has arisen, and as such that specification tends to be largely tentative, incomplete, and heavily determined by resources at hand. Any type or quantity of factors can in principle be specified within the constraints of available data. The risk of functional misspecification, of choosing insufficient or wrong variables to go into the equation, is perhaps the model's most salient weakness, for as Ashenfelter and Graddy observe, 'the danger remains that systematic movements in the unobserved characteristics of the objects being offered for sale may bias the results' (2006: 916). It is thus entirely 'up to the researcher or investor to define and estimate the entire set of characteristics that will affect prices over time' (Kräussl, 2010: 67). Unsurprisingly, as Bocart notes, the predictors used in the regression tend to 'correspond to data available in auction catalogues' (Bocart, 2014: 7; see also Ginsburgh et al., 2006: 960), that is to say 'effects that are observable to the econometrician' (Ashenfelter & Graddy, 2006: 911). The model thus logically reflects the field of information eligible for transformation into data, and an economic belief in the medium form of the efficient markets hypothesis, whereby all such publically available information is reflected in the price. In other words, HPM is, conceptually, the outcome of the felicitous coincidence to the econometrician of available information and price formation. In the case of art, the measurement tools of the econometrician determine the econometrician's beliefs about price formation in the artmarket, while the work itself, otherwise its own most public descriptor, remains invisible. Art in the understanding of hedonic modelling is a leftover from the subtraction of its characteristics from which, like an image, it is separate.

HPM assumes that qualitative differences between artworks such as affect prices are captured by a bundle of the few descriptive metrics that are applicable across artworks, for example dimension and style – sufficiently at least that what remains must be the value of a disembodied unit of 'art'; yet the difference between a painting by Marlene Dumas, a mixed-media sculpture by Berlinde de Bruyckere or a film-installation work by Isaac Julien, for example, is hardly principally about size or signature – nor will these features have equal weight internally to these artists' oeuvres. As a result, HPM entertains normative forces: like other models, it has overwhelmingly focused on painting and other flat surfaces, since these present the most consistent variables of differentiation with regards to physical properties. Material differences, here, are principally in magnitudes. HPM's capacity to commensurate by internalizing qualitative variables struggles to account for more esoteric materials or forms of expression in which common metrics are more challenging to determine, because differences between works do not occur incrementally across determinate variables.

Even in the restricted realm of painting, HPM's assumptions can be undermined by collection patterns that do not follow a fixed appetite for additional units of implicit

characteristics. An example discussed by Von Habsburg *et al.*, is of two William Trost Richards paintings of the same size, same medium, same condition, same genre (seascape), which sold at the same auction at Sotheby's in 2006 with practically adjacent lot numbers (von Habsburg *et al.*, 2010: 41–42). One fetched \$240,000 and the other \$42,500, for the simple reason that collectors of Trost admire his work for its crashing waves, and the second painting's waves were perceived as possessing inferior turbulence. Another example at odds with HPM would be the \$71.5m fetched by Van Gogh's 'Self Portrait without Beard' (1889) in 1998, an astronomical price achieved in part as a consequence of the rarity of a beardless Van Gogh self-portrait. As such examples show, the 'quality' that must be neutralised to obtain a characteristic free model is neither constant across artists nor within artists, and is not easily proxied. It is a fiction of aggregation which masks the great extent to which value in the art market often inheres in art's particular appreciation by a subset of people for reasons that evade – or at least exceed – notions of size, signature, or auction venue. More importantly it illustrates the fallacy which HPM panders to, and which it thereby propagates and anticipates, namely that the art market is one, rather than myriad, that it retains a categorical unity, a homogeneity within which all variation is subsumed and according to which variegation is structured.

As touched upon, a further limitation of HPM as an index model is that it holds correlation coefficients constant over time, genre, style, artist and price-bracket (Kräussl, 2010: 67) whereas mere observation would suggest that coefficients are highly changeable across such variables. Anecdotal evidence for instance points to the fact that size has become more highly prized as wealth growth has increased its signalling value, the concentration of funds chasing artworks in the hands of few, and the ability of private buyers to accommodate large works in their homes. Relative changes in demand for factors measured by constant coefficients may therefore significantly skew valuation. Aside from this, constant coefficients may also have a futurological performativity insofar as they extend historical statistical relations forward. Widespread adoption could, hypothetically, on the one hand encourage buyers to favour characteristics positively correlated with higher investment returns, while on the other hand encouraging the market to supply goods fitting those descriptions. Indeed, HPM fundamentally operates like a ranking system: it conceives of artworks as constituted of integrated sub-components each carrying a weight whose aggregate positions the work within the hierarchy of prices, and the whole of which is therefore optimizable. As Espeland & Sauder have shown in their analysis of university rankings, such rankings are both 'seductive and coercive', they change 'perceptions, expectations and behaviour', 'shaping [...] cognition and activities' as well as 'the kinds of interventions that seem possible or valuable' (2009: 64, 64, 68, 74).

As a valuation tool, HPM thus operationalizes not just a theory of art, but a theory of the art buyer. It supposes that the collector, on average, is a 'rational' buyer with a consistent willingness to pay for unit changes in particular chosen attributes, which in turn yields predictable changes in price. The sheer range of factors used demonstrates an ambition to find the combination of measurable differences that would explain market pricing structures, the underlying functional form of the art market, and thereby instantiates a belief that the social valorisation of art in part fits a rational, consistent, coherent and predictable pattern. HPM presents an obvious intellectual appeal, evidenced by its increasing popularity since the mid-1990s. The possibility of being able to capture the inner workings of an otherwise quantitatively invisible market would represent a significant triumph for an econometrician. Nevertheless it is important

to remember that the functional form of the model is contingent on the purpose for which it is intended, namely assessing average returns on art, as well as volatility. Of perhaps much greater significance, as will be discussed below, such modelling may also lead to the pernicious conclusion that the principal ‘holistic’ method of reading art as a distinct category of culture, in which is sublated its endless variety, is only possible as a reading of its financial performance; and that such performance is therefore its core identity.

The Repeat Sales Method

The repeat sales method (RSM) of quantitatively estimating investment returns works by tracking the price differentials of individual artworks having transacted on the auction market at least twice. It was pioneered by Bailey, Muth and Nourse (1963, based on insights by Wenzlick, 1952, and Wyngarden, 1927), again, as in the case of HPM, for the real estate market. The problem it resolved was that of heterogeneity in central tendency indexes (median and mean), and that of not capturing all relevant characteristics in hedonic models (Nagaraja, Brown, and Wachter, 2010: 2). It did this by effectively holding constant all geographic and internal property characteristics, since it only considers the appreciation of individual houses as they are resold across time. In other words, it is ‘invariant to different specifications of a hedonic model’ (Goetzmann, 1993: 1371), requiring ‘neither the measurement nor the definition of quality’ (Kräussl, 2010: 66). Its further advantage relative to hedonic regression is that the ‘minimal data requirement limits the costs associated with data collection’ (Freddie Mac, n.d.: 1). RSM’s most successful version was developed by Case and Shiller (1987, 1989), and a variation of it was used to compute Freddie Mac and Fannie Mae’s Conventional Mortgage Home Price Index, as well as the current Freddie Mac House Price Index, in the US. It has also been used in the Federal Housing Finance Agency’s House Price Index in the US, and by the Land Registry’s House Price Index in the UK.

One of the first notable application of RSM to the art market was by Goetzmann (1993) – though he later came to criticize this method. It has also been used by Baumol (1986), Pesando (1993), Locatelli Biey and Zanola (1999), Mei and Moses (2002), Mandel (2009), Erdos and Ormos (2010), Goetzmann, Renneboog and Spaenjers (2011) and Taylor and Coleman (2011), among others. Its most influential usage has undoubtedly been by Mei and Moses, whose landmark study of 4,896 price pairs over the course of a century was later patented, expanded and commercialized as the Mei Moses® All Art Index, becoming the analytical backbone of art advisory firm Beautiful Asset Advisors®, LLC, which the academics incorporated after ending their tenure. In October 2016, Sotheby’s purchased the Mei Moses Art Indexes, henceforth to be known as the Sotheby’s Mei Moses, on the grounds that these would enable the auction house to ‘analyze [art’s] performance against myriad benchmarks and competitors and measure the impact of macro-economic and societal forces on the art market’.⁵ According to Hiscox, ‘Sotheby’s intends to use the database to provide their clients with information personalised to their collections’ (2017: 10) Mei Moses publish one World All Art Index and seven further sub-category indexes that are updated annually with monthly estimates published in between. These tend to

⁵<http://www.sothbys.com/en/news-video/blogs/all-blogs/sotheby-s-at-large/2016/10/sothebys-acquires-meimoses-indexes.html>

follow the traditional categorizations used by auction houses: Old Masters, Impressionist & Modern, Post-War & Contemporary, etc. As at September 2014, their database had grown to 45,000 repeat sale pairs for over 20,000 individual works of art sold around the world since 1810, with 3,000 to 4,000 new sale pairs added each year (Tully, 2014a). They procure their data exclusively from Sotheby's and Christie's and exclude online sales, though the auction house where the first transaction of the pair took place can be elsewhere. Items that re-appear at auction but are bought-in are not included. The Artprice Global Index uses a similar method, though it includes sales from over 4,500 auction houses (again excepting online auctions, because they are not published or not in auction format, according to Jean Minguet, their head of econometrics – see Tully, 2014b). A functionality added in 2014 facilitates the comparison of this index with a number of major stock market indexes on mobile phones.

Mei-Moses have made a decided attempt to corner the index market, but the methodological limitations and technocratic ambitions of RSM have hampered its decisive acceptance by the artworld. These include conceptual limitations that real estate market academics have themselves frequently levelled at RSM indexes in their industry, and limitations specific to Mei-Moses's sampling and the fit between RSM and the structure of the art market. Perhaps the principal critiques levelled at RSM are those regarding its limited data set and sample selection bias, factors fundamental to its ability to generate a constant quality index. In the case of the Mei-Moses All Art Index used by Ginsburgh and Moses (2006), the sample represents only between 7-15% of available sales data depending on length of period. Case, Pollakowski and Wachter (1991), Meese and Wallace (1997), and Nagaraja, Brown and Wachter (2010) point to this flaw for real estate indexes, which, like RSM art indexes, cannot accommodate for single transactions. Clapp and Giacotto and Tirtiroglu (1991), and Clapp and Giacotto (1992) suggest that this limitation may be so significant that repeat sales homes are statistically different from others, and thus indexes may be representative for such homes only. Gatzlaff and Haurin (1997), and Clapham *et al.* (2006) support these findings of sample bias. Ginsburgh, Mei & Moses note that RSM should not be used for time frames shorter than 20 years, unless the number of pairs in the dataset is sufficiently large (2006, p. 970; see also Bocart, 2014, p. 6). Ginsburgh, Mei & Moses (2006), observe that this means disaggregation into subsets of art markets, let alone into individual artists, is not viable (966 & 970). For the art market, Collins, Scorcu and Zanola (2009) make similar criticisms, though they are sharper, as RSM is not only constrained to repeat sales pairs, it is constrained to repeat sales pairs having sold at auction, which is itself only at most half the market by value. Ashenfelter, Graddy and Stevens (2001), Ekelund, Ressler and Watson (1998), and Goetzmann and Peng (2003), also analyse this drawback (see Ginsburgh and Moses, 2006, for more extensive bibliography). This limitation has the further drawback, finally, of increasing the effect of outliers (*Ibid*: 966).

This sampling bias doubly predisposes the index towards successful works. First it exclusively includes artists successful enough to have individual works appear at auction on the secondary market *twice* – called ‘survivorship bias’ (Goetzmann, 2006) – which, as Petterson notes, is likely to follow on from institutional validation and be at the point ‘when demand outweighs supply’ (Petterson, 2014: 74). This negates the alleged investment purpose that indexes aim to support according to von Habsburg *et al.* because at this point the artist’s fame ‘is already likely to be included in her sales prices, and, by then, it is too late to “beat the market”’ (von Habsburg *et al.*, 2010: 52), though very substantial price increases even between auction sales

would seem to run counter to this argument. Secondly, and more subtly, sampling is biased because decisions by owners to sell at auction may themselves be conditional upon the perception that the value of the work has increased (Goetzman, 1993: 1371), just as at an auction house's decision to accept the work is conditional on their perception that they will successfully be able to sell it. A work sold once that subsequently 'became worthless' would not be auctioned again, being neither in the interest of the seller nor the auction house, and so would be excluded from the index sample; likewise masterpieces that were donated to museums rather than sold at auction (Goetzmann, 1993: 1371) would constitute a downward bias by excluding museum worthy works from the market (Ashenfelter & Graddy, 2006: 920). These filters, alongside the power exerted by auction houses via marketing and competitive price stimulation, illustrate the distortions inherent in the art market. To Greg Davies, head of Barclay's behavioural finance unit, 'it's as if the FTSE100 was constructed by the stock exchange each month selecting the stocks it thought had the best chance of going up, and then recording the price at a specific moment of their choosing after extensive marketing and media attention on the positive aspects of those few stocks, providing guarantees to those prepared to sell on that day, and funding for those prepared to buy. Any index constructed on this basis', he writes 'would dramatically overvalue the state of the market as a whole' (Davies, 2014: 10). As such the repeat sales method 'will fail to capture the price fluctuations of paintings that are not broadly in demand', and returns must be considered as approximate 'and quite possibly as an upper bound on the average return obtained by investors over the period' (Goetzmann, 1993: 1371). In the case of Mei & Moses, the sample contains a further restriction and inflationary bias, caused by their decision to only include sales made through Sotheby's and Christie's, the largest and most prestigious players in the field.

On such grounds, Bocart concludes that 'there is no special reason to favour a RSR [Repeat Sales Regression] form over an equivalent hedonic form. To the contrary, exploiting the hedonic form would allow practitioners to implement all existing developments designed to improve estimation of parameters' (Bocart, 2014: 9).

Mei Moses® world collecting category indexes versus the s&p 500 total return index and the financial times all shares without dividend reinvestment®

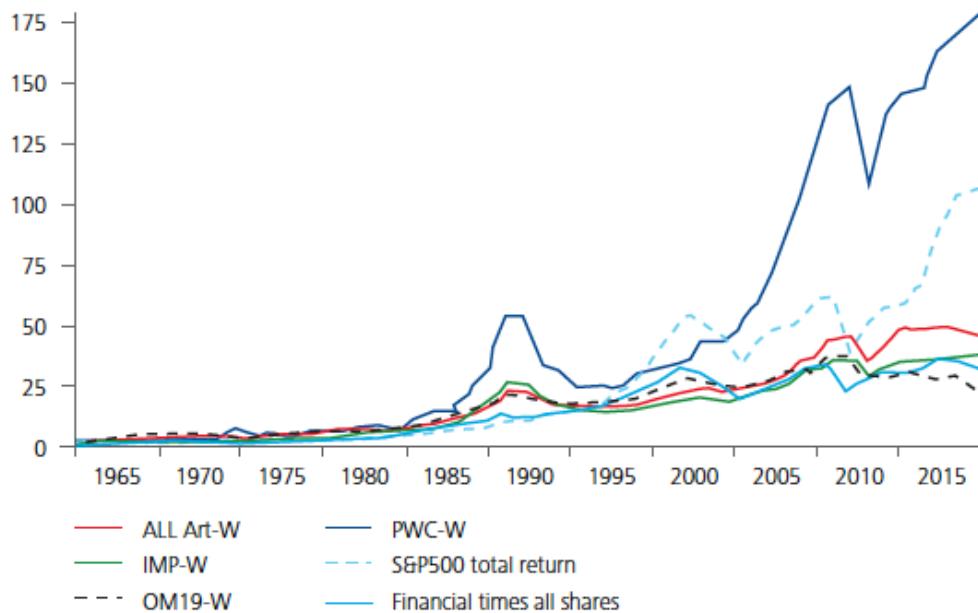


Figure 1 - Mei Moses Index - Last 50 Years (Deloitte & ArtTactic, Art & Finance Report, 2016: 107)

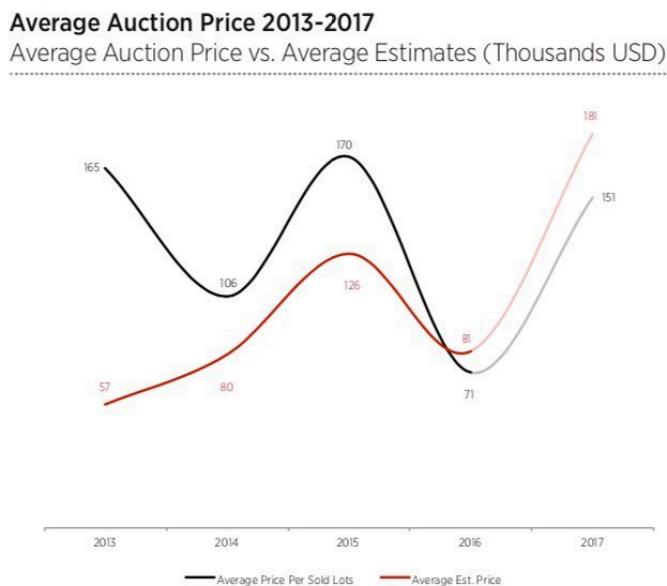


Figure 2 - ArtTactic - Facebook Post (2017)



Other Approaches

Artrank

Alternative market analysis methods have emerged to challenge or complement the narrow focus of existing calculative agencies. ARTSTAQ uses ratings from an algorithm together with opinions from a team of experts as the framework for their attempt to establish an art exchange modelled on financial exchanges (Schneider, 2017b). Artsy's MIT-educated new AI researcher Hugo Liu is building a model that will incorporate Artsy's Art Genome Project (in which six art historians have rated the influence of particular styles on tens of thousands of artworks out of 100), as well as data on online viewing patterns, and prices, to both 'paint a more holistic picture of art valuation', according to magazine *Wired*, and to help amateur consumers find other artists they may like (Rhodes, 2017). Among these challengers is also the young US entrepreneur Carlos Rivera, granted minor notoriety around 2015 for using econometrics to give curt advice to flippers: his ArtRank website recommends either of three options for a given artist to subscribers who pay \$3,500 a quarter: 'Buy', 'Sell', or 'Liquidate'. While the input data and model developed by Rivera could not be assessed, owing to its being private, interviews with Rivera and other articles on ArtRank contain ample information with which to sketch its mechanics.

Rivera's premise is a lament of the usage of historical price information, by indexes like Mei Moses, as 'based on momentum ideology' – an 'unintelligible strategy', in his view, which extrapolates the future behaviour of prices from past trend growth (in interview with Goldstein, 2015a), a form of financial analysis called technical analysis or 'chartism'. Given that auction prices are themselves 'really only determined by S&M: sentiment and manipulation', Rivera believes a more sophisticated approach is one that attempts to understand the 'truly intrinsic underlying variables that could tell you what the future of a market might be' (*Ibid*). His approach, which aims to do just that, is based on understanding that 'the art market is a market like any other', meaning that there are 'underlying variables of objectivity' which, while difficult to pin down, nevertheless exist (*Ibid*). In contrast to an investment strategy based on technical analysis, Rivera proposes a form of fundamental analysis. In the case of securities, this looks at financial statements, competitors and markets in order to arrive at a 'true' value whose difference from the actual market price can then be arbitrated. Though he does not reveal the precise working of his model, Rivera makes clear that it possesses a conceptual relation to hedonic regression insofar as it builds off sets of weighted data points, though it differs insofar as it does not *deconstruct* past prices but *constructs* an idea of the 'real' value of an asset, and insofar as it does this by focusing on variables unrelated to the artwork as object, such as market characteristics.⁶ Rivera's inputs include the number of works created by an artist in a given year, the likelihood of them appearing on the market – which means tracking who owns them and their likelihood of selling at auction – the collections that works by a given artist are in, and how these affect the likelihood of success. In more concrete terms, Artrank uses past auction results; assesses market saturation through an 'expert network' of professionals (mainly 'respected artists') who estimate the production level of

⁶ Ginsburgh and Moses (2006: 961) note that it is not clear that market characteristics can be introduced as a hedonic variable in HPM.

various artists; it looks at market support; and it mines CV data (education, gallery representation, past exhibitions, awards, and so on). Like Artfacts, it considers peer groups as a factor in the model: if two artists were university peers and then were represented by the same galleries, they consider it possible to infer the trajectory of one from the other, assuming the convergence influence of success and the aversion to negative price adjustments in the primary art market (see Velthuis, 2007 on the latter point).

Perhaps more interestingly, Artrank also make a foray into available big-data in order to quantify Internet presence, particularly using data from social media platform Instagram which is, according to Rivera, tantamount to ‘crowdsourcing opinion’ (*Ibid*). This reflects his broader idea that knowledge in the art market is no longer hierarchical – that is to say, the prerogative of gallerists and auctioneers – but interconnected, flat, distributed. Galleries, collectors, taste-makers, artists: many are on Instagram, and track what each other ‘likes’, leaving behind networked taste data that can be operationalized. According to Rivera, his model involves qualitatively applying a weight (‘saliency’) to the opinion, expressed as a uniform ‘like’, of different people in accordance with their influence in the network (*Ibid*). Galenson (2000, 2004), has demonstrated that, historically, critical evaluation of an artist’s most important period matched market valuations very closely – Rivera’s model takes a populist and short-termist approach to this point by privileging ‘influencers’, reflecting Anders Petterson’s view that the art market is ‘an ecosystem in which economic value is largely a function of a process of endorsement by tastemakers within that ecosystem’ (Petterson, 2014: 67). In so doing, Rivera reinforces his belief that artworld hierarchies have been decentralised. Petterson, who operates in a related data space, and himself from a finance background, supports this view, noting that technology, the internet, and changing buyer motivations may ‘change the endorsement process of contemporary art, giving increasing power to new types of players [...] potentially at the expense of the art insider’ (2014: 68). Petterson further notes that ‘the aggregate voice of social media and the large audiences it attracts could have a significant impact on how we form our perception and opinion about art in the future [...]. Maybe’, he asks, ‘Facebook will become the new art critic, and Google Analytics the new Artnet?’ (*Ibid*: 85).

ArtRank also assesses broad popularity by analysing how often artists and their peers are ‘hashtagged’ on social media, which is a form online earmarking, and they use Twitter information, and Google Trends, which quantifies the amount of web searches over time of a given term, to assess the sustainability of a career, by looking at how sudden or established a trend is (this, it should be noted, is actually a form of technical analysis, which likewise looks at trend patterns, support or break-away areas, etc). Artrank furthermore uses click-through data from its own private push sales, for each of which emails were in 2015 sent to 40,000 people. How these various inputs are synthesized to produce a final valuation figure is not known – it is possible weightings are determined statistically in the manner of hedonic regression models. However, whereas the type of hedonic regression discussed above assumes price variability is consonant with the variability of characteristics of artworks themselves, ArtRank’s model understands the prices of artwork as determined by standard market forces: supply (number of artworks produced / numbers of artworks held likely to be put back on the market) and demand (proxied by Instagram popularity, google search trends, demand for peers in a group, gallery representation, and presence in certain collections), with a base level given by historical prices. An economics based market understanding of the artworld enables Rivera – in his view – to account for certain otherwise

counter-intuitive dynamics that relate to price equilibria: for example the fact that an auction record for an artist can have negative effects when a record price exceeds the ‘real’ underlying value of the artist’s work, because the excessive perceived opportunity cost that results from it leads works to flood the market, making the prices fall in turn.

Following criticism in 2014 from notorious art flipper and collector Stefan Simchowitz (formerly sufficiently impressed to have sought a stake in the firm – see Helmore, 2014), Artrank issued an apology of uncharacteristic humility, acknowledging that its past analytical inaccuracies had evidenced that it is ‘impossible to gauge cultural value in objective terms’ (Goldstein, 2015a) – an opinion which its CEO, in an interview a year later, clearly no longer subscribed to. To be sure, the belief by Rivera and others in the ability of social media ‘likes’, which express neither nuance nor strength, to accurately proxy the influence of taste on price in the aggregate, is easily derided. But his interest in big data, in the Internet’s ability to supply information on (online) networks of influence, and in online consumer behaviour as proxy for real-world preferences, nevertheless carries important insights about the direction of future calculative practices in the artworld, of which it appears the most promising. As the online art market emerges, attracting the most mercantile of buyers, the data such models rely will become more robust, and simultaneously more representative of its consumer segment.

Tutela Capital

Dr. Fabian Bocart founded Tutela Capital SA in 2011, on the back of his doctoral research on hedonic regression at the Université Catholique de Louvain (referenced throughout this thesis). In November 2016, just after Sotheby’s acquired the Mei Moses Art Indexes, Tutela Capital was purchased by Artnet, which had been looking for a data specialist for 15 years (Hanson, 2016), thus roughly since Mei Moses started publishing their first indexes. Today Tutela’s valuation tool is internationally recognised in accounting for art’s fair value (an estimate of the price that would be received if the asset were sold under orderly market conditions), which enables ‘entities like banks and hedge funds to leverage art while conforming to regulatory demands for disclosure’ (Hanson, 2016). Despite being a hedonic regression model, it is worth separate consideration for the specific uses it is put towards.

As with HPM and models like ArtRank’s, Tutela’s model is built on a particular understanding of the market derived from fundamentally positivist questions, such as ‘How can we industrialise their [the appraisers’] thinking?’ and ‘How can we translate their experience into a model?’ (speaking at the Art & Finance Conference; Bocart, 2013). At 2013, in Maastricht, Bocart explained to a conference audience that Tutela Capital retain a unique emphasis on quality as the cornerstone of the market, which they try to mix with modelling, as a hedonic concept, to make ‘tools’. Once again, the conception of the market is a transposition by analogy of that of financial markets, the ambition described in 2013 being to give each artwork its own volatility measure, like a stock, bond or other commodity, as well as a valuation, and thus to be able to use it to perform portfolio allocation computations (*Ibid*).

According to Bocart, Tutela’s tool can infer the quality of a work by understanding quality in a very specific statistical way: ‘quality is a spread in price as compared to the average price of artworks with the same measurable characteristics’, in other words, a probability of

deviation from a mean price for works in the same medium, in the same genre, from the same period, and, presumably, from the same price bracket (Bocart, 2013). The key assumption is that the market is segmented by quality, and that this is the case even for works of the same artist (a good lithograph, a bad lithograph, a good painting or a bad painting by Picasso will all behave differently, Bocart explained at the conference). The analogy is with bonds: high yield bonds are correlated to investment grades, since they grow and increase together in the long run. A 2-year bond will be correlated to a 10-year bond according to the delta shift of the curve, but their slopes will differ, which is why dynamics, risks, and liquidity differ. Similarly, a blue chip Picasso will be correlated to lithographs of Picasso, but each will have different risks, and the purpose of their model is precisely to manage risks by assessing the probability of obtaining a particular price for an artwork given its measurable (hedonic) characteristics. To do so, the model takes into account quality and material / historical market segmentations, and provides confidence bounds for a price estimate.

Bocart illustrated the use of his model in 2013 by estimating what a Renoir painting, size 65 x 81cm, created in 1879, which was sold in November 2004 (all of these were inputs), would be worth today. The model suggests that the price should be between \$6.7 and \$8.4 million dollars, with a probability of sale of 88%, and an annualised volatility at \$8.2m of 7%. Having generated risk-adjusted returns, Bocart explains, it is possible to compute capital asset pricing models, portfolio optimization, and to include artworks in clients' global allocation portfolios. This can be used to estimate fair value of third-party guarantees or to estimate market and liquidity risks, or to track trends per quality segment, artist and media. Such tools could also in theory be used to assess the risk cost of auction guarantees, which lost Sotheby's \$100 million in 2008/2009, and shows that this risk is often not sufficiently covered. Ultimately though, as Bocart explained in 2016, the aim is to 'help push margins lower and to give banks, hedge funds and investors access to a market [that is] in a similar position as the real estate market in the 1980s and 90s' (quoted in Hanson, 2016); a comparison we will encounter again.

Other Quantification

Efforts to translate qualitative concepts into quantitative tools have found a very broad expression in the art market, and not all of them focus on the art market in the transactional sense.

Endeavours range from straight-forward data provision to advanced, even esoteric experiments in 'deep technology'. At the former end of the scale, companies like artprice.com and artnet.com provide access to millions of easily searchable auction records, along with analytics (such as price trends for individual artists), market alerts and other tools. Similarly, though the user interface is different, Magnus utilizes digital recognition technology to tell a user the name, past auction sales and current gallery prices (if available) of an artist's work. The aim of such companies is to increase transparency and reduce information asymmetry, thus affording the buyer greater bargaining power and commercial awareness. In close proximity to the models discussed above, Marek Claassen of Artfacts.net, describes his business as founded on asking 'if it would be possible to describe an artist mathematically, to predict an artist's career using econometrical methods' (Gleadell, 2006). Kunstkompas, similarly, have since the early seventies measured artist gallery and museum exposure as a non-price point system to determine artist's non-

economic value. Further afield, computer scientists from Rutgers University, New Jersey, have attempted to devise an algorithm that picks history's most original artworks by 'the originality of the product and its influential value' over other subsequent works, in part by analyzing qualities including colour, texture and scene type (Culpan, 2015); an endorsement of influence-based and individualist ideas of art history as successive creative breakthroughs subsequently absorbed by the artist community. There are scientists in various fields of cognitive and behavioural psychology and aesthetics who are trying to quantify taste in art (Shimamura and Palmer, 2011), and sociologists measuring the effects of gallery representation on artist prices (Accominotti, 2014). Researchers at Google have generated 'art', sold for as much as \$8,000, with algorithms that give art 'quantitative and mathematical attributes' based on neural networks technology that modifies digital images over thousands of iterations and can mimick well-known aesthetics (Jac de Haan, Google, in Wells, 2016), such as Van Gogh's 'Starry Night'. Google's Magenta project, similarly, is dedicated to the attempt to make art using artificial intelligence.

More sober market data endeavours are also cornering their own niches, often through the publication of reports. These are now available on global art loans, on the size and penetration of the online art market (Hiscox), on publicly listed art companies (Skate's Art Market Index – SASI), on collector behaviour and collectors (Larry's List), or on professional sentiment vis-à-vis the future of the art market in general, or segments of the art and finance industry more specifically (Deloitte & ArtTactic 'Art Market Confidence Index', annual 'Art & Finance Report'). Finally, closely tied to these are reports on luxury markets that include art in their purview (see the Knight Frank Luxury Investment Index – KFLII), and reports on wealth and the wealthy that touch on art assets (Wealth-X). In these are combined the factors of wealth and quantitative epistemes that constitute the pillars of this research. Signalling art's maturation into industry, the comparatively recent emergence of art market industry reports is coextensive with, and central to, the aims of financialization. It territorializes art market expertise, claiming it on behalf of the commercialised expertise of those who are deeply invested in the creation of an art & finance ecosystem, and enacts a shift in emphasis from understanding the art historical factors that underpin the value of art to understanding the economic factors that shape its prices.

Taken together, these developments represent a remarkable polycentric and multi-directional push to mathematically translate multiplying aspects of art as object, social phenomenon, commodity, or asset; a scientific intrusion over the humanities-dominated realm of connoisseurship and relational knowledge networks. What such calculative agencies show is the porosity of social relations to art to the reach, beyond their fields of emergence, of broader epistemological trends from technology, engineering and finance. What we also see is that while the market itself may be an epistemological tool in the Hayekian sense of signaling production opportunities and requirements to capitalists, it also begets epistemological tools that reinforce both the identity and the hegemony of the market as such, through the process of reification, and which thereby aim to fulfil the market's aspiration to abstraction and freedom from materiality.

Other Limitations

We have sketched out some of the key features of dominant calculative practices within the art market, as well as some of their conceptual draw-backs. But such methods, especially

where they produce indexes, also present a number of additional limitations relating to their practical applicability. While frequently raised in the literature on the subject, these objections tend to be crowded out by the louder commercial voices backing these methods in the art market. Criticisms broadly pertain to the inadequacy of the various methods to the market peculiarities of art – their inability to capture, among others, ‘glaring market inefficiencies, transaction costs, [and] artificial prices’ (Robertson, 2016: 237).

The first group of limitations refers to the costs of trading art, which seriously discount any returns on investment where measured by indexes that understate purchasing price and overstate sale price. As pointed in by Kazemi *et al.* in *Alternative Investments* (2016: 542), a coursebook of the Chartered Alternative Investment Analyst accreditation, if we take the median return to art investments from Ashenfelter & Graddy’s 2003 meta-analysis, and assume ‘round-turn transaction costs’ of around 25%, then ‘it would be expected to take 10 years of price appreciation to cover the transaction costs associated with a piece of art’. A first point, raised by Goetzmann in 1993 (1371), is that indexes do not incorporate transaction costs. Transacting at auction incurs significant premiums both at the seller and buyer side such that measuring financial returns would require one to ‘increase the purchase price by the level of the buyer’s premium but then decrease the sale price by the level of the seller’s commission’ (Ashenfelter and Graddy, 2006: 919). The seller’s commission is the most difficult to account for due to the fact that it is a negotiable and undisclosed aspect of the sale where the seller has bargaining power in proportion to the importance of the work(s) offered. In these instances, the seller’s commission is often reduced or waived altogether to secure a prestigious lot and prevent a rival auction house from doing so. Added to seller’s commissions are illustration fees for the catalogue, shipping charges to and from the auction house, minimum concessions, authentication charges, insurance and, potentially, title insurance (von Habsburg *et al.*, 2010: 48). Buyer’s premiums on the other hand are stricter and, therefore, public: they are regressive according to price bands, with percentages defined by each auction house, such that the cheaper items incur a premium often around 25-30%, while the higher brackets of more costly items (for example above £1,000,001 at Christie’s) incur around 10-12%. Difficulties arise for modellers, however, due to auction houses differing in their records on whether they record the hammer price, which is net of the premium, or the total. To deal with this, Mei and Moses (2002) increase all recorded prices of all items by the buyer’s premium but Ashenfelter & Graddy (2006) take exception to this generic solution on account of the fact that price brackets and rates have shifted significantly throughout the relevant time period, in some cases – principally concerning less expensive works – tripling from their stable 10% in the 1970s. Furthermore, sales taxes may also be levied on the commissions and premiums, such as VAT in the UK (5% for fine art). Artist’s Resale Rights, finally, deriving from the European Directive that came into force in the UK in 2006, are also enforced in cases where the artist is registered to the Design and Artists Copyright Society. These also work regressively, from 4% on the first EUR 50,000 to 0.25% on everything in excess of EUR 500,000.

A second limitation of indexes in their representation of investment returns is that they do not account for the significant holding costs of art, which may include insurance, shipping, framing, import/export taxes as well as capital gains taxes, fees for advisory, collection management, valuations, security, and potentially restoration costs. Melanie Gerlis estimates that holding costs can vary between 1% and 5% of the work’s value (2014: 68). McAndrew gives the same estimate (McAndrew, 2010: 23), as does Tara Loader-Wilkinson (Loader-Wilkinson, 2010)

in the Wall Street Journal, citing the founder of Bruins Private Collections Consultancy. These costs are *annual* costs, and they can rise to 15% of the value of the collection if a collector regularly transacts (Annelien Bruins quoted in *Ibid*). For these reasons, Davies suggests that the perception perpetuated by indexes and finance media of the art market as ‘open to a new wave of financially motivated investors ready to tap into a lucrative world that was once the preserve of enthusiasts and connoisseurs’ is both ‘inaccurate’ and, worse, ‘potentially dangerous’ (Davies, 2014: 7).

A third limitation is that indexes are inherently pre-disposed towards short-term decision making, offering conclusions on the returns to ‘timing the market’ to which there is no outlet, as they would need to be instantaneously actionable in order to be investible (McAndrew, 2010: 25). In practice, von Habsburg *et al.* estimate that transaction times at auction take at least three to four months (this is obvious from the fact that auctions tend to be seasonal events), and six months or more through private treaty sale (sale through a dealer). The longer lead times of the latter result from the demands of discretion and the network based hierarchies documented by Velthuis, which are structured by the granting of options to buy to the most loyal collectors first (Grant, 2015b; Schneider, 2017a; Velthuis, 2007). Though apparently creating market inefficiency, the huge resale price risks noted below in reality rationalise the existence of match-making intermediaries and the attentions they lavish upon repeat customers. Such practical limitations to art’s liquidity render it ‘sticky’, in financial parlance, meaning that desire to declutter and offload expressed among collectors is often not realised in practice, because people are ‘invariably over-optimistic about the time it will take and the cost they will incur’ (Barclays, 2012: 18).

A fourth limitation is the enormous price risk in the art market, which Goetzmann defines as ‘instantaneous uncertainty about the immediate resale value of a work of art’ (1995: 25). This is a corollary in the auction market of ‘stylistic risk’ (Goetzmann, 1993), that is the risk of having insufficient bidders when reselling the artwork, which Mei and Moses compare to liquidity risks in financial markets (2002; see also Bocart, 2014). As Felix Salmon comments: ‘The first time you try to sell a painting, you suddenly realise how ill-equipped the market is and how huge the bid-offer spreads are. [...] It’s much harder to sell art than people think and just because something is valued at a certain amount doesn’t mean that you can expect anything approaching that if it is sold’ (Barclays, 2012: 29). While Case and Shiller (1987) and Goetzmann and Spiegel (1995) assess price risk to be between 5% and 10% in the US housing market (cited in Goetzmann, 1995), Goetzmann (1995) finds the following results for art:

Table 1 - Price Risk in the Art Market (Goetzmann, 1995)

Changing Efficiency of the Art Market as Measured by Price Risk	
Sub-Set	Single-Sale Standard Deviation
Entire Sample	104.00%
Bought Before 1800	70.70%
Bought Before 1850	66.90%
Bought Before 1900	61.20%
Bought Before 1950	51.40%

Such figures show the astonishing price risk incurred in the art market, and outline the margin that specialist intermediaries ('market-makers') need to cover, hence representing 'a considerable motivation for a dealer to develop superior information about the assets, and about the market demand for them' (Goetzmann, 1995: 31). It is also commensurate, therefore, with the loan-to-value ratio at which market agents will lend against art (~50%). For investments, the price risk suggests that 'while returns to art investment have exceeded inflation for long periods, and returns in the second half of the twentieth century have rivalled the stock market, they are no higher than would be justified by the extraordinary risks they represent' (Goetzmann, 1993: 1370). The scale of the price risk, essentially the fee that intermediaries can charge for their informational advantage, suggests that the art market is inefficient, and that it does not rapidly impound in the price of art all available information, including information about the future prospects of an artist (Goetzmann, 1995: 25). To some extent this is because information is closely guarded – a status quo which data providers are aiming to disrupt – and because the prices of art are, by virtue of art's illiquidity, sticky. According to Robertson, the slow reactions to a downturn in the art market may, moreover, point to an asymmetry whereby bad news disperses more slowly than good news, an observation which speaks to the level of informational control in the art market (Robertson, 2016: 243–44)

According to economic theory, an efficient market operates such that 'all relevant information has been obtained and all the arguments have been delivered when the exchange takes place. Therefore, the economic value of a work is contained in the price last paid' (Hutter and Shusterman, 2006: 204-205). In such a market, the random walk test would show that the prediction power of past prices is nil, since all new information is instantaneously reflected in the price, rendering prices fully accountable to the underlying reality they represent, rather than anchored to past perceptions of the asset's value. Research on the art market suggests it is not efficient in this manner, and that actors within it are prone to using heuristics in pricing & valuing such as 'anchoring' (Tversky & Kahneman, 1974). Work by Beggs and Graddy (2004) finds that auctioneers may engage in partial information processing (referenced in Ashenfelter and Graddy, 2006), generating pre-sale estimates by engaging in anchoring; using the price fetched at auction at its previous sale regardless of the years that may have elapsed since and the different market conditions that may prevail. Von Habsburg *et al.* similarly suggest that a strong "reference price effect" is a feature of the art market over time, with works selling for a high price likely to be given a higher estimate in the future, with symmetric effects for losses (von Habsburg *et al.*, 2010: 60). Pownall *et al.* (2014) also find evidence for anchoring, particularly when works return to market quickly. The wider dissemination of information, unless it is accompanied by increased liquidity, will strengthen the reference effect. Using an app like Magnus which utilizes digital recognition technology to tell a user the name, past auction sales and current gallery prices of an artist's work, would increase the bargaining power of the buyer where there are no competing buyers, by increasing transparency; but only to the extent of a mean-reversion. This will reduce the slope of the value inflation cycle that the fees of intermediaries in art transactions tend to accentuate.

	S&P 500 Equity Index	MSCI EAFE Equity ETF	FTSE NAREIT All Equity REIT	Barclays Aggregate Bond	S&P GSCI Commodity Index	Mei Moses World All Art
S&P 500 Equity Index	1.0000					
MSCI EAFE Equity ETF	0.7128	1.0000				
FTSE NAREIT All Equity REIT	0.4919	0.4440	1.0000			
Barclays Aggregate Bond	0.2311	-0.1944	0.1287	1.0000		
S&P GSCI Commodity Index	0.1226	0.3558	0.1723	-0.2256	1.0000	
Mei Moses World All Art	0.0003	0.1524	-0.1719	-0.1788	0.1983	1.0000

Figure 3 - Correlation Matrix of Art vs. Financial Indexes (JPMorgan / ECJ Capital Research)⁷

Similarly, were calculative technologies to become established heuristics in the partial processing of auctioneers, they would also plausibly become self-fulfilling, anchoring valuation estimates to the last transaction price of a work plus the market movement represented by the index in the interim.

The investment thesis for art has also been criticized beyond performance aspects. The non-correlation dogma which Horowitz perceived as the main sales pitch of index-based research to the potential investor proposes that art resists non-idiomatic market risks (general movements in the market), the correlation with which is measured as an asset's beta. This is the quality that would render art instrumental in a portfolio as a way of hedging against market risk events, and is the aspect of art that most recommends it as an alternative asset class.⁸ If art is non-correlated, a downturn (or upturn) in other asset classes would not affect the performance of an art asset, whereas a negative correlation would mean that the negative performance of other asset classes in a market downturn would be counterbalanced by the positive performance of the art market. As noted in the 2008 industry book *Business Knowledge for IT in Private Wealth Management*, for example, it is 'on the basis of the Mei Moses Art Index [that] experts have concluded that art [...] provides a better hedge against inflation than most asset classes' (2008: 121). The different investment profiles of various sub-markets in art moreover mean that an art collection itself could be constructed to internally optimize the diversification of risk. McAndrew has for instance remarked that most research studies 'have shown that the Contemporary sector has tended to have the most correlation with financial indexes of all categories in the art market,

⁷ http://www.ecjcapital.com/uploads/8/3/7/5/8375049/ecj_capital_art_market_presentation_november_2014.pdf (15/01/2018).

⁸ Ironically, more financially motivated transactions in the art market will make demand and holding patterns more elastic to the performance of other asset classes, and hence will increase the correlation of art to them.

albeit often with a significant lag, and is therefore the most susceptible to general economic fortunes' (McAndrew, 2010: 27). Old Masters, conversely, is a category both less prone to such risk and less profitable. As expert Bendor Grosvenor describes it, 'the Old Master market has always just ticked along', its prices 'tend[ing] to remain static' and therefore 'Old Masters have only ever been a medium to long term store of value' (Grosvenor, 2015). An art collection could therefore reflect the risk-return appetite of an investor-collector by adjusting the relative amounts of art, by value, held in different historical categories, and such a collection could itself be incorporated into a broader financial portfolio alongside other assets with different risk profiles.⁹

While McAndrew & Campbell hold that 'the markets for art and equities are often simply unrelated' (McAndrew and Campbell, 2010: 96), a significant amount of research suggests otherwise, showing that art has been broadly correlated with the financial markets since the eighteenth century, such that Gerlis concludes that 'what may seem to be a lack of correlation may in fact be a lack of transparency' (Gerlis, 2014: 21), in other words a lack of sufficient information on transactions. This is a fundamental issue with illiquid assets, such as private equity, in which the 'stickiness' of prices relative to short-term volatility is an artificial effect of the fact that these are long-term investments where a real post-money valuation is usually only possible after around five years and assets are often held at cost in the interim period (as prescribed under GAAP accounting principles, unlike IFRS, which require interim fair market valuations – but even then such valuations only take place every quarter at most). The case for correlation follows the intuitive qualitative observation that art buyers are almost exclusively from the wealthiest segments of society, the very same segments who typically hold significant wealth in investments portfolios and whose purchasing behaviour thus comoves to the greatest (relative) extent with financial markets. As Davies notes 'demand for treasures is driven by investors with large incomes, and that is heavily cyclical', because large incomes and wealth fall 'when broader financial markets suffer' (Barclays, 2012: 29). Focussing on the time-series behaviour of art in relation to the stock and bond markets (proxied by an index of London Stock Exchange shares) over very long periods, Goetzmann's research similarly found 'evidence of a strong relationship between the demand for art and aggregate financial wealth over the very long term', which he interpreted as 'evidence that the demand for art increases with the wealth of art collectors' (1993: 1370). Three bear markets in art, 1830-1840, 1880-1900, and 1930-1940, for example correspond to 'broad economic recessionary periods' (1993: 1373). This supports the work of John Picard Stein, Michael F. Bryan, Olivier Chanel and Leslie Singer who found a positive relationship between art and the stock market over shorter time periods (quoted in Goetzmann, 1993: 1373). Spaenjers (2010, quoted in Kazemi *et al.* 2016; Spaenjers & Renneboog, 2015) similarly suggests that art prices are significantly explained by GDP growth, lagged equity market effects and income inequality. 'If wealth is the major constraint to price appreciation for paintings,' Goetzmann concluded 'then a rise in the stock market may relax this constraint' (1993: 1370). From these observations he furthermore inferred that 'a risk-averse agent would typically not find

⁹ In practice, the cost of purchasing a diversified portfolio of artworks would render it impossible for all but billionaires, a reality which underlies the growth of art mutual funds offering a stake in, or exposure to, such a portfolio (McAndrew and Campbell, 2010: 96). Moreover, as Gerlis notes, the data granularity needed to create a risk-optimized art portfolio is such that it seriously undermines 'any meaningful analysis or projection of its performance', particularly for RSM indexes, as they already operate on a shallow database (Gerlis, 2014: 31). Pownall has, however, claimed that there is enough idiosyncratic risk in the distribution of artists' repeat-sales prices for even a single artist to add to portfolio distribution (quoted in Deloitte & ArtTactic's Art & Finance Report 2016: 110).

art to be an attractive purchase for investment purposes alone' – only 'an agent who would otherwise choose a relatively volatile portfolio', for example stocks, would be interested in art 'absent its aesthetic dividend flow' (Goetzmann, 1993: 1370 & 1375). Over a quarter century later Goetzmann, Renneboog and Spaenjers (2010) reiterated these findings, relating their art price index to the British equity market and UK income series. Looking at the period 1830 to 2007, 'lagged equity capital changes show significantly positive correlation with changes in art prices' (2010: 4). Other studies, by Chanel, Worthington and Higgs, and others, support such claims. Bocart's research also supports the positive correlation between art and financial markets, but in terms of art's volatility, which 'increases similar to the stock index volatility' (Bocart, 2014: 64). Indeed, 'the idiosyncratic risks, i.e. the prediction uncertainty of the price of an individual asset, increased after the recent financial crisis 2008/09' (*Ibid*). Further correlated events include price drops after the 1973 oil crisis; strong price appreciations throughout the 1960s; the art market boom at the end of the 1980s and from 2000 to 2007.

The non-correlation conclusions of Mei and Moses (2002) may be due to methodological specifications, such as the fact that globalization of wealth makes their use of a US only stock-index redundant, and the fact that they did not time-lag their correlations to account for the fact that 'it may take some time before the wealth created in financial markets finds its way to art markets' (2010: 6). Regardless of the reasons, the unreliability of the correlation argument materially impairs the case for art investment. As Kazemi *et al.* point out 'these results suggest that the diversification benefit of art is lower than some may anecdotally believe, as most traditional investors already have positive exposure to GDP and equity markets; high-net-worth investors will also have existing positive exposure to wealth inequality' (2016: 545). They conclude that the combination of high risk and low return 'compares unfavourably to historical experience in equity markets' (544). This may be behind the fact that asset diversification, and even inflation protection lost importance as purchasing motivations in 2016, though it remains to be seen whether this is a longer term trend (Deloitte and ArtTactic, 2017: 117). In Mandel's view, art's dominant nature is therefore a matter of consumption, not investment (Mandel, 2014: 234). Given the fact that art's investment profile – low average returns, high volatility, positive beta – is dominated by that of other assets (art often underperforms risk-free bonds yet is more volatile than a basket of equities), there are grounds for seriously questioning the *a priori* assumptions that art 'provides any type of investment service at all' that are often, in the end, justified by the 'mere existence of structured markets for art or the trend in financial markets towards securitization of unconventional stores of value' (*Ibid*).

Conclusion

This chapter has outlined a number of competing and complementary calculative agencies and practices, each working towards systematicity of analysis and data processing. It has also highlighted some of their key conceptual and theoretical limitations.

Objectivity may take several forms, the confusion of which facilitate cross-surrogacies to the benefit of a general sense of objectivity, giving numbers what Espeland and Stevens have called a 'polyvalent authority' (2008: 203). It may be metaphysical, methodological, or moral, it may refer to ontological reality, to the production of facts, to impartial (or disinterested) enquiry,

to empirical reliability or to a rationality such as ‘compell[s] assent from all rational minds’ (Daston, 1992: 598). Each has a history, a pedigree and a use. Each is also likely to be confounded with one or more of the others, such that their specific premises and localized use-values are often conveniently obscured. In our case, insofar as objectivity is key to the statistical interventions described, it occurs at the procedural or mechanical level, which functions to oppose interpretations by ‘impartiality-unto-self-effacement’ (Daston, 1992: 598). This is similar to what Suchman has called ‘procedural legitimacy’ (Suchman, 1995), such as is integral to certain organizational processes, as indeed it is to the practice of accounting. As with accounting, it emerges from the fact that where functional specifications of inputs and variables or data sampling may be highly idiosyncratic, at least at the calculative level, ‘the practice [...] has to be “correct” [...] the rules of the game have to be respected and followed’ (Vosselman, 2014: 183).

Looking at the production of numbers in the art market, and appreciating their diversity and drawbacks, is to look at how numbers are always contingent, partial, and pliable to – if not driven by – *a priori* notions of their future usage, and the goals they are expected to support. It is to look at how the production of ‘facts’, as re-presentation of the world, is incidental to the universe of data available to it. We have touched on how the process of quantification involves co-producing new conceptions of art: teasing out eligible variables from a heterogeneous universe of description, and conceiving of the object as proxied by a set of statistical relations between them. New categories and classificatory systems, stabilised around recurrent criteria, and enacted through particular conventions (Levin, 2008: 116), attest to how quantification and commensuration always rely on ‘replacing murky variation with clear distinctions between categories’ (Espeland & Stevens, 2008: 414); a detachment of the entity, a kind of vivisection of the muck, that is necessary prior to its subjection to a ‘common operating principle’ (Callon & Muniesa, 2005: 1231). Desrosiere has called this desingularization process ‘qualification’ (1998: 246 – see also Carruthers, 2013: 534). It is, perhaps more importantly, a form of excision first – at the same time as it is an act of contouring.

Samiolo’s 2012 study of cost-benefit analysis in the Venetian lagoon has dramatized that ‘whether calculation succeeds in overcoming conflicting modes of valuing and thus in standardising the subject of calculation by giving it the stamp of impersonality, [...] crucially, also depends on how its subject is conceived’ (Samiolo, 2012: 399). Given that the process of quantification has not yet resulted in centralization around a dominant calculative agency, what we see is precisely that the conception of the object, of what it should do, for whom, and why, is constantly shifting, in part because it is recognised as the preeminent arena of the ontological contest.

Chapter 2. Four Easy Pieces

Introduction

Data has formed the basis of art's financialization by enabling an understanding of it as an asset that behaves and moves in particular and definite ways: its quantifiable characteristics becoming happy contributors to its price formation – its other characteristics discarded as irrelevant. More important than the accuracy of this research, which especially in practice is demonstrably suspect, has been its marketing value in assisting various agents in the art market to make a case for art's financial features, even its financial benefits, in instances where the services these agents sell is contingent on this being perceived to be true. As we are told in the Art & Finance Report 2016, 'better data tools are being developed to aggregate art prices and performance metrics into a language that financial institutions and investors are more familiar with' (Deloitte and ArtTactic, 2016: 84). In other words, if data is a language, it is a language that places obligations on what is thinkable, carrying within itself specific kinds of possibilities while precluding others. It is a language, that is, that comprises a capacity for action.

On average three quarters of respondents surveyed by Deloitte and ArtTactic (2017: 140) have across the four years to 2017 declared that their clients (for art professionals) or they themselves (for art collectors) buy art for the sake of collecting but with an investment view. AXA, in a 2014 multi-variate analysis, identified 24% of collectors as pertaining to a new type, the 'investor' (2014: 12-13).¹⁰ This chapter explores four parts of art's new ecosystem – (i) wealth management and advisory services relating to art; (ii) art securitization and loans; (iii) art investment funds; and (iv) art freeports – that have both helped foster and sought to capitalise on this new financial sensibility.¹¹

The drive to turn wealth management into the intermediating point of confluence through which aspiring or existing collectors access the full gamut of financial strategies for buying, investing in, holding, organizing, monetizing, inheriting, or selling art, quickly became clear in this research. Wealth management is the nexus of art and finance; it is where the personal and financial are synthesized. It is the central practice – and represents the key sphere of interests – around which the effort to institutionalize art and finance as a field of its own is focused. Through wealth management, art is integrated into and alongside other assets, and finance is elevated into the chief organizing episteme of an individual's or a household's possessions. Securitization and loans, art funds and freeports, are then tools with which to think and work with art objects as an asset class among others in a broader portfolio of holdings.

¹⁰ The other collector types were 'art aficionados' (37%), the 'traditionalists' (16%), and the 'hybrid collectors' (23%).

¹¹ In focussing on the four areas of the art & finance ecosystem which we believe to be currently dominant, we are largely excluding (though they are referenced) those ventures which are the most "audacious", but whose structural significance remains to be seen, such as public markets for shares in art.

1. *Wealth Management, Advisory, Collection Management*

Introduction

The case for wealth and tax expertise on art has been made by the attention of quantitative analyses of art to the impact on investment returns of transaction costs, regulations and taxes. Taxes, as we will see in this section, are a fundamental aspect of art advisory, as they are of financial advisory, and indeed wealth management. They are also, as will be discussed both here and in Chapter 4, a fundamental aspect of the process of financialization itself. The synthesis of art and the wealth management and advisory sector is furthermore a natural consequence of the fact that both the art market and wealth managers target the same segment: the world's wealthiest individuals. It is a segment that is disproportionately more likely to consider collecting from a total assets framework – what we call portfolio panopticism – because (i) its wealth often emerges from finance itself or from executive roles demanding high levels of financial literacy; (ii) it pays the most for art; and (iii) it can afford to solicit advice in doing so. Rick Flynn, managing partner of FFO Business Management & Family Office, a New York firm that describes itself as a 'premier family office and business management company serving ultra-wealthy individuals, families and their advisors', providing solutions that 'bridge financial and lifestyle objectives'¹², remarked on exactly this connection, noting that 'quite a number of our clients are spending significant amounts of money to build high quality art collections. For them, wealth management is essential in all aspects of their lives including addressing their growing art collections' (quoted in Prince, 2015). According to renowned art advisor Thea Westreich, clients such as her own are indeed 'totally conditioned to have advisers in all aspects of their lives' and 'like to feel confident that someone is looking after their needs' (quoted in Adam, 2011).

The differences between the roles of art advisor, financial advisor, or wealth manager have to do with the degree of specialisation and the length of the relationship with the client. Art advisors are specialised in both the acquisition of art and management of collections (which may include relevant financial expertise) and can be utilised for discrete transactions or retained long-term. Financial advisors are generalists in financial matters and are usually employed for discrete purposes. Wealth managers are generalists more broadly, capable of offering highly bespoke services, who manage the client's wealth or portfolio on a discretionary or advisory basis.¹³ Wealth managers are often employed over the very long term, such as across several generations (Harrington, 2012, 2016a; Harrington and Henwood, 2017). Each of these expert positions overlap in their inherent purpose of furthering the goals of the very rich, who can afford to solicit their services, and, particularly for the latter two, in the tools at their disposition for doing so. Art advisors do not need formal accreditation and are often former gallerists or auction-house experts leveraging their network to originate transactions, monetising the access they can provide for wealthy individuals that have no cultivated ties with gallerists, and so matching buyers and sellers (their proliferation as intermediaries point to changing economic incentives which wealth inequality has produced; as well as the title's lack of protection). Financial advisers and wealth-managers, on the other hand, are subject to supervision by regulatory bodies, and are typically

¹² <http://www.ffollc.com/> (accessed 14/11/2017).

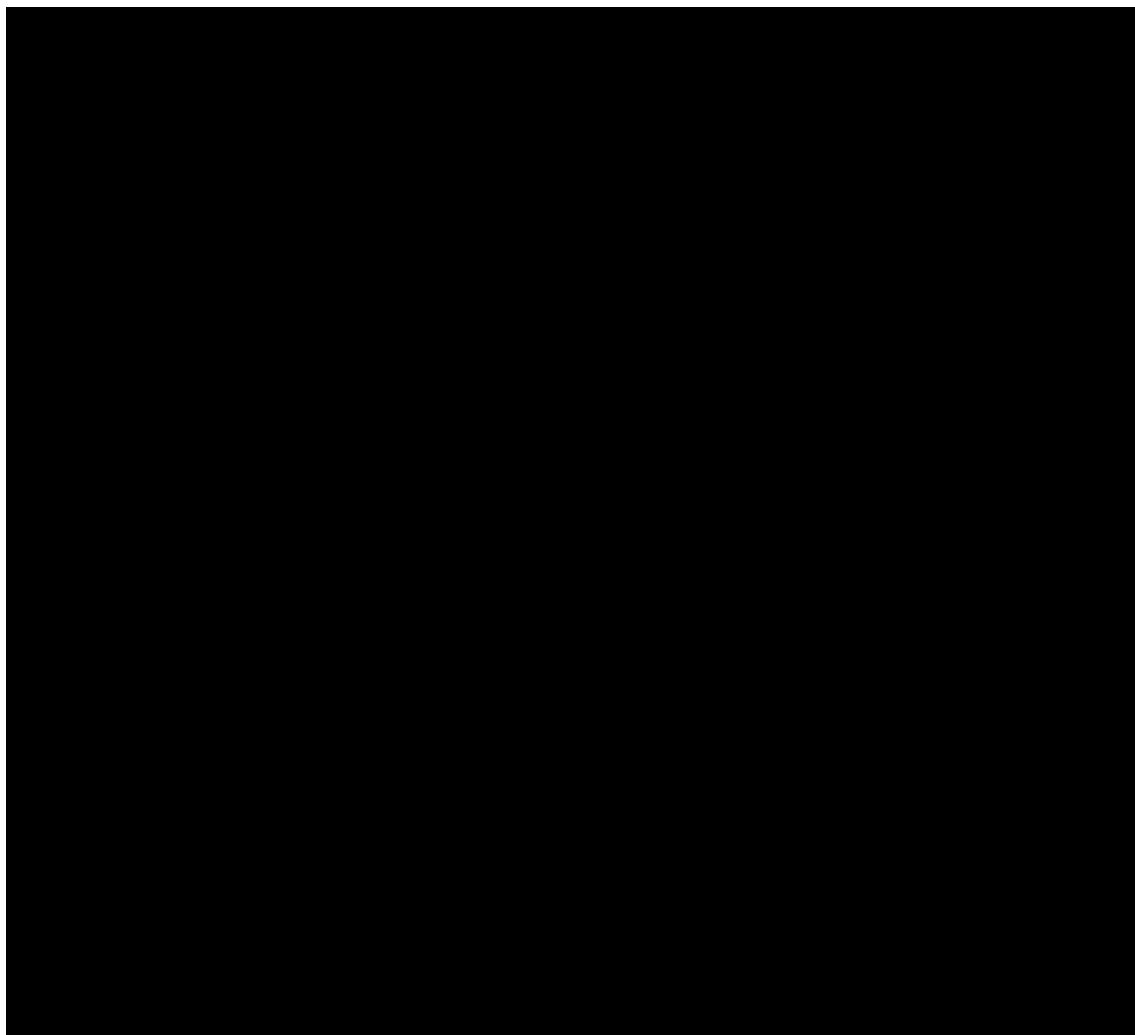
¹³ See Financial Conduct Authority's description, <https://www.fca.org.uk/consumers/wealth-management> (accessed 16/01/2018).

institutionally accredited. Recent work by Brooke Harrington, who spent eight years producing the first extensive sociological analysis of wealth managers (including training as one herself) has pointed to the extraordinary levels of intimacy, discretion and disclosure which characterise the client–wealth manager relationship. Here, a ‘layer of genuine interpersonal attachment’ must accompany the ‘rational-bureaucratic’ sense. Moreover, as Harrington has shown (Harrington, 2012: 829), wealth-managers or trustees are not expected to dispense legal, tax or investment advice, but to coordinate it from an extended network of experts, and be able to understand it. The distinction, according to a textbook of the Society of Trust and Estate Practitioner, ‘is fundamental’ (Parkinson, quoted in *Ibid*). This puts wealth managers in a crucial structural position with respect to art’s financialization: their interpersonal privilege and financial expertise enables the synthesis of the rationality of finance and the emotive charge of art collecting. Moreover, they are the nexus through which the diversifying and still fragmented ecosystem of art & finance can be channelled towards and made sense of for UHNWIs.

The emergence of art services within wealth management is fundamentally a form of horizontal integration that enables wealth management firms to provide a more ‘holistic’ wealth service as a competitive advantage over other firms, while enabling them to seek out new clients in their target segments. This matters in a sector where profit margins fell 40% between 2000 and 2015, even though bankable assets grew by more than 60% among the millionaire households of Europe (Deloitte and ArtTactic, 2017: 103). In fact, given ‘an increasing number of institutions are competing to service and manage the assets of relatively few’ and at least 400,000 collectors are present in the top wealth segments, owning USD 1.5 trillion in art assets (Deloitte and ArtTactic, 2014: 55), there is a significant incentive for wealth managers to think strategically about art and include it in their value proposition. It therefore makes sense, for example, for Morgan Stanley Private Wealth Management – which has over \$300 billion in assets under management from families with over \$20 million in investable assets – to have a dedicated art financial services team, for example.¹⁴ In fact, today, art wealth management services likely constitute a requirement in order to capture HNWIs and UHNWIs – not merely an additional service (von Frank, National Suisse Switzerland, speaking at Robertson et al., 2011). By 2017, the authors of the Art & Finance Report were pleased to report a ‘convergence between collectors, art professionals, and wealth managers on the role of art in a wealth management service offering’ (2017: 14), spurred on by the increasing wealth vested in ‘treasure’ or ‘passion’ assets, which on its own has ‘forced’ wealth managers to ‘take a more holistic approach to the way they work with their clients’ assets’ (2017: 23). According to Philip Hoffman, ‘Art is on the agenda of every sophisticated family office’ (quoted in Kazakina, 2017). Indeed, today, art funds, private banks, wealth managers, auction houses, galleries and art professionals offer advisory and/or financial services, each covering expertise they did not traditionally possess in-house. Growth in the advisory niche was institutionalised in 2011 with the formation of the Professional Advisors to the International Art Market (PAIAM) association, which groups lawyers, tax advisers, insurers and accountants specialising in the art market, as well as the establishment of the Luxembourg Art Law and Art & Finance Association (LAFA), set up in 2015 with related aims. Demand for a total service that encompasses all financial and regulatory aspects of acquisitions, sales, financing and

¹⁴ The ‘Blue Rider Group’, presumably named after the early twentieth century Munich-based group of artists, Der Blaue Reiter. See under ‘Approach’ for a typical menu of art-related wealth management services. (<https://pwm.morganstanley.com/blueridergroup/index.htm#aboutpwm>, accessed 17/01/2018)

tax structure has in turn incentivized the search for a solution to the ‘future challenge’ according to the *Art & Finance Report 2014*, namely that of ‘creat[ing] common platforms where the wealth management and artworlds can share their knowledge and expertise’ (Deloitte and ArtTactic, 2014: 66). The feedback loops between supply and demand have meant that while the emergence of this niche is also the outcome of supply-side competitiveness, ‘an increasing number of wealth managers (48 percent) recognize that their clients are putting pressure on them to offer art-related services (up from 38 percent in 2014; Deloitte and ArtTactic, 2016: 17). By 2017, this was 55% (*Ibid*, 2017: 23).



The Deloitte Global Impact model

Figure 4 - Deloitte Global Impact Model: Bourdieu-type Taxonomy Allows Broad Subsumption Under Finance
(Deloitte & ArtTactic, *Art & Finance Report 2016*: 75)

Accessing art through wealth management confirms the epistemological transfer that art data expresses and facilitates – namely the shift in the centre of gravity from art-centric forms of knowledge to wealth- and finance-centric forms of data and information, with a focus on ancillary services and the acquisition context and structure over and above the object of acquisition itself. The ambitions of wealth management in this respect are profound, seeing wealth itself as a channel for the insinuation of the financial episteme deep into the domestic arena, and using the inherent intimacy of its services as the strongest potential means of linking art and finance. Consider, by way of illustration, the perfectly pragmatic recommendation by Randall Willette, Founder and Managing Director of Fine Art Wealth Management (and initiator of UBS's art & wealth management strategy in 2000), that 'families should professionalise family meetings by inviting art market and wealth management professionals to attend as resources, teachers and mentors'¹⁵; or his idea – which is merely best practice – in a paper co-authored with Zorloni, that a truly robust family collection governance system involves 'the formation of a family art council, a structure bolstered by a well-thought-out collection policy and set of bylaws, that is typically the chief decision-making body for managing the collection' (Zorloni & Willette, 2014: 13). What these notions suggest is that a threshold of wealth exists above which concerns of capital preservation, taxation and succession achieve a prepotency that provokes the reorganization and formalisation of a family's social life in the image of a corporation, that is, around the profit principle. When that happens, wealth management and its epistemic apparatus effectively becomes its structuring force.

Wealth managers have recommended themselves on the basis of their professionalism, their discretion, and the flexibility and bespokeness of their offering, attributes that are prized as a result of the asymmetries and opaqueness of the art market, and given that, unlike art 'advisers' at large, wealth management is a regulated profession. Deloitte & ArtTactic for instance observed that 'it is likely that the neutral position of wealth managers in the art market would give more credibility to both art valuation and market research', meaning they could be instrumental in 'ensuring that the appropriate processes are in place when it comes to providing fair, unbiased, and accurate valuations' (2016: 58). In fact, 'both art collectors and art professionals strongly believe that valuation (62 percent and 69 percent respectively), as well as art research and information services (75 percent and 67 percent respectively), should be offered by private banks or family offices' (*Ibid*). By 2017, what became clear is that a vast proportion of wealth managers and family offices were now already offering valuation services (then seen as the most important art wealth management service by 74% of both surveyed art collectors and art professionals), but often sourcing these from third-parties (2017: 23, 144), highlighting the extent to which they are trusted by their clients on areas of expertise significantly outside of their own, by virtue of the strength of their interpersonal relation with their client, their impartiality, and their knowledge of the intricacies of their client's wealth. As noted in the report: 'This could signal that art collectors and art professionals now see the wealth management industry as a neutral party when it comes to providing valuation services' (2017: 144). Wealth managers have thus turned out to possess

¹⁵ <https://www.fineartwealthmgt.com/feature/home/family/YToyOntzOjQ6InR5cGUiO3M6NzoiZmVhdHVyZSI7czozOiJvaWQiO3M6MzoiMzQzIjt9> (accessed 17/11/2017).

unique advantages that have gradually made of art a domain over which they have extended an organic right as financial concerns have become preeminent as organizing principle; their claim over the ‘objective’ forms of expertise which quantification has produced, for instance, and their pre-existing overview of their clients’ financial portfolio.

According to the handbook *Business Knowledge for IT in Private Wealth Management* (Essvale Corporation Limited, 2008: 121), the advisory emerging from within the wealth management sector encompasses the education of clients about the art market ‘through museum tours, visits to galleries and auction houses, and introductions to personalities in the artworld’; refining client ‘strategies for purchases, sales and upgrades’; locating potential acquisitions for clients; advising on effective collection maintenance; and creating insurance policies and developing tax strategies in consultation with their trust, estate and general tax specialists. As part of their tax advisory, many firms will also offer expertise on devising philanthropic strategies, philanthropy being an area that sophisticated management tools are becoming the norm in, and they will advise on succession and estate planning, as FFO Business Management & Family Office do, creating both ‘documented policies such as collection strategies’ and ‘advanced planning strategies in order to mitigate taxes’ that include ‘multi-level succession plans [that] tie into their estate plans’ (Prince, 2015). As part of their investment advice, wealth managers may aid the collector in devising lending programs that will increase the public exposure and value of their collection. All advisory tends to cover these fundamental concerns. The breadth of the array indicates the structural importance of wealth managers as the point of confluence in the financial network through which the client is ultimately reached.

Art has offered another, less tangible boon to wealth managers in a hyper-competitive sector. Particularly in the aftermath of the global financial crisis, a focus on art offered the opportunity to ‘engage the client through something they might be passionate about’ rather than the dreariness of a mutual or index fund (Evan Beard, Art and Finance head at Deloitte at Beard, 2015). Speaking on the same panel, Kemp Stickney of the Wilmington Trust and Andy Augenblick, President of Emigrant Bank Fine Art Finance, agreed adopting a client-centric approach is essential in wealth management, the former adding that it ‘helps to demonstrate empathy when you can link to another collector, through passion’ (in von Frank et al., 2015). Suzanne R Gyorgy, Global Head of Art Advisory & Finance at CitiBank, likewise noted that it’s about ‘relationship building’ based on ‘a real rapport’ (von Poblitz and Gyorgy, 2015). Art is thus a way into the domain of the HNWIs and UHNWIs, a way for someone wanting to profitably manage wealth and someone having wealth that can profitably be managed, to establish a bond that is nevertheless not entirely financial, that possesses, even, an element of empathy. In this sense, art can serve to aestheticize finance; through the wealth manager, it humanises the image (and only the image) of its instrumental rationality. Indeed, the Art & Finance Report (2017) ranked ‘entertainment’ as the second most important motivation for wealth managers to include it in their services – only estate planning, for which life-cycle pressures exist, was ranked ahead. Entertainment, in its various forms, reduces the interpersonal friction of delivering financial solutions.

This logic of art’s power, soft and humane in a realm of supposedly hard pragmatism and impartiality, has proved a significant impetus. It is behind Citi Private Bank, as the first in Asia, hiring an art adviser from Sotheby’s (Miquiabas, 2015). It is the reason they have an Art Advisory and Finance department, which offers ‘personal curatorial advice’ and transactional advice

(Suzanne R Gyorgy at Bültmann et al., 2012). It is among the reasons, corporate branding aside, that ING Luxembourg, who specialise in private banking, sponsor TEFAF Maastricht, one of the largest art fairs in the world; why Deutsche Bank sponsor the Frieze Art Fair; why UBS sponsors Art Basel; and Royal Bank of Canada sponsors Masterpiece. It is the reason why Luxembourg, a European wealth management capital, is also where the main thrust for an Art & Finance synthesis is coming from, where creating an Art & Finance hub and ecosystem is a matter of policy, and where the Luxembourg School of Finance now offers a Masters in Wealth Management, in which, as Dr. Roman Kräussl says, they try to educate students about emotional assets, and about ‘how UHNWIs behave’ (Kräussl, 2014). Indeed, the *Art & Finance Report* 2014 has observed that ‘wealth managers can provide clients with exclusive access to the artworld’, a key strategy since ‘the social value (status and access) associated with buying art is a strong motivation for art collectors, and presents an opportunity for wealth managers to provide their clients with access to this exclusive ‘club’’ (2014: 16), which includes ‘exclusive social networks’ including ‘artists themselves, but also [...] other business people and celebrities’ (*Ibid*: 20).

While existing financial sector organizations have sought to create ties with the artworld by horizontally integrating new expertise directly or learning where to source it, new hybrid organizations have also emerged that combine finance and art expertise. 2015, for example, saw the launch of Cadell + Co in the UK, the first firm to combine ‘regulation by the UK’s Financial Conduct Authority with art management advice for trustees and family offices’ (Greenhalgh, 2015). The team, composed of veterans of both the financial and auction world, exemplifies the broader story of financialization. At the same time, art and financial advisory services have also become attractive to firms operating directly in the transaction of art. Auction houses, seeking to diversify their revenue streams to mitigate the art market’s volatility, and realising the value to be extracted from combining their brand and expertise with the evident demand for forms of art asset management rather than merely sales, have made their own ventures into financialization. In 2016, Sotheby’s purchased advisory firm Art Agency, Partners, who advise in areas ‘from art consulting and private purchases and sales to art-related estate planning, museum development, and art investment’, notably excelling at ‘executing the complicated financial transactions that are integral to today’s art market’ (Sotheby’s Acquisition Statement, in Maneker, 2016e). This acquisition has provided Sotheby’s with a discrete structure for the provision of such services. According to Art Market Monitor’s Marion Maneker, this is ‘an important step in the evolution of what an auction house can be’, because ‘as tangible assets become a more important part of the global financial equation, Sotheby’s is hoping to create an analogue to the large money centre banks which offer wealth management advisory services as well as transactional and investment banking services’ (Maneker, 2016b). As a result, ‘it’s growth bears watching for reasons that go beyond Sotheby’s’ (*Ibid*). Amy Cappellazzo herself, founder of Art Agency, Partners, confirms this vision: ‘Now we’re just a big transactional organization that has an advisory division, kind of like Goldman Sachs and UBS and all those guys’ (quoted in Freeman, 2016a).

There are, further afield, other examples of even more unlikely participants in the art & wealth management synthesis, highlighting the manner in which this relatively new sphere of economic opportunity affects the economic choices of agents in both the finance *and* the art sector. The Van Gogh Museum of Amsterdam is the most surprising illustration of this point. In 2016 the museum’s management suggested that ‘there could be room for a closer relationship between these institutions [museums] and the wealth management community’ (Deloitte &

ArtTactic, 2016: 71). According to its Managing Director, Dr. Adriaan Dönszelmann, in fact, the discovery was of an opportunity to participate in the dissolution of the traditional boundaries between art & finance that are still working against their synthesis. In a plea for harmony, he spoke of it as an opportunity ‘to build a bridge to be able to reach out to each other’s expertise’ (quoted in *Ibid*: 72). Dönszelmann, pragmatic and, perhaps, aware of his readership, went further still: the museum wants to help those who ‘aim to turn their art into a working asset by enhancing the visibility of a unique art object or a special collection’, recognising that ‘it can be financially attractive’ to work with a museum (*Ibid*).¹⁶ Its services offering mirrors the rise of the ecosystem described in this research, and includes ‘providing recommendations to a project developer building an art warehouse for a sustainable climate-control system’ (read: Freeport, see part 4 of this chapter); ‘A to Z advice on how to build and run a museum for the UHNI [ultra high-net-worth individuals]’ (i.e. private museums); and services for clients including ‘wealth managers’. As part of this effort, the museum sponsors a Van Gogh Chair on Art Finance and Museum Management at TIAS School for Business and Society, currently held by Rachel Pownall (also TEFAF Chair in Art Markets at the School of Business Economics at Maastricht University). It furthermore co-organises the Executive Master in Art Finance, in collaboration with Fudan University in Shanghai and TIAS, and offers masterclasses on the topic of Art Finance & Collections, on the premise that ‘Understanding the art investment market is an essential part of today’s service offering in wealth management and private banking’.¹⁷

This determined step into the warm embrace of capital; the museum’s sudden position on the other side of the debate (taking for granted the wisdom, even the modernity, of art & finance’s close intertwining); and its re-qualification of the ‘hostile worlds’ position as merely the wrongful siloing of expertise; are a stark illustration of the confluence of forces that bring finance into the public realm. It is possible that the Van Gogh Museum is pioneering the revenue streams of tomorrow’s museum. Robert J. Stein, executive vice president and chief program officer of the American Alliance of Museums (Washington) certainly views the program as ‘a great idea’, noting that this type of ‘entrepreneurial revenue diversification’ is ‘where cultural organizations are going’ (in interview with Siegal, 2016). The sheer scale of the assets which wealth managers have the purview over – and over which they are extending their administration – arm-twists into reality the commoditisation of public institutional expertise. More consequentially still, it monetises publically derived socio-cultural capital to the benefit of private intermediaries of the wealthy. Publically subsidised cultural institutions have been obliged to become private market participants to a great extent as a result of cuts in state funding that are part of fiscal austerity packages among western nations. The particular perversity of this type of arrangement arises from the fact that it is strengthening the expertise of precisely the agents – wealth managers – whose principal function ‘consists of helping wealthy people shield their fortunes from taxation and regulation’ (Harrington, 2012: 826), potentially costing the UK Exchequer £100 billion annually

¹⁶ In a document outlining their professional services and ‘making museum expertise accessible’, the museum notes that all revenues contribute to supporting its primary functions, pointing to funding as always a key component in decisions to give in to finance (as indeed it was for non-financial corporations in the 1970s – see Chapter 4). Source: see footnote 18, below.

¹⁷ See <https://www.vangoghmuseum.nl/en/business/professional-services>, including the ‘Professional Services’ document link (accessed 04/01/2018). Dönszelmann’s embrace of finance has had other avatars: his opening of trading at the Euronext stock market, on the 24th of February 2016, on the occasion of the opening of the exhibition ‘Easy Virtue’, or his welcome speech at Deloitte’s 9th Art & Finance Conference, 21st of April 2016, which the museum helps co-organise.

and the US federal budget \$250 - \$300 billion, according to estimates cited by Harrington (*Ibid*: 838), and resulting in a surtax on other payers of up to 15% in the US (Smith, cited in *Ibid*). The arithmetic is thus clear enough: 'cultural institutions could use their knowledge, experience, and skills to support wealth managers in their provision of art wealth management services. Whilst wealth managers indicate [...] that they find it hard to build up internal art competences, public institutions at their end are struggling with cuts in public funding and the need to create new revenue streams. This suggests that there could be room for a closer relationship between these institutions and the wealth management community' (Deloitte & ArtTactic, 2016: 71). Salvation is sought in one of the sources of the problem.

Taxes & Art

A key driver of the growth of the art market and its financialization is, as we have suggested, taxation. The issue of taxation as a factor in investment returns is itself embedded, among the top percentiles, in wider concerns for the conservation of wealth within the family unit – a wealth that, by virtue of its globalization, is rendered exceptional to the geographical boundaries of national tax regimes. As art economist Clare McAndrew writes: 'In many countries, investment in art is used as a vehicle to escape or reduce the burden of tax, and hence the tax advantages of owning art can be an important part of an investor's final return' (McAndrew, 2010: 24). Wealth has an important bearing on attitudes to taxation. For the majority a certainty second only to death, taxation is a fluid obligation – if not a form of confiscation to be escaped – among the very rich. As Alstadsæter, Johannessen & Zucman have estimated in a recent paper, 'tax evasion rises sharply with wealth': in Scandinavia, it rises from a 3% average in the general population to 25%-30% in the top 0.01% of the wealth distribution. As Harrington has shown, at a high enough level of wealth, 'national boundaries and laws are all optional. Taxes are optional' (Harrington and Vedantam, 2016). Legal frameworks nationally and around the world come to be seen as presenting opportunities for tax avoidance that are, as a result of being within the law, perceived to be more or less legitimate (Harrington, 2012: 839), and the exploitation of which is one of the functions of wealth managers, tax and financial advisers. Financialization, Harrington argues, or globalization, are therefore not less extensive by virtue of the lack of globally regulated system – such as a 'super state' (Harrington, 2017: 51). On the contrary global finance consists of 'a set of practices [...] that exploit and thrive on the divisions of the old Westphalian order' (*Ibid*), creating 'strategic disarray rather than convergence' (*Ibid*: 38). The optionality of taxation evidently becomes a reality only when the savings from avoidance exceed the costs of the avoidance mechanisms (such as advisory and other setup costs of tax efficient vehicles such as offshore trusts), and thus when wealth is sufficient to draw to itself additional forms of expertise in the interest of its preservation. James Carleton, in reference to estate and succession planning, opined that taxation can be 'dynastic or ruinous' (or perhaps avoided or paid; James Carleton quoted in O'Donnell, 2015). It is an area that is (infamously) ripe for strategizing – or 'strategic obfuscation' (Harrington, 2016b: 5) – and capable of producing a range of different outcomes.

The growth of art advisory services within wealth management is thus in part symptomatic of the spatial disconnect between wealth and markets that have globalized, and tax

regimes that remain bound to the territorial sovereignty of state and government.¹⁸ It is also, in part, a reflection of the generational shift (outlined in Chapter 4), as a result of which capital protection, succession and estate planning have become top priorities. The spatial disconnect is the area of both risk and opportunity on which much advisory is focused, for while lack of planning can expose the collector to multiple tax ‘threats’, the fact that it is not globalized presents opportunities for the jurisdictional arbitrage of more favourable tax regimes. Indeed, according to Knight Frank’s 2015 Wealth Report, ‘globally tax was highlighted as the main reason UHNWIs would consider moving to a different country’, illustrating the fluidity of UHNWI wealth – and the financial contingency of their citizenship – relative to state capacity to capture its tax entitlement. A 2016 conference by the International Bar Association which covered legal aspects of tax advisory notably dedicated a substantial portion of its program to questions of ‘how and *where* to structure an art collection’ and ‘how best to pass a collection down through the generations’.¹⁹ Andy Augenblick similarly noted in a 2012 Art & Finance Conference that the financial sector can be particularly important in advising how purchases should be made: ‘in your name or not, in a trust or in a family limited liability company, offshore or onshore, etc. [...] in highlighting the use of what is beautiful as a store of wealth and a way of passing wealth on to other generations’ (in Bültmann et al., 2012). The 2014 Art & Finance Report confirmed the topic’s rise to prominence by highlighting that succession planning was now offered by 61% of the surveyed private banks, compared to 28% in 2011 (Deloitte & ArtTactic, 2014: 66). Industry reference volumes followed suite, establishing the operative space of one of financialization’s key pillars with the annual publication of the updated *Art and Taxation for the Global Collector* (since 2013), covering the tax regimes and import-export regulations of over 100 countries in the course of almost 500 pages. The information it makes available is no doubt of great value: as Harrington has suggested, the competition between various states to attract private wealth has made ‘finding the best bargain a complex task—one that is often outsourced to professionals like trust and estate planners’ (Harrington, 2012: 831), who are the likely audience of the publication.

The mechanism for the avoidance of tax that became common practice to deal with art bought ‘for the sake of art but with an investment angle’ is primarily its transfer into another ownership structure, a limited liability company or a trust vehicle, which fundamentally works by separating the ownership and management of the assets from their beneficiaries. These strategies can be fruitfully combined: the art can be placed in the ownership of an off-shore limited liability company, for instance in the Cayman Islands, whose entire shareholding is placed in a trust – but the principle that avoids taxes remains the same. This method facilitates ‘acquiring the artwork anonymously, minimising tax liabilities incurred on the purchase and sale of artwork, safe custody and managing its eventual succession in line with the objectives of the settlor’, the settlor being the individual who transferred the assets to the trust in the first place (Binnington and Wayne, 2013: 5). Because trusts are not legal entities, but relationships between a settlor, a trustee (the owner) and beneficiaries that is governed by legal agreements, they are not required to be registered in most jurisdictions and cannot be subject to litigation or bankruptcy (Harrington, 2012, 2017). The same feature also means they avoid the costly regulatory compliance of companies, and indeed corporate taxes. A 2016 publication by the International Consortium of

¹⁸ Stonehage Fleming, a typical service provider in this respect, for instance specify that they advise on the ‘cross-border implications of taxation and governance’. See footnote 3, emphasis my own.

¹⁹ <http://www.aristitle.com/news/docs/Pure%20Love%20of%20Art%20-%20Programme.pdf> (emphasis my own; accessed 31/12/2017)

Investigative Journalists revealed that the 2015 Panama Papers leak had included a number of secret off-shore holdings of high profile artworks – confirming the reach of advisors in structuring art deals in this manner (Bernstein, 2016). The Paradise Papers leak of 2017 will no doubt do so as well.

Within the trust the art collection becomes formalised as an asset in both practical and legal terms. It formally graduates as a social object into the category ‘investment asset’ that was previously but a heuristic used to think the object in financially beneficial terms. Indeed, holding art in a trust to avoid taxes comes at a cost: it places onerous restrictions on its enjoyment as such. For example, the display of the works held in a trust in one’s home can convert them back into a taxable benefit, and so can moving them into the beneficiary’s country of residence. Display would only be permissible if the works were rented from the trust, which would in effect amount to the beneficiaries renting it from themselves. According to literature on the subject, the trustee, a professional hired to manage the trust, has a fiduciary duty to the client, and thus has certain obligations that need to be regularly demonstrated and documented for the trust’s legal compliance. These can include familiar demands of holding art: authentication, establishing provenance and cataloguing, but they also include other obligations that are specific to the way in which a trust formalises the categorisation of art into an investment. For example, the trustee should by best practice establish, in order to formalise policies of acquisition and disposal, the ‘risk appetite’ of the client. This risk appetite is in turn translated into a collection policy by applying traditional portfolio construction theory to the collection, and continuously re-valuing it. One of the means of achieving this is by using available data on art, including the art indexes that produced concern for taxes as a returns factor in the first place, and without which the application of portfolio theory would be inconceivable. Cadell + Co, the aforementioned UK firm, offers advice and services relating to holding art in trust vehicles, and markets an online collection management platform that displays updated information on the collection, including most recent revaluations, and which is ‘designed to support these trustees by giving visibility to all the portfolio’s art assets, enabling informed decision-making that ultimately preserves and enhances the long-term value of their clients’ portfolios’ – all the while assuring compliance with trustee obligations.²⁰

Insurance innovations have followed in the footsteps of trusts in terms of addressing art as the new frontier in estate planning products, and have likewise sought to capitalise on the affordances of data. In the US, a niche insurance segment known as Private Placement Life Insurance (PPLI), which allows investments in unregistered vehicles including hedge funds, private equity funds or real estate to fund a policy, have been enabled to ‘include fine art collections as eligible investments’ due to the ‘emergence of fine art as a distinct, investable asset class’ (President of Advantage Life & Annuity Company SPC: Moseley, 2014, p. 11). This new insurance product allows an individual to contribute their art collection towards a life insurance policy such that it will be given to the beneficiaries of the policy upon the policy owner’s death in the same way that a monetary sum is ordinarily given – and thus similarly tax-free (a periodic insurance premium, however, must naturally be paid until the event of the policy). The insurer requires the collection to be diversified by artist and genre, and to comprise a minimum of twenty works with no single work accounting for more than 20% of the total value at any point

²⁰ <https://www.wealthadviser.co/2015/08/17/228589/art-portfolio-advisory-service-wealth-managers-launched>
(25/01/2018)

throughout its possession by the insurer (*Ibid*: 12). Furthermore, the collection must, as in the case of a trust, be relinquished fully to the insurer at the time the policy is taken out, after which it is overseen by an independent third-party trustee. Control over the collection, including in terms of its maintenance or its sales and acquisition decisions must be given up completely to the fiduciary assuming control.

The dependence of tax mechanisms on the confirmation of art as an investment and its separation from its owner are common in other areas too, and are one of the predominant features that render the interplay of taxes and financialization interesting to our analysis. Among these, the US's Internal Revenue Service (IRS) tax code Section 1031 Like-Kind Exchange has become a widely discussed instrument in wealth management and art advisory circles. Formerly used mostly in real estate, it is increasingly used in the art market (Grant, 2015c). The principle is that by qualifying the sale of an artwork and the purchase of another as an 1031 exchange, the collector can 'defer' the capital gains taxes that would have been due on the appreciation of the first work sold, and which would therefore have reduced the amount of capital left to the collector to buy another work. Properly executed, the IRS will treat the 'entire transaction as a reinvestment of capital' (*Ibid*). Thus, if a painting is bought for \$10,000 and held for x number of years and then sold for \$5,000,000, the collector can avoid the 28% of CGT due on the \$4,990,000 appreciation by exchanging it for another painting, or a number of paintings together worth \$5,000,000. A successful exchange means that capital gains taxes are deferred indefinitely, and expire upon the owner's death, at which point inheritance tax is charged instead. It therefore also means that the full price obtained for the work sold can be reinvested, and the potential appreciation in value of the work bought thus accrues from a higher basis.

The requirements pertaining to the like-kind are not demanding: any work of art can generally be exchanged for a work of a similar medium and format (painting for painting, sculpture for sculpture, lithograph for lithograph, etc.). In order for the Like-Kind Exchange to be approved, however, the collector must convince the IRS that they are, in fact, not a collector but an investor, and the proceeds must be held in escrow by a qualified intermediary until reinvestment. Being deemed an investor means among other things that the work should be displayed not in a home but in a place of work, that is, 'held for investment or used productively in a trade or business by the taxpayer' (Goldstein Baker, 2010: 2); that the buyer should develop a reputation locally as being an investment expert in this particular area of collectibles; and that the 'investor' should have maintained thorough records pertaining to the work, including appraisals and regular reappraisals, and ideally have obtained expert advice regarding the work being bought and/or sold.²¹ The exchange mechanism is particularly favourable to art funds, as vehicles set up to profit from buying and selling art, allowing them to restructure their collection to suit their needs, for example to 'exchange out artworks for which appreciation has plateaued, into pieces with a greater upside potential' as Suzanne Goldstein Baker, Senior VP of Investment Property

²¹ These are inferred from the case of *Wrightsman v. U.S.*, 192 Ct. Cl. 722 (1970), according to a 'premier IRC Section 1031 qualified intermediary company', Asset Preservation, Inc. See the following websites for an informative discussion of the 1031 mechanism:

<https://apiexchange.com/artwork-and-collectibles/> (accessed 17/11/2017, quoted);

<https://www.lexology.com/library/detail.aspx?g=c07e453d-7836-4ea9-99e4-3ec1ffa4de5f> (published by law firm Loeb & Loeb LLP, accessed 17/11/2017);

https://www.americanbar.org/publications/probate_property_magazine_2012/2012/july_august_2012/akhavan_artfully_deferring_taxes.html (American Bar Association, accessed 17/11/2017).

Exchange Services writes in a special excerpt on 1031 exchanges for The Art Fund Association (Goldstein Baker, 2010: 1).

While there is, to my knowledge, no data available on the extent of use of this mechanism for art, its recurrence in various professional forums suggests at the very least that it has become more broadly known and almost inevitably, therefore, more widely used. Mary Cunningham, president of the Federation of Exchange Accommodators certainly claimed to have noticed an 'uptick' in its use in the two to three years leading up to 2015 (Grant, 2015c). Carlos Rivera, founder of ArtRank, has suggested that use of the 1031 exchange has a trickle-down effect that reinforces liquidity in high-value paintings (in Goldstein, 2015b). Because the like-kind exchange is based on medium, it is more difficult to achieve savings on CGT in high-value sculptures, as there are fewer of them that reach a high price. There are, conversely, many paintings over \$1m, so investors planning to use the 1031 loop-hole to render their investment tax efficient will privilege this medium, which in turn has a normative effect on its market dominance over others. According to Rivera, the 1031 exchange is therefore likely one of the reasons there is so much capital and so many transactions in the paintings market.

~

The focus on taxes has had ramifications for art's public life. It has achieved this through the instrumentalisation of philanthropy that tax deductible donations to non-profit organisations and the growing prominence of indirect state support policies have incentivized. This is a process we may call the privatisation of the allocation of public resources, through taxes forgone.

The participation of wealth management expertise in the realm of tax and investment advisory over what are public resources is not an inconsequential development. Analyses of art's price risk at resale and the existence of capital gains tax on appreciation mean that a risk-averse collector can be advised to maximize their benefit by instead donating the art they own to a qualified charity and obtaining the related tax credit, alongside the socio-cultural capital. This fact speaks to the growing intertwining of cultural policy and tax policy in a culture consumed by the power of incentives and nudges and living with the inheritance of a neoliberal faith in trickle-down economics. As a result, as Schuster points out, discussions the world over are 'increasingly concerned with the creation and restructuring of tax incentives' (Schuster, 2006: 1257) that encourage 'what is considered to be desirable behaviour vis-à-vis the arts and culture' (1254), especially in conditions of increasingly limited public resources. Tax deductions on a charitable art donation in the US depend on the nature of the 'donee' and the intended use. Ideally, donees should be public tax-free institutions (classified as public charities) where the donations qualify for 'related-use': the recipient must demonstrate that 'its use of the artwork is related to its tax-exempt purpose', meaning among other things that the donation is consistent with the recipient's 'mission', and that the work must not be resold within three years (Grant, 2015a). In such an instance, the full fair market value of the work – rather than its original cost base – can be deducted, with a limitation on the annual charitable contribution deduction of 50% of the donor's adjusted gross income (called 'contribution base'), and a carry-over of five years for the remaining portion. The donee must keep the work(s) for at least three years for the deduction to hold; and the donor can neither be an art dealer or an artist: they must instead be either a collector or an

investor. There are no obligations on the artwork's display where the recipient is an art museum. The value of the tax deduction is arrived at by an appraisal, often using comparable sales.

Other vehicles exist that provide different forms of tax benefit and financialization through the ultimate donation of the works. This includes the Charitable Remainder Unitrust (CRUT), again in the US, which allows the owner to place works in a trust from which they receive an income based on the trust's asset value while foregoing CGT on works bought and sold within the trust, so long as the works are then donated to a non-profit institution (Grant, 2016). In the UK, an offer to the nation gives 20% and a carry forward of five years (O'Donnell, 2015). The Acceptance-in-Lieu scheme (AIL) operated by the Arts Council England means persons with a tax-liability may also offer up art of sufficient heritage interest in lieu of cash payments, as in the 2016 case of a Reynolds painting being given to the tax authorities to satisfy a £4.7m inheritance tax on the owners of Castle Howard (Brown, 2016). In France, donations of works pertain to the 2003 Aillagon Bill, under which the work's value is 66% tax deductible, within the limit of 20% of taxable income, hence potentially costing the owner only 34% (Anon, 2016d: 7). Many works have, by virtue of these various tax incentives, passed from private to public at the initiative of private interests.²²

If the owner wishes to keep their collection, avoiding it being parsed to secure a tax credit, they can do so by building their own museum and placing their collection in it. The law will allow all art-related expenses to be borne tax-free, including insuring, conserving, and warehousing, and the museum to be the tax-free recipient of other assets from the collector, including financial assets such as stocks. The private museum safeguards the tax-credit in the event that pre-existing potential recipient institutions are too scarce for the size of the collection – or simply insufficiently thrilled about the donation – to satisfy the collector's attached conditions. The legislation is behind the mushrooming of private museums in the US and elsewhere, including the Brant Foundation Art Study Center, the Glenstone Museum, and the \$140m Broad Museum in LA, while public museums have seen both their funding dwindle and the price of acquisitions go up. Moreover, it accommodates – and thereby naturalises – the profound wealth inequality that renders the tax policy possible in the first place. Private museums must fulfil certain criteria intended to guarantee that they are a public benefit, including that they are open for a minimum amount of hours in the year, provide free entrance, and have a minimum number of visitors to evidence this. A *New York Times* article explored this phenomenon, noting that some of these museums were erected in the backyards of wealthy collectors, were closed for several months at the time, and actively tried to dissuade visits, for example by being open only by advance appointment or by avoiding signs and advertisements. The article caused the law to come under scrutiny (Cohen, 2015), with the suggestion from a study by the US Senate Finance Committee being that if the benefit to the public is less than the tax advantages reaped by the owners, the arrangement would be 'inconsistent with the letter and intent' of the tax law, which presumably was to facilitate philanthropy, not to make it profitable (*Ibid*). The role of tax advisory in instrumentalizing tax law in order to strategically maximize the portfolio value of wealthy individuals, and the effects of such laws and such practices on the configuration of art's 'public' life, are thus significant.

²² These schemes exist for collectors, but not for artists donating their own work, a symbolically potent restriction that the ever-savvy Warhol and Lichtenstein worked around by donating each other's works to museums (Thackara, 2015).

There are other ways in which tax efficiency (or avoidance, or evasion) affects the art market and its public life. In the US, use tax, a state level equivalent to the UK's VAT that adds 8.875% to the price in the case of New York City, can be avoided by first displaying the work in a museum located in any of the five states that do not impose such a tax (Alaska, Delaware, Montana, New Hampshire and Oregon). When the work is subsequently delivered to the collector, the work has already been 'used' and is therefore not taxed again (Kleiner, 2014). In use tax-free states, this has led museums to actively solicit such lending, marketing their tax status as a competitive advantage in attracting the favours of collectors with works to loan. Emma Kleiner found that the Jordan Schnitzer Museum of Art at the University of Oregon has a program called *Masterworks on Loan* which 'invites private collectors to share their masterworks with our constituents' and which notes that 'some lenders may receive tax benefits for participating in our *Masterworks on Loan* program and should consult a tax advisor to learn more' (quoted in *Ibid*). There is a double-benefit to the buyer in this instance, for 'the public exhibition of items from the collection may enhance their value' while nourishing conscience too: 'public display can of course neatly achieve both philanthropic and investment objectives at the same time' (*Ibid*). In such cases, estimating the boundary between tax avoidance and tax evasion can be marred by lack of clarity on legality, if not intent. In spite of the technical legality of use-tax arbitrage US attorney Preet Bharara's proved willing to indict oil-investor Morris Zukerman (U.S. v. Zukerman) for various forms of tax evasion that include the avoidance of use-taxes on Old Master paintings bought mere streets from Zukerman's New York apartment: the paintings, the case revealed, were simply shipped to Zukerman's Delaware corporate address and 'transported immediately thereafter (sometimes within minutes), [...] back to Zukerman's residence in New York – all without the payment to New York State of sales or use taxes' (indictment quoted by Maneker, 2016f).

Finally, it should be noted, the most frictionless solution for collector-investors can often be to place the works in climate-controlled and high-security freeports such as have comparatively recently become available in Luxembourg, Zurich, Singapore, and Delaware in the US, and which have the further advantage of resolving the practical problem of owners lacking display space. As specified by Desiree Moore and Blaise Niosi of global law firm K&L Gates, freeports can be particularly advantageous for investors, as the works can be purchased, shipped directly to the Freeport, provided with detailed documentation, and resold to another buyer – using the viewing rooms that Freeports make available – without incurring such taxes as VAT.²³ Indeed often without serious tax scrutiny, too. Such a solution is also consequential, albeit in a different way, to the public life of art, and speaks literally to the shadier fates for art and artists of financialization.

Conclusion

This section has elaborated on a set of intermediaries and a set of tools that participate substantially in the financialization of art. Doing so, it has sought to shed some light over the way in which tax avoidance goals, facilitated and devised by wealth managers and advisors, co-opt for art a set of pre-existing vehicles, strategies, incentives and legal loopholes, which in turn place obligations upon art such that its qualification as asset is crystallised. We saw therefore that

²³ <http://www.klgates.com/the-re-emergence-of-art-market-tax-investigations-and-the-domestic-freeport-as-a-tax-safe-haven-11-28-2016/> (26/01/2018).

wealth managers act as the isthmus between the financial and the personal; the medium and nodal point through which art is infused by financial considerations, subsumed and reshaped in their ambit, and finance given an additional interpersonal, even emotive, dimension.



Figure 5 – Cadell + Co: Portfolio Management Software²⁴

²⁴ <http://www.cadelco.com/> (accessed 26/04/2016).

Introduction

We have seen how the understanding of art propagated by data has intensified and rendered more sophisticated the wealth management services around tax planning using art collections, and how the vehicles or mechanisms used to attain tax efficiency often involve curtailing art to its purely asset-based qualities, thus legally binding it to a status that hitherto had functioned principally as a powerful analogy. In this section, we will elaborate on another consequence of the expansion of data in the art market: art's new amenability for collateralisation in art asset-backed loans. As Campbell & Wiehenkamp have noted, the 'inability to correctly assess the risk from changes in the price movements of art' had acted as a limiting factor on the growth of art asset-backed loans (2008: 54). Only 'since the collection of a number of price indexes', they write, is this 'now becoming easier' (*Ibid*). This view was also endorsed by Artprice who observed that 'the Art Market's organs of econometric control (such as Artprice), underpin the guarantees issued by banking institutions' (2014b: 35).

The process of art's collateralization draws it into the narrative of the financialization of the broader economy, discussed in Chapter 4, in two important respects. The first is that it reflects the general decline in reliance on traditional bank lending for credit (Phillips, 2002; Whalen & Zalewski, 2010). As this section will show, while also the prerogative of banks, lending against art is a service now also offered by more unusual financial players, including auction houses, specialised organizations often operating online, and art investment firms. Secondly, from the perspective of the supplier, the collateralization of art is symptomatic of what Deutschmann has called 'a growing general mismatch between rent seeking financial assets on the one hand, and declining real investment opportunities on the other' (2011: 382) – an aspect of financialization discussed in Chapter 4 in relation to 'accumulation-centred' and post-Keynsian theories. As a financial innovation, it is part of the financial industry's formulation of secondary and tertiary investment opportunities 'in the financial sphere itself' (*Ibid*: 383), monetizing non-productive assets in ways that potentially both increase the inequality of wealth they are the product of, and increase the instability of the art market by introducing into it the powerful force of leverage.

The Collateralization of Art

In the case of taxes – ongoing debate notwithstanding – at the very least in estate situations tax authorities will consider art as an asset and will accordingly seek its fair valuation. A permissible induction is therefore that it is apt to think of art strategically as an asset in respect of tax planning. With regards to loans, a similar logic has been a starting point. As McAndrew and Thompson noted, in the case of bankruptcy, the value of fine art is quantifiable and thus it is likewise appropriate to consider it as measurable collateral on loans (quoted in Ashenfelter & Graddy, 2006: 923). The collapse of the venerable British pottery company Wedgwood Waterford plc in 2009, which almost occasioned the Wedgwood Museum's sell-off to settle its pension bill in 2014 (it was saved from this fate by the Heritage Lottery Fund and other members of the

public); or the city of Detroit's 'Grand Bargain', in which Art Capital Group agreed to collateralise the Detroit Institute of Art's collection to save the city from bankruptcy – a historic deal which, fortunately, never materialized – are both examples of such situations. Both are limit situations where authorities ended up proving a point: art is capital.

In the post-recessionary environment, bolstered by a low interest rate environment and a boom in high-end art prices, art lending flourished. A 2015 report on the art loan industry by Skate's claimed that the art loans book was scheduled to grow beyond \$10 billion by the year-end, at least twice the level of the market when Skate's previously reviewed it in 2011, and estimated the addressable market could be as high as \$100 billion, leaving ample room for growth (Skate's 2015: 6). This estimation was reached by surveying 'two dozen art-lending practitioners' and researching filings, including liens recorded on art assets in US UCC filings (*Ibid*). By 2016, the *Art & Finance Report* found the size of the overall art-secured lending market in the US alone (measured as value of average loans outstanding) to be between \$15b and \$19b, having grown by up to 20% per annum in the previous 5 years, with private banks dominating the space (2016: 18 & 82). In 2017, this estimate jumped to \$17-20b (2017: 156). The 2014 *Art & Finance Report*'s art and wealth management survey revealed that 36% of banks surveyed now provided this type of lending, up from 22% in 2011, while their 2016 report showed 69% of wealth managers said their institutions – including two thirds of private banks - now offer 'services linked to art-secured lending', with 52% offering the lending itself in-house (2016: 18; see also 2017: 156, 159).

In the UK, Borro, Falcon Fine Art, Right Capital, Willstone Management Capital Partners Ltd, and ArtAssure now provide various forms of financing using art as collateral (see Skate's 2015 report). The Fine Art Fund is launching itself into the business on the back of Chinese interest by setting up Fine Art Financial Services, in part to provide leverage and increase their returns in their own fund investments, and to give clients access to the liquidity locked in their collections (160812). Of these, Borro have streamlined their loan application processes to such an extent, using a mobile phone app, that it is possible for a borrower to be credited their loan capital within 24 hours. In the US, Citigroup Inc., JPMorgan Chase & Co., Goldman Sachs Bank, U.S. Trust, Bank of America, Wells Fargo Private Bank, Morgan Stanley Wealth Management, Deutsche Bank Private Wealth Management, U.S. Bank Private Client Group and Emigrant Bank Fine Art are the dominant providers of such services, followed distantly by auction houses and boutique lenders (Deloitte & ArtTactic, 2016: 80). Privatbank Berlin has launched an art secured lending service for wealthy borrowers in Europe, Deutsche Bank offer a similar service. Collé, Hochberg & Grey offer brokerage services on art loans. In China, Minsheng Bank became the first bank in 2013 to accept alternative assets as collateral for loans, including wine, art, private jets, yachts and cars (Deloitte & ArtTactic, 2014). In Australia, Art Money offer consumer financing, allowing the spreading of the purchase of a work of art over multiple instalments, thereby aiming to allow more capital into the market. Art Capital Group, a global financier founded in 1999 is exemplary in terms of emblematising art's financialization: it has underwritten over \$5 billion in art-backed loans; structures bespoke financial products to help 'individuals, art-based companies, and asset managers adapt, expand, and satisfy a new set of needs in an age in which art constitutes not only a valuable collection, but a core asset'; and has a team with backgrounds from 'banking and finance, auction houses, and galleries'.²⁵

²⁵ See <http://artcapitalgroup.com/about/> (accessed 19/11/2017).

Wealth management advisory and art loans have formed obvious partners. As Dietrich von Frank commented at the 2015 Art & Finance Conference, HNWIs and UHNWIs have over the past three decades had a growing proportion of their assets held in illiquid assets – such as art – that are expensive to sell (due to capital gains taxes) and don't provide any revenue stream (such as dividends, interest payments or rental income in traditional assets; von Frank et al., 2015). This has made the loan market more attractive as a means of releasing liquidity from illiquid assets. By using art to back debt, a collector can benefit from the increasing value of their collection without having to sell it and incur significant risks, capital gains taxes and transaction costs; without even having to part from it. At least half the collection's value can in theory be released simply by using it to secure a loan or credit line. As art lender Asher Edelman points out, borrowing mitigates the risk of a work not selling at the right price or being 'burned' at auction, not to mention the desire not to divest from one's art collection (quoted in Dizard, 2016). The total interest paid is likely to be lower cumulatively than capital gains taxes and transaction costs. In estate situations, loans can enable the release of value from the collection while preventing effective double taxation at the point of inheritance: first by the capital gains taxes at the original point of sale, and secondly by estate taxes once the proceedings are passed on.²⁶ Wealth managers are also likely to recommend a loan strategy if the appreciation of the collection renders the portfolio imbalanced, that is, over-allocated to art. Using financing, such owners can 'synthetically diversify their portfolios', borrowing against their art to invest in other asset classes (Ramsay Slugg, Managing Director of National Wealth Planning Solutions at Bank of America, at von Frank et al., 2015).

Some high-profile cases of art-backed lending have made the news. In 2014, it was reported that Goldman Sachs granted a personal credit line (the amount was undisclosed) to notorious hedge-fund billionaire and art collector Steve Cohen, backed by his \$1 billion art collection, with Bloomberg speculating that interest rates on the loan could be as low as 2.5% (Weiss, 2014). As Skate's report, because the US is the 'largest, most transparent, and most efficient market for art lending', its banks can often offer interest rates for art loans at 2% or lower. In fact, the same year, Goldman Sachs launched a new European lending unit for its private wealth management clients with the aim of building up a \$5 billion loan book in three years by catering to its 1,700 wealthiest clients across Europe, the Middle East and Africa, for the purposes of liquidity, portfolio diversification, tax payments, and luxury purchases (Deloitte and ArtTactic, 2014). In 2015, Bank of America gave Las Vegas casino mogul and art collector Steve Wynn a \$200 million line of credit against 59 works of art at a rate of 1% (Schachter, 2015a). Loan arrangements were also discovered in September 2016 in the Wildenstein tax fraud trial, during which it was revealed that one of the largest dealer-collector families of the twentieth century held a \$1.1 billion collection in a Bahamian trust, using the services of the Royal Bank of Canada to either sell works or lend against their value as means of financing the family's cash needs (Carvajal, 2016; Maneker, 2016g).

There are different forms of financing in this sector. These include term loans, revolving credit lines, acquisition financing (where the work acquired becomes the collateral), bridge loans (advances on auction sales), working capital for organizations (using inventory to provide dealers

²⁶ See document by Andy Augenblick, President of Emigrant Bank Fine Art Finance, for a more detailed explanation of these principles. http://www.emigrantbankfineart.com/wp-content/uploads/2012/10/FineArtConnoisseur_May-Jun2008_OfficialReprint.pdf (accessed 17/11/2017).

and galleries with liquidity). Firms may either finance the loans out of their balance sheet (e.g. Falcon Group Fine Art), out of their own revolving credit lines (e.g. Sotheby's and Willstone Management Capital Partners Ltd, who have a credit line of \$100 million secured from New York hedge funds), out of term or interest only loans, or may merely act as a broker, carrying out the necessary due diligence before intermediating lender and borrower. Loan terms can be up to ten years or more, an offer whose competitiveness reflects the growth of the industry. As with advisory and wealth management, bespokeness and discretion are emphasized attributes among providers, consistent with a sector catering explicitly to the global elite.

With the exception of Borro, art lenders will for the most part only lend against art works above a certain value, and with secure authenticity or provenance. Art collateralisation is therefore an additional source of credit and leverage that can contribute to increase the wealth of those who already have it, at interest rates that in some instances compete with those available to ordinary customers from high-street banks. Focus on high value works is sensible from the lender's perspective for it solves two issues at once: higher priced works tend to have more stable valuations, and occupy a more liquid market (meaning they are easier to resell), thus making them less risky as security. A low-priced work would likely have less of a track-record or provenance to support the confidence of the valuation, and would consequently be riskier to sell. The due diligence costs of a basket of lower priced works versus an individual high value work would also be correspondingly higher, and the combination of these with legal costs mean, as noted by Michael Darriba, Director and UK Head of Lending and Credit Solutions at Deutsche Bank AG, that loans have to be substantial to be worth it for the creditor (in D. von Frank et al., 2013). The lender will also seek to minimize the number of artworks included for collateral to minimize the level of transaction costs and risks should the borrower default. Skate's note how given the liquidity requirement for collateral, lenders will normally look at assets worth at the very least \$250k upwards, preferably \$500k or \$1m, above which the highest liquidity is found in the global art trade (Skate's, 2015b: 6). The loan-to-value ratio is typically around 50% (e.g. Willstone Management). As such, when Right Capital offer loans between £500,000 and £10 million, we can reasonably expect that they depend on having individual works or small collections of works worth between at least £1 million and £20 million (Collé, Hochberg & Grey have similarly suggested, in the past, that lenders generally offer loans starting at \$500,000; today they have reduced this figure to \$50,000).²⁷ Emigrant Bank Fine Art Finance specify that their clients own art and antiques with a minimum value of \$2 million.²⁸ On the basis of this information we can infer that Steve Wynn's collateralized collection will be worth in the region of \$400m, or, conversely, that Steve Cohen's loan could be up to \$500m.

Given these parameters, it is clear that the growth of the art lending sector is linked to the increasing liquidity at the top end of the market versus the lower end, that is to say the increasing inequality of prices in the art market. McAndrew in fact observed that galleries with sales over €2 million have tended to sell works quicker (41% of sales within 6 months) relative to those with sales under (22% with sales under 6 months; McAndrew, 2015: 43). Likewise, as Skate's note in their report, the amount of works sold over \$1.5 million at auction has increased 30% from 2012 to 2014, with dollar value increasing 50% (Skate's, 2015b: 7–8). The value of works over \$20 million has overtaken that of all other price categories (*Ibid*). Wealthy buyers have thus done

²⁷ <http://www.artmarketmonitor.com/art-loan-brokerage/> (accessed 01/01/2018).

²⁸ <http://www.emigrantbankfineart.com/about-us/> (accessed 01/01/2018).

themselves a favour: by increasing the pool and value of high-value works, they have increased the supply of credit available to them. This credit can, in turn, fund further acquisitions, or other forms of financial activities, such as venture capital, or investments into securities and real estate. Michael Plummer, co-founder of consultancy Artvest Partners LLC and former Christie's Financial Services COO for instance observed that some fund managers will reinvest these loans in their own funds to benefit from the difference between their interest rate and the fund's rate of return (Weiss, 2014). A financial facility which emerged partly as a reflection of wealth inequality thereby comes, by the power of leverage, to increase it, magnifying effects observed by Piketty as the underlying driver of inequality, namely the fact that capital tends to grow faster than output, especially in conditions of low growth (Piketty, [2013] 2014). We will return to this theme in Chapter 4.

Among private sector borrowers, borrowing appetite also reflects pressures to use debt-financing to compete in the increasingly capital intensive activities of the primary and secondary market (see Resch, 2015), enabling firms whose capital is locked in their businesses to expand, for example, their acquisition program.²⁹ In turn, it also strengthens the structural dominance of large firms as only they can access, via their inventory, this additional source of funding in the first place - given the minimum value of a collateralizable work - while the cost of credit is transferred onto the collector via more aggressive pricing and sales cycles.

In order to assist in the lending institutions minimizing their risk and optimally performing their duties, there have been subsequent industry developments that in turn legitimize and cement the practice. In Europe, where banks and other boutique providers are obligated to take possession of the collateral to fulfil their security obligations, a number of countries have introduced a register of charges against chattels. This enables any institution to ensure that a work or collection of art cannot be subject to a charge more than once, as exists in the mortgage market. In the US, borrowers can keep possession of the art because such interests can already be registered under the Uniform Commercial Code. Insurers, never far behind, have developed new products to cover the 'fidelity risk' of the borrower, for instance the risk that they disappear with the art or 'move [...] it into a different legal jurisdiction where the loan agreement has no judicial force' (Deloitte & ArtTactic, 2014). Robertson Taylor & Longreach have developed similar products. Frank Crystal & Co, who established their Art Finance Group in 2011, provide risk management and insurance advice on art loan transactions, giving their clients access to the global art insurance market. Other developments are bound to follow.

Of particular note, among these, is Campbell & Wiehenkamp's proposal to create art credit default swap contracts to allow banks providing an art-backed loan to reduce their risk by transferring it to a third party against a fee (2008). Here the third party provides protection by providing a fixed payment to the lender if a specified credit event takes place (for example a default), in exchange for which they obtain the underlying asset. In effect, they are guaranteeing the bank they will take possession of an asset backing a non-performing loan the moment it acquires the status. The derivative is therefore a form of insurance. It allows the bank to avoid having an asset of uncertain value on its balance sheet (since it is worth at least what the third party guarantees), and prevents it from falling foul of stringent financial regulations that are difficult to apply to art. The provider of the swap is estimating that across a portfolio of swaps the default rate will be low enough, or the recovery rate high enough, that they take on less bad debt

²⁹ <http://www.emigrantbankfineart.com/about-us/> (accessed 25/01/2018).

than they receive in premiums and recover in owed capital. The loan itself could also be securitized through collateralized debt obligations (CDOs), which provide a similar service to the swap except that they are pooling together the debt (which is backed by the art works) to provide regular income streams of a more significant magnitude as long as a calculated level of default is not exceeded, as it was by mortgage-backed CDOs during the sub-prime crisis. Once debt is securitized in this manner, it can be treated and exchanged as any other financial asset in the market: long or short positions can be taken on it, it can be further pooled into collateralized debt funds, etc. Carruthers has explained the inherent capacity of securitization implied in these examples, suggesting that securitization is a reification process that means ‘to release debts from relationship, disembed them, and give them ‘thing-like’ qualities, to make them liquid’, after which, once ‘turned into things’ debts ‘can circulate more freely, and be bought and sold on markets’ (Carruthers, 2010, quoted in Deutschmann, 2011: 383). Securitization is thus essential to the abstraction process of finance, the disentanglement that prefacing the excision of a financial instrument, out of the material world, and which can expand capital’s network of circulation.

The CEO of Arthena has ambitions to create a market for such products (Deloitte & ArtTactic, 2016: 84). In the UK, Pi-EX Ltd have been authorised to create and sell an instrument called Contracts on Future Sales (CFS), which take place between, for example, the seller of a work of art and the buyer of the derivative, allowing the former to hedge their risk by selling an exposure to the sale (that is, a share in the price realised at sale). Once again, these could presumably be bundled into broader portfolios or funds of CFSs, offering a diversified exposure to an active part of the art market, while helping abet some of its volatility for private clients, auction houses, etc. They are part and parcel of the same form of developments we have been discussing with loans.

~

Financialization hasn’t proceeded merely by financial organizations broadening their operations to include art and the art market: established art market players too embrace finance in their services, as competition in sales leads them into alternative income streams. Sotheby’s is the best example of this. Its Financial Services division, whose revenue comes from interest on loans, was started in 1998 to focus on growing the company’s financial services, principally to their clients. It complements the needs of their clients by providing a broader service of art-backed financing, including term loans, for example to aid further acquisition or other activities at the borrower’s discretion, and bridge loans that advance on auction sales where the sale is contractually obliged to be made through Sotheby’s, thus helping obtain consignments as well as retaining clients. In 2014, Sotheby’s created a separate capital structure for its Finance activities so as to not fund them out their operating cash flows. To do so, Sotheby’s secured a revolving credit facility enabling it to fund loans with wholesale debt, in the manner of an investment bank (Lapavitsas, 2011: 621–22). Scheduled to become the second largest business unit of Sotheby’s, Skate’s estimated it will likely force emulation among rival auction houses (Skate’s, 2015: 6). In 2015, Sotheby’s obtained a \$1 billion credit line (it was \$200m in 2009) to make art loans, obtaining the financing from a consortium of lenders including General Electric Capital Corp. (Kazakina, 2015). In the first quarter of 2015, its loan portfolio already totalled \$700 million, a 53% increase year-on-year according to *Bloomberg* (Kazakina, 2015). Its unique position by

virtue of its market credibility built over two and a half centuries in the secondary market means it is particularly suited to exploit the synergies between art and finance, providing loans to buy or sell from Sotheby's. After a hostile take-over by hedge-fund billionaire Daniel Loeb in 2014, the arts educated CEO William F. Ruprecht stepped down to be replaced by Harvard Business School graduate Tad Smith, who made a point of declaring his lack of knowledge about art. Under Tad Smith's direction Sotheby's has decided to aggressively pursue its financial services activities, heralding a new era in the art market.

The example of Sotheby's merits pause, for it is perhaps the starker example of several of financialization's definitive patterns, principally the entering of non-financial organizations into financial activities, typically through the provision of credit, mortgages, or investment into financial assets. As detailed in Chapter 4 below, this has been widely commented upon in the literature on financialization (Alvarez, 2015; Crotty, 2005; Krippner, 2011; Lapavitsas, 2011; Lapavitsas and Powell, 2013; Lin and Tomaskovic-Devey, 2013; Orhangazi, 2008; Tomaskovic-devey, Lin, and Meyers, 2015; Zalewski and Whalen, 2010; van der Zwan, 2014). The episode also links the analysis to the rise of the shareholder conception of control – with executive compensation tied to share performance – and its attendant short-termist pressures. The hostile take-over of Sotheby's by activist investors and the replacement in 2015 of its existing executive with a shareholder-friendly face is indicative of Sotheby's reinvigorated alignment with its fiduciary duties. Tad Smith has consistently spoken in favour of finance as the new opportunity space for Sotheby's, a view with which the aforementioned purchase of Art Agency, Partners (January 2016), and that of the Mei Moses indexes (October 2016) is consistent – even though literature on financialization suggests that while such measures increase profits in the short to medium term, they ultimately erode revenue via a decline in the firm's key operating areas and competences, or the loss of core consumer segments, as a result of lack of internal re-investment. The most oft cited corporate examples of this in academic studies on financialization are General Motors, Ford, AT&T, Sears, and Target. Interestingly, the most aggressive 'border crossing' of them all has been by General Electric (GE; Lin & Tomskovic-Devey, 2013: 1293)³⁰ – the company that provides the wholesale credit for Sotheby's to engage in its own lending activities. Were Sotheby's to turn out to have embedded itself into a pre-existing network of quasi-financial organizations from which patterns of debt eventually constrain it from extricating itself, it will have followed the well-trodden footsteps of the financialization of other sectors.

Conclusion

As with all elements of art's financialization discussed so far, the development of debt products emerges as a direct consequence of the high value concentrated in artworks, developments in its quantification, and the emergence of finance as governing episteme. As the CEO of Athena Art Finance put it, 'better data and increased market transparency lets new players complete more complex transactions' (Andrea Danese quoted in Deloitte and ArtTactic, 2016:

³⁰. Founded in 1943, GE Capital was designed to provide loans for the customers of home appliances. However, under the post-1980 leadership of Jack Welch, its scope rapidly expanded to small business loans, real estate, mortgage lending, credit cards, and insurance. After running a close second for decades, it topped GMAC as the largest nonbank lender in 1992. In recent years, the financial unit consistently brought in more than half of the profits for GE.' *Ibid.*

83). In other words, data animates financial aspirations and engenders new ones. Within the art-related debt market, as in the advisory niche, we see a heterogeneity of players from both sides of the art & finance equation and an innovative, entre- or intrapreneurial momentum in which new products cause others to emerge – a typical case of which is insurance. The openness and nascentcy of the ecosystem thus produces various efforts at stabilisation around core offerings – around which organizations attempt to spread the risk or facilitate the logistics – and a reticulation of art-related expertise across agents with pre-existing financial knowledge and, vice-versa, that of finance-related expertise across agents with pre-existing art market expertise. Conceptually, an important ramification of art's collateralization is its ability to create a link, and therefore a kind of equivalence, between art and other assets that is synchronous with a portfolio-panoptic perspective, which it in turn legitimises.

The ability to generate loans out of art also add new incentives to buying works of art beyond a certain price if the buyer's funds permit it. According to Tim Hunter, VP of Falcon Fine Art – a UK art-loans provider – it is, however, a minority who will monetize their art to buy more of it (Hunter, 2017). More frequently, the released funds are used to invest in the owner's companies, in property, or in other assets. The financialization of alternative assets, as discussed in Chapter 4, therefore both reflects and possibly reinforces wealth inequality: it increases the array of possessions held by the wealth which can also be used to generate capital returns. In theory, certainly at the high end, if demand for art increases as a result of its ability to release liquidity (which reduces the opportunity cost of buying art), then there is the potential for debt to exert inflationary pressures on art prices, which would in turn increase the total loan value of art. This is one example of how art's financialization contributes to what Piketty has called the 'inegalitarian spiral' (Piketty, [2013] 2014).

3. Art Investment Funds

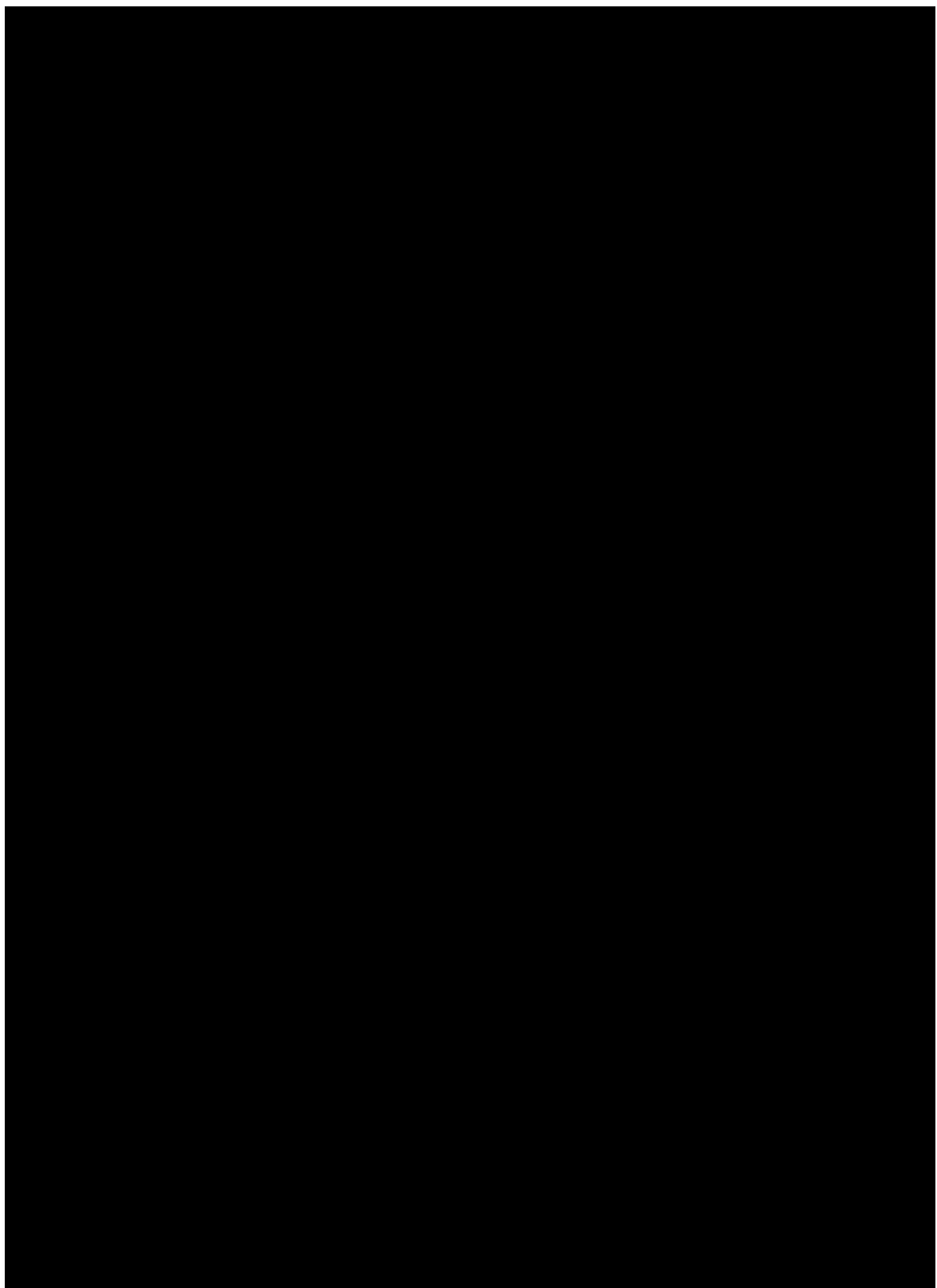
Among the structured services and products in the art market that have derived from the emergence of art price data and the growth of the market, the art fund has arguably been the most high-profile. A key element in the story of art's financialization, the art fund epitomises the ontological transformation of art into an investible asset and materialises the intersection between the quantitative episteme and the new technocratic character of the elite classes, for whom it provides a new and perhaps more familiar looking entry point into the art market.

Operating Principles

Art funds operate by pooling capital from investors into a tax efficient vehicle in order to profit from the buying and selling of art. Whether structured as limited partnerships, governed by the limited partner agreement, or as limited liability companies, governed by shareholders' agreements, funds follow the same corporate principle of broadly separating ownership from management. Investors commit most of the capital, and management contribute a smaller percentage in order to have 'skin in the game', thereby creating principal-agent alignment. Each lay claim to the rewards, or partake in the losses, in proportion to their commitments. In addition, management will be remunerated through management fees (calculated as a percentage of fund capital or funds committed), and carried interest – a profit share on top of that which they are entitled to as investors in the fund, which is triggered after investors see a minimum return on investment. The hedge fund benchmark 'two and twenty' is standard practice: 2% of the fund's capital, committed or deployed, is the basic per annum management fee, and 20% of returns over a basic threshold (say, 8% IRR) is the incentive.

There are two basic fund formats, both of which are 'blind pools' insofar as the manager retains discretion (subject, in closed funds, to committee oversight by the largest investors) over how and where the capital is invested. A closed fund, the most common format for the art fund, will run for a fixed period of time during which it is entitled to call and invest the total commitments of its investors – usually during the first half of the fund life – and by the end of which it is required to have exited its investments, distributed the resulting capital, and been liquidated. Art funds will typically run for five or seven years, though they can be as long as ten years and as short as two. Hoffmann argues that the credit crisis has meant that the ten-year fund – the standard duration for private equity funds – is no longer viable for art funds as clients are more sensitive to the length of commitments (in Viveros-Faune et al., 2015). The creation of the two-year fund was inspired by this insight (Hoffman, 2013). Open subscription funds, conversely, mean investors can enter and exit either when they choose or periodically, often after an initial vesting period, and are significantly more onerous in terms of management fees as they require continuous portfolio valuation and administration. The format presumes that the market is sufficiently liquid that held assets can be sold off in the amount and at the time demanded. The characteristics of the art market – non-fungible assets and long transaction times – place significant, if not terminal, constraints on this format.

Art funds will typically be run for a small number of investors, who, because they are 'accredited' (meaning they have investment experience, or in other words, as *CNBC* point out, that they are wealthy) mean the fund is 'not subject to the same regulatory oversight as stocks, bonds



This factsheet is only intended to provide an update to current investors and other interested parties of past performance, which is no guarantee of future performance. It is not intended to solicit investment as the Fund is only open to experienced investors as defined by the Financial Services (Experienced Investor Funds) Regulations 2012 of Gibraltar. Art Vantage PCC Limited, Cell A Tiroche DeLeon Collection, is registered with the Financial Services Commission of Gibraltar (Company Registration Number 105378).

Figure 6 - Tiroche DeLeon Collection – Quarterly Fund Report (Q2 2017)

and mutual funds (Schwartz, 2015). As such, like hedge funds, they are part of the shadow-banking sector. This classification places restrictions on their ability to advertise to and solicit clients, who are thus ‘generally drawn from informal networks of wealthy individuals’ (Hodges, 2015). In the UK this restriction is imposed by the Financial Conduct Authority, who ban the promotion of unregulated collective investment schemes (UCIS) and non-mainstream pooled investments (NMPIs). In the US it is the Securities & Exchange Commission (SEC), and in France it is the Autorité des marchés financiers (AMF). This also means data on art funds is difficult to come by, as they are run like private members’ clubs. Aside from these formats, a relatively new medium has been the managed private account (a single investor open fund), in which a single investor places his capital, often with a multi-million dollar minimum commitment, for the manager to buy and sell with. These accounts are open-ended and may have a life of several decades, though funds can be redeemed at will, in increments determined by the value of individual artworks (since it is not possible to sell less than an artwork).

The appeal of the fund structure rests on the belief that investing in art produces desirable returns; that it is useful in diversifying the investor’s portfolio; that a portfolio (the fund) of art assets can itself be diversified; that it is useful as part of a tax strategy; and that the regulatory compliance requirements of funds deploy the allaying components of transparency, standardized reporting and professionalism to an industry where investors otherwise struggle to find them. The fund’s premise (except where it is a single investor fund) is that it is too expensive for any single investor to purchase a collection of art that is internally diversified (i.e., where risk is minimized by balancing out the different art submarkets against each other), that it is too risky (and often also too costly) for an investor to consider single works of art, and moreover that investors do not have the highly specialised expertise or networks necessary to conduct such an investment, least of all to lower the transaction prices. As such, it offers a unique opportunity, by pooling capital under expert management, to participate in the value changes of art investments while mitigating a portion of the risk by paying for in-depth knowledge not possessed. Minimum commitment tends to vary between \$0.3-1.0 million, though smaller funds exist. Arthena for example propose online funds of total size between \$0.25-1.0 million. According to Hoffmann, the minimum fund size should be \$20 million and ideally between \$100-200 million, because various forms of risk (liquidity, authenticity, stylistic, market) are lower in the high-value works that they now mainly pursue, and returns higher (Hoffman, 2013).

The need for expertise means funds try to attract the most experienced and knowledgeable individuals in the field. Arthena markets itself as selling access to collections built by 58 art advisers, thus effectively commodifying a form of curation – the fund as authored playlist; the playlist as curated portfolio – with an investment angle. Hoffmann notes that The Fine Art Fund will not diversify into a subject heading unless it has at least two or three of the world’s leading specialists in those fields (von Frank et al., 2013). The existence of submarkets with their own experts, and the need to attract investors by appealing to their interest mean that funds are often conceived around ‘aesthetic, regional, or historic’ themes (Hodges, 2015) rather than pure opportunism. The Fine Art Fund Group has funds focused on Chinese and Middle Eastern art alongside its broader funds, while Arthena may focus on ‘emerging art from New York’ or ‘undervalued post-war art’ (Corbett, 2016). The DSPAF concentrates on high-end works from the nineteenth century to the present. The fund’s investment rationale means it does not have to forego the veneer of true collecting. Much more potently, having originally emerged through the

transformation of collecting into investing, it instead recasts investing as also potentially a form of collecting. Traditional relations to the art market become intermediated by finance: finance's cooptation of investor's sensitivity to elements that are in and of themselves irrelevant and even *irrational* to the investment decision-making process, chief among which is narrative, enables it to become the point of access through which such sensibilities are exercised. This allows the financial sector to market itself as merely an intelligent, pragmatic, even sensible special form of collecting. In this way, as with the nineteenth century life insurance market analysed by Zelizer, an idea that is resisted as taboo and antithetical to 'those aspects of the social order [...] that are culturally defined as above financial relationships', is transformed into the embodiment of the sensible mindset: 'a powerful normative pattern: the division between the nonmarketable and the marketable, or between the sacred and the profane' is defied (1978: 591, 594). After all, is buying art that maintains or increases its value not a moral obligation within norms of prudence, increasing or at least maintaining one's capacity for redeploying the capital to ends of social utility, either through supporting the art market further or through other forms of investment and philanthropy?

The different durations of closed funds impact the choice of art works that go into it (or vice-versa) and reflect the fundamentally different behaviours of different submarkets. The low supply and long historical precedent in the Old Masters sector means that time-frames are very long, and price movements are generally low, while the shortest time frames pander to the high-risk high-return profile of contemporary art, where trends can make prices multiply by order of magnitudes in a short space and just as quickly erode them. This manner of thinking about art and its submarkets is endorsed by its coincidence with the fault lines of art historical periodizations, the categories of auction houses, and as a result with the different indexes created by Mei Moses and others.

The interest in shorter holding periods owing to the recession thus presupposes investment in contemporary art, already the locus of most speculative behaviour, and where the art market itself has the largest influence in qualifying the continuous supply of new art (see Chapters 5 & 6). But there is, as referred to above, a second variable of differentiation qualifying variance within these markets, that is just as important: price. When Hoffman explains that higher priced works eliminate certain forms of risk, one of these risks is the liquidity risk – the risk of not being able to exit the investment, or not being able to do so at a sufficiently attractive price because a lack of buyers constrains competitive bidding. As Skate's Global Art-Loans Market Report from 2015 explains, the market for the most valuable art – over \$20 million – is now the most important market by total dollar volume of sales, and, along with the \$1 million to \$5 million range, they are the most liquid art-market segment, not least because they have among the highest repeat-sales ratios (2015: 8). TEFAF, in their 2015 report, confirm this intuition, noting that of dealers with a turn-around of less than €2 million, 22% were selling works within six months, whereas this share rose to 41% for those with sales in excess of €2 million (McAndrew, 2015: 43). A predilection towards the upper end of modern and contemporary art may thus be a structural feature of art investment.

Evolution of the Art Fund

Discussions of art funds in the press, in academia, or at corporate conferences usually locate the art fund's birth at the beginning of the twentieth century, with the eponymous 'La Peau de l'Ours' ('Skin-of-the-Bear') fund. This was the first time art was genuinely used as a capital asset on a significant scale, though it was not grounded in the kind of instrumentalisation that data subsequently invited. Started in 1904, it cashed out of its Picasso, Matisse and other holdings in 1914 to quadruple its investors' money. And yet, it was not until the 1970s that the idea was seriously taken up again. When it was, it emerged with a view of hedging high levels of inflation, and this time on an institutional scale, led by the British Rail Pension Fund – a public organization. As noted by Evan Beard, former US Art & Finance Leader for Deloitte, and now National Art & Exotic Assets Executive at US Trust, with the exception of the latter, these experiments largely failed (Schwartz, 2015), often before the conclusion of their term.

According to Beard, the fund format has undergone two iterations since its tentative beginnings (quoted in Schwartz, 2015). The first, in the 1990s, was led by pension funds and endowments building on Markowitz's modern portfolio theory and its understanding of diversification. It lasted until the credit crisis demonstrated that art was in fact – in the long run or for tail-events in particular – more correlated with other asset classes than had hitherto been believed, as was discussed in Chapters 1. After inflation and diversification, the current and third lifecycle of the art fund began, structured according to tax efficiency, into private equity structures or private syndicates, and often formed by former auction house executives able to capitalise on their networks and expertise to source promising works and minimise transaction costs (Schwartz, 2015). The traditional knowledge basis of the art market maintained its dominance, but was packaged and employed in a financial investment vehicle, to financial ends.

Over the decades, many funds have failed, principally owing to difficulties fundraising, suggesting a product supply push that was unmatched by demand and execution capability. These include the Finacor Fund; the Athena Fund marketed by Merrill Lynch; Chase Art Fund; Fernwood Art Fund; the Swiss based Art Collectors Fund; the AIA's Art Trading Fund; the ABN AMRO Art Fund; Falk Art Management; Christie's Art Fund; Meridian Art Fund; SGAM Art Fund (Picinati di Torcello, 2010: 22). Efforts have also been led by Berenberg Capital; Schroders; Citi Private Bank; Société Générale Private Banking; HSBC Private Bank; Intesa Sanpaolo Private Banking; UBS Private Bank; Emirates NBD; and Unicredit (footnote 1; Bocart, 2014: 1). According to Deloitte, the funds market peaked in 2012 in terms of both assets under management and numbers: at least \$2.1 billion AUM and 115 funds globally. The fund market was particularly strong in China, which then accounted for \$1.5bn AUM and 90 funds (Deloitte & ArtTactic, 2014: 94; see also McAndrew, 2014). But with a decline in over 75% since, owing to tougher regulations designed to curb extreme speculation in the art market, the total funds under management in China were believed to have plunged to around \$373 million in H1 2017 (Deloitte and ArtTactic, 2017: 182).

The outlook for the growth of art funds as an investment has been shaky, with periods of exuberance (see Deloitte & ArtTactic, 2016: 17). At the time of writing, macroeconomic instability in many of the world's largest economies and uncertain political futures likely contribute to the reluctance of investors to participate in highly esoteric investments, even as these same upheavals cause to emerge the biases towards tangibility that art prices, like gold prices,

have benefitted from. Still, in practice, as a centripetal force in the construction of the field, and as symbol, art funds are a key element of art's financialization, their theoretical possibility flaring up hopes even when reality often lets them down. Interest in gaining exposure to art through such vehicles has increased steadily with the advent of art & finance research (Deloitte & ArtTactic, 2016: 18), helped by the willingness of banks to offer third-party art fund exposure as an investment (23% of banks surveyed by Deloitte and ArtTactic in 2016 offered this, up from 8% just two years earlier, *Ibid*: 64). Today, the most established and most publicized participant in this sector is The Fine Art Fund, followed by Tiroche DeLeon. In 2013, The Fine Art Fund had assets under contract just shy of a quarter billion dollars (Hoffman, in von Frank et al., 2013). By 2015, CNBC reported the firm had grown to over five hundred million dollars under management (Schwartz, 2015), with predictions that it could reach a billion by 2017 (Hoffman, in Viveros-Faune et al., 2015). As at 2015, The Fine Art Fund had about 120 clients from 23 countries.

The failures and iterations of the art fund product point to the limits of the quantitative episteme in elucidating art, for funds still essentially commodify expertise that is profoundly embedded in the dynamics of the traditional art market. This is perhaps what Michael Moses, co-author of the Mei Moses art index, is (somewhat disingenuously) alluding to when remarking that 'art as an asset class is very information intensive' (in Viveros-Faune et al., 2015). Philip Hoffmann, founder and CEO of The Fine Art Fund, speaks more plainly. Always shying away from declaring art an asset class in spite of his position, Hoffmann observes that investing in art means 'you need expertise, you need almost insiders working with you, otherwise you can't make the returns' (Hoffman, in von Frank et al., 2013), because the new art fund model depends not just on maximizing revenue through picking the right 'stocks' and selling at the right time, but on minimizing the huge transaction costs – discussed in our analysis of art data – through the creation of its own purchasing & sales channels, all of which is relational work. Davies made just this point in 2013:

What you're ultimately buying is not so much art as the skill and expertise of the selector. The closest financial parallel I can think of is building up a portfolio of private equity concerns – yes we can use quantitative methods to evaluate whether this company is going up and down, but at the end what you're paying for is the person running the fund choosing the companies to put in the portfolio, meeting the heads of the companies, so you're buying skill more than an underlying asset class per se. (speaking at Pownall et al., 2013)

This notion of the art fund as a form of access to expertise and to proprietary dealflow, with a focus on transaction cost minimization, is consistent with Beard's third iteration. It also illustrates a critical aspect of the fund, which is that the inability to turn art itself into a financial unit – due in part to its objecthood – pushes the locus of financialization outwards. The fund is finance at the periphery: it is a vehicle that contains and circumscribes in a financial framework that whose substance could not itself be rendered financial. Having done so, it can virtualise the artwork indirectly: by rendering tradable and fungible the exposure to art, for example in the form of the shares in the company that holds the art assets. The fund vehicle interfaces between the assets that it holds and the investors or interested parties who seek to look in. Across it, a translation occurs. The insider knowledge and participation in informal networks that still qualifies the art investments internally is replaced with traditional fund investor reports with pie-charts of

allocation shares, performance comparisons against selected benchmarks, and other quantitative data (see **Figure 6**). The fund is thus a legal structure – one that is governed by a set of agreed-upon principles, and which is tax efficient – but it is also a marketing strategy. It conveys a legitimacy through its legal structure as well as its marshalling of data even if data is in the end immaterial to the execution of the actual investment thesis.

The above observations are commensurate with the suggestion in Deloitte's 2014 report that 'Art investment funds have the potential to become one-stop art service platforms for the wealth management industry', with surveyed art professionals recommending that an art fund 'could provide access to experts and knowledge that buyers do not currently have' (Deloitte & ArtTactic, 2014: 17). Marta Areny, Board Director of the Day Star Private Art Fund, likewise comments that the value-added component of the investment fund is that it 'offers investors in-depth market knowledge and a specialist art and financial advisory team' (quoted in *Ibid*, 2016: 115). Funds thus absorb some of the tax advisory and wealth management services discussed previously into a consolidated whole that also offers 'professional management with a strong investment discipline and a focus on value' (*Ibid*, 2014: 21), and most importantly, a monetized access. Moreover, art funds also incorporate concerns for the relational value of art in appealing to clients. The Fine Art Fund for example allows investors to borrow the art and 'get involved' because 'it's club like' (Hoffman in Viveros-Faune et al., 2015). Arthena, though, is probably the best example of the fund as 'one-stop art service': marketing their partnership with 'seasoned, international artworld specialists to help you find the perfect and most informed opportunity that will complement your existing portfolio', they promote their online collection management software, and other benefits such as 'insurance, an extensive calendar of events, and access to a global roster of galleries, museums and art fairs'.³¹

The change in the strategy of art funds, which has produced a hybrid format between collecting and investing that does not interfere with the financial objective, also reflects its clientele. Speaking in 2013, Arnoud Zevering, the head of Private Wealth Management at ABN AMRO Luxembourg, shared his firm's experience in the early stages of art funds. According to Zevering, the insight that their involvement produced was that their likely investors are first-generation art-buyers using the fund 'as a way to build-up expertise, as a way to build up their network' (Pownall et al., 2013). Therefore, Zevering suggested, funds 'should profit from the fact that some experts are involved', making these experts not just part of the mechanics that facilitate good returns, but part of the funds' offerings themselves (*Ibid*). Von Frank too noted this initiation function of art funds as 'a sound way to get one's feet wet', and Davies has suggested that 'it's a sanitized and lower risk way of choosing art yourself', providing 'a rational investment rationale to do something you want to do anyway' (*Ibid*). That entrance into the art market can be mediated by a financially-motivated organization is an important change: it frames that access. In this respect, as Davies notes, art funds are 'in the sweet spot', 'cleverly bringing together two sets of emotional concerns that people have when buying art – one is I like art, I like the social status that comes with buying art, I want the education that comes with that, two is that I want to know that my money is going to be returned to me, I want to know that there is an investment objective' (*Ibid*). What this suggests about financialization is consequential: financialization is not principally about displacing existing motivations, or eliminating extant and qualitative forms of expertise: it is about subsuming them into the episteme of finance, wherein they are granted their

³¹ <https://arthena.com/editorial/post/hedging-a-portfolio-with-art> (posted 24/01/17; accessed 01/01/2018).

functional niche providing they are aligned with the overall aim, which is profit. The fact that it can infuse such expertise with its profit orientation is perhaps more important than its ability to displace, because in eliminating the distinction, it also eliminates a locus of resistance.

As we saw in the instance of taxation, the financialization of art operates by self-reinforcing feedback mechanisms. In that case, we saw that an investment mentality fostered by data research and increases in the value transacted led to thinking about art as an asset. This in turn led owners to desire tax-efficient forms of ownership whose legal restrictions required the art to be considered an investment and an investment only, while also ensuring broader demand for art data. The interplay between nascent financialization and regulation follows a similar pattern for art funds.

Here we follow the same premise that data ratified the possibility of thinking about art as an asset. In this case, the possibilities inherent in the apparent conclusions of the data, in particular its function as inflation hedge, its low correlation, its tax efficiency, and its return profile, led to the subsumption of the purchasing and selling of art into pre-existing investment structures, namely the fund. The subsequent emergence of the art fund sector caught the eye of regulatory authorities, who in response sought to ensure that such entities are subject to proper financial regulation and oversight. The resulting basic restrictions, aside from on solicitation, have included increased demands for transparency to improve investor protection. These constraints have been heralded as positive developments by some industry actors, who believe both that they will go some way towards allaying investor fears about an uncertain product in already uncertain economic times, and that they could lead to ‘a greater level of professionalization among non-traditional asset funds’ (Deloitte & ArtTactic, 2014: 94). The effects could be distributive throughout the art market as a whole, which would in turn reinforce, or at least remove some of the barriers to, the idea of investing in art. For example, new directives may help relieve some of the problems in the market such as the negative effects of issues relating to due diligence, lack of liquidity, valuations, lack of track record, and general lack of regulation, all of which render wealth managers uneasy about recommending the art fund as investment product.

The Alternative Investment Fund Managers Directive (AIFMD), which focuses on the ‘management, administration and marketing of alternative investment funds’ across the EEA is just such a legislation.³² In 2016, the specialised Reserved Alternative Investment Fund (RAIF), which falls under the directive, was launched. Though the directive may not apply yet to art funds by virtue of size minimums, some industry participants have recommended becoming authorized by its regulations regardless in order to increase investor confidence in the product they are selling (the art fund), and to render it available across the EEA by virtue of its submitting to harmonized rules. Among other things, the AIFMD demands disclosure of valuation strategies and policies (i.e. the interaction between the valuation model builder and the expert), annual accounts, and requires the use of a depositary. The depositary’s role is to ensure the assets under management are properly acquired, kept, described and noted. Furthermore, these institutions may know nothing about art, meaning they would need to acquire this expertise, thus creating an opportunity for a ‘huge learning curve to bring operations people within the same ambit they see in their other [financial] sectors’ (Sinclair, 2013). The AIFMD also requires a risk management function, which will require the precise articulation of specific risks in the art market as distinct from each other,

³² <https://www.fca.org.uk/firms/aifmd> (accessed 01/01/2018).

meaning ‘codification is need’, and creating a situation ‘where it all becomes less opaque’ (*Ibid*). Taken together, this constitutes a nascent pressure towards the institutionalisation of an investment vehicle imagined by a group in Paris a century ago.

Institutionalisation is in part a process of definition, of categorizing and fixing terms and standardizing practices, such that terms become invariable and operations are reproducible, auditable and unequivocal. In this sense, the professionalization of art investment, through the renewed demands for monitoring it constitutes, reinforces the demand for art data, increases its viability since it becomes necessary for the art fund to legitimize its existence and since it requires further standardization, and ought to further the demand and supply of such structured investments (Arthena is an example of this being the case). But the function of a professionalised art fund also forcefully disperses finance specific art market knowledge through the services that it requires to function, namely those of accountants, transfer agents, paying agents, regulators, depositaries, auditors, and so on, and thus creates a new pool of expertise that can be called upon by – and which elicits the clientele of – further art & finance service providers. As Enrique Liberman put it: ‘With the advent of a new kind of investment vehicle, there are opportunities for those managing or servicing such vehicles to make substantial monies’ (in interview with Willette; Liberman and Willette, 2010: 5).

One example of the institutionalisation of the sector is the formation of the Art Fund Association (AFA), the ‘first professional body dedicated to Art Investment vehicles’, formed as a trade association to ‘act as a unified voice for the art fund industry and educate both the alternative investment community and the general public as to the importance and viability of art investment funds’ (*Ibid*: 2). The AFA (founded 2009), like the art dealers associations Art Dealers Association of America (ADAA) in New York, the Association of Art & Antiques Dealers (LAPADA) and the British Antique Dealers Association (BADA), part of the British Art Market Federation (BAMF) in the UK, develops best practices to promote the ‘highest ethical standards and sound business practices’; it aims to dispel the ‘negative mystique’ fostered by the industry restrictions on marketing and advertising; and seeks to help combat the ‘misperception’ that art is a collectible rather than an asset that extends far beyond even the traditional artworld to banks and other financial institutions.³³ The AFA, like PAIAM for advisors, represents the centralizing momentum of any form of institutionalisation, and its premise of homogenizing tacit knowledge into explicit standards.

Conclusion

Art funds ostensibly interest us as the epitome of the accelerating radical changes taking place in the art market over the recent decades, but they are also interesting to sociology for a range of other subtler reasons. As suggested in the above analysis, this includes their working ontological assumptions about art; the ways in which the regulation of art funds re-energises the quantification project; how funds standardise art as an investment product by systematizing the procedures and representations that mediate it (that is art’s environment); and the way art funds extend financialization via the demands for expertise they place upon their ancillary service providers and employees. In this way, art funds require new capabilities to be created internally

³³ http://www.artfundassociation.com/what_we_seek/guidance.html (accessed 01/01/2018).

and among their suppliers, which, in expanding the ecosystem, in turn create the expectation that such expertise will find ongoing utility – a feedback loop that underlines one mechanism in the process of market formation. What this suggests, as will be noted in Chapter 3, is that the market forms by emanations of chains of supply and demand that elicit and feed back into each other, adding a networked dimension to the isolated and spontaneous supply-demand couplets of neoclassical economics. Art funds, finally, also attempt to reposition investment as a form of collecting by marketing thematic funds and selling the ‘experience’ of the art market, including various forms of exclusive access both to events, expertise and personalities. This is perhaps the art fund’s most radical proposition: not that it facilitates investment, but that it can act as the point of entry into the ‘artworld’, and that art can thus be experienced through its mediation by an investment vehicle. This mediation extends further than to mere participating investors: AFA have, for example, formed a charitable arm ‘Art Funds Give Back’ that sponsors art education programs at schools, often in developing economies; but most importantly, one the ‘primary investment strateg[ies]’ of art funds is to lend their purchased works to exhibitions to ‘increase the artwork’s marquee value’, while ensuring the identity of the co-owners remains anonymous so as to ‘prevent the artwork’s sale prospects from being diminished in the future due to its association with an art fund’ (Liberman and Lumbreras, 2013). An audience could thus at any point be looking at a work of art without realising that they are saving an art fund its storage and maintenance costs and increasing its return by proffering cultural capital upon the work. Art funds have even sponsored fine arts education, thereby on one side supporting the production they rely on and partaking in the public exhibition of such works on the other.

4. Freeports

Freeports are not a financial service, but they are a key infrastructural element in the story of art's financialization, manifesting its various intersecting trends, and are explicitly backed on the basis that they are a crucial node in the globalized fusion of art and finance. As we have seen in our discussion of wealth management nested art advisory, tax saving ownership structures incentivize the use of freeports by their requirement that legal ownership and beneficial ownership be separate, in other words, by their enforcement of art's transformation into an asset. A freeport designed to accommodate art offers the opportunity to store a collection held in a trust and to streamline the efficacy of the necessary attendant services of cataloguing, conserving, valuing, in other words managing the collection, without being in breach of the trust mechanism. It also offers general shielding from value added and capital gains taxes on trades executed within their boundaries, as we will see below, thus providing significant advantages in the pursuance of an acquisition and sale policy within it. As a result of this, and due to their transformation into destinations in and of themselves, 28% of both art collectors and art professionals surveyed in the 2014 Art & Finance Report declared already using or having a relationship with a freeport provider, while over 40% of each were likely to use one in the future (Deloitte and ArtTactic, 2014: 86). An article by the French arts publication *Connaissance des Arts* put the figure for artworks in just the Geneva Freeport at over 1.2 million in 2013 (Maertens, 2013), a level of aggregation which represents concentrated risk exposures to insurers potentially far beyond the counter-acting benefits of climate-control and security (Neuendorf, 2015).

What is a Freeport?

A freeport is a free economic zone, traditionally a warehouse where goods that are technically in transit are given special status, including exemption from customs duties and taxes, confidentiality and lax scrutiny. The purpose of freeports has historically been to facilitate trade-flows by enabling goods to connect for re-export without being liable to taxes in every port of call on their way to their final destination. However, the fact that goods can be held in freeports indefinitely has led to a flourishing of freeports tailored to the tax-free storage of art and other assets of UHNWIs: gold, wine, cash, etc. The use of this loophole has been so expansive that a Swiss Customs Act (Switzerland is a key location for freeports) has tried to curtail it, in the same stroke giving more powers to its Federal Customs Administration (EZV) to monitor entry and exit of goods without the withholding of ownership information (Neuendorf, 2015; O'Murchu, 2015). In 2015, the Responsible Art Market Initiative (RAM) was formed to provide standardized guidance on best practices³⁴, including on money laundering and the illegal import of antiquities, which in the G7 Action Plan on Combating the Financing of Terrorism was specifically identified in terms of vulnerabilities such as the use of Freeports and Free Trade Zones (Deloitte & ArtTactic, 2017: 257). The fact that freeport representatives attend art fairs to solicit clients by promoting their services indicates how far these organizations have come from simply sheltering goods in transit. In a damaging article on the 23rd of Nov 2013, Matthew Valencia from *The Economist* referred to them as a 'fiscal no-man's land', where it has been estimated that millions

³⁴ See <http://responsibleartmarket.org/about-us/> (16/01/2018).

of artworks, with total value over \$100 billion are likely stored (Anon, 2013c). Indeed, not only can work be stored there, but it can often be bought and sold there too, out of sight of authorities, simply by moving objects from one room to the next. Indeed, the Luxembourg freeport aims to become ‘the ultimate secured storage and trading platform for valuables’ (Anon, 2013b: 14). Valencia also noted that such exchanges were not ‘uncommon’, while reporter Mostapha Heddya called freeports a ‘thriving tax-sheltered barter economy’ (Heddya, 2014). Dietrich von Frank, an insurer, confirmed it was not unusual to see that a work insured by them exits one insurance policy and enters that of another customer in the same location (in Mackel et al., 2014).

The list includes the Singapore freeport (opened in 2010), the Monaco freeport (2012), the Luxembourg freeport (2014), the Beijing Freeport of Culture (2014), the Delaware freeport (2015), the New York freeport ARCIS (2017; created with using the advisory services of the Van Gogh Museum)³⁵, and the Shanghai freeport (2017), as well as older freeports in Geneva and Zurich. The Singapore, Luxembourg and Shanghai freeports were started and are run by the same organization (Le Freeport). In Luxembourg, alongside Deloitte and with the support of the government, the freeport is part of a conscious art & finance ecosystem-building strategy that would complement its existing wealth management offering and geographical position as European hub (including for logistics). The freeport of Luxembourg was on the year of its inauguration the subject of the entire 7th Art & Finance Conference, in which the open address was given by the Luxembourg Minister of Finance.

The nature of the freeport means its appeal is to ‘a new breed of collector, buying not only for passion but as an investment’ (AXA, paraphrased in Anon, 2013c). William Alden, writing in *The New York Times* comments that ‘with more collectors viewing art as a financial investment, storage can become an artwork’s permanent fate’ (Alden, 2015), its circulation arrested in transit. Fritz Dietl, the founder of the Delaware freeport, made the same observation (quoted in Heddya, 2015), explaining how they are fundamental to his business plan:

‘if they are investors, the art is not meant for the home anyway, [it’s meant] as an asset. One may or may not like it but art has become an asset class, and thus it needs to be cared for and stored properly somewhere. [...] there are more and more investors that obviously have no reason to pay sales and use tax, if you are a fund, or a trader, why should you pay a tax in New York [?]’

Freeports are therefore uniquely suited to art investment funds inasmuch as they lower the ‘cost of transaction, of holding, of insuring, and of the logistics’ (Boris Liedtke, Chief Country Officer, Deutsche Bank Luxembourg, speaking at Mackel et al., 2014). For similar reasons, an initiative to create a financial art market trading in shares in art (SplitArt – which never came to fruition; see Chevion, 2011; also Robertson, 2016: 219) was planning to use the Luxembourg freeport as its storage base.

What SplitArt demonstrated was the freeport’s potency in virtualising the artwork, a potency which, although in different ways, tax mitigation methods also possess. To fully realise the artwork as an economic value, the artwork must be stored away, protected from climate, taxes, theft, and human error, in other words it must be unencumbered by its physical nature in order the

³⁵https://static1.squarespace.com/static/54aff3a8e4b0a3366e8981e3/t/58ca01c4c534a544cd3c747b/1489633734656/ARCIS_BROCHURE.pdf (21/01/2018).

better to float around as capital. As Alden wrote about a sleek (non-tax exempt) storage facility in New York prior to the city obtaining its first freeport, ‘everything about the facility seems designed to remove friction from the art market — to turn physical objects into liquid assets’ (referring to Uovo; Alden, 2015). An artist interviewed by *The New York Times* author agrees, suggesting there is ‘something about the way art is functioning, which is less about the artwork saying something or doing something and more about the artwork representing a value’ (*Ibid*). In this respect, collection management software where artworks are virtually stored alongside their relevant documents and periodic re-valuations can be seen as the exact counterpart to the freeport in the story of financialization, and the two work best together: the material aspect of the collection removed by the freeport returns spectrally through digital collection management software. It allows collectors to all the better see the artworks financially by forfeiting the need to see them physically, that is as inventory rather than collection, lowering the influence of irrational aesthetic components as heuristics in the strategic management of a portfolio collection. ARCIS, Manhattan’s new facility, know this: they provide both digitization services and ‘online exhibition services’, having partnered with digital platform ArtBinder to allow the client ‘to view and manage your collection from anywhere, on any device, at any time convenient for you’.³⁶ In the freeport, the collection comes to physically mirror its condition on the collection management software: all in one place, catalogued and invisible. The freeport is where the fusion between data and artwork into capital most successfully takes place.

Freeports are now a must-have for cities that are serious about catering to wealth, and this is largely where they have emerged. As the Singapore freeport’s website describes it, its conceptual genesis emerged out of the irresistible ‘resolve to elevate its art and lifestyle industry to the level of its financial sector’.³⁷ At the regulatory level, both come to fruition as a result of underlying tax avoidance mechanisms that such countries or principalities have endorsed to attract wealth; and at a practical level freeports express the territorial imperative of wealth managers to bring the art collections of their clients within their fold as they realise their vision of ‘holistic’ wealth management. The presence of wealth and a wealth management nexus represents the untapped demand freeports aim to satisfy and bolster. As explained by Nicolas Mackel, CEO of Luxembourg for Finance, an agency focused on the Grand Duchy’s development as financial centre, it is the fact that 62% of assets under management in their banking industry belongs to clients who own more than €5 million which made the creation of the freeport essential to help bankers ‘add an additional service they can offer their clients as part of their toolbox’ (Mackel et al., 2014). ArtTactic likewise note in their report that it is ‘paramount that the freeport providers and wealth management community work closely together’ (Deloitte & ArtTactic, 2014: 20).

The Singapore freeport, like its Luxembourg sibling, is an extremely modern, architect-designed facility with ‘lobby, showrooms and furniture designed by contemporary designers Ron Arad and Johanna Grawunder’ (Prystay, 2010) (see **Figure 7**). An enormous sculpture spans its lobby, and paintings adorn its exposed concrete walls. It has private galleries that enable collectors to view their art under ‘museum quality spotlights’ (*Ibid*), after they’ve been escorted from their plane by freeport staff in a limousine, with an armed escort if they are packing valuables (*Ibid*). The Luxembourg freeport, also located by the airport’s tarmac, boasts of its ‘Swiss concept and entrepreneurship, German technology, Italian exterior and interior design’, and speaks proudly of

³⁶ See footnote 35.

³⁷ <http://www.singaporefreeport.com/index.php#/history> (accessed 17/11/2017).

its vast frieze by Portuguese street artist Vhils in its atrium. It too has private viewing rooms, and an exhibition lobby (by invitation only) surrounded by doors with blinking ‘Entrée Interdite’ signs above them. ARCIS offers the ‘opportunity to inspect, show and appreciate your collection at your convenience’ in rooms with ceilings up to 16 ft high.³⁸ All art freeports are temperature and humidity controlled. All of this, finally, is packaged in an environment of extremely high security. In the case of Luxembourg, 300 CCTV cameras, walls topped with barbed wire, bullion rooms with 50 cm thick metal doors, access by biometric iris scanning. In Singapore, private rooms and vaults are ‘barricaded by seven-ton doors’ (Prystay, 2010).

The industry view discussed before both with regards to wealth management and with regards to funds – that art enables an empathetic connection with the client – drives the configuration of the freeport as something over and above its basic function: not just tax-free storage, but an event, an aesthetic experience, a hub of services, a trading platform, and a source of exclusivity. Freeports are no longer just warehouses, they are in themselves destinations, a ‘place the end customer wants to be seen in’ (David Arendt, president of Le Freeport Luxembourg, quoted in Anon, 2013c). But that is not the full extent of their ambition. As Arendt, explained at a presentation at the 2014 Art & Finance Conference, their ambition is to make the Luxembourg freeport the heart of a new competence cluster, ‘an ecosystem of forwarders, craftsmen, restoration and carpentry, professionals, art expertise, valuation, condition report, scientific analysis and specialised financiers to offer insurance, art lending, estate planning, monetization of assets that are stored in my facility’ (Arendt, 2014). Their long-term plan, tellingly is to make Luxembourg an ‘art capital’ with the freeport as ‘focal point’ – a rather different conception from the conventional idea of art capitals as emerging out of the proximity of strong public museums, fine arts education, primary market actors and dedicated collectors. The Beijing Freeport of Culture and the Shanghai freeport, both with municipal backing, also intend to form the centre of a broader art market cluster.

The notion that traditional art related services performed by specialised craftsmen and even eventually artists themselves might reorganize around the freeport as the core institution is an image that encapsulates much of what the financialization of art is about, namely the transformation of finance into art’s superstructure. As Sam Knight writes of the Singapore freeport in the *New Yorker*, it is ‘an over-engineered hybrid of vault and temple’ (Knight, 2016). Luxembourg believes it will be able to attract both the assets’ creators and their caretakers around a freeport where collectors can store their work away from the public and instrumentalise it as an asset; where art is thus, to use Alden’s words, the source of the collectors’ wealth, rather than its fruit (Alden, 2015). In these circumstances, the restorers and craftsmen are not there to protect the art, which will not be seen, but to protect or enhance the value that it represents. The freeport aims to coopt the conservation practices – traditionally undertaken for or in museums to preserve the culture of which they are the custodians – for the pursuit of different goals altogether. The ‘competence cluster’ of which Arendt talks is a cluster where money, in the shape of art, is polished, massaged, kept fit, while its value moves elsewhere, unimpeded. With its modern minimalist architecture, its display rooms, its laboratory and valuation services, the freeport is indeed somewhere between a vault, a museum and a gallery. Within the private rooms in which valuable objects can temporarily be exhibited to their owners, it may even be a shrine.

³⁸ See footnote 37.

Conclusion

The above analysis has highlighted four key areas of the art & finance sector: wealth management and advisory; securitization and loans; art investment funds; and freeports. What is clear is that the process of financialization depends on the development of new forms of expertise, extending that of finance to art, and that of art to finance; on the stabilisation of standard procedures and the packaging of art into both real infrastructure, legal constructs, contractual obligations, best practices, tax mechanisms, and web-based collection management software; and thus on the establishment of a field which supports and is organized around the idea of art as an asset class. In this way, the social life of art as an object finds itself radically transformed. Around this nexus alliances come to be forged that are less customary even than those between the art collector and the wealth manager – that between the museum and the wealth-manager; for example, or that between the artist and the freeport – uniting those who seek to bring art expertise within the fold of finance and those who, possessing this expertise, have discerned in its sharing a salvational revenue stream, and vice-versa.

The sum product of the convergence of the artworld and the business & finance community, of the professionalization of ‘collection management’, supported in part by related quantitative research, is that the value of art which its ‘aura’, as Benjamin called it, underwrites, can productively be instrumentalised as a financial tool ([1936] 1999). In this capacity art can be utilized towards the purposes of wealth protection and estate planning; it can be monetized within trust structures to increase the profit from appreciation in its value; it can be used by ‘philanthropy’ to secure a tax credit; it can be used in pension plans; it can be used, most importantly, as collateral for loans or credit lines that in turn can provide additional capital to finance other ventures, for example new entrepreneurial ventures, the purchasing of real estate, or any other form of investment. Often, in these instances, we see a reverse of Veblen’s ‘conspicuous consumption’ ([1899] 1994). The display rooms at freeports suggest as much. This is consistent, however, with a different set of priorities that guide our new age of inequality. We might call it inconspicuous preservation. As Harrington has suggested: ‘whereas privilege once meant the right to collect taxes from others, in recent years it has meant partial or complete exemption from *paying taxes*’ (2012: 837–38; emphasis in original). Where members of the elite believe they have a moral obligation to preserve their assets from government ‘theft’ (Harrington and Vedantam, 2016), at a time when a US presidential candidate can comment that avoiding taxes makes him smart, the art and finance sector flourishes. Indeed, the many ways in which tax avoidance mechanisms enforce art’s status as investment are much less burdensome to the owner if the safeguarding of the works out-of-sight was intended in the first place. In this case, financialization is particularly advantageous: it gives new value to otherwise idle holdings, allows them to be re-activated in a new form, one in which their own value is not only protected but potentially extended.

In this context, the proliferation of collection management software as a central (and centralising) component of art’s new ecosystem merits additional pause. It is, by extension, arguably a product of rising wealth inequality, which has created the need to inconspicuously preserve assets of which it is the compensatory mechanism. In a virtual space, it disentangles art from the archaic structures of the art market and re-embeds it into finance. As organizing space, it is crucial in interfacing between the four areas of financialization described here, and is given its

importance on the basis both of its portability for a transnational elite and of its centralisation of holdings otherwise made invisible. Because it often catalogues alongside the works themselves their fair value, purchase value, current location, exhibition activity, and price performance relative to specific benchmarks, and because it can often centrally store all relevant documents (purchase contracts, authenticity certificates, insurance policies, trust documents), it can also mediate services from counterpart firms, who may be granted access to specified areas. Such software can thus facilitate the breadth of financial transactions (from insurance products to advisory, loans, logistics, etc).³⁹ Collection management software may also be a component of wealth management software, in which art is one category of assets in the portfolio. In 2016, 73% of wealth managers surveyed by Deloitte & ArtTactic wanted a ‘common reporting mechanism’ for all their holdings to be visible in a ‘consolidated view’ (2016: 17, 21). In 2017, the report predicted that the market is ‘likely to see increasing demand for integration between art collection management software and banks’ existing reporting systems’ (2017: 24). This suggests that software, wealth managers, and freeports, may play an exactly parallel role with respect to the client, each a nodal point and an organizing principle. The freeport, in other words, is the material counterpart to the web-based platform, and wealth managers are their relational and interpersonal equivalent: all different facets of the portfolio panopticon.

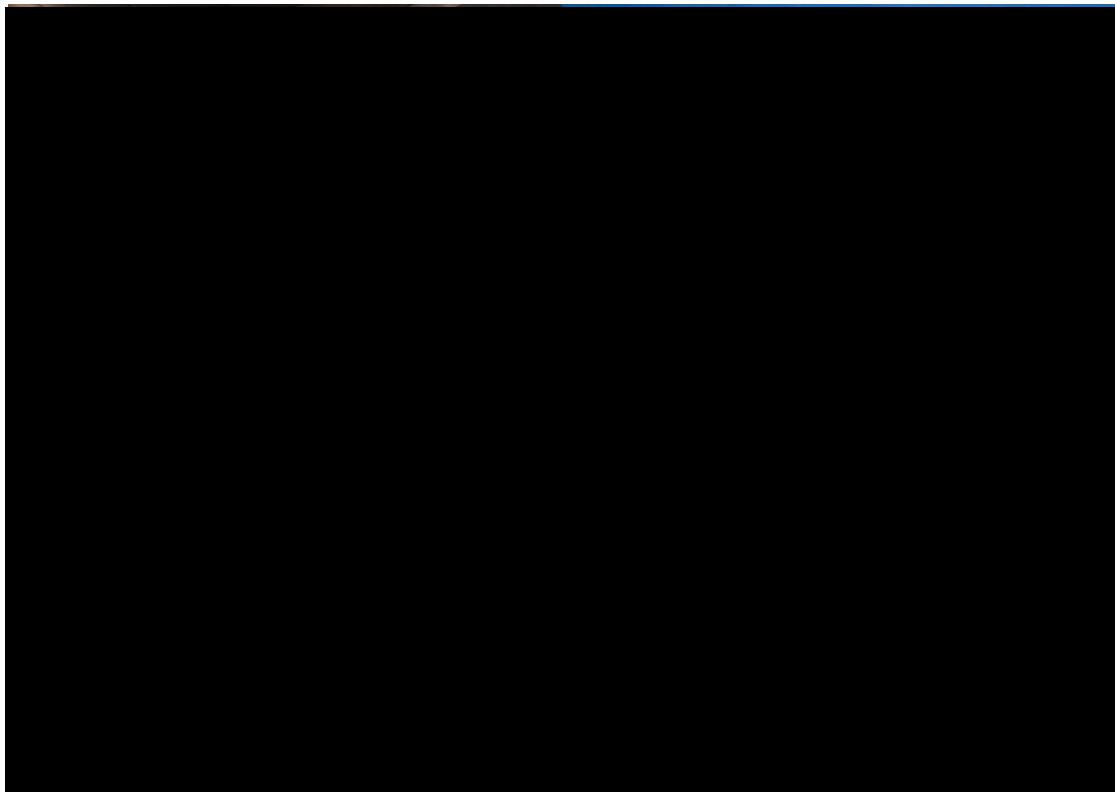


Figure 7 - Le Freeport Luxembourg (Top Left: Interior / Top Right: Exterior); Le Freeport Singapore (Bottom Right: Exterior / Bottom Left: Internal Atrium)⁴⁰

³⁹ Collectrium, a collection management platform, had for this reason partnered with art insurance firm Hiscox – and has since been bought by Christie’s (Anon, 2016a: 10). See also Greenhalgh, 2015.

⁴⁰ Top left image: <https://www.widewalls.ch/collectors-tip-luxembourg-freeport-and-other-important-questions-january-2015/> (15/01/2018); Top right image: <https://www.widewalls.ch/collectors-tip-luxembourg-freeport-and-other-important-questions-january-2015/> (15/01/2018); Bottom two images: <http://www.singaporefreeport.com/> (15/01/2018).

Chapter 3. Reflections on Calculation

Introduction

The ‘variety, limits, and artfulness’ of quantitative expressions (Espeland & Stevens, 2008: 432) which have encountered in our analysis are interesting in what they tell us about market formation and perceptions of objectivity given such shortcomings have not prevented the massive communicative success of numbers on the art market, especially as regards establishing art and finance as a distinct and proper realm of expertise. Art indexes, for example, the most widely circulated outcome of calculative practices, are not tradable and do not reflect real-time activity: they merely ‘collate historical prices’ (Girlis, 2014: 32). In practice, they can hardly be used to guide purchasing and selling in the art market even aside from this, owing to the art market’s specific features. Both in its practical applicability and its empirical validity, calculation thus suffers from the fact that, as art economist Clare McAndrew writes, the art market ‘has relatively few of the formal coordination mechanisms or institutional structures that are found in other developed markets’ (McAndrew, 2010: 19): transparency and liquidity are scarce; asymmetries of knowledge, secrecy and networked channels of interest are the norm and are deeply entrenched.

The implicit tension between validity and objectivity mean this analysis has also been the exploration of a disconnect between the localized form of objectivity that describes the calculative practices, and the generalized form of objectivity claimed – explicitly or implicitly – on behalf of its inferences as they are circulated and mobilized to promote the art and finance sector. The broad publication of the conclusions of especially the Mei-Moses indexes pertain to a kind of fallacious affirmation, where perceived connections between numbers & fact are marshalled in favour of a cause notwithstanding the extent of their real validity for those purposes or in general, and notwithstanding their membership of a body of research whose unacknowledged diversity actually includes highly contradictory positions (correlation / non-correlation of art with traditional assets; superior / inferior returns relative to public market indexes or inflation, etc). Indeed, the ongoing and unsettled construction of calculative agencies and any concerns for their ‘epistemic accountability to the real’ have scarcely prejudiced the subsequent social utilization of its highly contingent fruits, particularly where to do so has appeared to encourage and legitimise, as we have seen, the construction of financial ecosystems and the pursuit of commercial motives of a financial nature (Kukla, 2008: 285). The question of reconciling these methods’ ineptitude with their preponderance thus lies in the fact that their limitations do not ultimately prevent interested parties from using the tools: there are, after all, no better alternatives of a quantitative nature.

To Ginsburgh and Moses (2006: 949) art market indexes have four alleged purposes: to assess the viability of art as an asset class by rendering its returns comparable to other assets and by showing its general trends; to provide a measure of its volatility and correlation with other financial instruments in order to assess its utility in diversifying risk factors in a mean-variance efficient investment portfolio; to allow examination of macroeconomic effects on art (e.g. inflation); and to anchor appraisals by enabling mark-to-market valuation. Ultimately, however, the development of such tools may be first and foremost of an epistemological, rather than practical or econometric, import. What they achieve above all is the substantiation of a particular vision of the art market, reified in its unitary representation as index.

In doing so they appeal to the seductiveness of what Knorr-Cetina and Preda called a ‘scopic mode of coordination’, capable of unifying and summarising on a surface ‘dispersed and diverse activities, interpretations and representations which in turn orient and constrain the response of an audience’ (in MacKenzie, 2014: 5). Calculation has the power to frame and reify, through its ability – objective, impartial, representative, or not – to give visibility, and to communicate without words. The socially constructed power of empirical work, the immediacy of numbers and modes of data representation, enable a seeping territorialization of established qualitative forms of expertise, which are thus slowly relegated to secondary positions as peripheral and – more importantly – *subjective* commentary. For once again irrespective of the perceived validity of their work, the tool-makers *can* justifiably claim at least one important and new realm of expertise: the technical realm of market-infrastructure makers – their expertise as those who build, service, and understand calculative agencies. They become the custodians of a new ‘paradigm of research’, as Kuhn might have called it, with a specific technical apparatus that they themselves are creating (see Said, 1998: 162). The surreptitious slippage by which knowledge of the functioning of a tool becomes presented as knowledge of that which it is attempting to measure is then negligible, enabled by a too subtle difference, and by the ‘perilous intertwin[ing]’ of looking, seeing and knowing’ (Jenks quoted in Rose, 2001:7) in an ‘ocularcentric’ society (Jay, [1988] 1999).

While sectoral consolidation is taking place, noted in the greatly legitimizing integrations of Mei Moses indexes and Tutela Capital into Sotheby’s and Artnet respectively (both in 2016), dominant designs have not yet emerged whose adoption would give the art market the coherence which such calculations represent. The field remains highly heterogeneous, and the practice of calculation pluralist. As Girlis writes: ‘after a good decade of trying to assess and predict art’s returns several experts hit the wall’: fighting over their methodologies, they ‘met with the stumbling blocks of limited available data, general transparency problems and the unique nature both of each work of art and the way in which it is sold’ (Gerlis, 2014: 15, 48). Consensus over the returns of art remain eminently elusive, as it does over art’s potential role in portfolio diversification, with differences in views emerging, for instance, out of ‘empirical issues [...] around the temporal instability and sensitivity of the estimates of key parameters related to the market performance of art investments’ (Ashenfelter & Graddy, 2006: 923). From a broader perspective, the projects of hedonic or repeat regressions specifically are more or less doomed to remain – relative to their ambitions as index – a niche interest at the intersections of art and quantitative finance until more transparency is granted over primary market prices. Until such a time, calculative practices may thrive inasmuch as they can meaningfully integrate alternative data fields, for example scraped from social media, to make up for this shortfall. Even then, indexes will remain difficult to operationalize unless online sales grow their market share, reduce transaction costs (and time), increase liquidity in the market and commit to transparency; or unless efforts to create public exchange markets for art – efforts of doubtful merit but highly loaded symbolism – come to fruition. This chapter will look beyond the calculative fallibility of this project towards its real underlying social functions in terms of communication and what we call its embodied suggestivity.

~

In his 1984 Harold Rosenberg lectures on ‘Art and Money’, renowned critic Robert Hughes, asserted that the art market – ‘one of the wonders of cultural engineering’ – was the outcome of a ‘patient hydraulic effort [...] since 1960 at least’, aimed at channelling into the picture and sculpture trade the great liquidity created in the post-war period. The market’s ‘big project’, he noted, ‘has been to convince everyone that works of art, although they don’t bear interest, offer such dramatic and consistent capital gains along with the intangible pleasures of ownership [...] that they are worth investing large sums of money in’ (Hughes, [1984] 2012). The 1960s had indeed seen the first real research into art’s investment properties: Richard Rush’s *Art as an Investment* (1961), followed by Gerald Reitlinger’s three-volume ‘watershed study of historical prices’, *The Economics of Taste*, published between 1961 and 1970 (see Horowitz, 2011: 153). As an exploration of the possibilities inherent in the field’s generative myth – the successful art fund prototype, ‘La Peau de l’Ours’, run by André Level in Paris from 1904 to 1914 (see for example The Art Newspaper’s article “The story of the original and greatest art fund”; Finkel, 2014; and also Picinati di Torcello, 2010; Oosterlinck, 2011; Accominti, 2014; Hodges, 2015; Lewis, 2016) – these gave legitimacy to formerly fringe curiosities, and by rendering large sets of auction price data available, inaugurated a forum for the testing of various hypotheses that would unfold over the following years.

The late 1960s also saw the initiation of the Times-Sotheby Index, which charted the prices of market-representative objects according to periodic value re-assessment by experts and was carried by the *Times* of London, *The New York Times*, and *Connaissance des Arts* (Ginsburgh et al., 2006: 964; Haden-Guest, 1996: 53). It was carried out by statistician Geraldine Norman, in spite of her conclusion than in principle ‘it couldn’t be done’ (in Haden-Guest, 1996: 53). By 1971 it was discontinued by Sotheby’s chairman – it was showing a declining market – and its spirit seamlessly revived in Cologne by Willi Bongard in an annual *Kunstkompass*, in which artists were ranked according to a tally of points awarded on the basis of exhibition and publication history. Interest by institutional investors, then increasingly dominant in capital markets (Deutschmann, 2011: 378), followed these efforts, among them Artemis (Luxembourg, 1970) and the British Rail Pension Fund (BRPF, 1975), and soon succeeded by more (see Chapter 2.3 above). ‘Investment syndicates’ notes Haden-Guest, ‘were heavily promoted as inflation shelters’ in the 1970s and early 1980s (1996: 75). As the critic Philip Hensher reflected in 2006: ‘by demonstrating that pictures could be thought of in this way, the [Times-Sotheby] index guaranteed that they would be’. Just a year after Sotheby’s had created a liaison officer position to mediate between the art and finance worlds, they partnered with Citibank (1980) for the first ever art-investment program – inspired by the BRPF – ‘to guide its wealthiest clients to the rewards, spiritual and temporal, of purchasing masterpieces to be held alongside the certificates from IBM and Exxon’ (Rosenbaum, 1979: 43). Much of this activity was aligned with a new ““tangibles” cult’ of which art was an exciting new variety (Chanin, 1990: 86). As it would be in the post-global-financial-crisis period, it was also driven by the ‘lacklustre performance of conventional investments such as stocks’ and its inflation hedge potential (Rosenbaum, 1979; see also Podgers, 1980).

Interest created deliberations over merit, and it is instructive to look at the reservations which here and there were articulated by observers. The BRPF had for instance caused a debate in the House of Commons where government endorsement of such art investment strategy, via its national subsidies to the BRPF, was questioned. Reservations, among them art’s high cost of carry, and the fact of art investments – unlike traditional ones – not paying dividends (Rosenbaum,

1979), would be echoed in Hughes' speech half a decade later. In an analysis of art investment, popular US magazine *Kiplinger's Personal Finance*⁴¹ would likewise caution readers over art's lack of dividends, finally advising the reader to do their research or hire an experienced advisor, and endorsing the bottom-line wisdom of 'buy[ing] what you like' (Anon, 1974: 21). Podgers, writing in the *American Bar Association Journal*, and Roy Neuberger (renowned art patron) both converged in 1980 on the same conclusion, the latter advising that most of all, 'buy art because you like it' (Podgers, 1980). James Feldman, writing 'The Art Investment Picture' for *Orange Coast*, similarly noted art's value as inflation hedge, its downside of lack of liquidity and dividends relative to equities, and the fact that ultimately one has to collect with the heart: 'look at the painting and decide if the artist is saying something to you' (Feldman, 1982).

The subject of Hughes's lectures was unpopular in 1984, and Bongard's analyses downright reviled in the 1970s, with the embers of avant-garde mythology still warm. But they would be more than vindicated by the three subsequent decades. The odd lingering contemporaneity of Hughes' analysis stems from his discernment of incontrovertible issues with the idea of art investment that seem to have become formalised only just in the past decade's attention to the subject but nevertheless recur, with staggering uniformity (if not frequency) over the past half century at least, always with the same claim to currency.

Self-help tomes like Shulman's *Anyone can make big money buying art* (1977) and Ackerman's *Smart Money and Art: Investing in Fine Art* (1986) capitalized on a fresh burst of interest in art investment in times of a booming art market, but were followed by more rigorous academic interest, front-run by Baumol (1986; see Chapter I). Ackerman had himself overtaken a failed art fund, Modarco, in 1979. A flurry of papers in the *American Economic Review*, the *European Economic Review*, and the *Journal of Cultural Economics* followed in the 1990s, both using and building on Reitlinger's original dataset. By 2000, industry interest started to burgeon once again. Randall Willette was then working on building UBS's art banking capabilities, implementing a global strategy for its integration of art assets into its wealth management service, before spinning out as Fine Art Wealth Management Limited in 2004. In 2001, former JP Morgan investment banker Anders Petterson founded ArtTactic, with the idea of crowd-sourcing art market data. By 2008, the vexed question of art's investment potential, four decades old at least, took on a new economic dimension and institutional force by the formation of the Art & Finance department at Deloitte Luxembourg, and the establishment of its annual Art & Finance Conference. It was followed by an annual Art & Finance Report, published with ArtTactic from 2011 onwards, that would instantly become the field's central and centripetal institutionalising force, pursuing a commitment to 'build[ing] a platform to encourage and facilitate sustainable relationships between the Art & Finance world' (2017: 16). Speakers at the conferences and interviewees in the reports came from the Finance Departments and Business Departments of universities and auction-house based institutes, as well as from the areas of wealth management and art investment advisory or insurance – the beginnings, in other words, of an ecosystem.

The head of Deloitte's new department, Adriano Picinati di Torcello, estimated that the world could be witnessing the emergence of a financial fine art market in which fine art is considered an asset class (2010). Writing nearly half a century after the first articles on art & investment, three decades after the first funds, this seemed indeed plausible, if somewhat late to the party. His vision was bolstered by the strangely timed hope, given the crisis, that securitisation

⁴¹ Known then as *Changing Times: The Kiplinger Magazine*.

techniques might, applied to art, poise it for the same financialization as the real estate market four decades prior. Art would become part of a ‘holistic approach’ to wealth management that includes ‘non-financial lifestyle services’ (2010: 15). In other words, art would be one area among others allowing wealth management to exceed its financial confines and seep into dimensions of clients’ lives hitherto insubordinate to its logic. Even then, familiar reservations remained legitimate: art is – lest it be forgotten – a high-risk, illiquid, opaque, and unregulated investment, with high carrying cost and risk. Moreover, art pays no dividends.

The cause could by then be made significantly more visually and intellectually compelling by the commercialisation of the econometrician’s work, namely the ascent of the Mei Moses Art indexes since the early 2000s (see Chapter 1). These went on to receive a ‘talismanic coverage’ in mainstream media (Horowitz, 2011: 159), being often used as a reliable reference in discussing art’s investment merits in a manner that clearly privileged its objective appearance and glossed over the contentious nature of its methodological underpinnings. It proved a sufficient crotch for financial commentators or advisors wishing to make or sell an argument about art investment, for either substantive or polemical value. In *Fundamentals of Investing* (Gitman et al., 2008: 563), the authors noted that the Mei Moses index ‘reveals the historical performance of art as an investment and asset class’. Indeed it became a short-form for technical expertise and financial merit; its epistemic mode key to enabling imaginations; its medium, to use McLuhan’s formulation, the message itself.

In 2013, Artbanc, a firm providing art advisory, collection management, as well as a trading platform linking trusts and estates together with the dealer sector, published an article by RBC Wealth Management directors Alan Binnington & Wayne Person, in which they asserted that art was now seen as an important asset class, due to current global financial climate, low returns in uncertain markets leading to more tangible investment appetite (as it had in the late 1970s), as well as art’s low correlation with other assets. Capgemini, in their 2012 report on global wealth had similarly noted that the financial crises had led many HNWI to view art holdings as an ‘important component in their overall investment strategy’, if ‘not strictly an alternative to financial assets’ (2012: 24). Research in art economics agreed: ‘art has truly come to be considered, more than at any time in the past, its own distinct financial asset class’ (von Habsburg et al., 2010: 32); and ‘Art is now accepted as a valid investment asset class’ (McAndrew, 2010: 19). A host of pronouncements, from increasingly authoritative sources, followed:

‘The art market has effectively become “financialized,” turning works into assets that can be traded like equities and commodities.’ (Fontevecchia, 2014; *Forbes*)

‘For better or worse, fine art is now firmly planted alongside equities, bonds, commodities and real estate as an asset class.’ (Stewart, 2014; *The New York Times*)

Then from higher up:

During that panel discussion in Davos, I sketched out three main ideas about art: That art is a new and separate asset class [...] (Nouriel Roubini, 2015)

And finally, from the apex of the financial pyramid – Laurence D. Fink, head of BlackRock Inc., the world's largest asset manager:

The two greatest stores of wealth internationally today is contemporary art... and I don't mean that as a joke, I mean that as a serious asset class (quoted in Burgos and Ismail, 2015)

Roubini's view, much reported, was qualified and hypothetical: subject to the ironing out of transparency and regulatory issues, price collusion and insider trading – towards which trends were already visible – art would become an asset class. Others in the market, however, were already affirmative, as if the now long & dull history of posing the question was itself a sufficient answer to it for anyone willing to move on.

On January 30th 2015, the Geneva Art Law Foundation hosted a conference on the question of how art shapes up as an asset class, and it was noted that irrespective of beliefs, it is at the very least considered to be an asset class by the tax authorities, though it was also pointed out that equities, fixed income and cash are the only agreed-upon asset classes from a private banking perspective (Luc Thévenoz and Frédéric Dawance, referenced in O'Donnell, 2015). As McAndrew points out, highlighting the infiltration of financial mentality: 'even collectors with the purest of aesthetic motivations would be highly imprudent not to consider some of the financial implications of their investment in art, at least to the extent that they might affect the value or tax treatment of other assets in their portfolio of wealth, or even what can be bequeathed to or imposed on the next generation' (2010: 24) – the question of taxes again supporting financialization. The Geneva conference was followed in February 2015 by the International Bar Association's two-day London conference on art as an alternative investment class.

Finally, in March 2015, Deloitte wished to put a lid on a question whose lack of resolution, hitherto, could reasonably be expected to hamper the realization and legitimacy of its investment in the vision of a financialized artworld for the better part of a decade. The focus of their annual conference was no longer whether art was an asset class, but whether art was not, in fact, 'More Than An Asset Class'. Still, this underhanded concealment was not successful: the panel discussion was less than unanimous in its views on the subject, reproducing the old caveats of illiquidity, transparency, lack of revenue, problematic lack of quality standards, etc. Michael Darriba, Director and UK Head of Lending and Credit Solutions, Deutsche Bank, resorting to time-honored wisdom, suggested collectors should perhaps simply buy art they love and respect (von Frank et al., 2013). Philip Hoffman of all people, head of The Fine Art Fund, the world's largest art investment fund manager, short-changed the idea when he proclaimed art, in his view, is *not* an asset class, offering the more modest explanation that it is simply the case that if you're a smart operator you can make money, and if you have the clout, you can bargain down transaction costs (*Ibid*). The problem of scale needed in practice to reap the benefits of diversification was also raised, given that a diversified portfolio in art would demand about \$100 million dollars, which itself should ideally occupy a total of only 5% in the overall portfolio, thus severely limiting the pool of investors able to profit from this particular quality of art individually (while also justifying the existence of art funds). An audience member finally interjected that, after 20 years in the art market, 'I can say that investing in art to make a profit is more or less a pure gamble unless you have insider knowledge' (in von Frank et al., 2013). The question of art's

financial status thus appeared far from clear-cut, and yet, the increasing audience size across the conference's years, with members from increasingly important global institutions, nevertheless attested to the tremendous growth in interest that the field has attracted.

This point has not been lost on Hoffman, who has often used it to illustrate art's progression from obscure infancy to artworld limelight. According to Hoffmann, he first proposed investing in art to the Christies board in 1994, by which he succeeded only in eliciting the chairman's revulsion and contempt: 'over my dead body will we ever discuss investing in art, its vulgar, we don't do it, our clients don't do it, and Christie's has no intention of ever going down this road', he recalled the chairman saying (in Bültmann et al., 2012). In 2000, when Hoffmann had first started talking about investing in art and was establishing The Fine Art Fund, he was talking to an audience of only six. By 2012, that audience had grown to over 200, and the Christies team were praising him, saying 'how wonderful investing in art was' (*Ibid*). By 2013, The Fine Art Fund had assets under contract just shy of a quarter billion dollars (von Frank et al., 2013). Come 2015, CNBC reported the firm had grown to over five hundred million dollars under management (Schwartz, 2015), with predictions that it could reach a billion by 2017, and had over 120 clients from 23 countries (Hoffman in Viveros-Faune et al., 2015). Financialization was not going to let itself stopped by either practical or theoretical considerations: the capital exchanged for art sufficiently defied such hindrances. As put by Emilie Villette, Business Development Director of Christie's France, with a hint of exasperation, it is the fact of the increasing value of artworks, and therefore the financial stakes in them, that demonstrate '*as if it were still necessary*, that art has become an entirely distinct asset class' (Deloitte & ArtTactic, 2017, p. 147; emphasis my own).

Questions can be used to assert their assumptions. The iterations of art & finance's central question is illuminating. From: should art not also be bought for pleasure, given the unreliability of its investment characteristics? To: can art realistically be bought for pleasure with no consideration of its investment characteristics? If it is not quite possible to assert that art investments can be systematically carried out, it is possible to argue, instead, that it is imprudent not to consider financial returns when collecting. In this manner, traditional collector motives become suffused with finance.

Quantification: Communication / Orientation

Robert Hughes was right when he described the cultural engineering project of art investment as one of 'convincing'. 'Proving', would not have been apt.

The preceding analyses, in Chapters 1, 2, and here, illustrate a number of related points. The clearest is that half a century since the question was first taken seriously, the debate over art's status as an investment is still largely the same: interest in it emerges from the same considerations, reservations turn around the same points, and consensus over appropriate calculative methods and formats remain elusive for much the same reasons. The old news of art's impending financialization is permanently announced anew, constantly referred to the near-future, in articles that are each other's close avatars. And yet, from a mere suggestion testing art's fourth wall and quickly reverting to protective, fatuous platitudes of buying with one's heart, art *has* become broadly accepted – especially among companies servicing it – as pertaining in part to the

expertise of finance. Any concessions now to the subjective basis of collecting seem either a nostalgic homage to a passing epistemology or a stop-gap remedy intended to compensate for still unquantifiable risks; bridging the time to the resolution of data's continuing weaknesses. It is a means of buying time without attracting controversy, while the real work of expanding the reach of financial rationality continues in the background. The transformation, clearly, has not been substantive, in terms of reflecting the real success of quantification *per se*. It has been what we might call cognitive. Or cultural. Or hermeneutic. Or epistemic. And it has been sufficient to both shape and aid the motives of enterprise.

Five decades of discussion have thus given us art as an asset class through the sheer visibility given to the idea, through the force of repetition, anchoring, and framing, notwithstanding lack of resolution of its numerous objections. The art market, having always been built on belief, perhaps requires no other quality for its financialization.

This is not to take a view that current methods fall short of a pure form of objectivity, but to highlight the contingent and motivated nature of a process that is 'consistently partial' and which 'consistently (if not invariably) favour[s] specific interests in society and disadvantage[s] others' (Cooper & Sherer, 1984), in this instance interests in valuation's capacity for 'crafting new opportunities for profit' and for 'expanding [...] jurisdictional authority' (Fourcade, 2011: 1723) – that of wealth managers and wealth owners, for instance, or that of index-makers. The process of quantification has so far produced no contender for dominant design with a clear and lasting legitimacy over others: the field is too fragmented, and calculative agencies polycentric. But it has in and of itself affirmed 'that objectivity is a feature of certain kinds of empirical *practices* that are, by their nature, engaged in by particular kinds of concrete subjects, caught up in complex and often unequal power relations, in the course of trying to disclose particular kinds of concrete phenomena' (Kukla, 2008: 287). As Muniesa writes of financial valuation throughout the crisis, 'it was indeed and above all quite an activity' (2012: 27). So too has it been in the art market.

Within enterprises; among professionals from different niches of the art market; between providers of art & finance services and clients; and from the journalist to the reader; the spread of the financial episteme indicates an important sociological process has been taking place. It is what March & Simon have called 'uncertainty absorption' (March & Simon, 1958, p. 165; see also Carruthers, 2013, p. 532). Uncertainty absorption occurs when inferences are communicated absent the underlying evidence and assumptions behind the data, with the effect that 'numbers appear more authoritative as they move up a chain', paralleling 'the authority of its handlers in the hierarchy' (Espeland & Stevens, 2008: 422), in our case the authority of media outlets, financial firms and institutions, high profile economists and financiers, advisors and other market positions defined by their expertise relative to 'lay-people'. It relies on harnessing the performative capacity of these inferences by making the inferences themselves taken-for-granted, an effect it achieves through sheer scale of circulation; that is through effects of commonness. It uses to its advantage the fact that, in words ascribed to Samuel Johnson, 'chains of habit are too light to be felt until they are too heavy to be broken'. The slow building of buy-in around an idea leads to acceptance, and that acceptance, unwittingly, finds itself reproduced as acceptability; the promise of resolution sufficient for anticipative action. Accretive uncertainty absorption produces coalitions of private companies and individuals who form an ecosystem invested in an idea that is thereby crystallised, no longer a question, but a given, hypostatised in its new network itself.

Such a view corresponds to a constructionist attitude, underlining that the perceived legitimacy of the data, according to (and accorded by) the breadth of its circulation, is a product of vested interests in its use. As Miller and Napier construe it, ‘the question is not whether particular methods are inherently “rational”, so much as whether adherents of the methods promote them as rational’ (1993: 641, emphasis my own). In this case, the authority imputed to quantitative analysis of art and art prices is ‘a function of how successful groups have been in securing its durability and legitimacy, in making it seem inevitable’ (Daston, 1992: 419). As art critic John Seed puts it, ‘it is an accepted fact now that works of art can serve as financial instruments just like stocks, bonds or precious metals. If you want to check the value of Jackson Pollock as a “stock” you can use the Mei Moses® Fine Art Index’ (Seed, 2014). In this respect art’s quantification can be said to have ‘satisficed’: it may not have proven or settled divisive issues, but it has created a new cosmology around art to discuss them, a nomenclature of terms from finance that constitutes a new way of thinking art.

Art economist Melanie Gerlis has pointed out that it is helpful ‘to back up hunches with what look like hard facts, via graphs and charts, and art-advisory firms include these in their swish-looking investment packs on the individual artists and markets in which their clients have an interest’ (Gerlis, 2014: 38). Countless journalists have given valence to their opinions on the basis that ‘the Mei Moses Index shows [x]’. The effects of analyses within reports is increased manifold by the formal and informal media and marketing materials that in turn reference it, such that due consideration for the specific circumstances under which their inferences were valid is eventually lost. These echoes produce a surrogate of objectivity, empirical validity, professionalism, and market maturity that is quite apart from the actual value and soundness of original metrics. To ‘look like’, as Gerlis writes, is the operative mode: calculation here ‘serves to construct a particular field of visibility’ (Miller & O’Leary, 1987: 239).

Horowitz has alluded to this performativity of art market data and indexes: ‘It cannot be emphasized strongly enough’ he writes, ‘how important it has been for these economists to lucidly translate the theoretical benefits of art investing into intelligible economic jargon. This had the watershed ability to open the art market to a world of modern, global finance from which it had long been distinct: on paper at least, art could now be championed as a dynamic “alternative” asset class’ (Horowitz, 2011: 159). Our analysis supports this perspective, though suggesting also an ability of the jargon to change our relation to art in a way that is both humbler and more fundamental. While data has not sufficed in guiding quantitatively optimized investment decisions, it has sufficed as a new heuristic for reframing the act of buying (even collecting) art by placing the transactional nexus at the core of art’s ontology. As Ehrmann has explained of his firm: ‘after the work conducted by ARTPRICE, an artwork possesses a veritable I-D that allows it to participate in dematerialized trading’ (Tradingandip.com, 2014). The phrasing, here, is important: transactional history replaces art’s identity, grafted by an operation into its DNA, in turn freeing it for circulation as a financial object. The point is also clear in Picinati di Torcello’s emphasis on the importance ‘that art markets structure themselves by recognising an index, such as the S&P/Case-Shiller home price indexes created 20 years ago’, because this would ‘ease and increase the use of art as an asset class’, potentially poised it ‘for a similar transformation to what happened to real estate 40 years ago’ – which in turn was key to the global financial crisis of 2007-2008 (2010: 21). There is thus the individual artwork’s ‘I.D’ at the micro level, and the market ‘I.D’ at a macro level. Here again, the ambition is ontological: the art market should be

reconfigured and standardized around the image of its aggregate transactions over time. The appellation ‘World All Art Index’ by Mei Moses for an index covering only works that have sold repeatedly at either Sotheby’s or Christie’s for instance approves of the idea that the market is the site where art is defined as such, crystallizing the connection between its identity and its transaction history.

Hensher, writing in 2006, observed the effects of quantification on the changing perception of what drives value: ‘There are, now, only relative bargains, not absolute ones. What matters is a signature and a clean provenance; for those reasons, the market has settled on the well-documented careers of artists from the past 100 years or so, and contemporary artists have acquired a value – that of provable authenticity – that was never a primary factor before’ (Hensher, 2006). In this instance, the characteristics that determine the risk in resale value have actively informed purchasing behaviour and taste in the art market. Similarly, as noted in an industry volume on wealth management, in discussing the effects of another art index: ‘The art market is attracting such interest these days many HNWIs, even those that are not passionate about collecting art, now view paintings, drawings and sculptures as viable investment vehicles for diversifying their portfolio’ (Essvale Corporation Limited, 2008: 121). The normalization of the idea of art as a store of value and investment has no doubt contributed to the growing market acceptance of rapid returns to market (in the process improving the robustness of repeat sales indexes that may have caused it in the first place), decoupling the investment performance of art with its holding period. As Jeremy Eckstein points out, whereas conventional wisdom used to prescribe a minimum of seven years for costs to be recouped, now it is only a couple (in Pownall et al., 2013). As a result, Skate’s have detected a marked increase in the share of repeat sales at auction, up to 40% in the over \$20m category, meaning the share of new works among high-end sales is declining even as liquidity is increasing (Skate’s, 2015a).

More than providing empirical conclusions, the function of calculative practices is communicative. In their ability to communicate clearly and concisely, they trace the boundaries of – and give an internal coherence to – a new community of practice & interest that is thereby reified into existence. What they communicate, however, is not a set of specific numerical differentials from point to point over time, but the fact of financialization itself: the medium, again, is the message. In this sense, the influence of the outputs of quantification are meaningful in part in their capacity as image, rather than as calculation: they are the marketing of finance. What the increasing reports, firms, investors and conference participants show is a community that has sprung forth not from the attainment of objectivity (whatever that is taken to mean) and the accomplishment of financialization, but from the enshrinement of objectivity and financialization as defining and orienting aspirations – which is exactly what the index symbolizes – and the creation of solidarities around it.

Such observations accord with what social scientists know of the history of ‘objective’ forms of knowledge in their social production. Lorraine Daston has shown that in the nineteenth century, norms of objectivity and calculative practices emerged to meet the requirements of coordinating and enabling communication within an expanding scientific community guided more by arms-length relations and heterogeneous contacts than the interpersonal bonds that previously structured the much smaller scientific field (1992). The goal of communication itself was embedded in the scientific process, causing a ‘contraction of nature to the communicable’, and helping to keep together the field as such ‘not only by invisible girders that stretched across

national and linguistic boundaries in the form of international journals, commissions, and congresses, but also by the filaments that criss-crossed levels of skill, status and training' (1992: 608). As a result, the claims to objectivity of certain modes of quantification were determined by their ability to fulfil the demands of communicability more than their empirical robustness (Porter, referenced in Daston, 1992; Espeland & Stevens, 2008). Objectivity was to this extent the unambiguous style necessary for communicability, communication the *a priori* of objectivity, and calculative practices only possible 'in the process of knowing in networks' (Vosselman, 2014: 198). As with all communication, shared standards in turn define 'communities of interpretation' wherein this communication is optimal (*Ibid*: 404). This historical view conforms to the conclusions drawn by Espeland & Stevens, based on the actor-network theory of Bruno Latour and Michel Callon, that 'the authority of numbers, like that of scientific facts more generally, depends on establishing networks among objects and humans that become so sturdy they are no longer disputed' (Espeland and Stevens, 2008: 412).

Something similar is arguable here, namely that the communicative demands of a market globalizing in demand, supply, and market players, comprising stakeholders across cultures and buyers linked only by their wealth, created the conditions in which numbers and market information could become a preferable form of knowledge by virtue of its being non-linguistic, immediate, and authoritative. It is no coincidence that this process has only gained enough momentum to engender an ecosystem as wealth has both become more globalized, the Internet has facilitated instantaneous communication, and the size of the art market has exploded. That finance 'dictates [the] forms and contents' of neoliberalism, itself 'the ideological expression of the reassertion of [its] power', is a hegemony that 'was accomplished in close connection with the internationalization of capital and the globalization of markets' (Duménil and Levy, 2001: 578), whose coordination, we argue, it provided a new language for. In this sense, quantitative practices, carried out by various organizations and individuals, can be said to be in the service of what Edwin Hutchins has called 'distributed cognition' (quoted in Espeland & Stevens, 2008: 412), embedding these practices into 'enduring structures that shape and constrain cognition and behaviour' and giving them 'starring roles in the interactions that produce reality' (*Ibid*: 418-419).

Quantification: Embodied Capacity for Action

From the perspective of building a market, a fundamental contribution of indexes is their representation of the market according to the logic of the profit motive, a contribution achieved through their wide broadcasting and channelled by their communicative function. Putting profit at the centre of art has ramifications for how transacting with art, both relationally and economically, is structured: maximizing it means that taxes matter, holding costs and holding structure matter, transparency and asset pricing matter, downside protection – and its cost – matter, transaction costs and contractual relations matter, and, finally, the relation of art to other assets in an individual's ownership matters. The optimization of such variables, once designated as such, opens economic opportunities for individuals and firms that are able to do so, or advise on how to do so, and creates incentives for the market as a whole to aspire towards their own financial regulation. New areas of potential economic activity call forth new research and new reports, which in turn rope new domains of interest into the greater sphere – insurance, loan markets, art &

business, online markets, taxes – coordinating them with the existing (though still burgeoning) field. On the basis of the profit motive, recast in the terms of finance, a parallel organizational ecosystem to the traditional art market, subspecies from finance, comes to form, drawn together under a new episteme.

Art indexes, impotent in their inability to be traded, nevertheless have an anticipatory potency. Their process of quantification and communication, like valuation for Muniesa, is ‘about considering a reality while provoking it’ (2012: 32). Embodying its expectation, they seek to will into existence the rationalisation of the transactional environment, where the market is reproduced as paragon of neoliberal principles of objective calculations of supply and demand such as are enshrined in the prices of art over time. The anticipatory potency of indexes arises from the fact that their limitations become more problematic the more the models become fundamental to, and embedded in, the functioning and legitimacy of a burgeoning ecosystem of actors. It is one conclusion to say the models should improve their fit to the market and quite another to say the market should improve its fit to the model, as if the model had revealed the real potential of what the market could be, and so as to improve the accuracy of the model’s measurements. ‘The picture’, Espeland and Stevens write, ‘becomes its own subject, replacing, in the comprehension of observers, what it originally was intended merely to depict’ (2008: 426). And yet such ambitions emerge easily as one connection to a new field – here financial markets, through the cooptation of its quantitative representations – highlights and even problematizes what are now apparent as the remaining differences.

The dispersion of the art market is principally an issue as a dissonance from its indexical representation, and as an impediment to the efficient movement of finance capital which cannot therefore immerse it at a sufficient scale, with the sufficient contractual protections, bodies of regulatory oversight, and with sufficient speed of entry and exit, to be worthwhile. Transparency and the unregulated nature of the market have remained a challenge principally from the perspective of their incorporation into the service offering of wealth managers or private banks and family offices (Deloitte and ArtTactic, 2017: 101). Indeed, lack of systematic information about art is only highlighted by the fact that art is called an asset class that can be knowable quantitatively, drawing investors into the art market only to leave them frustrated by the fact that lack of information is hampering the quantification that was supposed to enable investment in the first place. As Jeremy Eckstein from ArtBanc has unwittingly pointed out, it is because very sophisticated models are being built on sparse data and prices that are not transparent that the industry needs to resolve the issue of better pricing so that modelling can fulfil its potential (in Pownall et al., 2013). Likewise are investment desires frustrated by the practical drawbacks of the market relative to other asset classes and what the new investment frame has now re-categorised not as mere inconveniences or as mere costs but as constraints on returns: transaction costs, taxation, carrying costs, and so on. It thus follows that such drawbacks should be lobbied against – as Roubini did at Davos – and such constraints mitigated, generating an impetus behind an entire art related industry of such services as tax-advisory and collection management that, through their particular mechanisms work to further the financialization of the art market.

The goal of investment means the art market should also be better regulated and institutionalised to facilitate it: transparency should be improved; certifications, best practices, legal frameworks introduced; new agencies monitoring the market created. As written in the Art & Finance Report 2016, ‘as the value of art increases, so does the expectation of fair play’; in this

respect, ‘stakeholders in the art market *can learn from regulated financial institutions* and gradually implement essential measures’ for instance the ‘know your customer’ (KYC) rules that exist in banking, deal transaction monitoring, professional and qualification standards, and other measures that could reduce a variety of risks (20, emphasis my own). What may start as analogies, such as that between art and financial assets, thus nevertheless provoke real consequences, for analogies are tools that enable new kinds of cognition; their terms intervene in framing action by creating new referents against which either element can be measured, allowing new, hitherto inextant differences to be formulated. The notion that the art market may seek solutions to its woes from financial institutions arises purely from the strength of such an analogy. By the publication of the 2017 Art & Finance Report, authors Picinati di Torcello and Petterson were pleased to finally note a ‘convergence of different stakeholder initiatives when it comes to improving art market transparency and the infrastructure around the management of art and collectible wealth’ (2017: 14).

Voices lamenting the distance of the art market from financial markets, or from those of their features which investors prize, are today a dime a dozen. Robert Barrington, executive director at Transparency International, has remarked on the deficient regulation of the art market, describing it as a regime that is ‘just too dispersed to be effective’ (quoted in Spero and Pickford, 2016). Among the professionals surveyed in the Art & Finance Report 2016, 60% of wealth managers saw lack of transparency as the biggest challenge to ‘the future development of the art and finance industry’ (66). Pownall similarly points out how the ‘lack of regulation and systematic market-wide risk management practices’ prevent the art market from growing too large, namely because no transparency and no liquidity means large financial institutions cannot mark-to-market on a regular basis and therefore cannot abide by their stringent regulatory margin requirements, meaning they often cannot consider investing in art (2014: 168). Kemp Stickney, Head of Family Wealth and Chief Fiduciary Officer at Wilmington Trust, concurred at the 2015 Art & Finance Conference that the current regulatory environment for financial institutions means that they don’t want to have art on the Profit & Loss sheet when they do not have the expertise necessary to make art regulation-compliant. The 2014 Art & Finance Report expresses a similar view, noting that ‘the overriding challenge for the development of the Art & Finance industry remains the unregulated nature of the art market’ (Deloitte and ArtTactic, 2014: 16). Indeed, as a result of these shortcomings in regulatory structure; information availability; clear title; as well as of the vague fiduciary duties of new intermediaries such as art advisors; ‘the art market is falling short of meeting the legal expectations of an asset class’ (*Ibid*: 119). Bocart even estimated in a November 2016 interview that if the right information and transparency were to ‘stimulate’ the art market by bringing banks, hedge funds and investors into it, it could jump from its current \$60 billion value to as high as \$1 trillion (Hanson, 2016).

The publicity given to such limitations intervenes in the social world. It both forewarns individual participants of the need to try to overcome them, and indicates a new opportunity space for businesses that believe they can provide the solutions for doing so. According to the Art & Finance Report 2016, art market transactions are already ‘moving from informal arrangements toward a market where careful due diligence and written agreements are becoming more common’ (20). A number of firms have also emerged seeking to use technology to redress regulatory, fraud and copyright risks, finding epistemic synergies between tech and finance as two forms of technocratic expertise. In this space we for instance note the existence of Ascribe, a firm which

aims to be a ‘notary and timestamp for intellectual property and creative works’, particularly to help digital creators (Hiscox & ArtTactic, 2016: 6), and Rhizome, which focuses on the safe preservation and promotion of digitally based art. We note Everledger, which, like Vastari, uses the blockchain technology of distributed ledgers to record provenance, thus helping in the securitisation of artworks for lenders and opening ‘the opportunity for a global “title” register for artworks’ (Deloitte & ArtTactic, 2016: 22); and we note Verisart, who use the same technology for the certification and verification of artworks (Hiscox & ArtTactic, 2016: 6, – see pp. 17-20 for more examples). The reason for this growth is not mere opportunity in addressing the barriers to financialization; it is also that the remaining obstacles to the further growth of the online market itself are, in fact, surprisingly similar, including the need for better condition reports, certificates of authenticity, and better customer protection policies (Hiscox 2016: 11; see also Deloitte & ArtTactic, 2016: 22). Other tech firms have focused on improving support services to help the market function more efficiently, looking at collection management systems or logistics (Deloitte & ArtTactic, 2016: 19). As gaps are plugged in its functioning by natural market dynamics, we can therefore expect more from the relationship between the Internet and financialization. The previous chapters were an exploration of this phenomenon, looking at firms that capitalise on the perception of a quantitative and investment potential in art in order to help facilitate its realization – such as firms specializing in tax advisory, in wealth management, in the tax-efficient storage of art, in the capital efficient investment in art, for instance through funds, or in its securitisation for the issuance of credit.

The deep connection between numbers and activity in the course of financialization is what could be called the former’s embodied capacity for action: the extent to which numbers, their uncertainty ‘absorbed’ institutionally, format and orient the possibilities afforded by that which they measure. As D. Mackenzie has shown (2006) model and reality always feedback into one another. The whole of art’s financialization proceeds from the interplay between numbers, the legitimacy they can marshall, and the actions that can be taken in markets based on such legitimacy, the ways such action in turn require more calculation, which in turn formats new kinds of action – even as quantitative measures were themselves developed only to try to explain prior actions – including those of Level and his *Peau de l’Ours*. Given this, the fact that a number of data-providers such as Artprice and ArtBanc have, in a second instance, also created their own proprietary art exchange platforms, is organic: it is the logical conclusion of data. As Wertimer & Barnes, of ArtBanc, have illustrated, it is the exposition of the auction system’s inefficiency through ‘objective facts, figures and data’ that constitutes a ‘strong economic support for an alternative sales system for fine art’, on the model of the Multiple Listing System (MLS) used in the real estate industry, or financial exchanges generally (2015: 8, 17). Likewise, that commercial houses have integrated data capabilities such as those of Tutela Art or Mei Moses to enhance their provision of art-based financing solutions speaks to the affordances discerned in quantification.

Quantification: Radical Disruption?

Whereas primary art market discourse polices boundaries and adds value through exclusion, a more generalized form of Accomino’s ‘relational purity’ (see Chapter 6), the majority of organizations who sell or explicitly use data on the art market promote themselves

through apposite notions of consumer empowerment, democratization, and thus disruption, reform, and transparency. The project is a disruption to entrenched interests that demystifies, revealing what the primary market obscures. Where the primary market achieves the surfeit of value in the artwork by keeping unspoken its interests in doing so, and maintains clear symbolic distinctions between the space of art and that of commerce (Velthuis, 2007), the art & finance market distinguishes itself by precisely fore-fronting information about, and its interests in, the transaction of art. Its affront to traditional commercial circuits is laden with binary imagery of lightness vs. darkness; visibility vs. invisibility; disruption vs. tradition; the promise of total quantification enacting an ‘amateur revolution’. It is taken for granted that the revelatory potential of statistics and their special social position in relation to the production of facts, merged with their authority and apparent impartiality, naturally links them to the twin projects of democracy and liberal society, which will in turn make them valid business model components and rich marketing seams. As Espeland and Stevens write: ‘we live at a time in which democracy, merit, participation, accountability and even “fairness” are presumed to be best disclosed and adjudicated through numbers’ (2008: 432).

Such pronouncements, part of the communicative apparatus of numbers, delegitimize the singularity of connoisseurship and historical expertise as mode of knowledge and further diffuse the hegemony of neoliberalism as a mode of discourse (Harvey, 2009: 23), in which numbers constitute ‘powerful symbols of social order’ (Samiolo, 2012: 383). The ‘scientificity’ of calculative methods is thus constructed not merely by procedural consistency and communicative efficiency, but contrapuntally by the othering of existing systems, recast as opposition. It relies on the important ‘rendering suspicious of the inadequacy of lay knowledges and practices’ (Miller & o’Leary, 1987: 252), or the downgrading of ‘embodied knowledge’ (Leyshon & Thrift, 1999: 434). Through this process, a variety of forms of knowledge are curtailed to give rise to ‘a peculiarly modern ontology, in which the real easily becomes coextensive with what is measurable’ (Espeland & Stevens, 2008: 431). The marginalization occurs not by displacement, however, but by subsumption.

Arch-propagator of quantification, Rivera, the head of ArtRank (Chapter 1), for example notes that he ‘had always imagined that it would be most important to advise someone based on some kind of objective measure’ and that he’s ‘from the generation that believes everything can be quantified’ (in Goldstein, 2015a). He acknowledges in an interview that he ‘felt some degree of an obligation to tell people exactly how it worked’ (*Ibid*) and that thanks to his work ‘for the first time ever, these amateurs have been empowered in the art market’ (in Goldstein, 2015b). It is implicit in the discourse of calculative agencies that the ‘non-initiate’ target audience does not possess the same status with regards to financial literacy, which acts as their epistemic gateway to understanding the art market. He terms it ‘the amateur revolution’. Art economist Clare McAndrew writes of the ‘older art elites’ who are uncomfortable with the ‘modern art market’ which has seen its ‘opacity’ begin to ‘slowly lift’, and opposes the ‘special position that art occupies in the fabric and culture of societies’, almost a caveat, with the ‘reality’ – which only one type of expertise has access to – that it operates ‘within an economic framework’ (McAndrew, 2010: 2, 19). Ditto the short run of the ‘Tutela mythbuster’ series, in which commonplace art market preconceptions were quantitatively challenged; or Magnus, the new app by Magnus Resch that seeks to crowdsource from and make available primary market prices for users, thus ‘equipping nonexperts with the knowledge of an expert’ (Resch quoted in Tarmy, 2016). A final

example is Artprice, self-styled ‘primary “disrupter”’ which has sought to ensure that ‘in just three mouse-clicks, the *non-initiate* can compare the price curves of two artists and check the performance of an artists versus the Artprice Global Index’ or ‘major stock market indexes’ (Artprice.com, 2015b: 127–30). They aim to regenerate ‘the knowledge revolution that took place during the European Renaissance’ – that is, to replicate the effects of the printing press, which expanded knowledge horizontally – through the internet (*Ibid*).

To be sure, the art market is inefficient from a financial perspective and bears similarities to markets that have for this reason been ‘disrupted’ in the past. As Sotheby’s art market expert Iain Robertson has noted, ‘the international art market is the sole mechanism for conferring monetary value onto art and antiques’ (2016: 13), and because it is ‘imperfect and difficult to access’, it ‘has the novice at a disadvantage’ and can therefore permit insiders to charge a high price for sound information, which is ‘impounded into the commission by both auction house and dealer’ (*Ibid*: 16). This high information cost, borne by those who transact through these intermediaries, is compounded by the potentially ‘calamitous’ cost of poor information, as multiple court cases and scandals have historically evidenced (*Ibid*). In addition, the art market is well insulated by high psychological barriers, the ability to overcome which – through knowledge of the ‘rules of the game’ and the right ‘aesthetic disposition’ – constitutes its own form of capital (Bourdieu, [1979] 1984). Touting their technological clout over the brick-and-mortar players of the art market, data-providers, have led a moral crusade to decentralize expertise and rebalance the asymmetries that make price-makers of galleries, dealers and auction houses (Velthuis, 2007). Their positioning is clear on the power of numbers, reproducing Hoskin & Macve’s notion of ‘the two complementary functions of control’, namely: ‘(1) to be a check on the essential accuracy of data and the honesty of functionaries and (2) to produce a condensation and clarification of data enabling a critical overview of the wider situation’ (Hoskin and Macve, 1994: 76). In this context, the art market bears similarities to the financial market Frederick Nymeyer, in a similarly moral and disruptive effort to create the electronic order book, sought to reform in the 1970s. Here too the innovation, making transactional data widely available, was intended to empower buyers and sellers in the pursuit of fair transactions, eliminating the need for intermediaries (and their private order books) who had rendered the maintenance of a fair and orderly market difficult and open to the possibility of manipulation (Pardo-Guerra, 2013: 23).

The envisaged ‘amateur revolution’ of data providers in the art market, ostensibly aimed at changing the outcome of an interaction with art or at inviting one in the first place, can however also be treated as aiming to change the premise of the interaction, namely that it only happens with individuals in their capacity as consumers. Given this, the new desire among start-ups, financial organizations, online marketplaces, or even art fairs, to educate their clients about art is clear enough in reflecting the financialization of art in general: their aim is the formation of consumers by equating knowing art with knowing the art market. Insofar as the virtual sphere of the Internet can operate the fusion of data and artwork (for instance in collection management software), insofar as it is privileged by the fact that the movement of consumers within it leaves behind it usable data, and given the promiscuity of the functioning of social media with the functioning of price, it is clear that digital technology emerges not as challenger but as handmaiden to the project of total financialization in which numbers are ‘a constitutive element in a form of normalising socio-political management’ (Miller & O’Leary, 1987: 240). In branding itself as a radical project on the side of the individual (as consumer) against an opaque behemoth,

ideas of equitability overlay finance to glaze over the supplanting of a cultural elite by a technological elite that would clear the way for capital to move more freely across an expanding universe of transactions and vehicles against no change in the volume of goods that forms their basis. This framing is important. As Miller & Napier note: 'it is through the distinctive vocabulary attached to particular ways of calculating that individuals can be persuaded to accept new devices and give up existing ones' (1993: 641). Quantification 'usually is embedded in larger social projects' (Espeland & Stevens, 2008: 411), it possesses, like accounting, 'a distinctive programmatic ambition' (Miller & Napier, 1993: 633) – perhaps that which Sandel describes as moving from 'having a market economy', to 'being a market society' (Sandel, 2012).

Conclusion

The link between quantification and financialization is on a direct level clear: the former facilitates the latter. Measuring returns leads to questions regarding which factors affect them, and how they can be improved, which in turn leads to the development of relevant fields of expertise, and hence new services related to minimizing transaction costs. Advisory services exist to devise strategies pertaining to mitigation of value-added, capital gains and inheritance taxes in different jurisdictions; law-firms develop competences to provide services fulfilling this advisory as it regards the formation of off-shore holding companies, trusts and succession arrangements; freeports enable the logistics to be carried out in anonymity and without tax burdens, financial services enable the use of leverage, or give loans that can be used to synthetically diversify a portfolio if it is not optimized; insurances develop products to underwrite some of the risk of creditor institutions, or to themselves aid in mitigating taxes; new investment vehicles such as art investment funds emerge to meet the requirements of diversification within the art collection itself, based on data suggesting that different art periods function differently as art markets and can therefore be used to create a collection as a portfolio at the 'efficient frontier' of a predefined risk, as well as to provide access to world class insider knowledge – and so forth. Each of these in turn disperse finance specific art market knowledge through their own transactions with auditors, accountants, regulators, depositaries, transfer agents, their employees and the labour market, creating new pools of expertise that are sustained in the continued commercial activity of these new fields. In exercising financial rationale through their particular priorities, art is dispersed through and fitted into legal frameworks, established practices and norms originally designed for other purposes. Thus the process of financialization, and the creation of a market for art finance, can be described as an emanation of linked chains of supply and demand rather than a single binary model, each eliciting each other and feeding back into their generative system, each link carrying new capacities for action, in a spreading rhizomatic reticulation. In this respect, orthodox economic principles describing the emergence of markets through the spontaneous supply and demand activity of self-interested agents connects with network theory's relational perspective in the creation of a field that is both informed by and which in turn embodies, reproduces and informs a financial episteme.

In practice, in spite of its 'stumbling blocks', and aside from the mechanics highlighted above, quantification has succeeded in fomenting a self-sustaining interest in art's financial potential whose scale itself, though based on a question, has eventually come to stand in for an

affirmation that art must have investment potential. Mac MacLellan's ability to write, on CNBC, to take a mundane example, that 'it also *pays* to learn about the artist's life and times. [...] note any prestigious awards or fellowships the artist has won, academic positions held and notable collectors or museums with the artist's work', because 'that information can offer positive indications about *the long-term value of a piece*' (MacLellan, 2015; emphasis my own), is entirely engendered by research on art's investment potential, which validated the introduction of financial discourse into the artworld. Therefore, the competing conclusions on art's investment characteristics are in reality dwarfed by the new nomenclature they have brought to bear upon art in discussing it; legitimizing new forms of thinking and talking art, and new positions of expertise in doing so.

Its theoretical considerations have bolstered the development of the art advisory, freeports and art fund sectors. Conferences and annual market overviews have served an anticipatory function, ring-fencing interests into their project, creating a sense of community, and serving to start formalizing the ecosystem envisaged for an art & finance industry – an ecosystem which enshrines its governing orientation. As discourse, the financial episteme has given a new lease of life to sellers failing to connect with new demographics on the basis of cultural capital, exploiting its moral value as disruptive and potentially democratizing force. As a result biographical, historical and institutional elements about artists can now, as MacLellan suggests, be valuable in terms of their effects on perceived investment chances.

Chapter 4. Financialization & Inequality

Introduction

The previous chapters have sought to describe both the content and mechanisms of financialization in the art market. There exists in fact a growing body of literature on the process of financialization in late capitalist economies in general, which, to my knowledge, has not been substantially explored in relation to the financialization of art (David Beech, 2015, comes closest to doing so). This is curious: the financialization of the art market as an ongoing project that started at the market's fringes and is slowly suffusing its mainstream, must be understood in the broader context of the transition of the global economy itself from industrial to financial capitalism in the latter part of the twentieth century, because it is its extension. It is therefore incumbent upon any student of the financialization of art to recover some of the insights of the rich and growing academic literature on the subject that has flourished in the twenty-first century in particular, including the tools and concepts with which the phenomenon of financialization is articulated.

Among these, is inequality of both income and wealth. Looking at the increasing share of national incomes derived from financial activities of non-finance sector corporates and the consequent disenfranchisement of labour; observing a fall in capital expenditure in favour of distributions of profits to shareholders and other financial instrument holders; or discerning an increase in the reliance on debt of labour to compensate for wage stagnation (debt that is often provided by the very corporates who have redirected capital towards financial instead of productive activities), this body of literature establishes clear links between the systemic expansion of finance and both inequality and the financial instability that in the long run impacts the poorest members of society the most.

Inequality, in turn, is profoundly connected to art's financialization. The increasingly unequal distribution of income and wealth in the world's major economies since the 1970s-1980s is the means by which the wealthiest members of society increasingly exert particular pressures – via their consumption preferences – on economic organization, which responds by re-structuring itself around the economic incentives which their changing profile, more than that of any other group, engenders. The project of quantifying the art market through prices, of reifying it, rendering it visible and thinkable as a coherent entity, was indeed transformed from a merely intellectual-ideological technocratic project into a legitimate professional ambition only once inequality made its potential insights valuable, and the practices they inform worthwhile. We mean 'valuable' insofar as inequality increased the prices of art to such an extent that a disciplined analysis of its potential returns became worth acquiring for art collectors and professionals and therefore a sufficiently lucrative business opportunity for businesses and entrepreneurs; and because the changing demographic of wealth towards finance and entrepreneurs and away from old forms of aristocracy and inheritance means that such contexts for thinking art were likely to find a better resonance among a new class of listeners. We mean 'worthwhile' insofar as devising holding structures or collateralising artworks, for instance, is only worthwhile (and, in the latter case, only possible) depending on the monetary value which artworks embody.

Looking at literature on financialization and on inequality it can be theorised that inequality is the means by which financialization itself extends into the world, constantly both cause and effect in successive rings in the ‘inegalitarian spiral’ (Piketty, [2013] 2014). As was seen in Chapters 1-3, what has been particularly consequential for the world of art is the insinuation into it of a financial episteme – finance as what Lin & Tomaskovic-Devey call a ‘metagovernance structure’ (2013), but inculcated, beyond firms, into the broader social fabric. Importantly, a number of phenomena with which we will characterise the artworld in the following chapters emanate in some part from the various processes that constitute financialization; changes that reflect, cause, feedback into and are embedded in it. In a direct sense these include inequalities being mirrored in the exacerbation of artist price polarisation, and the oligopolistic structure of markets which depend on them concentrating large swathes of business among a handful of players (auction houses and galleries, but also, eventually, art fairs and museums, with which localities compete for the custom and tourism of this top segment). Indirectly, inequality is also linked to the rise of contemporary art itself, the industrialisation of cultural capital via museums, and the privatisation of the endorsement cycle.

Financialization of the Global Economy in Academic Research

The study of the process of financialization has carved out an increasing share of academic research since the early 2000s as a narrative that competes – and perhaps supersedes – other ways of accounting for significant structural shifts in the post-WWII global economy, the ‘mature’ capitalist societies of the West in particular. These include globalization, neoliberalism, post-Fordism, post-industrialism, the information age, the rise of communication technology, flexible specialization, the new economy, and more (Krippner, 2005; Stockhammer, 2009). Financialization is often discussed within the context of certain generative regulatory, social and macroeconomic factors. Key among them is the lifting of capital controls in the form of the deregulation and liberalization of once highly regulated financial markets (Duenhaupt, 2012). Principally referred to are the collapse of the Bretton-Woods system of fixed exchanges that led to an explosion of new derivatives and instruments such as swaps designed originally to help cover new foreign exchange risks, and the progressive repeal of the Glass-Steagall Act (culminating in the Financial Services Modernization Act of 1999, signed by President Clinton) that had separated commercial from investment banking since 1933. Financialization in other countries is seen to be spearheaded by these events in the US. Other paramount factors include the labour market deregulation and the ‘ideological domination of the free markets since the 1970s’ (Lapavitsas and Powell, 2013); the development of new communication technologies; the establishment of quantitative rationalities and norms giving finance access to new economic sectors (Nölke, Heires, and Bieling, 2013); and the rise of institutional investors (Zalewski and Whalen, 2010). Within this context, defining the process and its significance has drawn in authors from economics, economic history, political economy and economic sociology (Deutschmann, 2011: 350), each in some way ‘interrogat[ing] how an increasingly autonomous realm of global finance has altered the underlying logics of the industrial economy and the inner workings of democratic society’ (van der Zwan, 2014: 99). The various definitions proposed and processes identified are of great merit in reflecting on a similar shift in ‘underlying logics’ in the art market and conceptualising its

connection with increases in the inequality of income and wealth distribution, which acts as a hinge in this research to the following discussions of shifts in the primary and secondary art market (Chapters 5-7). Most work in the field, including this one, has to grapple with the multiplicity which different positions and intellectual traditions have produced. A few of its principal clusters are worth outlining here.

Authors adhering specifically or loosely to an ‘accumulation-centred’ view have understood financialisation as essentially describing a new pattern of accumulation (what Regulationists call an ‘accumulation regime’) in which an increasing share of income is generated through financial means, rather than from the ‘real’ economy (Arrighi, 1994; Arrighi and Silver, 1999; Darcillon, 2015; Deutschmann, 2011; Krippner, 2005, 2011; Stockhammer, 2009). This process is often argued to derive from the profitability crisis of US firms in the 1970s (Arrighi, 1994; Magdoff and Sweezy, 1987), which, coupled with high interest rates, meant even non-financial firms redirected their internal investments to the financial sector in search of new means of capital accumulation (Alvarez, 2015), either trading in financial assets or entering financial activities – such as the provision of credit to customers – that turned the firms into rentiers. This view is therefore often linked to Marx’s theory of the tendency of the rate of profit to fall, as it can account for the process by which growth is replaced with financial expansion as the profit driver (Callinicos, 2010). According to Deutschmann, taking the argument further, more than the reduction in the rate of profit, financialization happened when an excessive accumulation of liquid capital (2011: 369) that was not reinvested in productive capacity was redirected into profit-seeking not just *through* the provision of financial services (lending) but *within* the financial sector itself (investments into financial instruments), ‘seek[ing] refuge in circulation’ from the dearth of primary investment opportunities (Lapavitsas, 2011: 612). This lack of opportunities generated ‘innovations’ that could capture the unused capital – in the form of secondary and tertiary investment opportunities – without expanding the pool of underlying assets; derivatives, tradable pools of securitized debt, synthetic collateralized debt obligations, and so on, all essentially bets on price movements of the underlying assets that massively increased the interdependencies and volatility of markets (Deutschmann, 2011: 383).

The Marxist figure of the rentier capitalist, who featured as a parasitical force in the work of Keynes, re-emerges in the closely related ‘post-Keynesian’ literature as an economic stratum (the rentier class or sector) driving financialization (Crotty, 1990; Demir, 2007; Duenhaupt, 2012; Duménil and Lévy, 2004, 2002; Epstein, 2005; Greider, 1997; Jayadev and Epstein, 2007, 2005; Orhangazi, 2008; Pollin, 2007; Stockhammer, 2004). Financialization is similarly understood as the increasing re-investment of real sector profits into the financial sector – idle capital usurping the scarcity and unequal distribution of capital to extract profits from interest, dividends, capital gains or buy-backs – rather than into the further growth of the productive sector. Again this is either due to the falling rate of profit and rising interest costs (Demir, 2007), or is an expression of an internal logic of capitalism that means that capital always favours investment in finance rather than production (Crotty, 1990).⁴² The pursuit of financial investment strategies by non-financial

⁴² Lapavitsas (2011: 618) has criticized this approach on the grounds that a rentier class is in practice difficult to define. For example, financial institutions constitute intermediaries that mobilize money across social classes, and are not themselves a rentier social layer, but this criticism may be misled by terminology. Post-Keynesians have not so much tried to identify a distinct social class conforming to the ‘rentier’ as they have used the nomenclature to describe income generated by owners of financial firms and holders of financial assets (Jayadev and Epstein, 2007), no doubt in part because it conveys the sentiment of their ideological tradition.

firms, and the increased payments of non-financial firms to the financial sector, is in general, in this literature and elsewhere, accepted as a key aspect of financialization (Alvarez, 2015; Crotty, 2005; Krippner, 2011; Lapavitsas, 2011; Lapavitsas and Powell, 2013; Lin and Tomaskovic-Devey, 2013; Orhangazi, 2008; Tomaskovic-devey et al., 2015; Zalewski and Whalen, 2010; van der Zwan, 2014). These latter occur as corporations turn to raising capital from capital markets and erode long-term credit relations established with banks. Banks in turn shift either to fee-based mediation of capital markets transactions or to transacting with households and individuals, whose stagnant wages, caused in part by lack of investment into productive capacity by corporations in the first place, are instead artificially increased by the expansion of credit and hence their own financialization, too (Lapavitsas, 2011: 620). Indeed, the expansion of bank assets pre-crisis were not reflective of lending to corporations, but of lending to individuals and other banks (*Ibid*).

The ascension of shareholder value, or the shareholder conception of control, defines the process of financialization in a third strand of literature (Clark, 2009; Darcillon, 2015; Davis, 2009; Dobbin and Zorn, 2005; Fligstein, 2001; Fligstein and Shin, 2007; Froud et al., 2000; Goldstein, 2012; Krier, 2005; Lazonick, 2015; Lazonick and O'Sullivan, 2000; Lin and Tomaskovic-Devey, 2013; Thompson, 2003). Here authors describe changes in corporate governance that emerged in response to disciplinary expectations of shareholders where the ownership and the management of companies was separate, realigning fiduciary duties to comprise the maximization of shareholder value, rather than the pursuit of product market strategies such as market-share expansion, a shift Lazonick has described as from 'retain-and-reinvest' to 'downsize-and-distribute' (2015). The shareholder value 'revolution' is perceived to be a radical one at the level of US cultural values: it subjects the understanding of the firm itself to financial rationality as the 'metagovernance structure' of firms (Lin and Tomaskovic-Devey, 2013). The financial conception replaces industry specific corporate strategy with shareholder value goals, in other words with decision-making based on a view of the firm as a portfolio of tradable assets that can be reconfigured according to the requirements of profitability (*Ibid*: 1292).⁴³ This is associated with the privileging of short-term approaches to boosting profit lines by cost-cutting (as opposed to productivity growth) through mergers & acquisitions, mass redundancies, robotization, or diversification into rentier activities, executive decisions that serve to signal to shareholders that they are being catered to, notwithstanding the fact that these measures have not been found to increase profitability in the long-run (Fligstein and Shin, 2007). Milberg (2008) has thus linked this shareholder value revolution to the extensive development of global value-chains by corporations and the disintegration (modularization) of production, particularly the off-shoring of manufacturing and other production to countries according to costs, which have served to support domestic asset values and to maintain profitability levels without gains in productivity or advances in growth. Crotty (2005), calling it the neoliberal paradox, similarly points out the profound links between globalization and financialization: competition and shareholder value maximization lead to off-shoring and cost-cutting, and repatriated profits are either redistributed to shareholders or reinvested in financial products.

Finally, the expansion of banks into private credit, surrogating stagnant wages, is one of the means financial rationality & discipline infuses not just corporations but 'the everyday' (van der Zwan, 2014: 102). Here high-street financial products such as consumer credit, mortgages,

⁴³ A subtly different but related ontology to Coase and Williamson's view of the firm as a contractual nexus where cost guides decisions to internalize or externalize productive functions (Coase, 1937; Williamson, 1975)

mutual funds or pension plans turn finance into ‘a decentralized form of power’ by which ‘individuals are encouraged to internalize new norms of risk-taking and develop new subjectivities as investors or owners of financial assets’ (*Ibid*). Individuals in their private capacity are encouraged to transact directly with financial services and markets and take information-technology driven risks to future-proof themselves against an increasingly volatile world, in the process producing a highly individualist new subjectivity, the ‘investing subject’ (van der Zwan, 2014: 102, 113). Such a ‘democratization of finance’ (*Ibid*: 114) has spurred on a convergence between finance and the life-cycle, and consequently a new conception of life as being itself ‘an asset to be managed’ (*Ibid*, in reference to Martin, 2002).

Echoes in the Artworld

Research on financialization bears both immediate and less direct relations to the financialization of art. At a first glance, there are chronological correlations. The first art funds, for example, and the first serious interest in art investment, happened in Western countries exactly during the early 1970s period of ‘stagflation’ (stagnant growth and high inflation) and the collapse of Bretton Woods, which in combination incentivized the creation of new financial products in the search for profit as described in the ‘accumulation-centred’ view. At the same time, when academic interest picked up again in the late 1980s, further deregulation had produced enormous new wealth within the financial sector that served to massively elevate art prices – particularly within contemporary art, which broadened from collector to lifestyle interest – such that the concept of investing in art could no longer be ignored. A ‘tangibles cult’ and appetite for alternatives (see previous chapter) was likely inherited from the savings and loans crisis of the early 1980s. Finally, the revival of the notion of art investment, concentrated in the period post-2007-2008 equally suggests a link between contractions in financial markets and renewed desire for financial ingenuity, particularly in orchestrating investment into tangibles, abstracting assets into new forms of liquidity and returns, or indeed simply protecting the value of existing capital. The longitudinal connection, of course, was that the factors that enabled the financialization of the economy, in increasing the mathematical and technological sophistication as well as the rewards of financial activity, created the natural conditions for its spread into frontier arenas, including the artworld.

More localized connections are also possible. Post-Keynesian literature sheds light on the appeal of art investment as a consequence of the excessive accumulation of (idle) capital seeking refuge in rentier activities, or at least into non-productive activities, especially in instances where collateralized art serves to free liquidity that is reinvested into stocks, bonds, or other financial products. This literature is also a useful descriptor of the growth of ancillary services, such as wealth management, which cater to the capital vested in art, as it constitutes a reorganization of labour towards non-productive activities that merely enhance the wealth of owners of capital by vesting it in circulation. In addition, both post-Keynesian literature, attentive to the how corporates have bypassed banks in raising capital through capital markets, and the literature on shareholder conceptions of control, which looks at the new mode of governance which this arrangement creates, to some extent also account for changes discussed in this research.

The case of Sotheby's, which is listed on the New York Stock Exchange (under the ticker BID, no less) is exemplary here in two respects. The first is the replacement of typical artworld insider William F. Ruprecht, its fine arts educated, long standing employee and CEO, with Tad Smith, Harvard MBA, former banker, adjunct professor of Finance, as a result of a hostile take-over by an activist hedge fund investor. Indeed, Smith, who was 'greeted in the business pages as a welcome and even long overdue step forward toward good governance and sound management' (Kinsella and Genocchio, 2015) was introduced on a compensation package tied to share performance, and vaunted his lack of knowledge of art as if an attribute in achieving these twin goals – the financial metagovernance incarnate. This is not to imply a judgment as to the relative merits of Ruprecht and Smith as organizational leaders, which will depend in part on the metrics they are measured against. It is merely to comment on the changing profile and skill-set expected of such-leaders under financialization. Here the commonality of finance expertise takes precedence over the specificity of deep sector expertise – expertise with the form and economic structure of an organization over expertise with its content. As a result, CEOs have become a transnational and cross-sectoral class of professionals possessing a highly transferable skill-set chief among which is their perceived ability to re-align the organization to address the short-run expectations of shareholders. The second point is that Sotheby's has in recent years not only shed *en masse* its less profitable collection departments and spaces to refocus on its 'core competences' (servicing its wealthiest clients), it has also as we have discussed, invested in and integrated entirely new revenue streams through the provision of financial services. This is exactly the process described by accumulation theorists, specifically because Sotheby's imperative to do so arose out of a profitability squeeze (guarantees on the one hand, and waivers of seller fees, on the other, have meant auction houses often do not gain, or actively lose money from top consignments). Indeed, as we noted, Sotheby's established a new capital structure to raise funds in wholesale credit markets, and then lend those funds to clients at a profitable interest rate. As Arrighi recognised (1994) at the level of entire societies, once they exhaust opportunities for real growth, the owners of capital must become lenders, extracting rentier value from their accumulated surplus.

Literature on the financialization of everyday life, finally, can also be productively extended to the case of art. This body of work describes financialization as a reconfiguration of ontological and epistemological parameters – that is as creation of a new subjectivity – and this research certainly agrees with this. This includes as a key principle in explaining field-formation where considered as producing concerns for value protection, succession and taxes intrinsic to its momentum. Davis (2009: 6; also Deutschmann, 2011: 352) writes that financialization produced 'a portfolio society, in which the investment idiom becomes a dominant way of understanding the individual's place in society'. The financialization of art fits into this narrative, for it pertains to a desire to accommodate art into the framework conceived as governing the management of anything plausibly qualifying as asset or capital. The 'portfolio society' results in a sense from the internal replication of the shareholder value conception as subjectivity: the owner's panoptic overview of their life as a distribution of assets in different classes enables these assets to be managed according to the logic of finance: increased, diminished, or retained according to value performance, business cycle, changing priorities, and changing risk appetite throughout the individual's life-cycle.

While literature on financialization describes processes that have direct parallels in various parts of the art market, the most important relation of the financialization of the economy in general to that of art in particular is through inequality. If we were inclined to indulge in a Marx-ism, we might call it the F-I-F form: financialization, though inequality, begets itself into new fields. As Perelman puts it, though the ‘outlandish expansion’ of financialization has ‘contributed to imbalances in the economy’ more so than anything else, ‘the imbalances have also *promoted* financialization’ (2008: 45, quoted in Zalewski & Whalen, 2010: 758, emphasis my own). The first transition (F-I, financialization to inequality) is described in the financialization literature; we will describe the second (F-I) subsequently.

Given its diversity, a notable aspect of financialization literature is that it virtually uniformly condemns financialization as a change that has had negative effects on society. Analyses show a fall in growth financing and investments into production innovation (Aglietta and Breton, 2001; Alvarez, 2015; Davis, 2014; Duménil and Lévy, 2004; Stockhammer, 2004) leading to decreasing productivity growth and lower returns (Cecchetti and Kharroubi, 2015; Jayadev and Epstein, 2005). This is doubly so: where non-financial firms re-route investments to financial activities (like Sotheby’s), and where capital available to such firms is constrained by increased payments to capital markets in the form of interest and dividends (Orhangazi, 2008). Doing so, it decouples the operation of capital from its impact on employment and workers (Clark, 2009; Thompson, 2003), reducing labour share of national income (Dao et al., 2017; Jayadev, 2007), disconnecting ‘the generation of surplus from production’ (Lin and Tomaskovic-Devey, 2013: 1284). The diversion of investment capital away from growth is important. Piketty’s work argues that the principle condition of inequality (when the average annual rate of return on capital exceeds the annual rate of growth of the economy, or $r > g$), can be alleviated by convergence factors, mainly knowledge & skill diffusion, and compounded by forces of divergence, for instance the tendency of the rate of saving to increase with wealth ([2013] 2014: 25). The literature on financialization suggests an additional mechanism: namely that financialization – the diversion of capital into financial assets with higher returns – often comes at the expense of investment into the knowledge, up-skilling, and modernization of labour and labour practices, hence reinforcing the differential return on capital by reducing growth in the long-run.

In addition to the above, by excluding labour from ‘revenue generating and compensation-setting processes’ (Lin and Tomaskovic-Devey, 2013: 1284), financialization significantly erodes and decentralizes bargaining institutions for workers, weakening employment protection, and exerting pressures on labour markets towards flexible working relations (Darcillon, 2015). The connection between global integration, which financialization enables, and de-unionization, is so profound that their trends are difficult to empirically separate (Dao et al., 2017: 125). As such, financialization is shown to shift the ‘distribution of political power, income and wealth towards rentiers’ (Jayadev and Epstein, 2007: 10), eroding ‘the “social pact” between capital and labour that provided crucial support for the welfare state during much of the post-war period, even, perhaps more effectively than capital mobility per se’ (Krippner, 2005, p. 203; see also Phillips, 2002). This disconnect has been most manifest in low-profit industries, where mergers, increased layoffs, reduced union density, automatization and offshoring have resulted from focus on shareholder maximization (Fligstein and Shin, 2007). Inasmuch as financialization,

globalization and inequality are thus mutually reinforcing, ‘rentier’ capitalism extends beyond there mere intensification of domestic inequality to also exploit and maintain international inequalities through global value chains that transfer profits to developed countries according to the ‘core’ and ‘periphery’ paradigm espoused by dependency theorists.⁴⁴

The emergence of finance as a dominant occupation among UHNWIs has been clear in the numbers. According to Wealth-X (2014: 19), finance, banking and investment as a sector accounts for nearly a quarter of UHNWIs by profession, over three times the share of the next industry – and it is growing. Kaplan and Rauh’s research, supporting this finding, has shown that the share of top income earners who are investment bankers and institutional investors has dramatically increased (quoted in Lin & Tomaskovic-Devey, 2013: 1288-1289). Within literature on financialization, many authors have also stressed that not merely the owners of financial assets but also the executives whose pay is tied to share value – and who have been operating in an environment in which maximization of shareholder value therefore acts as a ‘discursive construct, a language of financial market expectations’ (van der Zwan, 2014: 108) – have been the beneficiaries of the heightening inequality caused by financialization. Indeed, Bebchuk and Grinstein’s work suggests that executive compensation may have doubled just in the decade to 2003 (2005, quoted in Lin & Tomaskovic-Devey, 2013: 1288-89). James Willington, Director of International Group Finance at Gagosian Gallery, the largest multi-national gallery in the world, has born witness to this demographic change, observing that most of Gagosian’s clients are now ‘successful businessmen or financiers in their own right’ (in von Frank et al., 2013).

Finally, financialization is also intimately linked to the wage stagnation and increasing top executive share of compensation which accounts for significant aspects of rising income inequality since the 1970s (Lin and Tomaskovic-Devey, 2013). It goes ‘hand in hand’ as Arrighi & Silver put it, ‘with an increasing social polarization of wealth’ (1999: 151). The *IMF World Economic Outlook* report (2017: 121) has documented how ‘the decline in labour share [of income] has been concomitant with increases in income inequality’ because ‘lower-skilled workers have borne the brunt of the fall in labour share’ and because the concentration of ‘capital ownership’ at the top of the income distribution means ‘an increase in the share of income accruing to capital tends to raise income inequality’.⁴⁵ What is more, ‘declining value added produced by financialization was born most strikingly by labour and the state, while increasing value was channelled to corporate debt and equity holders’, constituting a ‘transfer of income [...] from “main-street” to “wall-street”’ (Tomaskovic-devey et al., 2015: 525, 530). More than just declining value added, as Streeck and others have argued, financial losses themselves have had a tendency to be socialized both through tax-payer funded bail-outs and through welfare retrenchment enforced by austerity (Dodd, 2014: 4; Harrington, 2016b; Streeck, 2011; Zalewski

⁴⁴ Note that between-country inequality globally has decreased its share of global inequality by over a fifth between 1988-2013 according to the World Bank, whereas within-country inequality has increased its share by 75% (up to just over a third). The reduction in between-country inequality reflects the rising wealth of Asia, and is driven by China in particular. Source: World Bank Group, *Poverty and Shared Prosperity*, 2016: 10. Piketty, among other authors of the 2018 World Inequality Report, now suggest otherwise, finding that within-country inequality growth is sufficient to outdo between-country inequality reductions (Alvaredo, Chancel, Piketty, Saez, & Zucman, 2018).

⁴⁵ See Chapter 3: Understanding the Downward Trend in Labor Income Shares (Dao, Das, Koczan, & Lian, 2017). Note in relation to footnote above, that here ‘the rapid advance of technology and the globalization of trade and capital’ are broadly understood by analysts looking at the West to be the causes behind increased domestic inequality as well as ‘income convergence in emerging market and developing economies’ (122). Hence, ‘integration of these countries into the global economy’ has been positive for emerging markets (123).

and Whalen, 2010: 771). Financialization has moreover increased the exposure of the real sector to financial sector crises (Callinicos, 2010), increasing ‘financial fragility’ (Duenhaupt, 2012: 466) in spite of adding no value (Aizenman, Pinto, and Sushko, 2013; Tomaskovic-devey et al., 2015). Labour markets (and indeed the state) are thus triply hit from financialization: it first fragilises employment by exposing it to financial crises and financial governance; the resulting wage stagnation or foregone employment means the state then has less revenue to address their problems; and it costs labourers the tax contributions they do make in times of crises (Tomaskovic-devey et al., 2015: 541–42). Equally important, as mentioned above, is that these processes have increased both supply of credit (through banks seeking new revenue streams, in what has been called ‘privatized-Keynsianism’ – Colin Crouch cited in Streeck, 2011, p. 17), and demand for credit, due to stagnating wages, with the effect of increasing overall household indebtedness of working and middle-classes, as well as their reliance on the system that ended their independence in the first place (Stockhammer, 2009). As the manifestation of neoliberalism, while it has failed at growth, it has thus succeeded in restoring the class positions to ruling elites that the world wars had substantially eradicated (Piketty, [2013] 2014), and has ‘created conditions for capitalist class formation in developing markets’ (Harvey, 2007: 34), through its aim of maximizing ‘income to capital’ (Tomaskovic-devey et al., 2015: 541).

Inequality at Large

The contemporary surge of inequalities in various guises has been remarkable according to many detailed studies. Inequality in a broad sense – of wealth, of opportunities, of control – coalesced into a significant strand of mainstream consciousness with the Occupy movement of 2011, itself a symptom of the foregoing financial crisis. The top one percentile, their resources and influence, were identified by the self-described ‘99 percent’ as a particular threat to democracy, meritocracy, and social justice. Later, inequality of income & wealth distribution within and between countries more specifically, exploded onto the main stage with the publication of Piketty’s *Capital in the 21st Century* in 2013, and its translation into English in 2014. The book gave new empirical contours and urgency to an experience of inequality personally familiar to many for decades hitherto. Though it was a subject of rigorous academic research before, including by Piketty himself, it has since signally featured as a prominent agenda item in policy discourse & forums, in academia, and in research conducted by organizations, think-tanks, charities and development finance institutions, including reports by Credit Suisse, Capgemini, Wealth-X, Oxfam, Knight Frank, the World Bank or the IMF. The promotion of *shared* prosperity has joined the ending of global extreme poverty among the goals of the World Bank and the United Nation’s Sustainable Development Goals, as ratified by the global community.

According to Credit Suisse, in 2014, less than 1% of the world population owned 44% of global household wealth (Shorrocks et al., 2014: 23), while under 9% accounted for 85% of it. By their latest report, published November 2017, the top 1% now own 50.1% of household wealth (Shorrocks, Davies, and Lluberas, 2017: 16). Wealth-X point out that 0.004% of the world’s adult population control almost 13% of the world’s total wealth (Wealth-X and UBS, 2014: 6). A 2016 report by Oxfam painted a graver picture still: according to their memorable analysis, 62 individuals own as much as the poorest half of the world’s population, a fall from 388 in 2010 in

spite of a global population increase of 400 million during this period (Hardoon, Fuentes-Nieva, and Ayele, 2016). Indeed, while the wealth of the poorest half had fallen by a trillion dollars since 2010, it had risen by more than half a trillion dollars for the 62 (*Ibid*). By 2017, the 62 persons had been further reduced to 8. Such polarisation, given the exponential shape of incremental wealth differences, has been replicated, though less extremely, within the wealthiest percentiles. Capgemini, in their 2017 World Wealth Report, reported that globally Ultra High-Net Worth Individuals (UHNWIs), defined here as holding \$30m or more in investible assets, constitute only 1% of High-Net Worth Individuals (HNWIs), who are defined as holding \$1m or more in investible wealth – yet they hold more than a third of their combined wealth, and account for 20% of their total spending (2017, p. 9; see also McAndrew, 2015, Chapter 3).

There were, according to TEFAF, almost 13.7 million HNWIs by end of 2013 (McAndrew, 2015: 117). In 2014, an estimated 211,275 of those were UHNWIs, including 2,325 billionaires (*Ibid*). The wealth of HNWIs grew 60% since their low-point in 2008/2009 (*Ibid*: 127), and has, according to Wealth-X, trebled over the past 20 years (2015a: 1). This is in spite of the multiple recessions and bubbles, lost decades, geopolitical instabilities, natural disasters and health pandemics that have severely affected numerous regions in the intervening years. In fact, Capgemini maintain their prediction that from a wealth of \$16.6 trillion in 1996, HNWIs would surpass \$100 trillion in wealth by 2025 (2017, p. 3), while their numbers are also projected to increase by 43% (Deloitte and ArtTactic, 2017: 21). When they looked back on twenty years of the *World Wealth Report* in 2016, global HNWI wealth had already expanded almost four times ‘in spite of the devastating effects of the financial crisis’ (2016: 24). According to the looser definition of Credit Suisse’s *Global Wealth Databooks*, in which HNWIs are defined as having net wealth (rather than investible wealth) greater than \$1 million, the wealth held by this group was already \$116 trillion in 2014 – having grown 67% in the five previous years. A 2018 report by the World Inequality Lab suggests that assuming no policy changes from the present day, a world represented by China, Europe and the US would see the wealth share of the top 0.1% equal that of its entire middle class (middle 40 percent; Alvaredo et al., 2018). By contrast, wage growth has stagnated in most developed countries: the recovery since the crisis was driven by asset price increases, and was thus concentrated in the non-wage income of HNWIs. Mirroring this, the IMF has found that labour share of income declined between 1991 and 2014 in 29 of the largest 50 economies (the 29 representing two thirds of world GDP in 2014), and in 7 of the 10 major industries (Dao et al., 2017: 125).

The global integration of finance and trade, bolstered by dynamics discussed above, has led to the convergence of wealth inequality between developed and emerging economies, where liberalization has rapidly produced acute oligopolies controlled by small elite circles. In the BRIC countries, the population of HNWIs has grown by over 250% in just the past decade – in China, 500% (Wealth-X, 2015a: 4). According to Dadush and Ali’s *In Search of the Global Middle Class*, the developing world’s share of global private consumption climbed from 18% to 30% (quoted in Knight Frank, 2015), while it is expected to account for 26% of additional wealth created between 2015 and 2019, relative to only 11% of the extra wealth created in the period 2000-2014 (McAndrew, 2015, p. 124; see also Anand & Segal, 2017). As Anand & Segal point out (2017: 4), updating a 2016 observation by Freund & Oliver, whereas the Forbes World Billionaires list included no Chinese billionaires in 1996, it included over 251 by 2016 (around

14%), with emerging economies accounting for 35% of the list.⁴⁶ This convergence process is symptomatic of the ability of modernized information and communication technologies, transportation systems, and financial penetration, to ‘democratize’ wealth away from purely inheritance-based dynastic models; or at least – as the current generational shift will show – their ability to give way to new sources of dynasties. Formerly anchored around New York, the global wealth centre of gravity measure has moved eastward since the 1990s to reflect this, shifting particularly rapidly since the global financial crisis and now crossing the Mediterranean (Wealth-X, 2015a: 3). Today, the world’s wealth is concentrated almost equal parts (between 30-35%) between North America, Europe and Asia. By share of global population, four of the top global art market countries, the US, France, UK and Germany, nevertheless still accounted for three quarters of the top 1% in 2014 (McAndrew, 2015, p. 124 – note that this is a significantly wider group, of which HNWIs are a subset).

Inequality as Channel for Art’s Financialization

Goetzmann, Renneboog and Spaenjers (2011: 3) have argued that ‘higher incomes can be expected to lead to higher art consumption, and thus to a higher price level in the art market. However, given the relatively limited supply of high-quality art, average buying power may matter less to the determination of high-end art prices than how much money the wealthiest members of society can spend. This is especially relevant because many high net worth individuals invest in art assets’. Building a regression on the income tax data of Piketty and Saez (2010), they show that ‘art prices rise when income inequality goes up’, with robust conclusions that a one percent increase in the share of total income earned by the top 0.1 percent triggers an increase in art prices of about 14 percent (Goetzmann et al., 2011: 14–15). As such ‘we can expect art booms whenever income inequality rises quickly’ (Goetzmann et al., 2011: 20; see also Spaenjers, 2010). Similarly, Frank, an economist referenced in Fligstein et al.’s recent paper ‘Keeping up with the Joneses’, ‘makes the case that the cost of positional goods [...] can be driven up over time in the face of constant or declining supply, particularly in a context of rising income inequality’ (Fligstein, Hastings, and Goldstein, 2015: 6 in reference to Frank, 2007). Art being both finite in supply, positional, and scarce by virtue of its uniqueness, is particularly vulnerable to this mechanism. Finally, financial wealth has also been linked to art market performance. As argued in Chapter 1, the co-movement of the art market and financial asset prices, both in terms of value (Goetzmann, 1993; Goetzmann et al., 2011) and volatility (Bocart, 2014), has found support in academic research, and can be expected to tighten as the information efficiency of the market increases, not least through its financialization.

At a primary level, asserting a connection between the art market’s performance and inequality may be spurious: it is hardly an observation worth making that it is principally the wealthiest members of society who can and do buy it, so that if they acquire more wealth, even at the expense of society’s remaining strata, art market prices will inflate. It is a somewhat different

⁴⁶ Anand & Segal (2017: 24) point out that contribution of China and India to the world’s wealthiest has been far more significant to the list of billionaires than it has been to a broader category of the richest – such as the global technocratic and professional elite – where the US and Europe still dominate significantly. This, as they say, ‘implies that their wealth distributions are particularly unequal at the very top, relative to other countries’ (*Ibid.*).

point, however, to posit that inequality not only changes the order of magnitude of art prices, but in doing so actively changes the structure of the art market, which comes to reflect the consumption preferences of those who benefit from it at an accelerating pace. UHNWIs were in 2016 estimated to have an allocation of \$1.62 trillion to art and collectibles; by 2026, this is forecast to reach \$2.7 trillion (Deloitte and ArtTactic, 2017: 23) – the ongoing effects of this trend are therefore likely to be highly significant. Moreover, by accentuating the relative magnitude increase, being that it comes at the expense of the preferences of those whom inequality disadvantages, this structuring impetus is stronger. Though art is technically available at a wide range of prices, most of them within reach of the middle class, the effect of inequality is to substantially redistribute organizational life chances and labour opportunities towards areas that cater to the extremely wealthy, in spite of their narrow population, because of the disproportionate value they represent. As Peter Atwater, president of Financial Insights argues, the concentration of wealth means the global elite *is*, statistically speaking, representative of the wider market – because it represents most of its value (cited in Verhage, 2015).

Because inequality of income and wealth magnify the effects of the demographic make-up of its beneficiaries, and the influence on the economy, on policy and on public life of their concerns, considering their profile – even at a very high level – helps provide a powerful account of one of the drivers of financialization from a demand perspective. Nathalie Moureau, economist and author of numerous studies of the art market, explains it as follows:

The contemporary-art collector is not just a buyer; he intervenes from the other side of the mirror, through the support that he brings to the production of works, or the contribution that he brings to building up artistic renown. He can finance productions, support galleries or lend works for exhibitions. The contemporary-art collection may play a role that cannot be overlooked in the recognition of artists. (Anon, 2016b: 29)

Of particular importance to our analysis is that, in magnifying the spending profiles of a technocratic elite, they have contributed to the art market's disposition towards finance and various forms of advisory that implant art into the pre-existing, increasingly totalising frameworks of wealth management.

According to Wealth-X, 87% of UHNWIs are male, and their share of UHNWI wealth is commensurate (2014: 18). Their average age is 59. Finance, banking & investment continue to extend their leadership as the dominant industry of male UHNWIs, representing 23.6% in 2014 (*Ibid*: 19), over three times the share of the next industry, real estate. Most UHNWIs are broadly self-made, and are involved in founder-owned private businesses, in which over two thirds of their wealth is held (Wealth-X and UBS, 2014: 5). According to Larry's List, which specialises in reporting on art collectors (of whom they have over 3,000 profiled), the average collector is likewise a man (71%), of average age 59.⁴⁷ Like UHNWIs generally, they are increasingly from developing countries, with China, India and Brazil already accounting for 15% of global collectors.⁴⁸

Taken together, these characteristics have multiple repercussions. The first is that wealthy individuals are unprecedentedly likely to view their wealth, and in turn each asset constitutive of

⁴⁷ <https://www.larryslist.com/art-collector-report/> (18/01/2018).

⁴⁸ <https://www.larryslist.com/art-collector-report/> (accessed 17/11/17).

it, from a holistic perspective whose logic is financial – the panoptic, external overview of wealth as a portfolio of diverse assets under financial rationality mentioned above – and to take a deep personal interest in the financial performance and structure of these assets, including a granular interest in their monitoring. The second, given their average age, means capital protection and estate planning become particularly important, as they prepare to pass their wealth onto the next generation (Wealth-X and UBS, 2014: 22). A widely publicized figure is that Baby Boomers will be passing on to their heirs around \$30 trillion in financial and non-financial assets *in the US alone* over the next three to four decades.⁴⁹ A survey undertaken by Knight Frank of wealth managers and private bankers who advise the wealthy corroborates this view, finding that ‘business succession issues’ and ‘possible hike in wealth taxes’ are their principal concerns (2015: 9). As has been noted, this has, taken together, led to a ‘collective anxiety’ over factors such as geopolitics and health, furthering the desire to monitor holdings, interests, health and family more closely and in a more centralised fashion; an espousal of the perceived link between commensuration and control, accounting and accountability – the fact that, as written in the Wealth-X report, ‘what can be measured will be managed’ (Wealth-X, 2015b: 5).⁵⁰

As the Baby-Boomer entrepreneurs and financiers pass on their wealth, a new generation receives it, and new money is laundered into old. The generational change means the consumption drivers of today’s Millennials and Gen-Xers will be established as the dominating force in the art market. As noted by Brian Peccarelli, this is certain to change current patterns of consumption, especially on big ticket items, in a way that could drive a significant shift ‘that could affect the fortunes of many different kinds of companies’ (2017). The generational divide revealed by a U.S. Trust study of 684 wealthy individuals is therefore meaningful to our analysis, because what it showed was that ‘next-gen’ collectors are ‘increasingly concerned with how art behaves as a capital asset’; are ‘significantly more financially driven’; are ‘less likely to view art as a risky investment and more likely to expect sustainable price appreciation in the future’; are ‘commercially minded’ and ‘much more comfortable selling their art’; and are ‘willing to use their collection as loan collateral to take advantage of strategic investment opportunities’ (Beard and Slugg, 2016). The concerns developed by one generation, described above, thus become the instincts of the next. Taken together, this suggests to the authors that art needs to be increasingly incorporated into financial modelling and estate planning; that these collectors will need more tax and financial advice, especially in relation to ownership structures; that record keeping will become more important; and that they will need art loan providers (*Ibid*). A 2016 report by Hiscox on the online art market, where younger generations are the most comfortable, confirm these findings, concluding that ‘a significant number of young collectors cite financial motivation (expected return) when buying art’ (Hiscox and ArtTactic, 2016: 3).

New lineages of wealth created by the Baby-Boomer or Gen-X, and the sheer number of UHNWIs which wealth concentration has generated, threaten modes of distinction based on conspicuous consumption patterns. The shifts caused by the ‘democratization’ of class and wealth mean-revert to patterns of elite distinction based on cultural capital, replicating convergence

⁴⁹ The figure is publicized among others by consultancy firm Accenture (<https://www.accenture.com/gb-en/insight-capitalizing-intergenerational-shift-wealth-capital-markets-summary>, accessed 19/11/17) and CFO.com, the online complement of *CFO Magazine* (<http://ww2.cfo.com/tax/2017/05/great-wealth-transfer-now/>, accessed 19/11/17).

⁵⁰ An interesting echo of the observation by Espeland & Stevens (2008: 416) that ‘sometimes discipline is a by-product of surveillance’.

theory in a new arena. Conspicuous consumption gives way to discernment, ‘careful, tasteful purchasing’ (Wealth-X, 2015b: 5). As Wealth-X puts it: ‘the newly minted are even more quickly aware of the need to learn and behave like individuals with established wealth’ (*Ibid*). New forms of exclusivity, based not just on high price point or scarcity, are expected to give way to ‘fundamental rarity’, whereby supply cannot be increased; a feature, for instance, of all non-serialised artworks. Personalisation becomes a key driver, including for wealth managers and family offices, inviting the dominance of CRM and data analytics among industries that service the rich in order to provide a ‘more holistic management of [...] client’s wealth: from non-financial assets to their broader lifestyle, such as health and security’ (*Ibid*: 8). Digital technology, insofar as it enables the infiltration of quantitative thinking, thus rises as the means of finance’s ascendancy as a way of conceptualizing a life, and, indeed, a family, a heritage and a lineage.

By 2016, 78% of wealth managers surveyed in the Art & Finance Report considered that art and collectibles ‘should be part of a wealth management offering’ – up from 55% in 2014 (2016: 17); in part because 48% of them experienced client demand for it (up from 38% in 2014). For firms operating in the coinciding spaces of finance and wealth, the incorporation of art as part of their offering has been organic. As note by James W. Crystal, chairman and CEO of Frank Crystal & Company when explaining his firm’s decision to establish an Art Finance Group, ‘it is a natural extension of our strength and expertise in serving both the financial services and affluent ultra-high net worth sectors’ (Anon, 2011). Demand comes from what Deloitte have called the ‘Investor-Collector’ (Picinati di Torcello, 2010), or simply investors intrigued by the financial potential but inhibited by their lack of familiarity with the art market; supply also targets wealthy collectors whose collection is not yet subsumed within their portfolio panopticism, and is offered by wealth managers who compete by the scale of the assets they manage, and survive – professionally – by territorially expanding their organizing frameworks and rationale over new pastures. As the TEFAF 2014 report revealed, nearly all collectors interviewed were not explicitly buying for investment purposes but ‘were cognisant of its financial value’ (McAndrew, 2014: 110). By 2016, 72% of collectors surveyed by Deloitte & ArtTactic indicated that collectors ‘buy art for passion with an investment view’, while as many as 82% of art professionals said this applies to their clients (Deloitte and ArtTactic, 2016: 17). 64% of art collectors acknowledged outright that investment value is an important motivation, up from 47% in 2014 (2016: 96). As researchers from Knight Frank note: ‘Although [...] the personal pleasure they provide is the main reason most UHNWIs like to collect beautiful and pleasurable things, one suspects that even the most epicurean collectors would prefer that their treasures grow in value’ (Knight Frank, 2015: 59).

Broad economically and generationally segmented profiles help make sense of the rise of a financial episteme. But more straight forward economic incentives, through the magnitude of art prices, also come to play. Caves have rightly observed that an ‘individual’s decision to consume a creative good is too small a transaction to warrant a large outlay on an advisor’s services’, with the exception, that is, of ‘major acquisitions’ (2006: 544). A 20% net return on a purchase of £5,000 will not be a sufficient expectation to justify an advisory fee, because it would cost far more than the expected return. On a £1,000,000 purchase – or a number of such purchases – however, this is different: here, receiving opinions on the bankability of the purchase, devising a tax strategy such as a deal structure for holding the artwork in an anonymous offshore vehicle, and an exit strategy for the eventual sale, may begin to make sense (financially). As Alan Binnington

& Wayne Pearson, from the Royal Bank of Canada, have observed in ArtBanc's magazine: it is the growth in 'acquisition and retention' of art that has led to the use of sophisticated professionally established vehicles like trusts to plan for the purchase, management and disposal of art (Binnington and Wayne, 2013). Moreover, the position of wealth management – including through family offices – as the main organizational-institutional form of the connection between inequality & financialization, as the centralizing force of private resources, is naturalised in relation to art when the acquisition costs of art mean the governing relationship with it is as capital.

As such, high prices in art shift the relevant realm of expertise from art to finance, and in turn the structure of the art market. Wealth management, legal and financial advisory services, and family offices, all depend on the simple principle that their value-added exceeds their cost. In doing so, it is possible that inequality of a sufficient magnitude to effect structural changes may reinforce itself. It stands to reason that inequality may become self-fulfilling at the point where employees are better remunerated working to increase the wealth of the investor than working in a productive capacity such as might otherwise act as a convergence factor. The many private banks that have developed boutique capabilities for lending against art (providing the art is above a significant value threshold), merely increase the uneven access to credit, affording those who benefit from inequality the right to extend their privilege by putting these loans to use in investments that grow faster than income. Advisers who structure art purchases out of tax 'efficient' offshore vehicles, among many others, also extend this inequality, the extent of wealth affording by these means a reduction of liabilities.

Conclusion

The analysis in this chapter has sought to put forth a simple theoretical case: the financialization of the broader economy is intimately connected to the financialization of the art market through the process of increasing income and wealth disparities, which acts as the medium through which one ontology replicates itself across a new field. This was recapitulated by the mnemonic F-I-F. Financialization, as a fact of late capitalism, produces severe inequalities by accentuating investment into financial assets rather than productivity and growth, hence simultaneously dedicating more resources to pursuing the returns on capital (in conditions where the rate of return is higher than output growth), and actively depressing output and productivity growth in the long run. This inequality accentuates the influence of the consumer patterns and preference profiles of its beneficiaries, thereby affecting the economic incentives within sectors where they are a key source of demand (for instance fine arts and luxury goods), and thus ultimately effecting structural changes within them. Looking at the profiles of UHNWIs drawn up in various third-party analyses, we identified important probable drivers of financialization in the art market: the growing importance of technocratic and financial services as source of income among UHNWIs, and so of 'self-made' wealth; an average age suggesting imminent generational change, and therefore a focus on succession, tax and estate planning, and capital protection (identified in Chapter 2 as essential components in art's financialization); the emergence of Millennials who are more at ease in a technological and 'portfolio' society, and so on. Value-driven behaviour, it was suggested, finds an outlet in the art market once art prices are sufficiently

high to warrant the outlay on advisers and intermediaries, and hence also ensure the market supplies such experts and organizations.

It is in fact possible to infer from this account the extension of the ‘inegalitarian spiral’ (Piketty, [2013] 2014): the ability to ‘unlock’ capital vested in works of art, especially in the prevalent low interest rates environment, means that the owners of art can further extend the pool of capital which is working for them, levering up their position by securitizing their art and then debt financing, at low cost, new investments into other financial instruments, perhaps even creating new demand for financialization in other realms. This may seem trivial given art-backed credit remains niche, but as merely one example of what is happening in other ‘alternative’ asset classes, such as wine, collectible automobiles, or jewelry, a picture emerges in which the holdings of society’s wealthiest percentiles are also a source of returns, and always open to conversion back into liquidity, whereas the possessions of lower percentiles represent sunk costs, sold in secondary markets mostly only at very high discounts.

Because unequal wealth creates unequal demand, such inequality is also mirrored in market structure. As we will see in the following chapters, there are dynamics in the traditional art market, in addition to those of financialization, in which it is difficult not to see the effects of an unequal invisible hand tipping the balance of economic power. The art market, indeed, is riven with emerging oligopolies: among artists, galleries, auction houses, art fairs and even museums, all of which in some way compete for the custom – or the philanthropy – of the top percentiles. Turning to the wealthiest for business, as a broad middle class is emaciated, they become increasingly reliant upon them.

Part II – Contexts / Effects

Having discussed the particulars of financialization through its auxiliary, intermediating, and often transaction-centric manifestations – data-creation and dissemination, tax and legal advisory, wealth-centric art services and new forms of infrastructure – Part II substantially changes tack. Taking a step back, it attempts to nest the previous analysis within a broader context that encompasses first longitudinal art historical movements, and, subsequently, processes currently at play in the art market that partake in the integration of art with finance. The intention is partly to recuperate some of the distinctiveness of the present moment by situating it within a wider temporal and spatial mapping, drawing out the various historical seams out of which it is plausibly construed; and partly to point to the underlying currents which intervene and participate in the project of financialization, mollifying resistance to it, giving it both room and credibility – even inviting it. It is premised on the fact that an analysis of the art market's financialization is incomplete without considering dynamics that impact the core components of the art market, namely artists, galleries, auction houses, and museums.

Financialization, must first be understood in the context of long-term changes to the nature of artistic practice, the structure of the artistic vocation, and enduring or shifting conceptions of artistic value. It must be embedded in the mainstreaming of contemporary art – with which it is concurrent - whose volatility, velocity of circulation, and malleability to private interests reflect and provide the opportunity for patterns of investor behaviour (Chapter 5). Chapter 6 then consists of a series of reflections on the contemporary artworld. Notably, it explores changes in financing structure and reduced space for curatorial risk-taking among museums; changes in the nature of artistic work; and the privatisation of the endorsement cycle, through the private sector's acquisition of outsize influence in the consecration of art. It then elaborates on the latter point by looking at the structure of cross-gallery representation of top artists in central London – as a network-analytical exercise – in order to point to the means by which value in singularities of high but uncertain value (as Karpik calls them, 2010) is created, protected and shared. Finally, I look at the expansion of the online art market – essential infrastructure - which has facilitated an investor mentality in the buying & selling of art; created a new source of both price and consumer behaviour data; and provided a new space for the interfacing of the art market and financial services. Throughout these reflections, attention is paid to the very high levels of various forms of inequality, oligopolistic structures which those of wealth in society more broadly has accentuated, and yet which are also fundamentally embedded in the social conception of art – as Chapter 5 shows – as an exalted pursuit. Taken together, these various dynamics have given new legitimacy to market expressions of value, namely price, as a meaningful summation of market and non-market information that can map endorsement onto its ranking mechanism. In doing so, they have had the important consequence of inviting forms of expertise that specialise in the interpretation, manipulation and arbitraging of price movements, namely finance, alongside the tools with which they intervene in the market.

The narrative drawn out below inherently picks out particular strands and supposes longitudinal shifts. It is specific to the task, and therefore unabashedly focused on the market-dominant forms and character of artistic practice, and is consequently not to be seen as an representative indication of art's broader history, whose fringe elements, often the most

interesting, are mostly unaccounted for here. The purpose is not to suggest, either, that everything led inevitably to where we are now; it is merely to draw out those changes in artistic life that it seems to me rendered it more plausible; which, if they didn't always invite, certainly pacified feasible resistance to the changes discussed under the umbrella term of financialization.

Chapter 5. Taking the Long View: Vertical & Horizontal Forces

Introduction

The below analysis situates the financialization of art discussed in previous sections within the *longue durée* of relevant changes in the place occupied by art and artists in culture and society. It is organized in two sections. The overall thesis of the chapter is that the contemporary artworld can be substantially accounted for by two opposing forces which in the art market become complementary: the linear, evolutionist, vertical disposition of romanticism and modernism, and the planar affinity of post-modernity.

Post-modernism has been described as a kind of spatialization and fragmentation; a turn to the horizontal which emerged in the context of rebuking the vertical, teleological & futurological disposition of modernism's fixation with time and progress (see Eagleton, [1985] 1999; Jameson, 1984, 2015). While post-modernism remains the 'cultural dominant' of production and theorization in the artworld (Jameson, 1984), modernism – ostensibly incompatible with its modality – nevertheless subtends the process of valorization and its ideological apparatus. I mean ideological here in the sense given it by Clark: 'a kind of inertness in discourse: a fixed pattern of imagery and belief, a syntax which seems obligatory, a set of permitted modes of seeing and saying' (1985: 43), or what Bearman & Rule, in reference to the work of Danto, have referred to as the "atmosphere of artistic theory" in which worldly objects appear as works of art' (2015: 162). Romantic precepts remain, therefore, to the greatest extent the 'residual' culture of the contemporary artworld, to use Raymond Williams' well-known nomenclature; 'effectively formed in the past but [...] still active in the cultural process, not only and often not at all as an element of the past, but as an effective element of the present' (Williams, 1994). Indeed, the romantic artist, I argue, continues to function as a kind of Balibarian 'myth of origin'. Secularised by modernism, it lives on principally – but very significantly – as the art market discourse through which worth is articulated, constructed, the artistic mission elevated, and the fetishism of the artwork sustained. Outside of the market this myth survives in the persistence of 'Art' as an evaluative concept – even if the criteria for the evaluation today have tended to reward in art political substance, cross-disciplinary and documentary ambitions, programmatic structure, or community involvement – because these are often absorbed into art theory on the basis of their ability to effect meaningful change, envision better futures, or convey inarticulable truths. Indeed, such dimensions remain conceived as powerful only insofar as they are embedded in the conventions that categorise the works as art, whose operative mode artists themselves are often eager to distance from forms ostensibly closer to it, documentary-making, sociology, or social services, for instance (Bishop, 2012). As Stallabrass puts it, 'artists and museums are good at making sure that what they do is seen as art' (Pennings et al., 2011: 75), in the former case, among others, 'by cultivating art-historical references that sit alongside mass-cultural ones', and in the latter through 'the framing function of their buildings, interpretative material', and so on.

Through this modality of creating disproportions (see Chapter 6) which uphold the exalted value of art, what Chiang & Posner called 'omnisignificance' of art (2006: 328) – its polysemy, its pluralism, its denunciation of hierarchy and epistemix fixity – it continues to be convulsed back into the ranking machine of the capitalist economy. As Karpik puts it: 'the structuring of the market and the structuring of individualism are, and will remain, intertwined'

(Karpik, 2010: 264). But whilst at the level of production this produces a tension, at the level of the market it creates an advantage. I argue that the two ideological forms have co-existed with different functional specifications, to different, and ultimately complementary effects: the one vastly expanding the field of art, multiplying art's hermeneutic affordances, and thus eroding terms of assessment; the other proselytizing the pricelessness of this production, and the role of price in both reflecting and consecrating it, enabling galleries with strong structural positions within the field of taste to effectively conjure value, as if out of thin air. Menger, though without reference to post-modernist thought (which nevertheless imbues his conception of 'the criterion of originality') describes this well in terms of how it functions in practice:

Artistic creation is built on a distinctive property, that of fine-grained differentiation of its products due to highly individualized strivings for originality and novelty [...] The multidimensional nature of differentiation encourages recognizing many different embodiments of originality as true manifestations of creative talent. Yet critics, experts and consumers never cease making comparisons by ranking filmmakers, visual artists, writers, composers or actors. Both the market sellers, experts, critics, and eventually the end consumers sort and organize in a hierarchy those products of individual creativity which the criterion of originality by itself would tend at first sight merely to juxtapose [...] turn[ing] horizontal differentiation into a vertical and inequalitarian one (2006: 780)

This account aims to recast this principle within the historical development of artistic practices and artistic value, from art's elevation to a liberal art as a product of its intellectualization in the seventeenth century to the Romanticist sacralization of the artist which modernism inherited, and which was transmuted into market practice during post-modernism as the fixative that binds that attracts demand to supply. In the second part, the post-modernist 'spatialization' of artistic practices is explored as both extension of and attempted break from modernist principles. An important consequence of this was that the non-market endorsement system was derogated as the buttress of a monocultural hegemony, and canonical forms of credence consequently invalidated, all of which privileged the market as the central arena of artistic dissemination and operation – a theme that will be explored in more detail in Chapter 6. In doing so, this analysis seeks to recuperate some of the contingency of the current market.

I conclude by positing that the fragmentation of post-modernism, its radical relativism and deep connection with late capitalism, is being reversed in this even later stage of capitalism. I argue that the repressed monism and utopian fantasies of high modernism return in a different form, forming a new whole in the shape of the market where finance is no longer a kind of Marxian substructure – the social unconscious from which social life springs – but is aestheticized and distributed through the screen, the index and data visualizations, as superstructure, as organizing principle of representation and allocation, and as epistemic tool. In portfolio society, post-modern omnivorousness is directly homologous with the requirement of portfolio diversification, which is its financial spectre. Its spatial propinquity is paralleled in the recasting of the heterogeneous practices and resources of social life into the epistemic architecture of the portfolio.

1. *Vertigo: Persistence & Recurrence*

First Ascent

Throughout most of Western history, artists had ranked alongside weavers and shoemakers as craftsmen in a trade passed on through apprenticeship, rather than taught as theory and scholarship (Walsh, 1999: 93). As with other crafts, guilds were central to artistic life, giving their diverse practices a sectoral guise and solidarity, regulating quality, buffering external competition, and serving as administrative channel for commissions and sales. The individual artist was, in turn, for the most part subsumed within production units.

It was in the late Renaissance, as Baxandall has shown in his well-known study of fifteenth-century artistic practice (1972), that a shift took place in the manner of evincing distinction and taste, which diminished the role of precious pigments – ‘gilt splendour’ becoming the subject of ‘classical distaste for sensuous license’ – and increased the demand for ‘pictorial skills’ (1972: 14-15). As inventiveness became valorised, paintings became privy to the first signs of autonomy through the appearance of ‘functionally redundant elements’, such as detailed backgrounds (Schinkel, 2010). The change was moreover given ‘its special charge’ by the fact that distinction between raw material and labour ‘was the whole basis of costing a picture, as indeed any manufacture’, so reflecting the relative change via the differential economic recognition of the artist’s skill (Baxandall, 1972: 16, 2).

Such changes in the sphere of commissioned art were intensified by the extent and distribution of wealth produced by the emergence of early capitalism - ‘new seigneuries and principalities on the one hand, and wealthy cities on the other’ (Bürger, [1974] 1999: 52) – which engendered ever more ambitious commissions in terms of scale and complexity. Those who could rise to the task were rewarded with hitherto unheard-of prestige: the likes of Michelangelo, Raphael and Titian not only bypassed guilds and became extremely rich, they were also ennobled (Thomas, 1999: 176). Reflecting the new status of art, and, by extension, the excellence of its patrons, the period would also produce the ‘first’ art historical publication, Vasari’s *Le Vite* (1550), which had the effect of delineating for art a separate arena of social life, as well as evincing a new biographical consciousness of artistic life.

By the sixteenth and seventeenth centuries, key cities across the Netherlands, Belgium and Italy saw the emergence of a market for non-commissioned works. Because ‘demand mostly overrode guild reluctance to relinquish control of distribution’, and because, by extension, such scale of demand meant ‘distribution came to require efficient sales mechanisms’, guild protectionism could not avert the intervention of a new kind of intermediary, namely the specialised dealer (de Marchi, van Miegroet, 2006: 70). The trade was incorporated into the general market for luxury goods and remained conspicuously proximate therefore to sources of wealth, something rendered logical, rather than problematic, by prevalent conceptions of artistic work.⁵¹ A resale market subsequently developed, and soon the basic functional elements of the art market were in place. Non-commissioned works arose as a derivative to the market for ‘unique, public commissions’, of which they were ‘largely confined to serving a need for cheaper versions’.

⁵¹ In Antwerp, the main art sales venue could, from the mid-sixteenth century, be found on the top floor of the new Exchange (*Ibid*: 88). This proximity remains fundamental – it anticipates, for instance, the Fondation Pinault’s future contemporary art museum location, due to open in 2019: the old Paris *Bourse*.

(de Marchi, van Miegroet, 2006: 70). With new technology (oil painting) allowing for greater portability on linen or panel, and trade flows increasing across merchant towns, patterns of emulation and differentiation nevertheless took place as organic ramifications of competition for clients, becoming constitutive aspects of artistic practice as market dynamics took hold, even if not yet valorised for their own sake.

New prestige eventually bore institutional ramifications. Both the foundation of the French Académie royale de peinture et de sculpture (1648), and eventually the British Royal Academy of Arts (1768) were monarchical efforts to harness the new cultural capital of fine arts, institutionalise its quality and production, and thereby surpass in excellence rival polities. Significantly, in endeavouring to further refine and elevate the status of artists by ameliorating its class composition, the Académie also forbade the profaned aspect of the erstwhile craft: artists could no longer, by law, keep shops or display their works in studio windows (Walsh, 1999: 92). The status of artists was thus staked against mercantilism as a means of preventing its assimilation back into it. In the bourgeois gentleman-scholar, an ontological contradiction was sown between the spiritual aspirations and the economic underpinnings of art that were momentarily resolved only insofar as the state could displace the need for external patronage, but which would emerge again with the advent of modernism and which would require the symbolic function of disproportion.

From the mid-seventeenth century, whence, unlike the middle-ages, ‘the elites generally withdrew from participation in popular culture’, the new status of ‘liberal art’ accorded it by elites was no longer tainted by art’s common origins (Burke, 2004, quoted in Belfiore and Bennett, 2008). The concept of art’s autonomy, upheld from the eighteenth century onwards, was thus originally an autonomy from the prosaic reality of the labouring class, rather than, as it was later perceived, from society or from capitalism. Tony Bennett has argued that the axiomatic concept of disinterestedness itself, from Kant’s eighteenth-century writings on aesthetics, rehearsed older civic humanist thought that ‘the independence of the landed gentry and liberal professions from the dominion of others’ was ‘an essential qualification for the disinterested exercise of both aesthetic and civic capacities of judgment’ (Bennett, 2011). What we begin to see are the early signs of art’s autonomization as a historical product of class consciousness (Bourdieu, 1993). In Bürger’s view, this caesura had aesthetically palpable consequences. Among the bourgeois, as ‘members of those classes which at least at times, are free from the pressures of the need for survival, a sensuousness could evolve that was not part of any means-ends relationships’ (Bürger, [1974] 1999: 56). So too, in time, would the new model for artistic valorisation sequester the cost of art from considerations of social utility, by that principle elevating it beyond the commensurative practices of everyday calculation.

Nevertheless, artistic greatness in the fine arts for a long time remained intelligible only insofar as technical excellence was the given plane along which differences occurred. Art remained functionally defined according to the mimetic vocation of self-effacement in the act of creation. Moreover, being an institutionalised civic profession, its duty of moral instruction made aesthetic transgressions examples of public deceit.

Romanticism

The Romanticist upheaval, initiated at the end of the eighteenth century by such thinkers as Schlegel, Fichte, Novalis, Holderlin, Schelling and Hegel in Weimar Germany, but also native to other nations of Europe, was fundamental to the developments that led first to modernism, and then to the current state of contemporary art. According to Schaeffer's unsparing and brilliant analysis of the subject, the romantic revolution of the end of the eighteenth century was born of 'a twofold spiritual crisis, one in the religious foundations of human reality and one in the transcendental foundations of philosophy', each of which culminated in Germany with Kant (Schaeffer, [1992] 2000: 9). The Romantic 'syndrome' was driven by a 'disorientation linked to the ever-greater differentiation of diverse spheres of social life' and thus 'an irrepressible nostalgia for a harmonious and organic (re)integration' of these dispersed facets of reality (*Ibid*). Romanticism gave gravity to that loss which modern life inherited: 'to be modern', as Roland Barthes would later write, 'is to know *that which not possible any more*' (Bois, [1986] 1999: 329). The late British Romantic cultural critic Matthew Arnold called this the 'disquieting absence of sure authority' (quoted in Belfiore and Bennett, 2008: 136), inheriting the conception from Shelley that poets, but also artists in general, must in this vacuum become the 'unacknowledged legislators of the world' (1891: 46). It was thus fundamentally conservative in its aim to halt the 'secularization of philosophical and cultural thought that had been undertaken by the Enlightenment' (Schaeffer, [1992] 2000: 67); and it saw in artists a potential counterweight to the types of rationalist forces that would eventually seek to establish utility as meaning, to use Arendt's memorable wording (Arendt, 1958)

Uniquely incapable of being standardized, Art became the repository, for Romantics, of spiritual needs whose fulfilment was perceived to have been previously accomplished through religion, community, and a pastoral connection to the means of production. The oeuvre of Friedrich in particular became archetypal in providing pictorial equivalents to this loss. The sacralization of art was moreover construed via an additional religious parallel: the act of pure creation being a divine prerogative, the artist's relation to their work could be recast as a recapitulation of God's to the universe, thus imputing a very real connection between the two. Art's platonic shortcomings vis-à-vis reality no longer appeared as morally corrupting failures of mimetism where that very distance symbolised the artist's creativity. Individualism found its arena. The compensatory function of Romanticism's sacralization of art, channelled through its absorption into the realm of philosophy, which itself was grappling with the falling apart of traditional certainties, was thus given force through the absolute elevation of the creative act (Schaeffer, [1992] 2000). Romanticism was in fact the apogee of belief in art's moral, civilising and civic powers. As Walt Whitman put it in 1871 with regards to Romantic authors: 'the priest departs, the divine literatus comes' (quoted in Asselineau, 1999).

Originality in the Industrial Age

The emergence of Romanticist thought was profoundly linked to the emergence of the bourgeoisie as a political and economic force; the ruptures of early modern shifts in social and economic organization; the continually improved status of the arts since the eighteenth century;

the rise of the art market; and the new importance of the philosophy of aesthetics. The newfound uniqueness of artistic practice, as isolated from the currents of industrial production, exhorted artists to emphasize the exceptional nature of their mode of production', in what became 'a practice of one-upmanship' (Bois, referring to Schapiro's arguments: [1986] 1999). Romantic theories of the dialectical progression of civilization eventually translated into an endorsement of a 'historicism conception of artistic evolution' (Schaeffer, [1992] 2000: 5), according to which artistic innovations were framed as an uncovering of art's inner essence, each avatar the 'fulfilment of potentialities' already inscribed within it (*Ibid*: 101). This was supported by the autonomy of fine arts, as a liberal art, from its commerce, and therefore, by extension, from the humdrum praxis of social life. It occasioned questions over the nature of artistic work and the function of artists at the same time as philosophy, in the study of 'aesthetics', became interested in art and newly valorised it for its apparently unique attributes (Hutter and Shusterman, 2006: 184). The 'ecstatic knowledge' which art came to represent, invited new forms of what Jameson called 'hermeneutical interpretation', a kind of looking behind signs which Rancière also recognised as having taken hold in Marx, Balzac and, naturally, Freud ([2003] 2007: 16), and which radically expanded the intellectual affordances of art. Artistic practice itself, naturally, became ensconced in performing the divine attributes that Romanticism had imputed it and by which its status had been significantly improved. Already by the nineteenth century, according to Bürger, the 'apartness' that had been the condition of art's functioning became 'its content' (57 Bürger, [1974] 1999).

The new connectivity of the nineteenth century brought with it waves of émigrés artists across the art capitals of Europe whose experience would imbue the modernist consciousness. This had a number of consequences. Among them was an over-supply of artists in the capital of arts, Paris, compounded domestically by the elevated status that Romanticism was giving artists, for which the traditional channels of the Académie had no capacity. This meant that significant numbers of aspiring artists were suddenly outsiders to established institutional frameworks. These frameworks, in turn, found the monopoly they exerted over the formation and aesthetic of artists diminished. Outside of institutional frameworks, however, the philosophy of *art-for-art's-sake* had the perverse consequence of 'depress[ing] the supply price for the artist's services below the pecuniary compensation expected from the artist's best alternative (non-creative) job', because it became a constitutive element of that compensation (Caves, 2006: 534), elevating the spiritual rewards for the 'artistes maudits', destitute and itinerant, the more they were immiserated. Artists who were not academicians were diverted towards the budding channels of the art market, where an outlet could potentially be found for higher variance than the standardized teaching of the Académie allowed, by intermediating with the new bourgeois class. At the same time, the advent of photography, cinema, radio, television and recording in this period (Williams, [1989] 1999: 25), which allowed for the assembling of 'an encyclopaedia of the shared human inheritance: remote life-forms, works of art, popularized bodies of knowledge' (Rancière, [2003] 2007: 6), vastly expanded and diversified society's image repertoire. Pace of change, contemporaneity and ephemerality were introduced into its understanding of imagery. Such conditions created a 'syncretism of experience that provided a sudden openness to new styles of life' (Bell, 1972: 25). The image of the émigré, of the marginalized artist, became central to the modernist self-conception, including themes of isolation, alienation and discontinuities; self-referentiality and the exploration of subjective experience in a newly forming modernity. It fulfilled Romanticism's celebration of the individual genius as inherently separate from the mainstream of social life.

The rise of the bourgeoisie, pitted against inherited aristocratic interests, and the changing nature of economic and technological organisation, moreover begot a change in value systems that would eventually seep through to the domain of visual arts and complement the groundwork which romantic thought had laid. What is important, as McCloskey writes, is that attitudes changed towards innovation and markets; they were accorded a dignity (McCloskey, 2010). Existence outside of aristocratic or state systems of funding became plausible in the access to a new bourgeois demand base provided by the organising mechanism of the market, and a separate art sphere could as a result begin to form. ‘Modern painters’, Clark has noted, ‘knew the market was their element’ (1999: 11): it ‘provided the structures of exchange and consumption through which the avant-garde could reach a public’ (Frascina and Harris, [1992] 1999: 13). As Crane agrees (1976; see also Schinkel, 2010: 282), a semi-autonomous reward system was necessary for a relatively independent artworld.

The market first allowed, then encouraged, and eventually enforced experimentation. The perceived equivalence between academic art’s subject-matter and its means of depiction meant that, as Clark put it, ‘the normal habits of representation must not be given a chance to function; they must somehow or other be outlawed’ (Clark, [1985] 1999: 49): the market was both an outlet for difference, and reliant on it to distinguish its wares from those available through official channels. Market and artists reinforced each other’s novelty.

Originality as token of modernity would come to play two complementary roles: it drove the market – notably elevating its capacity for audience-generating controversy – and it inured artists from the perception of market-pandering to which they had become exposed in transacting through it, keeping at bay the spectre of mercantilism. Originality was the key factor according to which artists could produce works for circulation on capitalist markets without being seen to betray their art’s aloofness from pecuniary ambitions: originality was the new discursive signifier of disinterestedness. The renunciation of society’s *idées reçues* on art was a strategy that endeared such art to certain segments of the ‘educated hereditary bourgeoisie’ precisely because such an ‘aesthetic sensibility’ could serve to distinguish it from the ‘swelling’ petite bourgeoisie – ‘ignorant or dim-witted philistines’ (Bourdieu and Haacke, [1994] 1995: 41) – that were beginning to threaten its position. Moreover, the severe constraint on the pool of available buyers structurally maintained the Romanticist image of the suffering artist, capitalising on its transmission into the artistic field of the anchoritic connection between suffering and the seeking of Truth. While originality was inherently relational, the fact of its generative locus being perceived to be hard-won artistic imagination meant that the referentiality (such as that of mimesis), already weakened by the eighteenth-century focus on technique, was lost once originality became the driving force of value. The material surface of the artwork effectively became the receptacle of artists’ mystical intuition; originality reified. Thus, art’s value became locked into the object the very moment it also emancipated itself by becoming the commodity, a status which, through these machinations, was somehow sufficiently transmuted for it to also be elevated.

Romanticism and what would eventually be known as market liberalism were thus inextricably linked: the former identified and built up the intellectual and spiritual framework (individualism, the personal merits of striving and genius) under which the latter’s goals could be both justified, upheld and pursued. With the gradual loss of the academic foe, capitalism rose to occupy the focal point against whose inhumanity artists were pitted, though its ability to

coordinate demand with supply remained dominant among artists' means of liberation from the establishment, and thus more surely implied the more radical artworks became. Naturally, this opposition always was – and remains – fraught by art's dependence on the market, even if underwritten by the symbolism of originality as the surest sign of transcending its effects.

By the beginning of the twentieth century, an aestheticism emerged that took art's position, by virtue of its appearance, against the petite bourgeoisie and against propriety and vested interests, as political by default. In this new 'aesthetic regime', art's 'operational closure' was finalised (Schinkel, 2010: 283) with the aim of 'directly realiz[ing] the idea [of itself] in self-sufficient material form' (Rancière, [2003] 2007: 19). Its materiality, its being-in-the-world, became the source of a connection to reality formerly affirmed through mimesis, and thus the pretext for an increasing disconnectedness from lived life. The 'systemic closure' of the artworld as an 'autopoietic subsystem of society' finally refocused art around a single internal problem: 'the possibility of being a work of art' itself (Schinkel, 2010: 275). 'The work of art', in Adorno's words, 'becomes its own material' (2001: 64). Whereas 'naturalistic art had dissembled the medium, using art to conceal art; Modernism used art to call attention to art' (Greenberg, 1961: 309). Kantian 'disinterestedness', which in Kant's thesis was a property of the aesthetic disposition, became codified directly into the work of art, which no longer required definition in reference to anything external to it. Originality alone became art's *causa sui*, alterity its political force, because at all times inherently under threat by the dominant system. By a curious paradox, art's disavowal of its markets became the main driver of its renewal and thus its continued economic success. 'The autonomy of the artworld' as Schinkel writes, was thus 'maintained precisely with the help of a supposed crisis' (Schinkel, 2010: 281).

High Modernism

Modernism lasted not more than a couple of decades over a century, peaking in the baby-booming exuberance of the post-war order, a period often referred to as 'high modernism'. The conditions sensed in the nineteenth century's early modernity – secularization, bureaucratization, the spread of means-ends utilitarianism, the undermining of community life, the penetration of markets 'into more and more of the world and the texture of human dealings' (Clark, 2001: 7) – had by the first half of the twentieth century come to grotesque & glorious inflorescence. The 'blindness of modernity', what Clark describes as the 'hiddenness of the "hidden hand"; or rather, the visibility of that hiddenness – the availability to individual consciousness of more and more "information" [...] pointing to the purposelessness of social action' (*Ibid*: 9) became modernism's critical meridian, the condition whose inequity it made its goal to lay bare, and yet whose fruits it also celebrated (in Futurism, Vorticism, and later Minimalism), in a tension it could not ultimately reconcile. The evolving nature of modernity meant that artists and intellectuals deemed art's compensatory mandate, inaugurated by the Romantics, to have only a stronger basis still: culture *must* be the bulwark against total anarchy, total degeneracy. The sacralisation of artistic activity, its inheritance of a mystic connection to Truth, its increasingly singular status as unalienated work in the context of the rise of scientific management, and its deep connection to the non-empirical knowledge acquired 'not as a lawyer, a physician, an astronomer, or a natural philosopher, but as a Man', in Wordsworth's memorable phrasing (quoted in Belfiore & Bennett, 2008: 130), gave the

arts a singularly powerful position as the antidote to, or the compass out of, man's 'self-incurred tutelage' (Bennett, 2011).

Bell has pointed out that 'whatever the political stripe, the modern movement has been united by rage against the social order' (Bell, 1972: 28). Cameron, likewise, has written that 'the avant-garde is kept vital through conflict, both real and imagined' (Cameron, 1990: 6). Nevertheless, the works that such conflictual posturing gave rise to were, in the central canon of modernism, political mostly in an oblique sense. Resistance was the *de facto* function of an artistic momentum defined by experimentation, but its aesthetic expression was legible only with contextual reference to broader and increasingly esoteric artistic production, Cubism and Surrealism being exemplary in this respect. As a result, what were conceived as radical acts were in reality, through the elite and idiosyncratic conditions of their meaningfulness and dissemination, increasingly divorced from the world.

The artistic position of the modernist avant-garde had in fact synthesized two ostensibly opposite strands in nineteenth-century thinking, namely the Saint-Simonian strand that saw a civic role for an artistic avant-garde as fundamental to civilizational progress, and the romanticist emphasis of *art-for-art's-sake* on the autonomy of art associated with Theophile Gautier. The reconciliation centred around the notion, alluded to above, that the experimentation of art itself reflected the great upheavals of modernity and thus, in pointing to them, sided with the oppressed and marginalized. The problem of art's autonomy had on its own, for instance, been particularly acute for politically radical intellectuals attempting to deal with now totally abstract art in other ways than by decrying its elitist hermeticism and irrelevant formalism (for instance the *Partisan Review* and *Marxist Quarterly* – see Guilbaut, 1980: 241). There was tension around the autonomy of art as a strategy of difference always predicated on resisting 'instrumentalizing and 'massifying' trends within capitalist development' (Hanquinet and Savage, 2016: 3).

The solution was articulated by Meyer Schapiro who argued that abstract art was a reaction to, and therefore reflective of, underlying social conditions. As a result, it too could be used to 'express a critical social consciousness', while remaining free of any party-political affiliations that might threaten artists' autonomy to do so (*Ibid*). The most influential account of modernism, however, enshrined in new museums of the interwar and post-war era, was the formalist account developed by Greenberg between 1939 and 1948, in which the explicitly political dimension of the avant-garde was rendered implicit in an *artistic* avant-garde that served not to highlight political issues but to further the project of artistic radicalism so as to prevent it from falling prey to mass culture and 'kitsch', such as was represented either by the homogeneity of totalitarian ideologies (i.e. Communism) or the bourgeoisie. John Carey indeed suggested that the development of modernism in literature too was a form of hostility to the masses, in this case the growing reading public which educational reforms produced (quoted in Belfiore & Bennett, 2008: 33). This was moreover consistent with a high / low culture split in 'which sociological theorists from Weber to Simmel and the Frankfurt School became increasingly bound up' and formalized (Hanquinet and Savage, 2016: 6), and which is forcefully summarised in the observation by Adorno, arch-proponent of 'high art', that 'the concept of the work of art implies the notion of success. Botched art is no art at all' (quoted in *Ibid*: 276-277).

As should be clear, the formalist understanding of art's political dimension was in reality a depoliticization of the interpretation of art, a removal of friction, of everydayness and contingency, that gave art a preternatural affinity to the workings of the market, in part because it

consecrated art as self-sufficient object. As Cockcroft has suggested, this implied that ‘avant-garde artists generally refused to recognize or accept their roles as producers of a cultural commodity’ (Cockcroft, 1974: 82). For Terry Eagleton, the experimentalism of art was a strategy of opposition to mass market culture, which it was continuously trying to forestall, and thus an attempt to remain aloof of the mundane, rather than part of the development of an internal essence, and least of all part or a more significant political practice *grounded in* the mundanity of experience. However, experimentalism, even obscurantism, came at a cost. It meant that ‘the modernist work escapes from one form of commodification only to fall prey to another. If it avoids the humiliation of becoming an abstract, serialized, instantly exchangeable thing, it does so only by virtue of reproducing that other side of the commodity which is its fetishism. (Eagleton, 1985: 96).

The modern museum was established in the same period, as the most cutting-edge embodiment of artistic values formulated since the nineteenth century: individualism, rebellion, the elevation of the spirit above mundane reality and towards pure abstraction; heirloom of a Christian metaphysic in an increasingly secular world. Moreover, it was structured around the new proper aesthetic disposition of private contemplation, for which the context of display had to be purged of all potential distractions. This condition of display became ‘fundamental to the construction of the category ‘art’ in the modern western world’ (Emma Barker, 1999: 13), and this itself remained predicated on a spiritual and apocalyptic revelation (Duncan and Wallach, 1978).

As an organic by-product of modern art’s accession to the establishment, albeit a revamped establishment in the image of the art it served, ‘a kind of modern academy’ emerged, as Paul Wood writes, ‘of course, not as institutionally organized as its classical predecessor’ but nevertheless characterised by the same dynamic: ‘the ethos of the artist as the producer of painterly aesthetic effects and of the competent spectator as one who cultivates the ability to discriminate such effects takes hold as the cultural reflex of bourgeois society’ (1996: 256). Soon, ‘the marginal or rejected artists become classics of organized teaching and of travelling exhibitions in the great galleries of the metropolitan cities’ (Williams, 1989: 26). The critique of mass society became part of art’s consumption, with museums, in all the ‘tiniest details of their morphology’ betraying their ‘true function, which is to reinforce for some the feeling of belonging and for others the feeling of exclusion’ (Bourdieu, Darbel & Schnapper, 1991: 179).

With a new solidarity between state and institution towards modern art developed ‘an entire bureaucratic apparatus’ of ‘arts councils, funding bodies, educations programs, residencies, magazines, awards’ as well as MFA programs, graduate schools and grants (Deresiewicz, 2015) that effectively professionalized the contemporary artist and formalized his (his: mostly, but no longer entirely) market ecosystem. Increases in real disposable per capita income and high taxation rates of post-war Western economies moreover led to ‘an increasing fraction of national income and employment being devoted to the arts’ (Menger, 2006: 767). As had been the case in earlier centuries, mechanisms and environments that seemed to favour the creation of great artists were a matter of national interest, particularly for America, which projected itself as the defender of the free world. A system thus matured where the art market and art museums operated jointly to establish the worth of contemporary art: museums increased the stability of market prices and their legitimacy as corollaries of a slowly accrued assessment of quality to which museums bore the ultimate seal. Museums thus reflected what modernist artists knew: that the market ‘compounded a process – a verdict’; it fed off biographical elements, compared works across periods, saw artists as having phases and crises, zeniths and twilights and thus rendered their work

path-dependent (Clark, 1999: 56). Romanticism, in part, had helped make it thus: it had shaped the formula of artistic valorisation in the market.

Romanticist Legacy

Exhausting the areas marked by our social inheritance of romantic precepts would be an impossible descriptive task. However, before elaborating on the shift which post-modernism constituted, I want to point to a few candidate areas here.

The conception of art's privileged relation to 'Truth' (as opposed to Beauty) has been central to modern art. It marked the mystagogic ambitions of Symbolists, the search for 'truth to materials' of Barbara Hepworth and Henry Moore, and the puritanism of Minimalists. Its support for art's transformative potential as divine disclosure or gnosis structured the Surrealist project of revealing and freeing repressed desire ('Eros'), the mysticism of Suprematists, the spirituality of Rothko. All are indebted to the Romanticist reformulation of a Christian metaphysic based on hierophany. A relation to truth has been key to art's involvement in negotiating what Jameson called 'depth models' – essence / appearance; latent / manifest; authenticity / inauthenticity; alienation / disalienation; signifier / signified – which have structured much of modern thought (1984: 62). Public policies supporting fine arts have themselves been predicated on the transformative narrative of art; Bennett has suggested that British support for the arts in the post-war period cultural policy was '[i]n many respects [...] a Romantic project' (2006, quoted in Belfiore & Bennett, 2008: 134). And Danto observed, of a later period, that the heavy subsidies allocated to artists and art in places such as France 'might be justified if art were as exalted a pursuit as the Romantics believed it to be' (Danto, in his introduction to Schaeffer, [1992] 2000: xvi).

Equally significant, the pursuit of Truth was connected to the evolutionist understanding of changes in artistic practice across time – because Truth is accretive – and the notion that this pursuit related to the unfolding of an internal, immanent destiny. It informed the autotelic, historicist, evolutionist, quasi-dialectic format for understanding art historical progression that dominated the writings of Greenberg, the flow-charts of Alfred Barr, and the internal lay-out of the MoMA, in which each artist acquires significance 'according to how much they contributed to the evolution of the total scheme', itself culminating in the 'transcendence of mundane experience' (Duncan and Wallach, 1978: 34–35, 46). The entire project of the avant-garde was, in Schaeffer's words, 'an eminently historicist project', with 'an internal history as a motivating factor' (Schaeffer, [1992] 2000: 279–87). Within it, artistic careers recapitulated the whole. As T. J. Clark has written, 'thinking of pictures as primarily episodes in an individual's career – as opposed to, say, contributions to a public dialogue in the Salon, or response to [historical] moments' became 'natural to modernism': it would 'teach artists to view their work, proleptically, as part of a singular continuous past; and therefore to produce work to fit the bill' (Clark, 1999: 55–56). By extension, Pollock has argued, the Romantic notion of genius also structures standard art historical forms such as the monograph and catalogue raisonné, reproducing an artist's corpus as the expression of merely biographical factors, 'autonomous' of historical and social contingency (1980: 63).

As Hutter and Shusterman (2006: 187-190) have shown, in philosophy too the Hegelian connection between art and Truth endured across continental, especially German philosophy of the twentieth century, including in the work of Nietzsche, Heidegger, Gadamer and Adorno, as crucial to articulating a vital political role for artists. Through this conception, aesthetic practice could be linked to the production of a 'free, critical and self-reflexive form of individuality' (Bennett, 2011). To Rancière, the power of Romanticism was to conceive of art as 'a sphere both at one remove from polities and yet always already political because it contains the promise of a better world' (Bishop, 2012: 27), a promise manifested by art's perceived ability to afford a transcendent glimpse of a common humanity through the inherent claim to universality of the Kantian 'judgment of art'. The purported universality of aesthetics was thus given a strong political dimension as a 'technology of the self' through which the community of man might be realised (Bennett, 2011). In this argument, art suspends everyday reason and power evenly across its viewers in the *pre-cognitive* moment, and therefore invites them, through the interpretive work required by looking at art, to consider both the state of the world and, by extension, its contingency and openness to future change. In this manner, art can catalyse a process of rethinking the world's configuration that is inherently political, in part by virtue of its being aloof, in a direct sense, from the machinations of politics (*Ibid*). The aesthetic is therefore the potential locus of a 'metapolitical' foresight of a coming humanity – a secular take on Romanticism's reformulation of the Christian metaphysic (Bennett, 2011). Jill Bennett's *Practical Aesthetics: Events, Affect and Art After 9/11* (2012), in the lineage of Rancière as much as Clive Bell, has similarly proposed an immanent power for art insofar as it 'generates a set of aesthetic possibilities, which may in turn inform political thinking', in other words 'an inherently hopeful or anticipative sense of aesthetics' (quoted in review by Henry, 2013). Pollock has understood artistic practice as powerful insofar as it orchestrates an encounter with heterogeneity which in turn 'stimulates the necessity for concept formation', an activity that 'renovates all systems of meaning, but sometimes revolutionises them' (Pollock, 2011). Such conceptions of art, based on what Mew has called a 'provocative function' (Mew, 1973, p. 333; see also Belfiore & Bennett, 2008), have remained a potent force in art theory. The aesthetic sphere's ability to summon a *sensus communis* has underlined the notion of aesthetic communities in Bauman (1991), Ferry (1993), Gronow (1997), Maffesoli (1996) and Lyotard (1988) (references from Woodward and Emmison, 2001: 298).

Finally, the influence of the sacralisation of art endures in the development of the contemporary exhibition style, even if it is today tempered (in theory, more than in practice) by the privileging of experiential and interactive components. The elevation of art as the realm of communion is subjacent in the 'untouchability of objects', the 'religious silence', the 'puritan asceticism' and the 'grandiose solemnity' of displays of art (Bourdieu, Darbel, and Schnapper, [1969] 1990: 179); and in the fact that 'museums, as modern ceremonial monuments, belong to the same architectural class as temples, churches, shrines, and certain kinds of palaces', that they encourage an interaction 'most accurately described as ritual' (Duncan & Wallach, 1978: 28). Romanticism underpins 'the myth of the innocent eye' as the still prevalent logic of the modern museum and therefore the belief that the purification of the space in which the encounter takes place, rather than brute intercession, is the museum's goal (Hanquinet & Savage, 2012: 43). As Bürger has noted, the late eighteenth and particularly the nineteenth century individualised not only production but also the reception of art, such that 'the solitary absorption in the work is the

adequate mode of appropriation of creations removed from the life praxis of the bourgeois', what can be called an 'aesthetic' mode of experience (Bürger, 1992/1999: 57; Belfiore & Bennett, 2008: 21).

2. Agoraphilia

Post-modernism probably crystallized as the predominant cultural and intellectual disposition with the collapse of the Soviet Union and the end of socialism (Clark, 2001: 8-9). For philosopher Susan Buck-Morss (2002), echoing a condition discerned by Lyotard (1979), this event was the end of mass utopian thinking which had so characterised the twentieth century: the notion that industrialization would overcome scarcity, that urban environments could be designed to produce moral citizens, or that freedom would emerge from the centralised strategies of the state, among others. Not only did it represent (and was it touted as) the death-knell of collectivist ideology, it was also the liberator of unfettered market fundamentalism. As Michael Cox has argued, abating the threat of communism had likely held in check the neo-liberal zeal of Western powers in the post-war period, forcing them to provide significant safe-guards to workers and extensive welfare systems in order to do so.⁵² 1991 removed the only competing ideology to capitalism, and thus inaugurated an era of unopposed expansion of market mechanisms into the dealings of social and political life: deregulation, privatization, tax reductions and the contraction or elimination of the welfare state to accommodate trickle-down economics (Bauman & Tester, 2001: 73) – all features of financialization as we have discussed it in Part I.

To be sure, post-modernism started before then: it lived already in 1968; it came forth in civil unrests in the sixties and seventies; in deconstructionist and post-structuralist philosophies; in Marxist, feminist, gender and post-colonial scholarship and revisions to Euro-centric, white male dominated historical narratives. It lived, too, in the 'spectacle society' which hyper-capitalist commodity culture had created. It pervaded the exuberance of the stock markets in the eighties. Similarly, as I have argued above, modernism did not entirely end in 1991; it continued hidden in the structure of the market itself, internalized in complex and contentious patternings of thought, underwriting the structural coherence of the artworld. As Savage & Hanquinet have pointed out, in spite of the battery of late century attacks, and in spite of the laudable efforts by numerous players in the art market to embed institutions and practices into local contexts and communities, 'the power of high culture appears to continue in marked ways' (2016: 11).

This section is concerned with the ways in which post-modernity inaugurated the demise of assessment systems and interpretive authority, weakened the claims of institutions and, by inverse proportion, strengthened the voice of the canons produced by the market. If the previous section concerned itself primarily with vertical relations of worth, the focus of this chapter is the planar expansion of artistic practices during post-modernism – their 'spatialization', horizontal explosion and fragmentation. I will start with an account of key theoretical features of late modernism – ostensibly a break, but also the logical extension of the hermeneutic valorisation of art started in the nineteenth century – and place the rise of post-war and contemporary art in its context.

⁵² Michael Cox, 'Rethinking the end of the Cold War: Debates, Contestations and Questions' (05/10/2016: LSE IDEAS).

Post-modernism

Post-modernism has mostly been characterised in terms of an assault on, and a delegitimization of, the certainties held by modernism (see Hebdige, 1986-87: 311, for a list of post-modernism's meanings). Lyotard saw it as the end of the valence of meta-narratives, what Eagleton calls 'the grand totalizing narratives of the Enlightenment' (Eagleton, 1985: 95). Shorn of beliefs in the great binding arcs of progress, the emergence of the West, or science; of belief in the perfectibility of reason; and of its futurological disposition (through the constant supplanting of the past), postmodernism becomes anti-teleological, suffering what Jameson has called 'a volatilization of temporality, a dissolution of past and future alike [...] an existential but also collective loss of historicity [...] and inability to imagine, let alone to organize, the future and future change' (Jameson, 2015: 120). This demise emerges out of the broader context of an attack on 'Truth' and the 'metaphysics of presence': Foucault's work on the ideological specificity and historical contingency of the epistemic regimes by which societies produce what they hold as 'facts'; Baudrillard's description of our era as one of 'hyperreality' and thus fiction; Derrida's exploration of the constant relativism and instability of meaning as a result of the functioning of language; Latour's insights into the social construction of scientific facts and scientific practice as 'culture' – to name a few. The generation of knowledge is thus revealed as 'singular, localized and perspectival [...] constructed, not discovered [...] contextual, not foundational' (Elliot, discussing the work of Bauman, in Elliot (ed), 2007: 6). Postmodernity, as Keith Tester put it in his work on Bauman, 'is the world without unchallenged "evidencies"', it means 'living with the awareness of contingency' and signifies 'the recovery of ambivalence' (2004: 139). In other words, it has been a coming to terms with the facts that 'despite modern ambitions the war against human waywardness and historical contingency is unwinnable, that the resistance of human modality to logic and rule is here to stay, and that the modern crusade against ambivalence and the "messiness" of human reality only multiplies the targets it aims to destroy' (Bauman in *Ibid*).

With postmodernism, previously held 'universals' thus suddenly appear in a new guise: as 'hegemonic norms and institutional values' that are 'inevitably normative, and thereby oppressive and binding', and that must therefore be denounced by 'identity politics and the politics of secessionist groups and marginal or oppressed cultures' (Jameson, 2015: 127). The carefully constructed Greenbergian canon of modernism and the whole institutional apparatus dedicated to its support suddenly appear more of a means of exclusion (of gender, race and class), and thus an affirmation of specific centres of power, than a means of elevation of that which is 'best'. The power of transcendence is recast as the failure of aesthetization and a symbol of distance from political and social reality: transcendence, through its disregard for the particular, may anticipate the brotherhood of man, but history shows it is equally likely to buttress the status quo. The notion of individual genius, of individualism as a whole, along with the intellectualism of formalism, becomes emblematic, furthermore, of 'the economic practice of private property rights, free markets and free trade' that anchor dominant ideologies (Bishop, 2012: 12). The romanticist valorisations underpinning modernist art turn it into art an aestheticization of neo-liberalism. As Williams wrote, it becomes clear that art's 'forms lent themselves to cultural competition and the commercial interplay of obsolescence, with its shifts of schools, styles and fashion so essential to the market' (1989: 26). The modernist artworld, only just institutionalized in the post-war period, reveals itself as merely a new, and equally elitist establishment, whose

curation of and aspiration to a lineage, as evident in the norms of modernist display, are based on ‘a representational conceit—a “science” of origins that does not hold up’ (paraphrasing Douglas Crimp; Foster, 1998: xiv).

In a world where there are no longer criteria ‘by which acts of affirmation or denunciation would be possible’, history becomes ‘spatialized’ into ‘a range of possible styles’ (Eagleton, 1985: 97; see also Jameson, 2015: 130 on the ‘preponderance of space over time in late capitalism’). The world of contemporary art becomes ‘a field of stylistic and discursive heterogeneity without a norm’ (Jameson, 1984: 65) Hierarchies ‘which kept apart the competing definitions of culture – high culture, low culture, mass culture, popular culture, culture as a whole way of life’ fall apart, become blurred, in favour of ‘the particular, the vernacular, the sanctity of regional or national materials, styles, methods and traditions’ (Hebdige, 1986: 333, 336). The notion of the avant-garde, as front-running liberators of civilisational consciousness, loses sway. The demise of the cultural hierarchy underpinning the notion of ‘aesthetics’, as Claire Bishop writes, means that ‘idiosyncratic or controversial ideas are subdued and normalised in favour of a consensual behaviour upon whose irreproachable sensitivity we can all rationally agree’ – what Rancière calls the ‘collapse of artistic and political dissensus’ (2012: 26, Rancière quoted in *Ibid*: 28). If meaning is relational, then the universalist basis for assessing such meaning falters into relativism. In the arts, as in politics, ‘contemporary society [gives] “hospitality to critique” an entirely new sense and invent[s] a way to accommodate critical thought and action while itself remaining immune to the consequences of that accommodation’ (see also Boltanski and Chiapello, [1999] 2005; Bauman, 2001, in Elliott, 2007). The democratizing turn of post-modern life can thus also ‘abet a flat indifference, a stagnant incommensurability’ (Foster, 2003: 128). The subjection of ‘all modes of cultural expression [...] to extensive external review and critique’ has ‘relativized’ their values (Hanquinet and Savage, 2016).

Under the dominance of the spatial dimension, institutional exhibition structure moves away from chronology and its inevitable emphasis on a teleological hermeneutic, towards juxtaposition: thematic, deliberately and explicitly idiosyncratic arrangements, based on the values of experience and enjoyment, rather than scholarship, enlightenment or ‘truth’. The architectural layout brings in ‘the pierced partition, the open balcony, the interior window’ in a ‘constant decentering around the continual pull of something else, another exhibit, another relationship, another formal order’ (Krauss, 2005: 347). Space collapses time. MOMA, bastion of modernism, transcends the broad art historical categories defining even its internal organizational structure by having departments work together for the first time in a ‘more flexible and open’ manner, mixing objects across artistic, craft and design categories, with the aim, according to its chief curator, of reflecting a ‘more widespread shift from thinking in categories — or thinking in so-called canonical narratives — to thinking about multiple histories. Having a sense of curiosity, rather than a desire for pronouncement’, and so increasing curatorial latitude where it had been restricted by the chronological imperative (Ann Temkin, Chief Curator of Painting and Sculpture, quoted in Pogrebin, 2015). Seeking to ‘activate’ the audience, museums ‘prompt and prod us as many of us do our children’ (Foster, 2015), they pander to the post-modern move away from notions of audience or viewers to those of participants or co-creators – of the moment of art conceived as transitive. Thereby, as ‘spectacle-museums’, they envisage a new relationship with visitors that is ‘more sensational, more direct and more accessible’, based on an educational dimension that is ‘interactive and dialogical’ (Hanquinet & Savage, 2012: 43-44). From *Dylaby: dynamic labyrinth*

at the Stedelijk Museum (1962), to *One two three swing!* by SUPERFLEX at Tate Modern (2017), playfulness and interaction have been key to museum programming. Indeed, the rise of participatory art comes from the same artistic and intellectual history, aimed at breaking down the strength of institutional judgment in favour of the beliefs of artist like Yoko Ono and Feliz Gonzalez-Torres, as gallerist Andrea Rosen puts it, that ‘there is an equality where everyone has the same ability and right to a point of view’ (quoted in Bodick, 2015). Constant contemporaneity overwhelms the preservative function of the museum; the temporary exhibition overwhelms the permanent collection.

The prerogative of democratization invites a broad conception of culture through ‘institutionalized pluralism, variety, contingency, and ambivalence’ (Bauman, in Tester, 2004: 139). Museums want to reflect culture at large, not preserve a canon, so shifting from their capacity to select to their capacity to encompass. This poses a problem for art, even as it solves another. Some have lamented the disappearance of ‘some sort of larger system of belief, a larger structure of continuity that permits works of art to speak across time’, and observed that what has replaced it is a ‘broadmindedness so roomy that it is indistinguishable from indifference’ (Lewis, 2015). This development, Lewis writes, is ‘lethal’, for ‘while the fine arts can survive a hostile or ignorant public, or even a fanatically prudish one, they cannot long survive an indifferent one’ (*Ibid*). As Menger put it, ‘an art realm that welcomes any novelty as a noteworthy innovation necessarily lacks consensus on any critical paradigm’ (2006: 788). But this is not modernism’s demise. As Clark so perceptively wrote: ‘Post-modernism mistakes the ruins of those previous representations, or the fact that from where we stand they seem ruinous, for the ruin of modernity itself — not seeing that what we are living through is modernity’s triumph’ (Clark, 2001: 3). If ‘there is no longer an avant-garde’, as Bell wrote already in 1972, it is because ‘no one in our postmodern culture is on the side of order or tradition’ (30); the avant-garde is ‘institutionalized’ in a ‘society given over entirely to innovation, in the joyful acceptance of change’ (*Ibid*, 13; also Jameson, 1984). Crisis, fully accepted, mainstreams what Harold Rosenberg already in 1959 called ‘the tradition of the new’. *Plus ça change, plus c'est la même chose.*

Pluralism has diminished space for specialised forms of connoisseurship within art history which make certainty their objective, in favour of multi-disciplinary approaches that avoid the problem of prescriptiveness or historical objectivity altogether. Brian Allen, former director of the venerable Paul Mellon Centre for Studies in British Art and trustee of the National Portrait Gallery, is among those who have noted and condemned the slow demise of traditional art history and the crisis of connoisseurship, which produces students that are no longer comfortable making ‘attributional statements’ or studying pre-twentieth-century art, favouring instead sociological or social history approaches to contemporary art that, according to Allen, require a less specialist body of knowledge (interviewed by Alberge, 2015), no doubt because, like the art they study, they are perceived to be counter-hegemonic forms of knowledge-production. Indirectly, Allen is therefore lamenting, like Lewis, the abandoning of a discipline that sought to create knowledge and debate within fixed historical, thematic and stylistic parameters in favour of epistemic approaches predicated on broad epochal or systemic shifts and varied geographic and temporal narrative patterns (*mea culpa*). That art history was scrapped from A-levels in the UK in 2016 – even if this was eventually reversed – should be seen as illustrative of this shift, whereby the study of art becomes absorbed, if it takes place at all, within fields such as sociology, economics, or cultural studies. Simultaneously, a great many contemporary artists have themselves embraced

multi-disciplinary forms of documentary-making, community engagement, and research programs that have legitimised this turn in the humanities and social sciences.

Standardized scholarly practices, such as authentication and the catalogue raisonné, the latter of which defines the authoritative universe of works made by an artist, have also lost sway to the market: the waves of litigation against scholars for opinions perceived to be incorrect, misleading or damaging, and the sheer capital involved in the art market, now mean that the exclusion of works of art can have dire financial and legal consequences for both collector and scholar; the former through loss of value, the latter through litigation by the former.⁵³ Indeed, ‘the risks for authenticators have risen along with prices’ (Duray and Halperin, 2016), to the extent that the mere threat of a law-suit, the pursuance of which can lead to financial ruin before it has time to lead to justice, is sufficient to discourage categorical pronouncements. Eminent catalogue authors David Anfam, Alex Ross and Richard Grant, interviewed by *The Art Newspaper* along with Katy Rogers, the president of the Catalogue Raisonné Scholarship Association, have observed shifts as a result in the authority of the format; authors becoming more likely to call the catalogue open-ended or in progress, others publishing it online rather than in print for easy amendment, sidestepping the problem of the weakness of informed opinions against capital (Duray and Halperin, 2016).

Where ‘broadmindedness’ has been a boon is the market. As Foster writes, while the notions of art as ‘pluralistic, its practice pragmatic, and its field multicultural’ present it as ‘benignly liberal’, ‘this position is also not-so-benignly neo-liberal, in the sense that its relativism is what the rule of the market requires’ (Foster, 2003: 124). Post-modernism, then, does not escape the market. If its emergence was closely related to that ‘of this moment of late, consumer or multinational capitalism’ (Jameson, 2015: 144), its ongoing relation to the market is strengthened by the demise of stable authorities within the artistic endorsement system – and the broader questioning of legitimate authority itself – that introduces the study of art’s market to complement, or even invigorate, the study of art by the humanities. A fragmented and disavowed value system, in which museums are repurposed ‘into a popular and mass-cultural space, visited by enthusiastic crowds and advertising [their] new exhibitions as commercial attractions’ (Jameson, 2015: 108), is corroded by the self-organizing, centrifugal force of the price mechanism. The price mechanism, in turn, creates its own, far more volatile canon, a canon that it constantly revises to suit the profit prerogative, and which responds better to the deliberate interventions of private players. As Zorloni writes: ‘with the decline of the traditional judgment criteria [...], the assessment of artistic production, particularly contemporary production, has begun to depend on more and more refined market strategies, by making the added value deriving from the brand of the creator progressively more important than the intrinsic value of his work’ (2013: 94) – whatever intrinsic value is taken to mean.

As if anticipating this shift, Willi Bongard published between 1970-85 in *Art Aktuell* a list of top 100 artists according to (i) prices, and (ii) a points system intended to reflect the accumulated prestige of individual exhibition history. This demonstrated, according to Nairne, ‘the degree to which the contemporary artworld, despite its fragmentation, could act as a single system of influence, with curators and dealers both making a contribution’ (1999: 115): in other words – extrapolating somewhat – the mere appearance of a unified hierarchy, such as price,

⁵³ 2016 even saw a court case against artist Peter Doig for claiming to *not* be the author of a particular work never sold as his. The artist won.

seemed to return the semblance of the Whole that post-modernism denied, but in a different guise. If Bongard's ambition was to advise on artists that were over or underpriced relative to their cultural capital, this system was less the artworld than the art *market* – to the extent that such a distinction even then remained meaningful (we will return to this point later). The emergence of contemporary art as the driving force of the market, defined by such a system of influence, took place in this context.

The Rise of Contemporary Art

The rise of contemporary art as the dominant force in the art market was co-extensive with post-modernism, whose courting of glamour controversy, playfulness, interaction, fetishism and absurdity brought it wide attention from a broader public upon which the institutionalisation of modernism had now enshrined the inoculated, if thrilling, merits of innovation.

It can be difficult, therefore, and in light of the above analysis, to fathom the comparatively recent marginality of contemporary art in a culture now permeated by its imagery and its chronological disposition. For a century after the late nineteenth, its collector base consisted of a minute and eclectic coterie of devotees. In London and Paris, exhibiting societies and annual exhibitions such as the Royal Academy's 'Summer Exhibition', alongside the new private exhibitions put on by a handful of dealers in their galleries, sporadically punctuated an otherwise empty horizon (see Nairne, 1999). In London, the singular impact of individual exhibitions bear evidence to this: those of the Impressionists and post-Impressionists by Roger Fry in the 1910s, or those of the colour-field painters, Hockney, Caro, Ayres, and Denny by John Kasmin in the 1960s, for example. In the post-war period, public funding institutions such as the Arts Council of Great Britain (1946) were set in place. Alongside new national institutions for exhibitions of modern art such as Tate Gallery⁵⁴, the Institute of Contemporary Arts in 1947, the Hayward Gallery in 1968, and other regional museums, it functioned to promote the production of and access to fine and contemporary arts (*Ibid*). In New York, the Museum of Modern Art and the Solomon R. Guggenheim Museum pioneered their country's new cultural position, and were swiftly followed by the development of a robust private gallery ecosystem – such as would emerge across major cities globally thereafter. In the late sixties, contemporary artists became enmeshed in a rising culture and lifestyle sphere comprising music, fashion and design; the innovative thrust of modern art was enabling long careers of incremental experimentation to give way to careers made on stark innovations at very young ages (see Galenson, 2001, 2015). As a consequence, fine arts universities, such as London's Camberwell College of Arts, the Slade School of Fine Art, St. Martin's School of Arts and Goldsmiths, became key loci for innovation. The term 'modern', inseparable from the ideological connotations of modernism and modernity, gave way to the 'contemporary', whose principal position is that of perpetual presentism.

Still, even in London, thirty years ago 'few big [...] galleries [...] were selling contemporary work by high-profile international artists' (Higgins, 2006), but the establishment of the Turner Prize (1984) and the Jerwood Painting Prize (1993); the foresight of Jay Jopling & the White Cube gallery; and the forcefulness, breadth and vision of Charles Saatchi's collecting

⁵⁴ Tate Gallery was not new (except in name), but it had hitherto been dedicated to British art only. In the twenties and thirties, it would also become a museum of international modern art (see Fyfe, 1995).

changed that. Contemporary art then received validation both institutionally, with the opening of Tate Modern in 2000, and commercially, with the first Frieze Art Fair in 2003. Nicolas Serota, then the Tate's director, recalled in a 2000 lecture that a year prior to his appointment in 1987, a civil service enquiry concluded that the salary of Tate Gallery's director ought to match that of the directors of the venerable Victoria & Albert Museum and National Gallery, not as a reflection of equal status, but because 'the director of the Tate has to deal with the very difficult problem of modern art' (quoted by Higgins, 2016).

Demand for art naturally commoved with an increase in overall disposable income in the global north and, more recently, as a result of new wealth among elites in emerging economies. According to Artpiece (2015a) the art market's consumer base grew from 500,000 after World-War II to 70 million in 2015. In the process, the 'old boys club', defined by 'a sense of intimacy and trust' has become 'much more about business and money' among 'a new class of buyers' (art dealer Robert Landau on Art Basel, in Breiding, 2016). Increased consumer surplus also came from technological changes that have lowered the relative cost of consumption. As Potts writes, 'that people in the nineteenth century did not decorate their houses, listen to music for hours each day, or experience the world's great museums and galleries was not because they lacked a preference for these cultural goods and services, but because at the prevailing prices and incomes of the time very few such transactions occurred' (Potts, 2014: 221).

The figures are now vast. Overall market size is disputed, but oscillates more or less around €40 billion per annum in total sales. There are close to 200 significant art fairs, the top 22 of which generated visitors figures in excess of a million, and in excess of 300,000 companies involved worldwide (McAndrew, 2015: 215). Overall, TEFAF estimates the art market generates 2.8 million knowledge-intensive jobs (*Ibid*). The whole market, in turn, spent €12.9 billion on a range of external support systems in 2014 that supported well over 300,000 additional jobs (*Ibid*). This includes highly specialized industries such as conservation, restoration, packing, shipping, insurance and the financial services that comprise much of our discussion. While work in the art market previously required no particular education and was dominated by the logic of connoisseurship, it is now a whole ecosystem of interlinked and sophisticated players that can have significant economic impact. Still in 2014, 55 million people were estimated to have visited the top 10 museums alone, most of whom would have travelled, required accommodation, sustenance, and made other purchases in the region (*Ibid*). Cultural tourism is therefore an enormous industry.

With much of this activity related to contemporary art, today, the Post-War and Contemporary art category is 'by far the largest in the market by value, and the most popular category for new and established art buyers' (McAndrew, 2015: 70). The rise of Post-War and Contemporary art has been spectacular in the present century in particular: between 2004 and 2014, it increased in value by over 600% (McAndrew, 2015) relative to an overall market increase of just over 100%. This comprised 500% from 2003 to 2007, a steep 60% loss of value in the following two recessionary years, and a subsequent rebound of 300%. Artpiece, giving an estimation for Contemporary art only (rather than Post-War and Contemporary), put its value increase at auction at 1,800% between 2000-2015 (Artpiece.com, 2015c: 9). As the most speculative and risky sector, it suffered disproportionately in the recession – the Old Masters market, for example, was barely hit – but its recovery in value was equally remarkable, in part due to a now global demand that is more robust to region-specific market crises, unlike in the 1990s,

where the collapse of the Japanese asset-price bubble severely affected the markets that the foregoing boom had supported. In 2003, for instance, Sotheby's main buyers were from 36 countries. By 2007 there were three times more of them, and across 58 nationalities (Picinati di Torcello, 2010). The May 2015 evening sales of contemporary art at Sotheby's alone saw bidders from more than 40 countries (Maneker, 2015). The breadth and pace of expansion of UHNWIs discussed in Chapter 4 is thus mirrored in that of contemporary art. As will be seen in Chapter 6, while prices in the art market have become intensely polarised, the erosion of western canons of taste and globalization *have* enabled artists from a much broader geography, and a wider range of communities, genders and identities, to participate in the market. The *Financial Times* reported in 2016 that in Tate Modern's recent extension, not only is 75% of work acquired since 2000, the 300 artists on show are also from 57 countries, with much of their programming devoted to non-Western artists (2016). According to Stallabrass, it is partly as a result of the 'erosion of identifiable and stable national cultures' that 'the artworld both exemplifies and propagandizes for globalization' (2014: 159). Insofar as art in emerging economies often lacks institutional infrastructure, depending instead on the support and resources of local private patrons, major western museums are able to consolidate their global positions via something that closely resembles the core-periphery model of dependency theorists, reconstituting as array that which in high modernism they had proposed as apogee. As we will in Chapter 6, museums have also expanded abroad the better to leverage their advantage, with satellite museums in multiple countries.

In 2014, Christie's Post-War and Contemporary Art sale, on the 13th of May, generated the highest revenue - \$745 million – of the firm's history, and, indeed, 'the entire history of art' (Artpice.com, 2014a). It was accomplished with just 68 lots. The success of contemporary art is now so strong that auctions have started strategically bundling it with art of other periods, the contemporary now having sufficient aura to go around. Sellers have realised that 'emerging cultural capital' has staked on the contemporary its position against traditional forms of highbrow elitism (Savage, 2015). Christie's took the lead in this instrumentalisation with its 'Looking Forward to the Past' auction in May 2015. Thematic (or 'curated') rather than strictly chronological sales have become more commonplace since. The sale in November 2017 of Leonardo da Vinci's *Salvator Mundi* for \$450 million, has so far been the high-watermark of this tendency's success. The painting became the most expensive painting ever sold at auction by 2.5x – and indeed the most expensive painting ever sold *at all* – in part through a massive branding exercise that included placing the painting in Christie's Post-War & Contemporary evening auction, a choice that was apparently not a reflection of its substantial repainting by conservators in recent years.

Conclusion

Hanging between the boundaries of death and life, reality and fiction, private and public, reflection and gaze among others, the unique flexibility and the multiplicity of the space and time in his works allows the images to transcend the threshold of the vision to depict 'the imageless substance that lies behind the boundaries of the vision.

Three Faces, Two Places, One Device, HADA Contemporary, 2014

Holly White suggests and proposes both a new present and a new future whilst re-imagining how one looks at the past.

No one is going to go there anymore, Evelyn Yard, 2014

The artist shines a spotlight into the anonymous seething masses: [...] a kind of exorcism, open, spontaneous, bloody and raw.

Jimp: Return to the Cave, Eleven Spitalfields, 2011

The works become a suggestion, an offering.

Carla Busuttil, Josh Lilley Gallery, 2013

A closer look reveals meaning in the material used; each piece of ephemera chosen for its ability to express associations.

Underlined, jaggedart, 2014

Tomory Dodge [has] invested in them techniques that deliberately allow each work's imagery to reveal much more than a simple relaying of his original intentions [...].

Tomory Dodge, Alison Jacques Gallery, 2014

Katchadourian's prolific, highly varied, and almost relentless output is reflected in Flight Log.

Nina Katchadourian: Seat Assignment, Cecilia Brunson Projects, 2014

The muted tones and thin application of paint make the objects seem not quite present, as if occupying a liminal reality where only the essence of the object is depicted on the canvas.

Zhang Enli: Four Seasons, Hauser & Wirth, 2015

Through depth, line and colour, liminal thresholds appear to signal and echo the notion of consciousness as it is woven through flesh by strings of the sensual.

Animal/Liminal, Leyden Gallery, 2014

They are silent and meditative, familiar yet distant. Despite their elusiveness, they abound in presence.

Francis Upritchard, Kate MacGarry, 2014

Renowned early twentieth century art dealer Joseph Duveen is reputed to have once commented that 'when you pay high for the priceless, you're getting it cheap'. Another art dealer, Leo Castelli, suggested half a century later that paintings – in his example, modernist – acquire such high prices because the works are 'a myth' (quoted in Horowitz, 2011; and Thompson, 2014). As Castelli saw it, his 'responsibility is the myth-making of myth material—which handled properly and imaginatively, is the job of a dealer' (*Ibid*). Another reputed art dealer from the same period, John Kasmin, recently said, tongue-in-cheek that 'all artists do is produce the work, the

dealer has to create its allure' (interviewed in Jenkins, 2016). Finally, Larry Gagosian pointed out recently in the *Wall-Street Journal* that a painting is 'something you kind of create value for [...]. It's an act of collective faith in what an object is worth. Maintaining that value system is part of what a dealer does, not just making a transaction but making sure that important art feels important' (in Lipsky-Karasz, 2016). While the dealers need not be taken at their own esteem, the similarity of these views over the construction of value – and indeed of pricelessness – speaks to both the difficulty, if not impossibility of assessing value in the contemporary market, and the kinds of things that are value is construed of: beliefs that exceed, envelope, and in some sense replace the material object. Its predication belief means that, as Schjeldahl once pointed out, the art market is 'in economic terms, essentially all speculative bubble, all the time'.⁵⁵

Part of the aim of the above analysis has been to show the myriad ways in which the legacy of the late eighteenth- and early nineteenth-century romantic intellectual revolution underlies historical and current conceptions of contemporary art, how it is valorised, and for what reasons. The notion of art as an open-ended occasion for concept-formation, for instance, or even world-making (see work of Jean-Luc Nancy) remains a time-honoured tradition. Thus, while postmodernism emerged from targeting virtually all the values dear to the romantic project – the hegemony and universality of the art object, the evolutionist structure of the artistic canon, the primacy of authorship and the stability of meanings – Romanticism continues as a substantial ordering factor in the contemporary art market and indeed in art theory. Art's connection to Truth and its revelatory potential, the teleological historicism of its evolution in pursuing it, its autonomy from mundane life and its transcendental potential, as well as the privileged spiritual capacity of creativity and the individual – these remain the key pillars around which the artistic mission, and therefore art's worth, are consciously or unconsciously conceived.

The examples above, all taken from commercial art galleries around London, provide a glimpse into the strategies for 'myth-making', the 'making sure that important art feels important' mentioned above. They show something of the interplay between the valorising discourse of romanticism and modernism – where art illuminates, feels beyond the quotidian, and builds a kind of enlightenment out of suffering – and the spatial, polysemic thrust of postmodernism – spread over coordinates, 'blurring lines', *nearly*, *quasi*, or *almost* anything. The latter situates the work within the conventions of current cultural theory, while the former attempts to construct the worth of the contribution out of priceless attributes. Artists explore, question, and evoke, but they also combine, document, and assemble. Originality, with its connection to the historicist evolutionism of romantic thought – persists as the main goal of the text's persuasive elements. The particularised and local in artistic practices focused on research programs, various forms of relational engagement (where artists seek to bypass the hegemony of the conception of the artist as producer of objects) are constantly reframed as of a universal relevance; the artist authoritative, seminal, and influential.

Given their connection to value, galleries have perhaps naturally been the most enthusiastic proponents of romantic thinking. In part, galleries are constrained from the fact that they are ultimately traders, and so need to sell discrete objects or property (even if at times merely intellectual). The discourses of post-modernism do not help it here – they cannot sell a program, a situation, an intervention or a practice – so they must fall back on, and thus perpetuate, pre-existing precepts of the pricelessness of art as a fillip to increase its value, mining the discourse

⁵⁵ <https://www.newyorker.com/books/ask-the-author/questions-for-peter-schjeldahl> (18/01/2018)

which since the late eighteenth century secured the autotelism of the art object as discrete, closed-off commodity. The power of the white cube, and its principle of barreneess, remains the predominant model of galleries, and its power has been well recognised (O'Doherty, 1976; Velthuis, 2007): the press release is an attempt to jump-start the hermeneutic cycle which the space is aimed at facilitating. The potency of art, 'which is contrasted, as an ontological mode of knowledge, to other human activities', and the presentation of the artist as 'interpreter of the mantic voice' (Schaeffer, [1992] 2000: 6, 10), remain axiomatic.

This nurtures the advantageous – but also deeply unstable – proposition that art is always worth more than what merely meets the eye, what Schinkel described as the 'hermeneutic problem [...] of not being allowed to take at face value that which initially presents itself only as a value to the face' (2010: 279). While artists may actually seek level *interaction* with co-producing participants, the gallery nevertheless structures art as the medium of an asymmetrical authority, in which the artist instead ends up exerting unilateral power over a passive viewer. This asymmetry reinforces the authority of galleries as arbiters of value in the event of a transaction, attempting to assuage the 'feeble constructions of value', that according to Velthuis's analysis, also 'hide behind the impressive gallery space' itself (2007: 7).

What press releases help shed light on is the extent to which, as Jameson put it, we today consume 'not the work, but the idea of the work' (2015: 114). Indeed, 'no object presents itself "spontaneously" as an aesthetic object; we have to constitute it as such' (Schaeffer, [1992] 2000: 305–6). As Rancière put it, 'the supplement of exegetical discourse proves necessary in order to transform a ready-made by Duchamp into a mystical display or a sleepy parallelepiped by Donald Judd into a mirror of intersecting relations' (2003: 29), as indeed, we might add, to turn the 'pornography' of Koons' 'Made in Heaven' series into 'a vulnerable form of self-portraiture' (critic Eric Gibson, quoted Landi, 2015); Christoph Büchel's sweaty socks, thrown on the floor at Frieze Art Fair in 2009, into a conceptual work priced at £20,000 (which would be well paired with Gabriel Orozco's *Empty Shoe Box*, 1993); and Wilfredo Prieto's 'Glass Half Full' (2015) – quite literally a glass half full – into a work priced at €20,000. Schinkel, going further, has suggested that 'communications about art are in fact more important than communications through works of art' (Schinkel, 2010: 277). The fact that this point animates market behaviour is what gives it force.

Chapter 6 will look at a number of features of the art market that address elements of its configuration and changes in its authority. In particular, what will be looked at is how rising oligopolistic structures, alongside the increasing authority of private players, have privatised parts of the endorsement system in their favour, to the detriment of public institutions. In light of the above analysis, what is important for now is that these shifts are profoundly related to the expansion of the category 'art' to encompass a vast heterogeneity of objects and practices, and to the essentially hermeneutic worth which is assigned to render art valuable, which we will suggest galleries have been able to concentrate. In the epistemological power-vacuum left by destabilised assessment frameworks, the neoliberal moment of advanced capitalism has put forth one candidate, namely price. As Plattner has noted, in the 'absence of a well-defined set of rules for judging quality, price and how widely the work is distributed are taken as a signal of excellence' (quoted in Saranovic, 2017: 15). The financialization of art as described in this research has been a project pursued in earnest only in the period during which the contemporary art market rose, and indeed, as seen in Chapter 4, levels of wealth inequality. These correlations are not coincidental.

The signalling value of contemporary art, its amenability to various kinds of interpretation, its embeddedness in the mainstream of culture, have made it an outlet for competitive consumption. As prices have inflated with ever richer individuals seeking to acquire the exalted fruits of artistic pursuit, financialization became inevitable. As volatility arose from the unstable value constructions in the work of ever younger artists, investment opportunities materialised. And finally, with the problems of supply, authenticity and provenance bypassed – as well as the barriers of traditional cultural capital – contemporary art has clearly provided a singular outlet for the exercise of financial rationality. Perhaps more importantly, the new confidence in price as indicator (and constructor) of value has entangled formerly irrelevant forms of expertise to its analysis and interpretation, finance a key one among them.

A few final remarks are worth making on this subject. A number of commentators (Hanquinet and Savage, 2016; Joyeux-Prunel, 2008; Schinkel, 2010 - for example) have noted the growing affinity between the disintegrative force of postmodern atomism, artistic practices rooted in multi-disciplinary approaches, and modes of apprehending the cultural sphere in research fields based on social scientific methods. Hanquinet & Savage (2016: 3-4) refer to the ‘increasing deployment of social scientific expertise involving formal methods allowing forms of art to be subject to external evaluation and critique in the name of a ‘social’’. This, they argue is ‘implicated in a thoroughgoing neo-liberal polity in which audit and accountability is extended to all arenas’, moreover ‘allowing the external and contextual critique to take on new power and pervasiveness’ (*Ibid*).

In the context of this analysis, the power of these approaches is arguably in part that they bypass the problem of heterogeneity, again, by subsuming it into a higher order wherein the particulars can maintain the discretion of the particulate, but also be aggregated and subdivided in various ways. The affinity with these facts with the financialization of art seems to me clear: here too modes of intervention are predicated on integrating and reifying a dispersed sphere, and in turn rendering it legible and amenable to pre-specified directions of intervention. Inasmuch as the market is concerned, these methods both process and reproduce the twin axes analysed above: a breadth beyond cogitation, yet also a differentiated profile of elevations. It enables the creation of equivalences – for example between assets of different kinds – by the same process that it particularises.

The suggestion here, therefore, is that the loss of coherence in the praxis of art during post-modernism, as a result of which substantial shifts have taken place in the configuration of the artistic field, is being subsumed within the wider rise of the ‘portfolio society’ (Davis, 2009: 6), in which the relations between widely differing things is – without fundamentally traversing their substance, but instead contouring it – established through the logic of the market, and in turn that of finance. Thus in the ‘age of micro-narratives, the art of the fragment’ (Virilio and Lotringer, [1997] 2008: 41), marked by the loss of what Krauss called ‘modernism’s search for perceptual plenitude and unimpeachable self-presence’ (Krauss, 1986: 38), a whole was nevertheless reconstituted elsewhere. The repressed returned, and chronology resurfaced in a spatialised episteme on the screen, in the indices and price charts of finance, and its logic of the portfolio – the imperative to be not just a cultural, but a financial omnivore – as a kind of genome where the dissemblance of physical nature is bypassed entirely in favour of a continuous underlying structure, again, that of price. The futurological disposition, lost to postmodernism, is enshrined in the markets of postmodernity, always brought into the constitution of the present through

circulating debts and obligations. Where post-modernism fragmented the entire apparatus of legitimacy itself, the language of finance and its extra-linguistic modality, both spatial *and* chronological, has proposed itself as the new bind; global capital as preeminent cosmopolitan force. In short, post-modernist fragmentation, and the demise of non-monetary forms of assessment, have invited panoptic logic of the portfolio.

Chapter 6. Reflections on the Contemporary Art Market

Introduction

In 2014, a staggering 18% of global auction turnover for contemporary art was generated by just three artists: Basquiat, Wool and Koons (this represents half the US contemporary art market at auction, or ten times that of France; Artprice.com, 2015c: 11), while 62% of the global market was owed to a mere 100 out of the 49,000 artists that went to auction (*Ibid*: 9). Put differently, in spite of the fact that 92% of transactions were below €50,000, 54% of the value transacted came from transactions over €1 million, a mere 0.9% of market transactions (*Ibid*: 73). Nearly all works over \$50 million are now modern and contemporary (*Ibid*). According to David Galenson, economics professor at University of Chicago, the ‘relative increase in the value of recent art’ is ‘the single most surprising change in the art market’ (quoted in Stewart, 2014).

While exorbitant, these are only the most salient form which inequality takes in the art market. As a structural principle, inequality reticulates across the spectrum of the market, into institutional relations, artistic practices, and gallery ecosystem configuration. As we have explored before, notably in Chapter 4, these facts are linked in important ways to the divergence of income and wealth distribution in the economy as a whole – through trade contagion, certainly, but also through subtler and more consequential ways. This includes their common ancestry in neoliberal policies of austerity, which have forced the effective privatization of components of the artworld hitherto of public ownership, some physical; others, like authority in the endorsement cycle, more intangible. This chapter explores some of these facets, and others, as a series of reflections on important trends in the art market, all of which contribute, once again, to the centrality of the market itself in the artworld.

Auction Records – Dispersion

By way of pointing to the magnitude of inequality in the art market, and to suggest something of the market’s structure, a simple exercise was carried out whose output will come into play again later. To delimit a coherent sample, galleries within the Zone 1 perimeter of London with registered addresses on GoogleMaps were selected as a sample (n : 152). The sample was extended marginally eastward to capture these, on account of a range of important galleries in the East London boroughs of Hackney and Tower Hamlets. The location of the galleries can be seen **Figure 9**. The roster of the artists they represent was then aggregated – ~3,100; of which ~2,900 unique – and available auction details were procured from Artprice⁵⁶: lots sold in total and in the most recent year (then 2014), revenue in the most recent year, and record price achieved. Auction record and total lots sold were the most frequently available metric (n = 1,473; just over 50% of artists), as artists having only sold at auction once or twice may not have done so in the

⁵⁶ ArtPrice possesses over 27 million auction prices and indexes covering over 500,000 artists. It receives information continuously from 4,500 international auction houses. Deceased artists were removed from the sample as a way of curtailing outliers – even though some galleries may represent their estates – including very successful modernist and post-war artists such as Picasso, Warhol, Basquiat, and so forth.

most recent year (only 27% of artists had seen their works at auction in 2014). The range of record prices was from \$15 to \$52,000,000. Using this data, a Lorenz curve was computed, alongside a Gini Coefficient and the Schutz Index, as a way of ascertaining the inequality of art prices in the art market (**Figure 8**; see

Table 2-Table 4). The Gini Coefficient is a statistical dispersion measure which expresses the level of income inequality in a given community: a coefficient of 0 is complete inequality (the 45-degree line in), and a coefficient of 1 is perfect inequality, where close to one member accounts for the entirety of the variable measured. It is defined mathematically as the ratio of the area between the Lorenz curve and the Perfect Distribution Line to the total area below the Perfect Distribution Line. The Schutz index represents the portion of the variable (for instance income) that would need to be redistributed from the top half to the bottom half to achieve income uniformity. The Lorenz curve graphically represents the distribution.

Using the record price achieved by artists as a proxy for success (albeit a deeply imperfect one), the analysis confirms a market that is deeply unequal in its distribution of rewards. The top four artists are responsible for 25% of the cumulative best auction price achieved by the total pool of 1,473 artists. The top 21 artists account for 50% of it. The results are not consequentially ameliorated by looking instead at the distribution of total lots ever sold at auction by the same pool of artists: the Gini coefficient of 0.91 reduces to 0.82; but here the volume is highly contingent on the interplay of pricing with the volume of works produced by the artist, so that the top artists by volume are not exactly incidental – though overlapping – with the top artists by auction price. Prolific and successful artists with numerous serials (e.g. David Hockney, Yayoi Kusama, Takashi Murakami, Gerhard Richter, Jasper Johns, Frank Stella) feature in both; but volume also includes artists not near the top auction record list who are well-known and who produce substantial amounts of work, notably on paper (e.g. Christo & Jeanne-Claude, A. R. Penck, Markus Lüpertz, Mimmo Paladino, Alex Katz). This does suggest that auction records are an inadequate measure of income, which for some artists will come from volume rather than individual prices. More importantly, it should be remembered that artists typically do not earn from auction sales of their work, so that prices serve merely to give an indication of relative magnitude with regard to the market's esteem for the artist. Where huge new prices are achieved at auction, the difference is, as David Beech points out, quoting Marx, merely capital 'coaxed out of the pockets' of other capitalists into that of the seller (2015: 307) – not into that of the artist, excepting in cases where the artist is entitled to Artist Resale Rights. On the other hand, the level of inequality is likely to be substantially underestimated here by the survivorship bias in the sampling: artists featured were from a pool of artists with gallery representation (already a subset), which in addition had seen one or more of their works sold at auction. The top auction record at the 50% population interval of \$24,087 (**Table 3**) is certainly not insignificant from the perspective of the vast majority of artists, not least the 50% of the total sample excluded here who, while having gallery representation, at the time had no secondary market presence. Suffice it to confirm, for our purposes, and as noted in the introduction, that the distribution of economic rewards is indeed highly unequal in the art market. We will return to this later, having considered a few distinct areas of change in the art market.

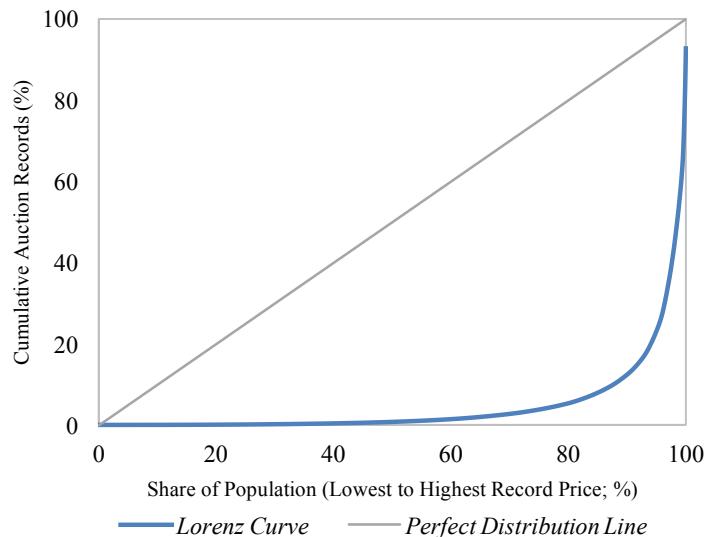


Figure 8 Lorenz Curve (Artist Auction Record Prices)

Table 2 - Inequality of Artist Auction-Record Prices

Artist Auction-Record Prices	
<i>n</i>	1,473
Gini Coefficient	90.71
Schutz Index	77.69

Table 3 - Artist Auction-Record Prices: Quartile Distribution

Distribution by Quartile	Record (USD)	Cumulative (USD)
The bottom 25% of the population have 0.1% of total income	5,359	727,663
The bottom 50% of the population have 0.74% of total income	24,087	5,314,486
The bottom 75% of the population have 3.8% of total income	127,392	27,148,281
100% of the population	52,000,000	711,580,740

Table 4 Inequality of Total Lots Sold per Artist

Total Lots Sold	
<i>n</i>	1,473
Gini Coefficient	82.24
Schutz Index	66.56

Table 5 - Total Lots Sold per Artist: Quartile Distribution

Distribution by Quartile	Lots	Cumulative
The bottom 25% of the population account for 0.46% of total lots sold	5	926
The bottom 50% of the population account for 2.37% of total lots sold	18	4,727
The bottom 75% of the population account for 9.93% of total lots sold	83	19,847
100% of the population	6,767	198,994

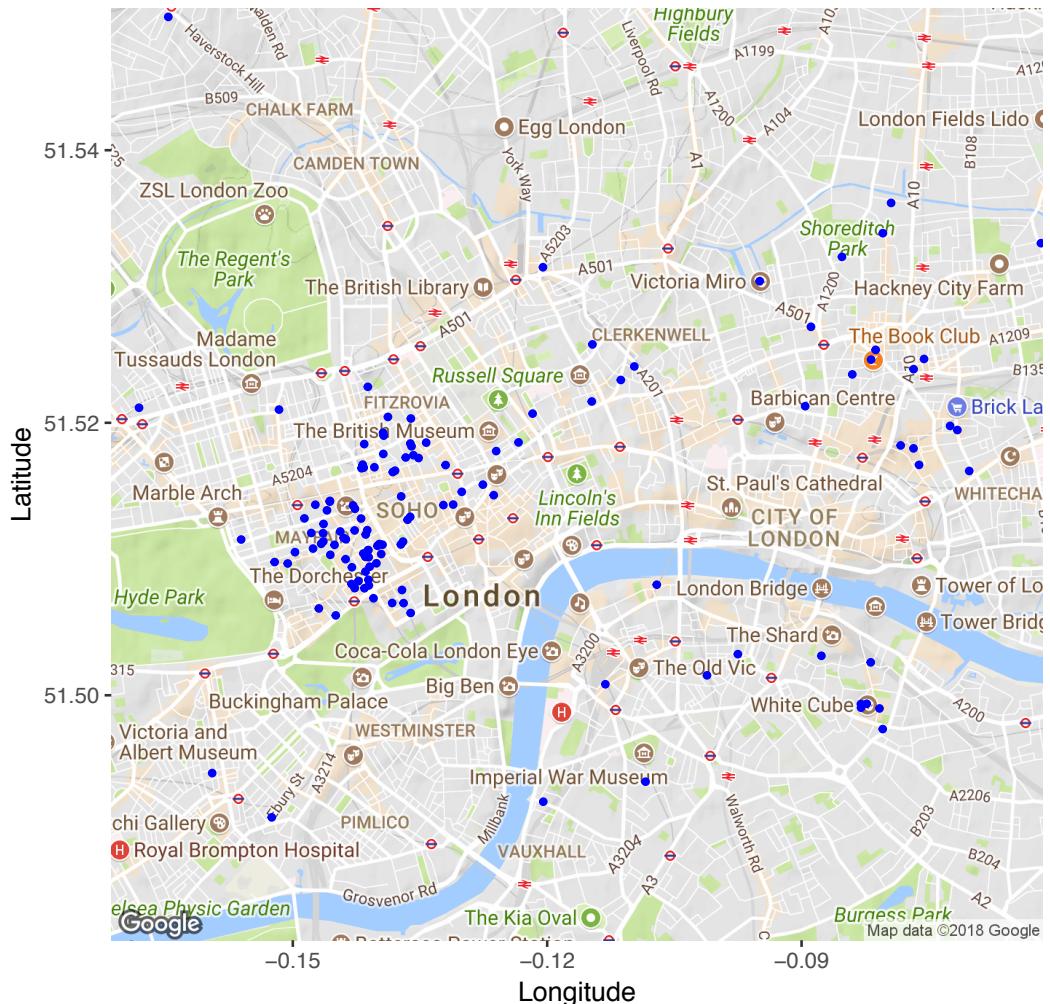
Table 6 - Inequality of Median Auction Record per Gallery

Gallery Median Auction Record	
<i>n</i>	150
Gini Coefficient	87.42
Schutz Index	73.49

Table 7 - Median Auction Record per Gallery: Quartile Distribution

Distribution by Quartile	Median Record
The bottom 25% of the population have 0.01% of aggregate median records	9,751
The poorest 50% of the population have 0.45% of aggregate median records	305,237
The poorest 75% of the population have 3.65% of aggregate median records	595,799
100% of the population	15,209,559

Figure 9 - London Galleries (n = 152)



1. Expansion of Museum Sector & Turn to the Experiential

The vast increase in consumers and consumer demand in the art market, figures that reflect the popularising of contemporary art, have also correlated with a large increase in public outlets for this demand, namely public and privately-owned museums. Combined with basket cases like the Guggenheim Bilbao museum and its 'Bilbao effect', referring to the urban regeneration, increased tourism, and increased tax revenues obtained from the construction of a branded museum (the Spanish branch of New York's Guggenheim Museum), museums have become an aspect of 'soft power' competition among cities and nations, and a matter of urban planning, media attention and philanthropy. Numerous awards, such as the 'Awards for European Cultural Brands', confirm this, while the conception of art's importance in the urban fabric resonates across private sector projects such as the Art Basel Cities Initiative, which aims to support cities in developing their own art ecosystems (Anon, 2016b: 27). A report launched by UNESCO in October 2016 titled 'Culture: Urban Future' synthesises some of these views into a formal 'global' expression of the importance of culture 'as a strategic asset for creating cities that are more inclusive, creative and sustainable' (Irina Bokova, Director-General of UNESCO; UNESCO, 2016).

As a result, the industrialisation of cultural capital creation has become a matter of municipal and state policy. Museums with a reputation to profit from and in need of new revenue streams have jumped on the occasion: The Centre Pompidou (Paris) has expanded to Metz and Malaga, and will soon feature in Brussels and Shanghai; the Hermitage Museum (Saint Petersburg) is expanding to Barcelona; the Louvre and Guggenheim have developed huge museums on Saadiyat Island (Abu Dhabi). The Louvre Abu Dhabi, inaugurated in November 2017 by French President Emmanuel Macron, will generate an estimated \$747 million to the museum in fees for loans, exhibitions and curatorial services in the coming years. The large collections of such museums, a fraction of which is ever on display, give them resources to leverage: of the Centre Pompidou's 100,000 works, for example, only 2,000 are typically on display (Anon, 2014). The new paramountcy of the museum brands of the global north, decoupled from the collections of their genesis, is also evident where museums have licensed out their curatorial, conservation and management expertise (as Rangaswamy *et al.* write, licensing is where 'brand equity has real value', 1993: 61): the Louvre's partnership with the Cairo Museum of Islamic Art, for instance, or the British Museum's work with the Palestinian Museum or the Zayed National Museum on Saadiyat Island. According to Stallabrass, branding constitutes 'one response to attracting the transient, insecure and protean populations that the neoliberal attack on the state, welfare and the trade unions has brought about' (2014: 149).

Astoundingly, between 2000 and 2014, according to The Contemporary Art Market Report 2015 (2015c: 8), 'more museums opened around the world than during the entire nineteenth and twentieth centuries, and the movement is continuing with more than 700 new museums a year'. To some commentators, 'the only thing remotely like it is the cathedral-building boom of the Isle de France in the 13th century, when each city vied to build the loftiest, thinnest, and brightest Gothic nave' (Lewis, 2015). In the Greater Asia region, on average one museum was created *every single day* by 2014 (Artpice.com, 2014b), and here, as so often, no example is as startling as that of China. In their special report 'China: Mad About Museums' from Dec. 2013, *The Economist* examined the upgrade of culture 'to the level of a strategic industry' by the State

Council in 2009: roughly 5% of the country's GDP was the expenditure goal, or twice its contribution at the time of the report 'even after a decade of expanding at 15-20% a year'. This scale of growth has meant museums – envisaged as architectural icons for their cities or regions – often predate the formation of their collections, and sometimes struggle to assemble them once built.⁵⁷

At the same time, the predominance of the iconic value of the museum is reinforced by other trends, suggesting that the creation of museums is not generally demand driven. In the US, for instance, a study by the National Endowment for the Arts has shown that visitor numbers to art museums and galleries declined substantially between 2002-2012 (and especially from 2002-2008): in 2002, they recorded 190 million visits to this category, with on average 3.5 visits per person per year (Silber and Triplett, 2015: 17). By 2012, this figure was 132 million, with 2.7 visits. In the UK, a fall of 1.4 million visitors was also recorded between April 2015 and April 2016 by the Department of Culture, Media and Sport – though recent fears of terrorist attacks may be a significant confounding factor (Ellis-Petersen, 2017).

In recent decades, the rise of contemporary art, sectoral growth, and financing changes have altered the museum's predication on 'overt cultural paternalism' in favour of commercialism, spectacle and popularity (Hanquinet & Savage, 2012: 42-43). Post-recession austerity, the mobility of capital and the competition of governments for tax-jurisdictional arbitrageurs have brought additional impetus to an already established convergence to the 'American model' of cultural financing (e.g. 'Aillagon' bill in France). This relates to a general process of 'decentralization, déséatisation, and devolution in cultural policy' (Schuster, 2006: 1254), whereby direct funding is replaced by indirect funding in the form of tax breaks to donors, a policy that therefore embodies a trade-off 'between individual and collective decision making' in 'the allocation of what could be construed as public resources', such that the taxpayer is left 'to pay, in part, for the rather idiosyncratic results of the decisions made by individual donors' (*Ibid*: 1258, 1261; see also Frey & Meier, 2006). Frey & Meier, in their study on 'The Economics of Museums' indeed observe that donors 'directly influence museum policy by interfering in the programming, or they can set strictly binding constraints on the ways in which works they donate can be used', potentially imposing 'considerable opportunity costs on museums' even as the museums enhance the donors' prestige (Frey and Meier, 2006: 1031).

Both the Musée d'Orsay and the Metropolitan for example display donated collections in their original and complete configuration (a condition of the bequests), thus centring a public display around the biographies of their erstwhile owners. More recently, the Whitney Museum of American Art's decision to open an exhibition of the works gifted from the single collection of Thea and Ethan Wagner was seen as controversial for exemplifying the dynamics whereby institutional glorification is exchanged for donations through changes in the exhibition program. A still more controversial example was that of Dutch entrepreneur Bert Kreuk, who presented parts of his collection at the Gemeentemuseum in The Hague only to sell 11 works from the show at Sotheby's two months later, in this case literally using the museum as means of acquiring, and then converting, cultural to economic capital (Velthuis, 2014). While it cannot be assumed that a direct aid system's allocation is superior in target, volume or efficiency, still, 'public sector idiosyncrasies in decision making arise because of bureaucratic or political failures that presumably can be corrected through vigilance and institutional design', whereas 'the

⁵⁷ This happens in the West too; Rome's Zaha Hadid designed MAXXI is a good example.

idiosyncrasy of private decisions is inherent and cannot be as easily corrected' (Schuster, 2006: 1261).

Oster & Goetzmann have observed in their analysis of museum governance that ultimately 'the structure of a museum's financing may [...] affect the way it pursues various objectives' (2003: 75). It affects its allocation of resources, the stakeholder accountability and incentives alignment of top management, and, consequently, its goals. The political role of the institution's governance comes to include managing the trustees – positions often acquired through donations – and, thus, something like a 'trustee conception of control' can be said to take root in which institutional governance is privatized. The role of senior management comes to include, for instance, endearing the institution to potential donors, requiring it to 'position itself', as Thomas P. Campbell, director of the Metropolitan put it, 'as a potential recipient for major gifts' (quoted in Tomkins, 2016). Subsequently, trustees and large donors must be catered to. As conceded by Douglas Druick, director of the venerable Art Institute of Chicago, keeping the trustees happy takes up at least a quarter of his time (speaking to *The Economist*, Anon, 2013a). Finally, museums become accountable to the appearance that donations received are well used in order to 'encourage a regular flow' (Frey and Meier, 2006: 1031).

In the West, the building boom is perhaps one of the consequences of shifts towards indirect funding policies. 'For museum executives', Ben Davis has remarked, 'the dirty secret of expansions has been that they are often motivated by the need to have some exciting new thing to rally board members and interest potential patrons. These institutions depend heavily on rich people to fund them. Those rich people like to pay for flashy new buildings; no one wants to donate to boring old museum upkeep' (Davis, 2016; see also Maneker, 2016d). The Met's Director, mentioned above, confirmed this: 'I can't raise a hundred million for a single work of art, but what I can do is raise six hundred million to rebuild the Modern wing. That's easier to do' (speaking to Tomkins, 2016; see also Halperin, 2016). As a result, internationalisation has not been the only strategy for museum expansion. Just in New York, the Whitney Museum of American Art has built a new, much larger outpost; MoMA is to expand – for the second time in a decade – into the adjacent lot formerly occupied by the American Folk Art Museum; the New Museum is adding another 42,000 square feet of space; and the Metropolitan Museum of Art has overtaken the old Whitney building to house and expand its contemporary collection. According to *The Art Newspaper* (Halperin, 2016), 26 US museums spent or pledged \$4.95bn on expansions between 2007 and 2014 for reasons including the need for spaces to accommodate new art forms (contemporary), new facilities adapting to the museums' 'evolving role as community hubs', more exhibition space to display their growing collections, and the need to compete for donations. The outcomes of this 'edifice complex' can be of doubtful merit – particularly in light of the decline in attendance mentioned above – insofar as public welfare is concerned (James, 2017), poised to lead to 'socially wasteful investments' that are often, according to Harvey, 'built upon burgeoning employment in financial and real estate services' (Harvey, [1987] 1990: 267–68). A 2012 report from the Cultural Policy Center of the University of Chicago for instance noted that the building boom in cultural buildings between 1994 and 2008 was, unfortunately, matched by the rise in museums in financial peril once built (referenced in Davis, 2016).

Other effects relate to the impact of business sponsorship in relation to prioritising high-impact temporary exhibitions (Frey and Meier, 2006; Oster and Goetzmann, 2003). Public outcries at sources of sponsorship with questionable social integrity indicate public awareness of

the nature of the exchange, for they emerge on the basis that the implicit arrangement is one where financial support is rewarded by an attractive, even exonerating, institutional endorsement.⁵⁸ Another consequence still is that UHNWIs have, in the US in particular, extended the economic inequality from which they benefit (described in Chapter 4) into the museum sector, concentrating donations and endowments in the hands of high-visibility museums – none more so than MoMA, whose endowment today stands at around \$1 billion (confirmed in a study by Quartz of 20 museums in seven countries; see Maneker, 2016c). In another calculation (Smith, 2014) it was noted that in 2000, five percent of US visual arts institutions controlled nearly four fifths of combined museum income, endowments, infrastructure and donations. Meanwhile, the US National Endowment for the Arts has, as a result of budgetary cuts, been enfeebled in its function of using public funds to level the institutional playing field (Horwitz, 2016). Similarly, in the UK, the 2015 'Cuts Survey' run by the Museums Association, reported that budgetary cuts had led to the closure of 44 museums since 2010, with a quarter of the 115 surveyed museums planning staff cuts, and 12% planning governance changes to boost efficiency (Museums Association, 2015). Their 2017 report suggested a further 20 had since then closed, with publicly-funded museums in England suffering a 31% real-terms cut in local authority funding since 2010 (Museums Association, 2017). This has driven museums to prioritise 'public-facing services', such as public events and temporary exhibitions, which attract far more visitors and are fee-paying; while the possibility of an active de-accessioning program, which would make art dealers of museums, is no longer as inconceivable as it once was (Rankin, 2015).

Taken together, this has ensured that even museums formerly occupying 'distinct missions, collections, and curatorial identities' have entered into direct competition, pressured to expand their presence into contemporary art for finance, and lured by its potential for enlivening the antiquated in the eyes of fickle new generations as therefore of the institution in the eyes of donors (Saltz, 2015; see also Foster, 2015). For museums, 'modern and, especially, contemporary art has become so big a draw that few museums can't afford to do without it' (Tomkins, 2016). As many have noted, the desire among museums for experience and spectacle found its natural outlet in the controversy-courting experimentation and interactivity of contemporary art and contemporary visual culture more broadly. This shift is demonstrated by the 'sudden embrace of live events in institutions otherwise dedicated to inanimate art', a 'turn to performance and dance' aimed at validating - and activating - the museum as 'relevant, vital or simply busy' (Foster, 2015). Similarly, Bishop writes, whereas performance art emerged in part as a strategy of resistance to the art market by rejecting the art object, 'today dematerialisation and rumour have become one of the most effective forms of hype', because they tend to intensify media attention and, through it, symbolic capital (Bishop, 2014: 230).⁵⁹ Moreover, the post-modernist interest in the wide participation in the category 'art' of objects, practices and people here has conveniently provided a mandate for museums to exhibit virtually anything that could conceivably draw

⁵⁸ See for example Liberate Tate's successful protest against its receipt of BP sponsorship; similar protests against the British Museum and the Louvre's sponsorship by Total and Eni; or the successful removal by protesters of Israeli sponsorship of the Fundação Bienal São Paulo. Other examples, such as the sponsorships by Philip Morris, Exxon and Mobil in the US during the twentieth century, are examined in detail by Bourdieu & Haacke in *Free Exchange* (1995). More can be expected on the back of *The New Yorker's* 2017 exposé of one of the most influential art sponsoring families, the Sacklers, who have principally made their fortune manufacturing and encouraging the prescription of Oxycontin, the opioid derivative at the root of the current US opioid crisis.

⁵⁹ Bishop is talking about performance art at art fairs, but the point is also valid for museums. Saltz (2015) provides a list of the 'fun-house attractions' that museums have embraced in their reach towards 'global, multi-referential, democratic, and easily bored' audiences (Wullschlager, 2016).

blockbuster audiences. Museums emerge from this process, Saltz argues, as ‘institutions [...] at all times intensely in pursuit of new work, new crowds, and new money’ (Saltz, 2015): entertainment becomes a ‘megaprogramme so obvious that it goes understated’ (Foster, 2015).

2. *The Artist-Entrepreneur*

If the model of the pre-Romantic artist was the artist/city-merchant; that of the Romantic and early modernist period that of the artist-genius; and that of the post-war period that of the artist as professional; today’s model is arguably that of the entrepreneur. It has been described as an ethos that privileges skills in self-promotion, networking and marketing, management and commercial savvy, rather than skills in production itself; versatility rather than specialty and expertise and breadth over depth. In this capacity, ‘you’re supposed to build your brand, your network, your social-media presence’ (Deresiewicz, 2015). ‘Online marketplaces, self-publishing platforms, non-profit incubators, collaborative spaces’, these new formats through which the artist and their work are disseminated, form part of the new ecosystem of the artist-entrepreneur, up to and including the sale: ‘with creators handling or superintending every aspect of the transaction’ (*Ibid*).⁶⁰ Roger White, describing his experience of art school, illustrates the penetration of these concerns into the core of artistic training:

‘The minute we’d set foot in our first seminar room, we were all already inside the industry [...] The students are already building their career portfolios, learning how to speak about their work so that galleries will want to work with them, and some are even hiring undergraduates to complete the labor on their visions’ (quoted in O’Connor, 2015).

Fischl refers to the same experience by a fellow-artist:

‘David Salle told me he went up to Yale a few years ago to give a master class, and he said all the students kept asking him, “How do you become branded?” That was absolutely their preoccupation. They saw it totally as a business model. That represents a huge change. I think it’s absolutely legitimate for artists today to want to know business in regards to what they’re doing. They have to understand the reality of it; they have to be able to negotiate it nowadays. I don’t have any problem with it. The problem I have is with artists who want to create a business model in their art itself as opposed to know how to deal with their art once they’ve made their art into a business. The other thing is—and this is a change that cannot go underestimated—kids come out of art school owing a quarter of a million dollars.’ (Fischl, 2014)

As analysed elsewhere in this thesis, post-modernity, other than a change in intellectual climate, was also marked by the evolution of industrial capitalism into finance capitalism and the

⁶⁰ For gallerists and dealers, conversely, the narrative of the artist as entrepreneur has proven a timely and useful bridge by which to make sense of art in the desired audience’s terms when trying to foster demand within the artistically disengaged realms of tech and entrepreneurial wealth. Jessica Silverman, who moved her gallery closer to tech companies in California in 2013, underlines this fact that ‘both technology and art are extremely entrepreneurial. Both are looking for competitive real estate’ (Stone, 2015), and both the FOG Design + Art Fair weekend at SFMoMA and the Seattle Art Fair, art and technology themed, were hoping to capitalize on the same simile.

infiltration of neo-liberalist principles into traditionally left-leaning political solidarities. Claire Bishop (2012) has written about the relation of the arts to such changes in detail. In her view, it was New Labour who in the UK introduced the agenda of creativity as of national interest ‘because the population is increasingly required to assume the individualisation associated with creativity: to be entrepreneurial, embrace risk, look after their own self-interest, perform their own brands, and be willing to self-exploit’ (2012: 16). This coincided with ‘a flourishing literature on creative industries’ focusing on ‘the role of cultural activities in fostering innovation, growth, and societal progress’ and the support of the market mechanism in helping it do so (Lapadre, 2014: 384). As Bishop writes, ‘artists provide a useful model for precarious labour since they have a work mentality based on flexibility (working project by project, rather than nine to five) and honed by the idea of sacrificial labour (i.e. being predisposed to accept less money in return for relative freedom)’ (2012: 16).

Dominant business themes of entrepreneurship, technology and investment have become more common as ways of making sense of artists and their careers, on the basis that ‘valuing a work of art or a start-up is an art’, in part because it is ‘100% potential’ (Passariello, 2015). Petterson has similarly observed how ‘Contemporary art is a bit like the market for start-up technology companies. Value is based on the expectations of success rather than the underlying cash-flows’ (Petterson, 2013). Artfacts, likewise, report building their *Artist Ranking Tool* on the idea that the relationship between a curator or gallery owner and the artist ‘relates to that between investor and entrepreneur’.⁶¹ These patterns of analogy have already crystallized into real business plans. Among others, organizations such as Hatchfund⁶² or Art:i:curate⁶³, for example, are crowdfunding platforms for artists which replicate entrepreneurial venture capital fundraising models directly in the artworld. Pooled investment vehicles have been structured to diminish risk, diversify and provide future returns, in which the artists invest their own works: the Artist Pension Trust, set up in the UK, is designed to ‘help artists build up and sell a store of works that would provide a stream of returns over the long term and spread the benefits of a rising reputation’ (Pickford, 2017) – they are, in other words, a hedge on the future. Alongside these, other forms of revenue streams have also become available. Among them are the Artist’s Resale Rights, under consideration in the USA, implemented in the EU in 2006 and administered by the Design & Artist Copyright Service in the UK, which entitles artists to ‘receive resale royalties whenever one of their works is resold through galleries, auction houses or dealers for more than EUR 1,000’ (Eckstein and Moser, 2014).

The entrepreneurial model has found more literal applications. Jeff Koons, Takashi Murakami, Ai WeiWei, Martin Kippenberger and Nam Jun Paik, are well-known in part for heading enterprises counting what can be hundreds of assistants creating works that are not always physically seen by the artist before being sold (as revealed in a recent lawsuit against Paik). At his peak, Damien Hirst had 250 employees, helping produce a portfolio that included by 2013 around 6,000 paintings and 2,000 drawings. The model is not contingent on deceit, however: the conceptual apparatus elaborated during the twentieth century prevents deceit from being needed. Rather, art in its modern formulation has rendered craft irrelevant to authorship, and repurposed it instead as content. Hirst has openly acknowledged, for instance, that ‘the best spot painting you

⁶¹ <https://www.artfacts.net/tour/artist-ranking/> (25/01/2018).

⁶² <https://www.hatchfund.org/> (25/01/2018).

⁶³ <https://articurate.net/co-curate-the-future-of-art/> (25/01/2018).

can have by me is one painted by Rachel [Howard]', one of his assistants (quoted in Thompson, 2014: 39). Conversely, Richard Prince has disowned one of his Instagram works (after finding out that it was owned by Ivanka Trump), creating a highly volatile interplay between the work and the category art.

In other cases, though to same effect, labour has been outsourced rather than hired in. Tom Otterness describes the delight of carving figures out of stone that were in fact sculpted by Ned Cunningham or Bybee Stone Company, while Barry X Ball uses computer-scans and CNC-mills to produce his carvings, a similar process to Carole Feuerman (Shaheen, 2015) – and so on. Less intuitively, outsourcing has also been intrinsic to participatory art involving delegating the performance to audience members (Bishop, 2012: 231). Thus, while participatory art is in its non-material format aimed at rebuking neoliberal capitalism's emphasis on individualism and consumer goods, 'so many other aspects of this art practice dovetail even more perfectly with neoliberalism's recent forms (networks, mobility, project work, affective labour)' (2012: 277).

Economically, the hiring of labour is a prosthetic way of expanding the production of already reputable artists beyond their individual capacity by employing less-known artists where their labour can produce more surplus value. As such it is an upwards redistribution of labour and a movement of sectoral consolidation. Managing an organization, however, exacts constraints in terms of mandatory production scale requirements via employment obligations, creating normative pressures to produce and remove scale as a flexible and intrinsic component of the conception of artworks or art corpora. But these are not necessarily counter-productive, economically speaking. Menger writes that 'problems arise as to how consumers can know and appraise many characteristics of so many widely differentiated goods' (2006: 781), which creates a 'cumulative signaling advantage' to the most visible artists. One solution to this is to narrow the diversity of production in order to create a brand effect. Baker (2007: 310) has pointed to the fact that brands precisely 'help simplify decision-making' and act as 'a form of mental shorthand'. Artists willing to command a large production have in fact – unsurprisingly – mostly ensured the expansion in output has not been accompanied by a like expansion in variety, avoiding adding excessive pressure on what Rangaswamy *et al.* call the 'extendibility' of the brand, by adding 'extension categories' under the brand which do not fit either with the brand or existing product categories, or indeed existing brand associations (1993: 61-62). In doing so, artists may be able to create a 'sustainable differential advantage' (Doyle, 1989, quoted in Baker, 2007: 309) that in part explains the 'winner-takes-all' shape of the market (what Rosen, 1981, famously called the 'superstar model'): as Benhamou (2002) has argued, the success of artists tends to be self-strengthening. Zorloni & Ardzizzone (2015: 5) have pointed to this creating 'almost monopolistic positions' based on 'reputational barriers to entry'. There is therefore an obvious value to an iterative aesthetic. This was recognized by Amy Capellazzo, who noted that it can be 'to an artist's advantage to have a very large, organized, and actively traded body of work' (Capellazzo, 2016). Laura Hoptman, the influential MoMA curator of paintings, similarly observed in a recent interview, using as an example the so-called 'Zombie Formalists' (coined by Mugar, 2013; popularised by Robinson, 2014) that 'the sameness, the repetition, is extremely important, because you want a piece that's instantly recognizable as being from one of these painters' (quoted in Kerr, 2016). This renders them 'perfect for the way they are consumed', because 'you can collect them

all like toys' (*Ibid*)⁶⁴: they are highly exclusive by virtue of price, but highly available by virtue of supply, and among the collecting community, highly inclusive by virtue of brand.

The importance of the brand conceived as a revenue-generating asset, the permeation of entrepreneurial modalities into the practice of art, and the new legal, tax and financial considerations attached to art, have seen artists take measures more familiar to lampoons of capitalists. Anish Kapoor has bought monopoly rights to a deep black, Vantablack made by the firm NanoSystems. Jeff Koons is rumored to have fired 15 staff from Jeff Koons LLC because they were 'attempting to unionize', though the concerned individuals would not speak on record for 'for fear of reprisal and the potential for future litigation' (Johnson and Jones, 2016). Between 2015 and 2017, Koons reportedly laid off 70 of his 100 staff (Halperin, 2017). Patron, collector and art venture capitalist Stefan Simchowitz has encouraged artists such as Petra Cortright to use 'proprietary production techniques', taking steps to prevent her fabricators from offering the techniques to other artists (Glazek, 2014) in order to increase her competitive position and prices.⁶⁵ Performance artist Marina Abramović, famously teary-eyed in a surprise encounter with her former partner Ulay during a piece, was very shortly thereafter taken to court by him for failing to acknowledge his co-authorship of whole swathes of their early collaborative work, published in her books under her name, and for withholding royalties on the sales of such work.⁶⁶ The logical conclusion, expressed by UK copyright lawyer Peter Wienand, is that artists involved in joint authorship must draft contracts formalizing their contributions to and claims arising from the work (Gerlis, 2016). As such it is clear that the higher sums attracted by art invite incentives to shirk informal obligations where doing so is economically beneficial, which in turn, through resort to legal redress, demands the placing of this activity within regularised legal contractual formats, thereby contributing to the professionalization of the artist and the formalisation of the ecosystem within which he or she operates. If art, through the market, is more exposed to the herd behaviours and trends of collector consensus, then defensive strategies, collusion, speculative joint action by economic players across the market side of the endorsement system, and sheer marketing manipulation, are not so much market distortions as methods of playing post-modernity – in which no judgment is king – to one's advantage.

As if to consecrate the change, the branding of artists has invited Hollywood agencies into the representation of artists, offering their expertise in this field to a new segment that is finally ripe for Hollywood's variety of star-making. *The Wall Street Journal* reported in early 2015 that United Talent Agency, a Beverly Hills based agency representing a number of high-profile celebrities, was now launching UTA Fine Arts to help artists secure financing for creative projects, sign corporate partnerships, while offering film industry access and digital distribution platforms (Anon, 2015b). In 2016, UTA Fine Arts expanded by opening its own gallery space, UTA Artist Space. Creative Artists Agency, likewise a talent and sports agency, represent artists Rachel Rose, Ai Weiwei and Steve McQueen among others.

⁶⁴ This also suggests the strength of the brand's normative force: from comprising a form of equity upon which the artist can capitalise in making new work, it can become a negative association that is extremely difficult to undo: the market for the zombie formalists crashed as fast as it had been built up.

⁶⁵ Stefan Simchowitz, a notorious patron of the arts, operates by taking a venture capital incubator model to art through his investor group Simco's Club. Simco's Club is an informal network from the centre of which Simchowitz buys and resells vast amounts of works in a bid to simultaneously benefit those who are members of his network and the artists. The strategy relies on buying bulk, and at steep discounts, the work of artists in their early stages (that is, when they have little bargaining power), micro-managing their artistic careers, production choices, work ethic, and intellectual property protections, and then selling the works by leveraging his network.

⁶⁶ Ulay won a compensation of €270,000 in September 2016 (Gerlis, 2016).

We will return to some of these points below.

3. The Privatisation of the Endorsement System

While museums have vastly expanded in terms of outlets, the relativism of the post-modern intellectual landscape, and – in the Anglo-American world especially – the reliance on private sources of financing, have considerably weakened their institutional authority within the endorsement system. A parallel development has complemented this shift: the expanding authority of high-end galleries in legitimising high-art. To a great extent, the post-modernist artworld was defined by the arrival of new, professionalised gallery operations in architect-designed spaces, such as Mary Boone's gallery, which opened in 1977 in New York and exhibited the likes of Julian Schnabel, Ross Bleckner, David Salle, Jean-Michel Basquiat, Georg Baselitz and Marcel Broodthaers. These extended a growing recognition of dealers – such as Seth Siegelaub in relation to conceptual artists in the 1960s – as co-producers of artistic worth and critical components in the endorsement system. As Nairne notes, Boone considered herself a curator, and the role of the gallery as *sharing*, not complementing, the responsibilities of the museum for both preserving and commenting on outstanding artworks (in Nairne, 1999: 123). Both Boone and, in the UK, Saatchi and Jopling, among others, brought an entrepreneurial ambition to the curatorial function in the primary market, and thus strengthened 'the position of the exhibition as the central focus for selection and evaluation in the delicate ecology of the artworld' (*Ibid*: 125, 126).

The new demand pressures on contemporary art described above have required the artworld to increase the speed of its endorsement system so as to accelerate the supply of legitimised works of art to the very limits of artistic production. In this context, the slow accretive process of achieving prized institutional recognition has become too inefficient for the required output scale, and collectors have had to instead look to the primary art market for this function. Museums, moreover, have become too disconnected from a model of innovation in which, as Galenson has shown (2001, 2010, 2015), original contributions have been made possible and acceptable at ever younger ages (2010: 360). Major galleries have therefore sought to appropriate for themselves the capacity for consecration. Today, as MoMA curator Laura Hoptman has pointed out 'the market has become such a strong force that it doesn't need institutional validation' (speaking to Kerr, 2016). This process can be summarised as the privatisation of the endorsement system.

The movement of museum veterans over to auction houses and galleries, which has effectively erased the boundaries between the public and private sectors that taboo once held in place, has in part reflected the shifting fate of public institutions and private organizations (see Gerlis and Halperin, 2016, for a substantial list of examples). With the patronage of a vaster, wealthier, and more malleable clientele galleries have borrowed all the trappings of museums to satisfy, in appearance, the collectors who 'want to be sure that the art they are buying is of museum quality' (Anon, 2013a). This shift has presided over the transhumance of the museum's scale, resource level, quality of display, scholarship and publications, inventory and operation size to the private gallery. Through this 'mimetic isomorphism' (DiMaggio and Powell, 1983), private galleries have synthesized the aesthetic of institutional endorsement with the core interests of commerce.

Monumental scale in exhibition spaces and artworks have historically been the exclusive preserve of the museum. In the case of contemporary art, it was pioneered by institutions such as the Guggenheim and Tate Modern (Wullschlager, 2016), as if on the premise that the viewer's sense of the work's importance is coextensive with the work's ability to coerce that importance upon the viewer physically. Where this “‘wow’ factor [...] drives commissions, acquisitions and displays in public institutions worldwide’ (Wullschlager, 2016), it has also informed our understanding of merit, and, by extension, the way the primary art market seeks to – and can – satisfy that understanding. To judge by many top art galleries, this change in the terms of assessment towards scale as heuristic for significance has been beneficial: scale, after all, is an imitable aspect of the museum. The awesome can be manufactured with an ease and speed that aesthetic, political, social – in short historical – import, is more resistant to. More importantly perhaps, the monumental has found new demand. As *Financial Times* reported in October 2016 that ArtBasel Unlimited, the art fair's space dedicated to monumental works – once ‘dominated by the public museums’ because collectors favoured ‘domestic-sized works of art’ (which the fair as a result catered too) – is now broadly a private collectors market (Murray Brown, 2016).

In practice, the significance of this idea is amply evidenced by the spatially expansionary ambitions of leading galleries: in New York, the multi-storied spaces of Zwirner (30,000 square feet for its third in the city) and Pace (60,000 square feet over eight floors planned, also for its third in the city), have prompted market observers to note that galleries now seriously rival – and occasionally dwarf – the city's best known museums in terms of cumulative exhibition space, even without considering their global outposts (Gagosian for instance has 17 galleries around the world, Pace has nine). These include the New Museum, The Bronx Museum of the Arts and the Neue Galerie (Sutton, 2015). In 2018, David Zwirner announced the opening of a new space in 2020 with 50,000 square feet of exhibition space, exactly equivalent to the recently opened Whitney Museum – and using the same architect, Renzo Piano. In their expanded spaces, high-end galleries have taken to organizing museum-quality exhibitions – some without any works for sale at all. By in-sourcing the provision of a function ordinarily fulfilled by the museum, the gallery-museum distinction has been profitably blurred, and galleries have evinced flexibility, efficiency and resources in doing so that museum governance mechanisms struggle to match. Gallery exhibitions mixing works for sale and works on loan have likewise contributed to an atmosphere of ambiguity that is propitious for works standing to benefit from the status uplift. In doing so, galleries have been known to solicit the talents of renowned museum curators. MoMA's John Elderfield (former Chief Curator of Painting and Sculpture), Peter Galassi (former Chief Photography Curator), and Guggenheim curator Germano Celant have programmed exhibitions at Gagosian's galleries. Yale School of Art's Robert Storr has worked with David Zwirner. Centre Pompidou's Alfred Pacquement has worked with the Mnuchin Gallery, and Paul Schimmel (LA MoCA) has partnered with Hauser & Wirth (Sheets, 2015). As bearers of the authority of the museum they benefit from the ‘alleged innate neutrality of museums and exhibitions’ which Karp saw as ‘the very quality that enables them to become instruments of power as well as instruments of education and experience’ (1991: 14), and utilise it towards the ends of the gallery, hence contributing to the museum's diminished relevance in the endorsement cycle

One consequence of these dynamics is that, according to a report by *The Art Newspaper* in Spring 2015, almost a third of US museum solo shows today go to artists represented by just five galleries (Gagosian, Pace, David Zwirner, Hauser & Wirth, and Marian Goodman; Halperin,

2015). According to Saltz, this figure is as high as 40% at LA MoCA, 45% at MoMA and more than 90% at Guggenheim (Saltz, 2015). That large commercial galleries often provide logistical and financial support to museums, and are often pressured by museums into doing so (Pogrebin, 2016a), thereby improving the ability of museums to do shows of their artists, is likely a contributing factor to this convergence of museum and market. Indeed, as Artprice reflect, ‘the market reach of an artist and his/her prices depends less on the role of art critics than on the support provided by prominent galleries’ (2015b: 23). Gagosian, Emmanuel Perrotin and Blum & Poe for example each contributed a six figure sum to a Takashi Murakami solo show at LA MoCA in 2007 – donations which, *ceteris paribus*, could well tip an exhibition program in an artist’s favour (Finkel, 2007; see also Maneker, 2016; Pogrebin, 2016a). For galleries, the calculus is straight-forward: a solo show at a major museum will increase the value and desirability of the artist in question, and so potentially reward their expenses through the value growth of the existing and future inventory of the artist. For museums, like film-producers raising capital through product-placements, the financial aid may be too attractive and too essential, ‘rais[ing] the specter’, as *The New York Times*’ Robin Pogrebin observed, ‘of a pay-to-play model’ that ‘could give galleries undue influence over what the public sees’ (Pogrebin, 2016a). Lucy Mitchell-Innes from Mitchell-Innes & Nash gallery confided in 2016 that while this was once an uncommon practice, their gallery was now asked a couple of times a month for support by museums – a position also corroborated by Angela Westwater of the venerable Sperone Westwater gallery (speaking to Pogrebin, 2016a).

This is a very significant change. It illustrates the failure of museums to fulfil the logical ideal of public support – given art is ‘driven by the same uncertainty principle that underlies the market competition for successful innovation’ (Menger, 2006: 799) – becoming an instrument of market legitimisation instead of a space that, by virtue of being separate from the market, is open to radical risk-taking. Museums today, as Wallach noted of MoMA in his 1991 essay, have ‘little direct impact on artistic practice’ – at least experimental practice – instead focusing on a reactive function of ‘reporting recent artworld developments’ or taking care of their permanent collections ([1991] 1999: 286). The founder of Ancient & Modern gallery, formerly of Margate’s Turner Contemporary museum, touched on exactly this when observing in 2006 that ‘in the public sector, in the end you just exclude challenging practice. In my mind, the publicly funded arts are supposed to support what the market cannot, but apparently they cannot support an avant-garde’ (speaking to Higgins, 2006).

While concentration of wealth has been a boon for galleries with the resources to capitalise on it, the market has also been privy to its corollary implication. Market players have observed the increasing visibility of primary businesses folding, particularly in the mid-market, which has accompanied the successes of multi-national galleries (Tarmy, 2015; Tully, 2015). Peter Bläuer, who organises the LISTE Art Fair in Basel, noted in an interview:

‘Every week I get emailed a notification that this gallery closed, that gallery closed. The most expensive things work very well in this market. The auctions are still fantastic, no? But, for the new generation, it’s not easy. In March I was in New York, and I think I visited about at least 60 young galleries. And most of them were showing the same thing—they all have things to hang on the walls, or perhaps sculptures. But I know it’s not that they wouldn’t like to show video or digital works’ (Goldstein, 2016).

The capital intensiveness of the art gallery model (see Resch, 2015 for a thorough analysis of this) would thus suggest that initial divergences between lower and top galleries soon compound as economies of scale accrue to those with the largest operations, who thereby also strengthen their visibility to UHNWIs. Such pressures account for the shuttering of many eminent and established galleries in recent years (Tully, 2015): Yvon Lambert in Paris and New York; Alexander Ochs in Berlin; Manny Silverman in Los Angeles; McKee in New York; Nicole Klagsbrun in New York, among others. An analysis in ARTnews, from June 2017, gives an extensive list of closures. The author makes the observation that, by their count, the number of gallery closures in the small to mid-size may have tripled from the period 2012-2015 to that 2015-2017 (Douglas, 2017). Some of these have reincarnated as businesses with fewer fixed costs, including forfeiting the gallery space itself. Galerie Jérôme de Noirmont closed in 2013, explaining that 'the future appears to be in certain specialized niches for simple structure galleries, and in the branding of mega-galleries, with several international locations'⁶⁷. Lisa Cooley, who after eight years closed her New York gallery in 2016, explained that in the future she hopes 'to show that growth can be about ideas, not just about scale' (Freeman, 2016b). Statistics confirm the increasing inequality between top and lower-level galleries, with TEFAF 2015 reporting that dealers with sales under €500,000 saw an average turnover decrease by 1% year-on-year while dealers with sales over €10 million reported an average increase of 18% and were more optimistic about future growth prospects. Moreover, sales of higher value works tend to happen quicker than those at the lower end (McAndrew, 2015: 41). Several mergers have taken place among galleries hoping to survive through scale synergies, as for example between prominent New York galleries Zach Feuer and Untitled; Valerie Carberry and Richard Gray; Galerie Forsblom with Lars Bohman Gallery, ZiiherSmith and Horton Gallery; the consolidation of Esther Schipper and Jorg Johnen, or as with gallerist Gerard Faggionato joining David Zwirner (Salmon, 2015; Tully, 2015).

For bigger galleries, the future is in expansion and internationalisation. David Zwirner, Sprüth Magers, Lehmann Maupin and Massimo de Carlo have or are all opening new spaces in Hong Kong; Pace Gallery has expanded into Silicon Valley with its Art and Technology space and will open its ninth gallery in Geneva in 2018; Gagosian has opened a new branch in San Francisco; Timothy Taylor a New York gallery; Almine Rech complemented their three galleries with one in New York; Dominique Lévy has taken over a whole new building, Thaddaeus Ropac has opened a third outpost, this time in London – the list goes on.

~

Given the importance of galleries, it is worth exploring the configuration of the private gallery market in some more detail, and in light of the observations made on the discourse which galleries use to valorise.

An interesting phenomenon given the 'structural over-supply of artists' (Menger, 2006) is the representation of a small-number of artists *across* galleries – a fact that is anecdotally known to anyone reading art news or regularly attending gallery exhibitions. An analysis, conducted on

⁶⁷ <http://www.noirmontartproduction.com/1994-2013/exhibition-fermeture-galerie.html> (25/01/2018).

the sample of central London galleries mentioned in the beginning of this chapter, reveals some structural conditions that merit consideration here.

The analysis, again, was conducted taking central London galleries approximately within the Zone 1 perimeter (see **Figure 9**) – which contains a robust sample of globally dominant galleries – and producing a network plot using artists held in common as links ('edges') between galleries. In the following example, a gallery-to-gallery univariate incidence matrix was created on the basis of publically available lists, from their own websites, of gallery representations for 152 galleries. Organized by degree centrality (galleries with more ties are closer to the centre), what the graphical representation revealed was a clear clustering of interrelated galleries surrounded, by a populous crescent of isolated galleries (the crescent shape is part of the graphic organizational principle of this mode of representation).

The node sizes were then made contingent on degree centrality such that the most connected nodes appear larger. This was then overlain with a ranking of galleries into five equal groups (each of 30), according to a composite measurement comprising the z-scores of average number of lots sold by artists in a gallery in the most recent year available to 2015; average turnover by artists in a gallery in the most recent year available to 2015; average record price of artists in a gallery; and the average of total lots sold per artists in a gallery.⁶⁸ As can be seen from **Table 6 & Table 7** – which contain the per-gallery inequality coefficients calculated on the mean auction record of the artists in their roster – and as demonstrated by Accominti (2014), galleries do not appear to diversify inequality by picking a mixture of highly successful and less successful artists. On the contrary, it would appear that they are relatively homogeneous in terms of the price level of their artists, and thus highly hierarchized among each other.

The first group contains the top 30 galleries of this ranking, group two gallery 31 to 60, and so on. The lowest cluster was deleted because no auction information was available on any of the gallery's artists. That it is the lowest is therefore an assumption, but it is a logical one. Given the 'winner-takes-all' shape of the market (Velthuis, 2007; Zorloni & Ardizzone, 2016), which flatlines very rapidly, node colour is made contingent on hierarchy group: red for the first group, and purple for the other groups, which are less distinct from each other in our data, and may well be indistinguishable from an auction performance perspective. Note that this chart illustrates a steep price point differentiation among top galleries and between top galleries and the rest, who are far more homogeneous and may differentiate along more qualitative variables as they aspire to move up the curve.

⁶⁸ Variables were selected out of a marginally wider universe by principal component analysis.

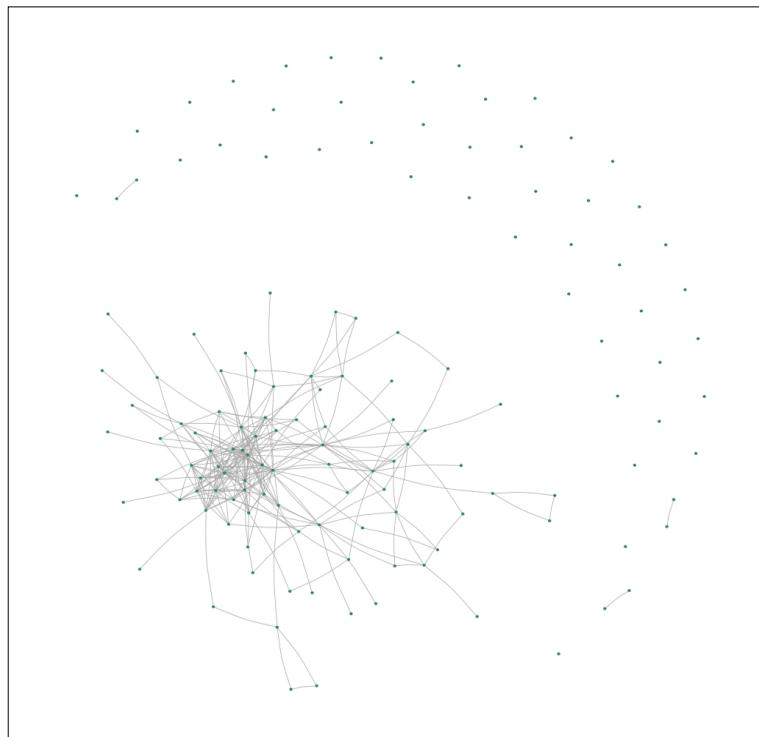


Figure 10 - Cross-Representation of Artists by Galleries

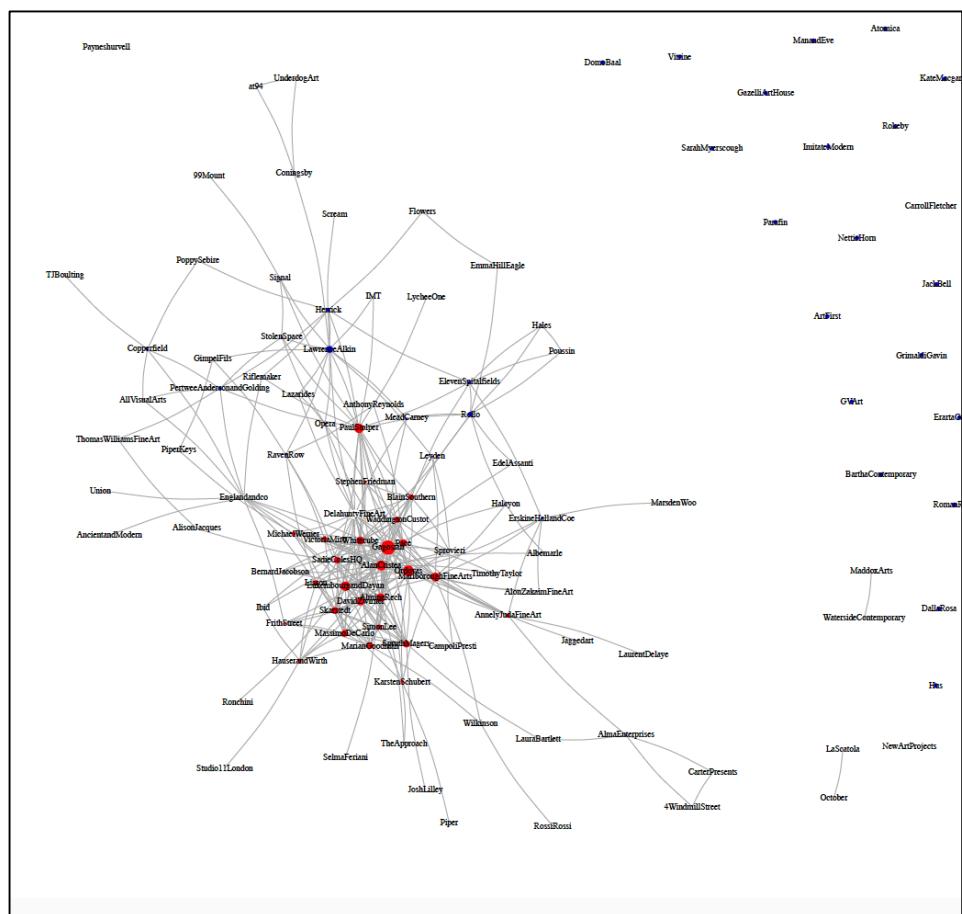


Figure 11 - Cross-Representation of Artists by Galleries, (red = top bracket; blue = the rest)

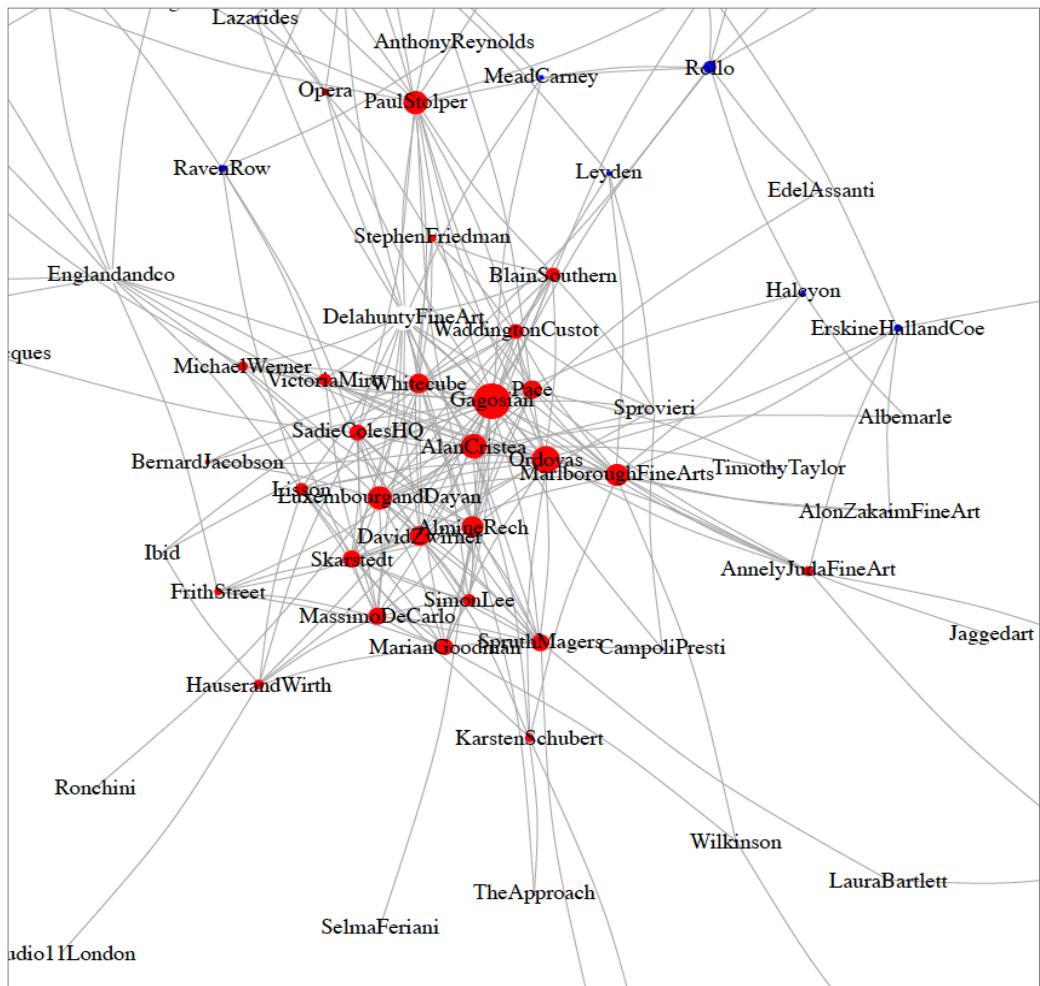


Figure 12 - Cross-Representation of Artists by Galleries (detail; red = top bracket; blue = rest)

Nearly all the galleries in the network that are in the centre of this web of relations (**Figure 9**) are from the top cluster by average economic performance of their artists. Gagosian is the gallery that has the most artists in common with other galleries, being surrounded by Pace, Alan Cristea, Whitecube, Ordovas, Luxembourg and Dayan, Sadie Coles, and so on. Only a single gallery from group 1 finds its place in the sickle-shaped periphery: Michael Goedhuis – because it specialises in modern and contemporary East Asian art, specifically Chinese art, making it the most differentiated gallery within the group. A cumulative distribution function of degree distribution evidences this in simpler terms (see below). Only one gallery has nearly 30 artists in common with others, one third has zero, and two third have below five. The graph is consistent with the market curve presented above, as is made even more striking when looking at the mean number of relations per group.⁶⁹

Galleries thus appear to become more embedded in a matrix of relations with other galleries in the peer group – and their differentiation by represented artists thus becomes smaller – as galleries represent more valuable artists. Artistic success can be said to be correlated with

⁶⁹ The most successful galleries are also the oldest. Average age of galleries in the groups are: 23.5 (Group 1); 12.41 (Group 2); 9.0 (Group 3); 7.7 (Group 4); and 7.6 (Group 5).

multiplicity of representation, which is consistent with the value of artists being contingent on demand side network externalities (Zorloni and Ardizzone, 2016: 3), and with the notion of the cumulative signalling effect of visibility. It also illustrates the quasi-monopoly status enjoyed by artists who are multiply represented: they occupy multiple positions each of which could otherwise potentially be filled by an individual artists. A recent example of such an artist in the press is the case of Mark Grotjahn, of whom *The New York Times* wrote that he seeks to maximize his ‘international exposure through multiple galleries’ – notably through Gagosian (Pogrebin, 2017) Furthermore, galleries at the top, though tightly knit with their peers (what is called in-group homophily), are relatively well insulated from lower galleries. Galleries increasingly resemble each other in terms of gallery representation as we move up the gallery hierarchy, and by that token strengthen their difference from other groups.

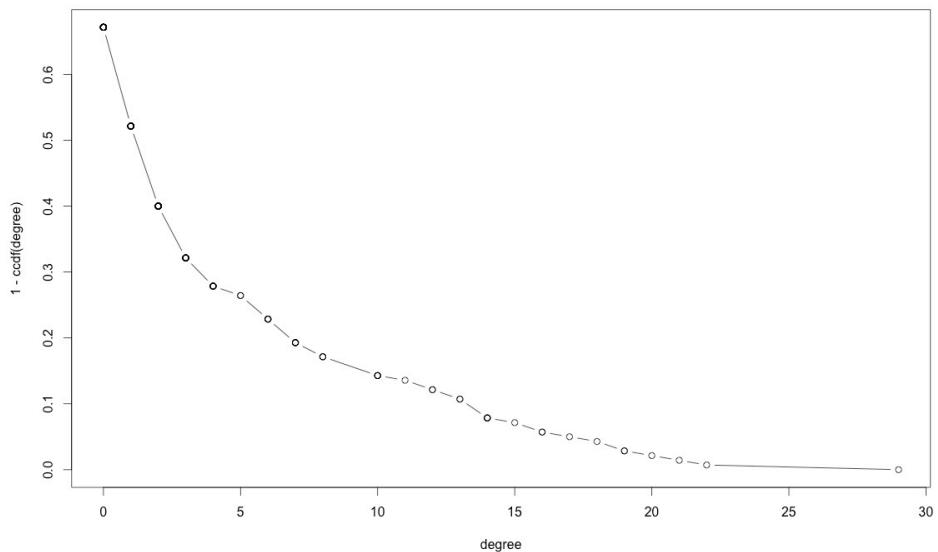


Figure 13 – Cumulative Distribution Function of Degree Distribution

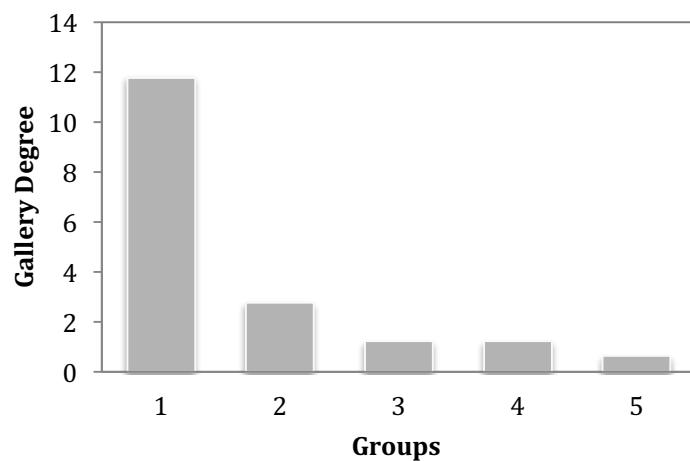


Figure 14- Average Number of Relations per Gallery per Group

The combination of in-group homophily with distinct out-group heterophily gives credence in the contemporary London market to a point made by Accominti about the early twentieth-century Parisian art market, namely that galleries add value to their artists by the extent to which they are able to police and maintain relational purity between themselves and lower level galleries, here the crescent (2014). That is to say, valorising is in part a function of entrenching and performing the differences between gallery classes. Artists themselves enact these internal bonds, in this case, within the more homogeneous top tier, creating one aspect of the relational purity they need whilst also multiplying the number of venues where they can reap its benefits. The high level of supply of artists in the top tier – achieved through arrangements that include hired labour – and the multiple outlets for their work, concentrate the ‘effect of symbolic imposition’ within a relatively narrow clique of artists who, together comprising the most visible aspect of the ‘field of production’ can ‘limit the universe of the forms of experience [...] that are objectively possible at any given moment’ (Bourdieu, 1984: 228). In other words, the structurally dominant position of top artists – and their galleries – is strengthened by the visibility and recognisability of artists across galleries, because it improves their ability to symbolically impose their aesthetic as the aesthetic of dominant art forms. What is more, it improves their position vis-à-vis buyers for whom, to use Hutter & Shusterman’s phrase, knowing the artwork’s ‘position in the world of taste’ is sufficient (2006: 195). Looking at the same data but mapped onto their actual locations, (**Figure 15**) with node size contingent on relation, predictably shows that this same cluster of top galleries is very tightly bound together both via the artists they represent *and* the narrow geography wherein they do so. The differentiation, again, evinces a conscience of the principle of valorisation.

The ‘winner-takes-all’ distribution of incomes for artists and other cultural actors, as indeed of prices for certain other singularities, is well known (Adler, 1985; Benhamou, 2002; Karpik, 2010; Rosen, 1981; Velthuis, 2007; Zorloni and Ardizzone, 2016), and relates us back to the subject with which we opened this chapter: inequality in the art market. Important research has explained this phenomenon on the basis of network effects, whereby positive feedback loops between exposure (such as in key venues or collections), turnover, and revenue create extreme situations for its beneficiaries (Adler, 1985; Zorloni and Ardizzone, 2016). Feedback loops emerge because high information asymmetry, the subjectivity of expertise, high search and information costs, and bounded rationality lead to reliance on the reputation both of intermediaries and of the artists themselves as a form of cognitive short-hand. In conjunction with our observations on the artist-entrepreneur, these features are clearly addressed by artists who, like Grotjahn, seek to ‘actively manage their own markets’ (Pogrebin, 2017). The network outlined above is nothing if not a mechanism for leveraging positive feedback loops. While we cannot know without further research who initiates cross-representation – the assumption being that it is the artist – it is not clear that this system is not as beneficial to the kinds of mega-galleries described above as it is to the artist. While the artists may occasionally call the shots, galleries of a high-standing would presumably have too much reputation at risk to see their artists shared with a gallery perceived to be subordinate. To this extent, there must be at least tacit collusion in this arrangement by galleries with a sufficient degree of parity.

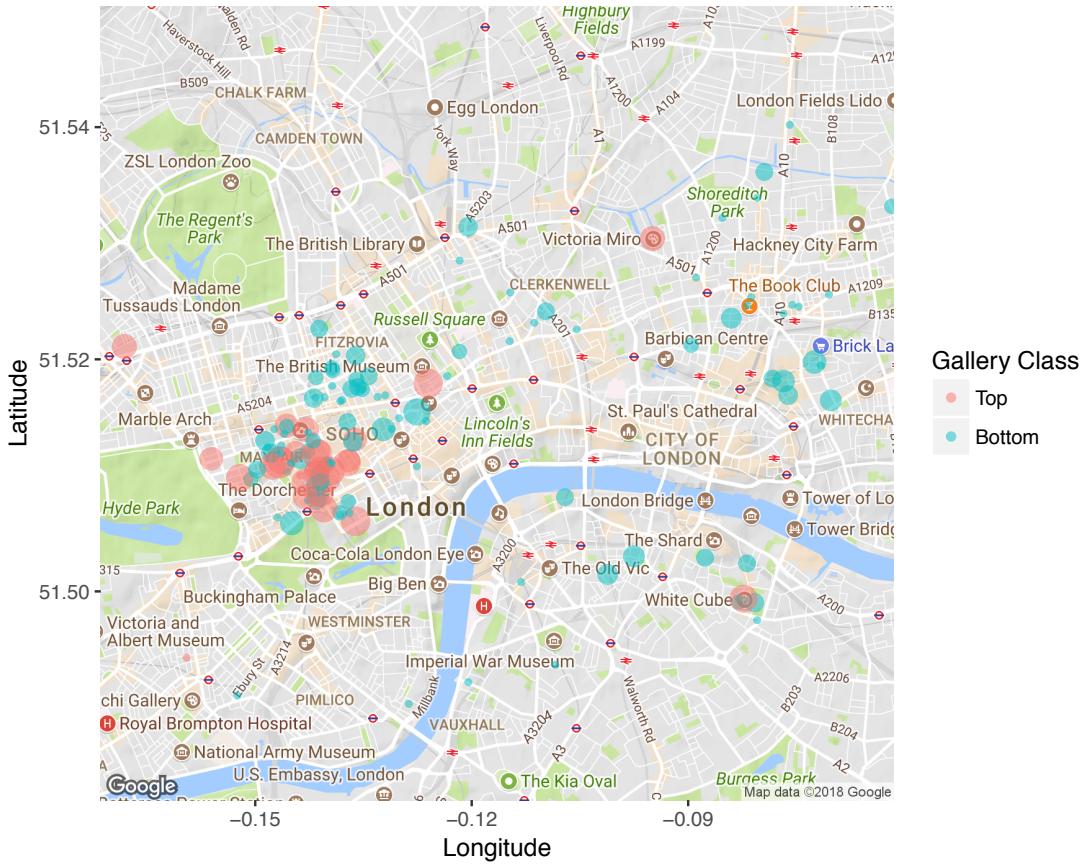


Figure 15 - London Map of Galleries (Node Size Contingent on Number of Relations)

Tacit collusion over the power to consecrate in an ‘attention economy’ where the attention of viewers is a scarce resource, information overload is value-corrosive, and consumers have preference for limited sets of artists (Adler, 1985)⁷⁰ – may present significant advantages for the gallery as well, not least because each gallery can present itself as representing a wider pool of artists than they presumably could under conditions of exclusivity. Like museums, the power of consecration in a gallery is a function of the association of the incoming artist with the collective merit of artists already represented. A lesser known artist suddenly taken up by a gallery that represents many of the top 100 most successful artists, for instance, will see attention to their work increase, and subsequently its perceived worth, on the basis that the gallery has distinguished in it something worthy of its being integrated into that of a group that includes other already established artists. Consequently, the prices of the work increase: there is a degree of convergence. Yet the limited number of highly successful artists, as a function of the market’s extreme inequality, also naturally constrains the ability of each gallery to operate this value increase among newer artists in traditional conditions of exclusive representation, for there is eventually a decreasing marginal return to additional new artists, and soon a negative one, given a fixed

⁷⁰ The concept of the ‘attention economy’ was developed in the late 1990s on the back of Herbert Simon’s oft quoted insight that ‘the wealth of information means a dearth of something else: a scarcity of whatever it is that information consumes. What information consumes is rather obvious: it consumes the attention of its recipients’ (1971: 40). Authors include Davenport and Beck (2001), Goldhaber (1997), Franck (1999) and. See also Crogan & Kinsley (2012).

amount of ‘capital’ in the form of established artists. Cross-representation means that galleries can arbitrage price convergence over a greater set of successful ‘reference’ artists. If Grotjahn can be represented by four galleries, then there are four times the amount of artists (not discounting for other shared representations) who have the merit of being represented in the same gallery as him.

Thus, the above network configuration suggests that galleries may tacitly collude in sharing among each other – providing it is with galleries perceived as peers – the representation of established artists, potentially to collectively enhance their ability to create monetary value by endorsing the works of newer artists they represent among them, without risking diluting each gallery’s individual reputation. These high-profile artists come to act as value anchors for the gallery group as a whole. In this manner, the network is optimized – but within strict limits. One of its constraints is that of the elevated supply required from the artists cross-represented, outputs that may be difficult to meet by the labour of a single individual. It is thus possible to recognise in this pattern the potential offered by the expanded productive capacities of artists working with hired labour, as discussed above, in order to fulfil it. Its structure points to the means by which similarity and scale of output become effective in constructing value in artistic careers: they both warrant and satisfy multiple representation, which in turn strengthens their ability to signal themselves beyond the price dilution which higher supply would normally cause.

Going back to the question of the ‘winner-takes-all’ shape of the market for a moment – which galleries replicate – we may consider the interpretation proposed by Velthuis (2007; based on Zelizer and Simmel) and Karpik (2010), looking at the question from a different angle. Karpik puts the insight as follows:

‘when it comes to the economics of singularities, ranking [through price] is at once inevitable and absurd. It is a fiction. Disproportion is the “solution” to a general problem that the economics of singularities cannot avoid: how to symbolically and materially impose the sign of an irreducible difference where exchange assumes that no difference is irreducible [...] the *disproportion re-establishes incommensurability*’ (2010: 222, emphasis in original)

Put differently, increasing disproportion – ‘the twin movement of elevation and separation’ – is ‘both part of this transformation and its consecration’ (*Ibid*: 221), hence why price can be ‘more meaningful than other types of praise or recognition for artists’ (Velthuis, 2004: 371). Disproportion has the symbolic function of re-establishing a relation of extreme inequality which the fixed increments of capital would otherwise deny. We can see this same disproportion as a structuring principle of the network: movements are free within an elite clique, so long as they do not overflow it.

The discussion in Chapter 5 points to some of the beliefs held about art which find themselves realised and confirmed in the fact of disproportion, and can be taken in light of the above to suggest that ‘elevation and separation’ – as Karpik says – are particularly strong signals where traditional cues to value, such as complexity, skill or preciousness that can be appraised, are demonstrably irrelevant. Thus, one way in which the gallery system is able to create ‘myths’ that provide their artists and themselves sustainable economic advantages is by homogenising within the peer group and maintaining the differentiation without, and thus maintaining the double functionality of the disproportion of price.

Conclusion

This chapter has looked at sets of different features of the contemporary art market. A common theme across them was the synthesis of private interests with endorsement power. Indeed, in the absence of the museum's arbitration – or without the patience for it – and alongside the neglect for scholarly interest which the velocity of the art market, a deep relativism, and changing cultural capital norms have produced, representation by well-known galleries was argued to proxy artistic recognition. One of the means of achieving this was that in the disintegration of 'the general universal of art itself', leading commercial galleries have succeeded in gaming the aesthetic of 'institutional space' which now only, according to Jameson, can confer the status of art (Jameson, 2015: 107). To the extent historic increases in both supply and demand can be said to have eroded the museum's authority to sacralise, these forces have also partaken in transferring it – by dint of sheer practical need – to the pricing mechanism. Thus institutions that 'served to mediate the difference, to cushion artists, ideologically, economically, and psychologically, from the full force of the marketplace' are bypassed and, in the process, weakened (Deresiewicz, 2015).

Insofar as these patterns operate to elevate the velocity and the prices of contemporary art, they have a direct bearing on the project of financialization. Indeed, the importance of this point, it should be reaffirmed, comes from the fact that these structural changes in the endorsement system map endorsement onto a single ranking mechanism of hitherto suspect authority as a mark of quality in the artworld. Alongside the visibility of auctions, and propagation of data on the market, the causality between historical import and prices has become indistinct. Petterson, to give an example, has noted that 'it was not until after the auction market started to elevate [Richter's] prices in 2011 and 2012 that his 'position' in art history was firmly solidified', from which he concludes that 'market validation often plays a critical role in giving the ultimate blessing to an artist's reputation and standing' (2014: 74). An important consequence of reinforcing the pricing mechanism's claim to both encompassing and consecrating artistic value is that it reinforces credibility of quantitative and financial forms of expertise in its analysis, representation and interpretation, and therefore gives both visibility and legitimacy to the capacities for action inherent in the conclusions of financial, econometric, or various lay analyses.

Each of the facets discussed also presented a stark element of inequality: multiplying branded museums, factory-produced art and 'mega-galleries' expanding globally, met by museums closing for lack of funding, a vast majority of artists on the flat part of the Lorenz curve, and small and medium sized galleries packing shop. Oligopolies in the auction and art fair world could be added to this list. Elucidating the relation between general forms of wealth inequality and those which transpire in the art market's structures is clearly beyond the scope of this work, but in pointing to its presence, and suggesting some of the means by which various forms of stratification can be perpetuated, it is hoped to have provided some meaningful context to the project of financialization.

Chapter 7. The Online Art Market

Introduction

Research from the cultural economy of finance perspective (Beunza and Ferraro, 2011; Knorr-Cetina, 2003; Muniesa, Millo, and Callon, 2007; Pryke, 2010; Pryke and du Gay, 2007) has recognised the importance of ‘scopic’ systems of organisation and visualisation tools which ‘project market reality while at the same time carrying it forward’ (Knorr-Cetina, 2003: 7). In the eighties, in domains such as foreign exchange trading, technological advances transmuted the market – then comprising dispersed interpersonal networks for sourcing prices and discerning potential transactions – into the single screen, where it has since resided (*Ibid*, 15). To be sure, the art market is very far from being thus structured, but it carries within it the echoes of these changes. As Baxandall once remarked, ‘the pattern of the picture trade tends to assimilate itself to that of more substantial manufactures’ (Baxandall, 1972: 3). Certain points of resonance are therefore worth drawing out – not least because no account of financialization would be complete without addressing one of its key technologies, in all its manifold expressions, both relating to finance in the art market and to ‘economistic’ modes of apprehending it.

In the research mentioned above, three observations are worth reiterating here. The first is that what the screen unifies is primarily price information and secondary information derivative of or material to it. The second is that, a ‘constellation of technical, visual, and behavioural components’, the screen produces ‘a global world in which [members] can participate on a common platform’ (*Ibid*, 8) – in other words it reifies a community. The third is that because visualisation is both ‘significatory’ and ‘interventionary’ (Hacking, in Pryke, 2010), it can change knowledge formation and types of intervention. Similar, though less categorical arguments can be made about the online art market. Here market players typically forefront the availability of prices or market information; they devise environments intended to optimise the presentation, interaction with, and transaction of art works; they often aggregate a wide array of activities or goods in the art market in order to present themselves as a single forum; and they provide contexts, information and visualization that perform ideas about the artworld, namely that the artworld and the art market are one and the same thing. It is therefore largely for its epistemic importance – its ability to foster an experiential regime, to use a phrase from Bishop (2012: 8) – that it is worth considering the key aspects of this market in its current formation, its aspirations, failings, and effects.

The Online Art Market

By vastly reducing entry barriers relating to capital investment, the internet has greatly expanded the pool of accessible artists, buyers, commentators, and providers of secondary services. The advent of user-created content on social media and blogs; the growth of online news outlets; the proliferation of online sales platforms; of online spaces for curation, dissemination, representation, & exhibition; the creation of new platforms for art due-diligence, management, documentation, insurance and financing; all have had the effect of ‘radically shortening time

horizons for art to emerge from studios and into the salesrooms' and multiplying the speed at which art can circulate thereon after (Schachter, 2015b). Artworld luminaries such as Hans Ulrich-Obrist, the artistic director of the Serpentine Galleries, have endorsed the internet for providing a 'great platform for artists in the 21st century' (here referring to Instagram), enabling them to increase their visibility to collectors and brick-and-mortar galleries (quoted Stokel-Walker, 2016). Sites like Early Works exhibit and sell artists online that have either just come out of university or have not yet graduated (see Anon, 2015a). On the demand side, the Internet has enabled what Baumol (2006: 345) called 'the dissemination revolution' (quoted by Potts, 2014: 225), lowering the 'thresholds of risk associated with novel consumption' and consequently increasing 'experimental consumer demand' (227). As Potts has observed, 'the ability to be a wide-ranging cultural omnivore was once more costly than it has recently become, owing to the lowered costs and greater potentials of new media technolog[ies]', which have 'made the sampling of perhaps exotic or rarefied forms of arts and culture only a mouse-click away' (223).

'Sampling' is an apt description for an expanded access predicated on new criteria of merit derived from the peculiarities of hype in the attention economy (Crogan and Kinsley, 2012), and thus enhancing the conflagrative volatility that physical galleries ordinarily buffer artists from (Velthuis, 2007). Alongside the focus on low price-point of online actors, and the focus on areas which do not 'require broad expertise or art history knowledge to market or sell', these features of the online market have naturally attuned it to partaking in the dominance of contemporary art (ArtBanc thought-piece, 2014).

Intermediation & Escape in Circulation

Entrepreneurs have been lured to the internet's disruptive potential by the profit opportunities inhering in the abundance of unrecognized artists – invisible to an 'inefficient' endorsement system – and the psychological barriers to optimal matching of art and buyers constituted by elitism. Among the opportunities envisaged for the internet are included expectations that it will disintermediate the market's antiquated structures, liberating its hidden economic potential through democratization of access, and thereby reclaim it from the hands of its gatekeepers (see also Chapter 3). As Legros has noted, the Internet embodies a threat to 'the market positions of [...] intermediaries [...] because their rents are linked to entry barriers in the distribution market' (Legros, in Ginsburg and Throsby, 2006: 286). Another vision has held that the Internet will enable big data syntheses of networked consumer behaviour data, social media influence measures, and textual analytics into bite-sized consumption advice, thereby empowering individuals (empowering them to become consumers) and overcoming power imbalances based on information asymmetry by centralizing and automating the interpretation of a heterogeneous plurality of sources. As critic William Deresiewicz has noted, 'no more gatekeepers' seems to be the slogan of 'the Internet apostles' (Deresiewicz, 2015), with the aim of eliminating intercession achieved through what Simchowitz has called 'cultural Lutheranism': the state where collectors 'have the tools to evaluate and purchase art without the hand holding of a gallerist – perhaps without ever even visiting an exhibition' (citation from Little, 2016). In this context, proponents of tech, often business school graduates, have celebrated their own casual ignorance of the artworld as a token of their distance from its social codes of connoisseurship and class-based consumption

etiquette, adapting the diluted maxims of post-modernist critique to produce a framework for the legitimization of their enterprise.

To be sure, the medium *inherently* side-steps the inadequacies which lack of socialization into the ‘legitimate aesthetic disposition’, as Bourdieu calls it, elicits in potential buyers by elite culture (Bourdieu, [1979] 1984). A survey by Hiscox & ArtTactic for instance found that 39% of respondents found online sales less intimidating than physical ones (2016: 11), while others have commented that an online presence can help ‘break down real and perceived barriers’ (Holcomb-Holland, 2015). These feats notwithstanding, both path and destination of the online market are far from clear. A satirical analysis from ARTnews (Miller, 2015) underscores the unlikely consistency with which, every few months since 1999, *The New York Times* has published the almost exact same story, prognosticating the imminent revolution of the art market by the internet (and the demise of incumbents) much as the press has done with financialization for decades (cf. Chapter 3). Technologies aimed at automating, optimizing or bypassing subjective and therefore suspicious systems of representation, valuation, transaction and endorsement, have risen and fallen again, failing to topple and liberalise the existing structures of the artworld. Though tech entrepreneurs have tried, with characteristic bravura, to demonstrate that that fine-tuned systems of crowd-sourced information, networks of influence, or quantitative models, can replace elitist forms of knowledge and (offline) interpersonal knowledge networks, success has so far eluded them, not least because they have found it stubbornly dependent on the favours of the very market players whom their ambitions hold in contempt. Arguments both grandiloquent and banal about breaking down the psychological barriers of the art market echo emptily across the artworld, naïve to the barriers’ double-function as constraint on demand – certainly – but also structural buttress of price; and are met by conservative, complacent and oft repeated rebuttals on the grounds that art must be experienced in the flesh, an ineffective argument in spite of the fact that it is, of course, true. Here ambitions run up against the fact of market structure being not just reflective of defensive market oligopolists – such as described in Chapter 6 - but homologous both with the highly unequal social distribution of economic resources and the structure of artistic valorization itself, which depends on this inequality under the prevalence of Romanticist precepts.

‘Evolution’ rather than ‘revolution’ (Deloitte and ArtTactic, 2014: 104), many firms have settled for complementing the market’s existing offering, acting as ‘simply intermediaries, or intermediaries to intermediaries’, as McAndrew notes (speaking to Goel, 2015), adding layers to the complexity they had aimed to clear. Third-party sales channels have for instance become a preference for half the galleries that sell art online (Hiscox and ArtTactic, 2017: 2), and aggregators one of the dominant business models. As McAndrew notes, ‘there are limits to the amounts of that needed in the market’ (speaking to Goel, 2015).

It is possible to argue that the low operational cost potential of the Internet allows for the disruption of the market at the level of pricing and functionality rather than at the level of structure. Certainly, this would seem to be one of the key advantages for firms with an exclusively or predominantly online focus, such as SaffronArt; Heritage Auctions; 1stdibs; Artsy; Artnet; Paddle8; Artspace, etc. And yet, in practice, it is unclear that customer savings from online providers actually take place. An analysis by ArtBanc concludes that, in fact, online auction houses do not add any substantial savings, total transaction costs remaining between 20% and 50% (ArtBanc thought-piece, 2014) – not to mention providing no transactional value-added (limited risk mitigation, independent assessment, etc.). Worse, in the case of aggregators and

online market places, transaction fees may be ‘additive to the existing dealer channel because they add another layer of transaction fees to the buyer without their knowledge’ (*Ibid*). As such, the online market has in common with financialization that it constitutes a multiplication of network nodes through which capital can pass, and rents extracted; an escape into rather than an escape from circulation.

The Limits of Flatness

In spite of allowing, in principle, for a more level playing field among incumbents and new entrants, due to its cost-effectiveness, the online market has nevertheless predisposed the largest players to success. Online transposition of traditional models, extending and ratifying the existing market structure, remain the norm. Existing bricks-and-mortar players have acquired online capabilities, or partnered up with existing third-party marketplaces where developing a proprietary e-commerce strategy has not been deemed viable (Hiscox and ArtTactic, 2016: 3, see also 12). In other cases, brick-and-mortar firms have purchased the added functionalities of smaller tech companies: Christie’s has bought collection management platform Collectrium which itself has partnered with Hiscox; Phillips has partnered with Invaluable, which also provides core technology to Sotheby’s; and the Swiss conglomerate that owns the Art Basel fair, MCH Group, has acquired Curiator. The online market, therefore, ‘will not exist as a separate entity – it will augment and co-exist with what is happening in the real, physical artworld’ (Hiscox and ArtTactic, 2014: 5)

Impediments to the structural challenge of the internet to the high-end market are common-sensical: lack of track-record, lack of due-diligence opportunities, risk perception, etc. Moreover, in spite of its lower start-up costs, online ventures are disadvantaged by the substantial resources incumbent organizations can deploy to leverage strong brands and reputational capital built over decades – sometimes centuries. These have consequently acted as buffers to the threats online businesses are perceived to comprise. Indeed, ‘findings show that the sellers’ reputation is a key factor in deciding to commit to an art or collectible purchase online’ (Hiscox and ArtTactic, 2014: 5). But there are also other reasons for the weakness of technology’s claim to being able to overhaul the entire market. In part, the failure of true internet disruption comes from a failure to address the fact that art as a consumer product is an assemblage whose value arises from more than the physical work itself: rituals accompany the purchase (particularly at auction), concierge services and social graces distinguish the buyer’s prestige, and above all a certain visibility is conferred upon the transaction (even, or particularly, in situations requiring complete discretion), all of which recognise the buyer as collector. The internet suffers in the high end from that which recommends it in the lower end: its inability to confer distinction. We might take literally, then, the avowal of 34% of AXA’s respondents that buying artworks online is something they ‘could not see themselves doing’: they would be rendered invisible by it (AXA Art Insurance, 2014: 11).

The spatial configuration of the equivalence of artworks before the desires of the consumer thus breaks apart when confronted with a valorisation model indebted to long-established romantic precepts. Put differently: if the art market wants to democratize, it cannot then also hope to achieve what in the physical art market is achieved through disproportion, and which is built up through years of relational practices and competitive positioning that emphasize

the uniqueness of specific works, oeuvres, or artists, and their exclusivity from an inferred realm of prosaic goods. It would seem therefore that the online art market is in tension between horizontal and vertical modalities.

While the Internet may not, therefore, overthrow the high-end market, its traction *has* grown very substantially in the lower-end of the market, and, by extension, with the younger spectrum of buyers. As Hiscox write, the online market is proving itself an important platform and incubator for the next generation of both buyers and collectors (Hiscox and ArtTactic, 2015: 5). This is demonstrated by the fact that 79% of online transactions were at price points below \$5,000 in 2017 (Hiscox and ArtTactic, 2017: 2). According to a 2016 Hiscox Report, the prime target of new online sales platforms is therefore the 'new buyers' category, particularly those from Generation Y, who possess a greater familiarity with 'digital technology, and e-commerce, as well as social networks [...] that online sales platforms rely on and in some way extend' (article covering the report, in Anon, 2016c: 7). In fact, 20% of respondents under 35 years old surveyed by Hiscox had in 2015 bought their first art online (2015: 14). A 2015 survey of collectors on Instagram by Artsy suggested the 51.5% had purchased works from artists they had discovered there, and had purchased on average five works from these artist, prompting the speculation that this might disincentivize artists from 'seeking gallery representation from small or no-name galleries' (Soboleva, 2015). A survey of 4,534 participants by Invaluable in 2016 concluded that 44.3% of young Millennials (ages 18-24) and 33.8% of older Millennials (ages 25-34) find new art through social media channels like Instagram and Pinterest – a much higher rate than older generations, a pattern replicated on questions regarding purchasing art online. In total then, they found that 22.75% of US consumers discover art through social media channels, versus only 20% through museums and 15.9% through art galleries. Research by Barnebys, an online aggregator of auction sales worldwide, draws similar observations, concluding that as Millennials age, they will drive the market from the bottom up through internet purchases.

Rather than disintermediation, what the internet effects is thus a bifurcation of the market. With many market players disadvantaged by their inability to reap the costly rewards of globalization, access to which is through either or both participation at art fairs and multinational expansion, less capitalised galleries have often opted to pursue virtual inroads to globalization instead. In 2015, indeed, art fairs were the second largest item of expenditure at 19% of the total, in spite of only being incurred by dealers (McAndrew, 2015: 170). Dominique Lévy, in conversation with *The New York Times'* Robin Pogrebin has revealed spending \$300,000 on her preparations for Art Basel alone (Pogrebin, 2016b): figures around \$150,000 are common currency. In this context, the internet proposes a new stratification of the market where brick-and-mortar transacting mediated by interpersonal exchange becomes the prerogative of elite consumption, and non-elite consumption is relegated to the algorithmic efficiency of digital markets. Indeed, though existing online art buyers are acquiring more, art buyers who have not bought online 'remain unconvinced' (Hiscox and ArtTactic, 2017: 2). While this fits the market to the generic strategies for sustainable competitive advantage that Porter outlined in the 1980s⁷¹, the reality is also that this bifurcation has been vertically integrated by large players such as multinational galleries and auction houses, segmenting the dearer works away into the gallery or

⁷¹ Cost leadership at the lower end, with cost minimized across the value chain through economies of scale and process efficiencies; and differentiation at the higher end, where goods can command higher price points for their quality and brand differential (Porter: 1980).

the auction room, and the cheaper ones onto the Internet, extending their significant resources to capture market-leading positions in both. As of 2017, for instance, the Hiscox Online Art Platform Ranking top 25 place Christie's first, Sotheby's second, Phillips sixth and Bonhams ninth (2017: 12). On social media, the most followed accounts are those of the major institutions (MoMA, the Metropolitan, Tate), major auction houses (Christie's, Sotheby's, Phillip's) and major art fairs (Art Basel, Frieze, the Armory; see *Ibid*). The internet in this context fortifies existing oligopolists, allowing the largest organizations to capture the whole value chain of the market and life-cycle of collectors, as much as it allows for any equitable redistribution of organizational life-chances.

Data & Screen

Arguably, the importance of the online market is not in new business models at all, but in data. The quantification and monetization of authority and influence, of social traction, and of taste, makes visible and instrumentalizable previously ineffable aspects of art's value and, in turn, monetizes them. It embeds 'continuous surveillance and algorithmically-based data collection into the consumption process' (Couldry, 2015: 384). As Petterson writes: 'It is not unlikely that an artist with one million followers on Facebook or ArtStack will have the possibility of creating a market on the basis of public interest. Maybe mass following, public taste and popular culture will become the new driver for the economic value in Contemporary art' (Petterson, 2013). Auction houses, galleries and fairs are already using social media to promote individual auctions, sales, or events and displays (91% of galleries for instance promote themselves on social media; Hiscox and ArtTactic, 2017: 5); collectors are broadcasting private purchases and interests; taste-making is becoming decentralized and privatized through 'influencers'; information formerly disseminated through close-knit social networks is transposed onto virtual and semi-public networks in which influence leaves data traces. These can then be mined for patterns and prediction and subjected to 'powerful scaling processes that reduce the high dimensions and volume of data to legible forms of variation' that fit on a screen (Mackenzie et al., 2015: 377). As Adam writes, this has 'certainly facilitated the creation of multiple indices, analyses and price guides that are eagerly seized on by advisors, bankers, fund managers and so on to bolster their promotion of art as a new asset class' (Adam, 2014: 127). The internet is therefore critical to the anchoring of art into the field of devices in which 'pattern matching and pattern recognition' – through 'displays, gauges, metrics, dashboards, graphs, and visualisations' – have become endemic and therefore mundane 'forms of judgment or perception' (Mackenzie et al., 2015: 373).

A conversion of art into simulacrum is enabled by the internet. In a sort of *mise-en-abyme* that simultaneously emblematizes Malraux's *musée imaginaire* and Benjamin's mass dissemination from 'mechanical reproduction', art becomes an image of itself, itself an image. The conversion permits a radical loss of the friction which art's physicality (in most cases) causes in the physical world. As token, image of an image, its potential as capital is liberated, and the constraints on its allocation are in theory eroded. Geographical constraints flounder, circulation and payment become instantaneous and cheap, the coupling of popularity and price tightens. Its new immateriality perfects its marriage to price, another representation of an idea. Contemporary art specifically is, for these reasons too, recommended as the natural operative space of the online

market – and vice-versa – matching and illustrating their mutual instantaneity, velocity, and continuous presentness. If art loses some of its aura, it also loses the heavy physical conditions (gallery shows, institutional display – the apparatus of disproportion) under which aura is possible, and makes gains instead as an investment proposition; free from the esoteric nature of aura, which financial expertise is ill equipped to detect, evaluate and make sense of, it can develop its own, more propitious metrics of success: scrapes of online consumer behaviour data, regressions of variables on price sequences, and so on.⁷² The extent of art's online distribution, ordinarily a sign of its success, becomes the success itself. In this sense, the internet inverts causation: by providing factors of success that can be gamed, it turns consequences of success into its causes. As observed by McAndrew 'while social media data may interest or reassure visitors to a site, it is important to realise that in any comparison, many of the social media scores can be significantly manipulated (with considerable incentives for doing so)' (2015: 201). If this constitutes an increase in transparency, then the question for sociology is which veil has been lifted: what are we looking through to, and what has the process of looking caused to change?

The digital application Wydr is an interesting case of ambitions within the art market. It imports the 'swipe model' from 'dating'-apps Tinder by allowing users to opine on works uploaded by artists by swiping one way or the other – gestures which then aggregate to a rating. Based on the record this produces, Wydr's algorithm attempts to present work matching the user's preferences. With its frame inherently controlling for heterogeneity and truncating art to its common commercial properties, Wydr dissolves granularity of assessment to propose that since 'in the end, art is what you like', a binary "like" / "not like" basis may, individually or in the aggregate, be entirely sufficient – and sufficiently nuanced – for the aims of consumption, and indeed of art (Gander, 2016). It offers the discovery of an object whose principal mode of signification is alterity on the basis of sameness, which it produces by computing correlations on chains of binary judgments; the likelihood of a person liking *b* given they liked *a*, based on the relation to object *b* of previous users who have liked object *a*. Kollecto, like Wydr, is another 'Tinder for art', which similarly curates the works of art shown on sale to the user based on an automated ratings feedback, though with an initial input from the user in terms of broad preferences. The nature and structure of social media as an arena of competing influences and herd behaviour are thus often integral to the conception of new art sales platforms. As the Hiscox 2015 report explains, given the market thrives on interest and debate among various players, 'social media naturally aligns with the core structure of the artworld' (Hiscox and ArtTactic, 2015: 10).

Because these systems depend on feedback loops 'between knowing and acting' that can be 'hard to disentangle precisely because they are becoming more tightly coupled' (Mackenzie et al., 2015: 376), the act of consumption is entangled with the process of learning to consume. Education (loosely speaking) has in fact become an important factor in the thought process of internet start-ups. Doing so they capitalize on the support of the 82% of art professionals and collectors who, according to the Art & Finance report 2016, believe 'art information and education' to be key areas where online business and technology could have a significant impact (the proximity of information and education is worth noting; Deloitte and ArtTactic, 2016: 19).

⁷² Mackenzie et al. (2015: 376) cite the following techniques: 'k-means clustering, nearest neighbour classification, linear regression, logistic regression, principal component analysis, neural networks, decision trees, random forests, and support vector machines'.

The overt rationale may be, as one user Wydr user put it, to ‘tak[e] away the power of self-defined experts, or dictators’, particularly since ‘eventually taste is subjective’ (quoted Gander, 2016). Here a typically pseudo-post-modern relativism is marshalled to defend the merits of any form of education as antidote to those considered elitist; but this education too is nevertheless highly specific. While the internet has ‘destabilised the traditional processes of evaluation and consecration based on judgements by experts’ and replaced them with ‘the participation of lay Internet users, regardless of their social or professional status’, processed through ‘non-human mediators’ (Donnat, 2015: 405), it has nevertheless also privileged its own peculiar forms of interaction.

Artsy’s ‘Art Genome Project’ is a sophisticated classification system which ‘maps the characteristics (we call them “genes”) that connect artists, artworks, architecture, and design objects across history’ – over 1,000 characteristics (including movements, subject matter, formal qualities) are currently used, each applied on a range from 0 to 100 by a team of art historians, and are used during user interaction with the website to predict works they will like.⁷³ According to *The New York Times*, it is using education ‘as the first step in making buyers more comfortable’ (Goel, 2015). As COO Sebastian Cwilich puts it, the aim is to ‘create a larger class of people who will appreciate art broadly and a subset that wants to make it a part of their daily lives by acquiring art’. Likewise, Kollecto’s biggest challenge is lack of such education and so they ‘have to spend a lot of time teaching people on “how to buy art”’ (Schmidt, 2015). Hiscox’s recent surveys corroborate this; buyers are ‘attributing significant value to the educational experience’ on platforms (2017: 5). Faced with a vast array of works, and lacking the coordinates with which to locate themselves in it, there is a role for guidance; to this extent they echo Jameson’s focus on mapping as a solution to post-modern bewilderment (Jameson, 1984). Coupled with the low price-point of the works on sale online, the online market thus ‘acts as an incubator for a new breed of collectors’ (*Ibid*: 9).

One consequence is that screens, and ways of representing on screens, become ‘the privileged medium for our relationship with culture whilst emphasizing the permeability between culture and amusement, between the world of art and that of entertainment and communication’ (Donnat, 2015: 403). We would argue that the permeability, through the kinds of ventures outlined above, extends to a more specific component of culture in particular, namely the market. However, through it, it also expands the market to encompass culture in turn. The context of ‘education’ is in fact the formation of the user as consumer. In the cases above, the user is guided through an inventory that is on sale – rather than an art historical catalogue – with the idea that with confidence in their own tastes, honed through experience of a tailored image repertoire and facilitated by sets of criteria, the viewer will be transformed into a buyer. Where systems are designed to converge on the user’s unarticulated preferences, the overall interface is ‘itself an actor’ (Couldry, 2015: 388) that is fundamentally intended to approximate – rather than to challenge – the user’s taste. It does this in part through seeking to ‘predict events precisely in order to shape them’ (Mackenzie et al., 2015: 376); in this case eliciting the purchase through the automated and continuous formatting of an online environment of goods predicted to be most propitious to it.

Perhaps unsurprisingly, there is evidence of an affinity between the online art market and investment behaviour, and therefore, as seen in Part I, between internet technology and

⁷³ <https://www.artsy.net/categories>, accessed 25/01/2018.

financialization. In their 2016 survey, Hiscox found that ‘investment value’ motivates 60% of online buyers and an even higher percentage of new buyers. In 2015 they had already noted the growing place of returns as motivation for online purchases, ‘with art seen as an increasingly tradable asset online’ (Hiscox and ArtTactic, 2015: 5). As written in their analysis, this ‘suggests a strong “trading” mentality and the potential for online marketplaces to succeed as transactional platforms’ (*Ibid*: 6). Conversely, buyers with an investor mentality will buy almost exclusively online (*Ibid*, 2014); will be less interested in building relationships with art market actors; and yet are more likely to seek the advice of specialized art consultants. The Art and Finance Report 2014 report had foreseen this trend, arguing that the online market’s increased liquidity and transparency ‘could encourage more people to look at art as an asset class’, and could act as a facilitator of further art and finance activities such as funds and collateralized lending, and therefore bolster the wealth management industry (2014: 18). Indeed, unlike the bricks-and-mortar market, the online market typically includes prices upfront. This allows price to preface the (virtual) relationship with the work, rather than being obtained as a result of it, and nearly 90% of online art buyers find that it is an essential ingredient in the process (Hiscox and ArtTactic, 2017: 5). This promiscuity of the functioning of social media with the functioning of price has meant that Millennials are not only more comfortable discovering and buying art online, they are also more likely to think buying art is an investment. Today’s online market provides both an abundance of data, and the analytics that synthesize it into a factor of price, both exacerbating and potentially helping to resolve the problem, as formulated by Jason Potts, that ‘it is more difficult now to discover quality, due to the avalanche of quantity and variety loosened by new technology’ (Potts, 2014: 228). The resolution offered, though, comes at the cost of critical pluralism, and presents as self-evident what is both contingent and motivated: namely that the solution must arise in the context of possible transactions, making price the only true synthesis of information.

Conclusion

Growth patterns, so far, augur well for the online market. Having largely missed the dot-com bubble – which wiped out the first generation of internet players – today’s organizations have risen instead in the past decade, leading to an online market that, according to the Hiscox reached \$3.75 billion 2017 (8.4% of the market), with projections that it could reach \$9.58bn by 2020 (2016: 3–4, 2017). Though Adam points out substantial methodological difficulties with estimating the market size, it is clear, she writes, that ‘behavioural acceptance’ of this market as a fact of the artworld has taken place (Adam, 2014: 122).

While online market participants have ‘lowered barriers to entry and have reduced the costs for accessing new and broader markets worldwide’ for consumers (McAndrew, 2015: 176), they have also produced new forms of interaction with purchasing choices, data, and services. Using algorithms (often translated from other types of applications) or various forms of calculative agency, such organizations offer systems for either discovering art, or visualizing the art market – generating a new and expanding ‘field of devices’ (Mackenzie et al., 2015), that interacts with the ongoing conceptions of what art is, what it should do, and how individuals might relate to it. As Clark once put it: ‘In capitalist society, economic representations are the matrix around which all others are organized’ (Clark, [1985] 1999: 42). This was therefore not an

argument about the ‘network society’, but about the importance, as analysed in Part I, of the market’s affordance of a semblance of totality – accessible through calculative modes of enquiry and often circulated on screens – which it was the primary post-modernist project to erode. To a large degree, the force of its epistemic model comes from its aestheticization of the totality, glimpses into which can be tailored and distributed on handheld devices worldwide.

Conclusion

The claim was made in the opener to this analysis that the precondition of art's financialization is data. As Carruthers has pointed out, 'in social settings that privilege rationality, [...] incalculability is a problem' (2013: 526): it must be overcome for the functioning of the system. The quantification of art through statistical interventions on variously aggregated sets of transaction prices has been an active project for at least half a century, first within academia, and, later, within the private sector. Indeed, financialization has continuously re-asserted itself in relation to the establishment of legitimate calculative agencies upon which rationally justified decisions and actions can be taken. As Munesa writes, after all, 'an economy is, in its larger gist, the establishment of valuation networks' (2007: 381).

In the course of this research, however, this proposition was modulated. Data's importance did not appear to lie principally in what is intuitively its most important function, namely to embody and to represent art empirically and objectively, and thereby to enable quantitatively driven investment decisions. Instead, the intractable 'problem' of incalculability has so far made do with merely the *appearance* of a resolution in the form of proliferating numeric information – irrespective of quality – a resolution upon which has depended the viability of financialization as a project. The mere claim of objectivity in data has to this extent been sufficient to market the idea of art as a financial asset, 'satisficing' to use Herbert Simon's old phrase (1956), rather than satisfying; and the ideological nature of data production all the more clearly in view for it. Financialization has relied on numbers' 'distinctively portable format and scientific appearance' and the fact that they are 'easy to incorporate into rule-based or formulaic decision procedures', with the hope that they can reach sufficient critical mass to 'simply endure' (Carruthers, 2013: 544). One could say that data has played an almost aesthetic role in legitimizing finance, appearing to reveal underlying reality while in fact constructing it, and serving thereby to invoke finance in the service of art.

The thesis opened with a review of a number of calculative practices that have emerged in the field of art data, including hedonic and repeat sales regression models for creating indices, and models addressing value based on 'fundamentals' or volatility/risk analyses. We also outlined a broader array of the calculative ecosystem; disparate practices used for purposes, formal and informal, ranging from regular trade reports on specific aspects of the art market, publications of quantitative analyses of individual artists in trade magazines and websites or blogs, even attempts at rendering aspects of art legible to computers. Still in infancy, art & finance's 'ecology of devices' for producing and processing information (Hutchins, 1995) reflected that 'if money is one, monetary commensuration (or economic valuation) techniques are numerous and varied' (Fourcade, 2011: 1725). Admitting of such variety was premised on the idea that 'economies, in all of their diversity, depend heavily upon divergent and often controversial analyses', that is, 'all the theoretical and practical, expert and lay knowledge, know-how and skills developed and mobilised in the process of designing and managing calculative agencies or socio-technical agencements' (Çalışkan and Callon, 2010: 2; also Vosselman, 2014).

Various categories of shortcomings of these practices were described, relating to usefulness, applicability, amenability to meaningful extrapolation, as well as the conceptual

reduction of the calculated category to its measurable and consistent characteristics. None of these shortcomings meant that the calculations did not take place or ceased to be meaningful, nor that their numerical outputs were not given their full legitimacy as such in the market. In other words, empirical limitations were not mirrored by social ones.

Four key components of the new art & finance ecosystem were analysed in Chapter 2 as deriving very substantially from the econometric and calculative efforts described hitherto. Of these, one – wealth management and advisory – was seen as a nexus for the others. It was argued that wealth managers and advisers occupy a key structural position with respect to art's financialization, their interpersonal privilege, financial expertise and perceived impartiality enabling them to fuse the rationality of finance with the emotive dimensions of purchasing or even collecting art. As a result, they were seen as playing a fundamental role in the institutionalization of the art & finance sector, as well as in the expansion of its reach. In particular, their role with respect of tax avoidance was emphasized as an important area for complex financial planning around the purchase, holding, monetizing, disposal or inheritance of art. An important insight here was that mechanisms by which this is achieved, typically by co-opting legal frameworks established for other asset classes and other purposes, very often require that the artworks be legally constrained to their status as investment – the monetary gain in this case at the direct cost, albeit never terminal, of art's signifying mode. Other forms of planning, for instance taking advantage of tax rebates on philanthropic donations or the building of private museums, were seen as a direct channel through which financialization spills over into public life.

Two forms of financial arrangements were subsequently discussed: art loans & securitization on the one hand and art funds on the other, both of which are heavily indebted to calculative practices within the art market. As with advisory, a great diversity of participants, with a great diversity of offerings, were seen to provide loan services. This included traditional art market participants such as Sotheby's, who substantially re-structured their organization towards the provision of such services. A means of 'liberating' liquidity from artworks, often for reinvestment in other types of assets, the debt relation was argued to be an important means for fixating art's position within the portfolio.

The art fund utilizes data in a different manner to loan providers, and principally as means of communicating with investors in the established financial language of such vehicles, confirming the importance of such information both in performing equivalences and in establishing a new form of rationality. As a structure, it was argued that the fund subsumes the singularity of art into fixed legal parameters which allow a degree of systematicity in the management of the vehicle that is difficult to achieve in the trading of art. Costly, and requiring a range of inputs, the fund model was, like wealth managers, argued to extend financialization via the demands for expertise they place upon their ancillary service providers and employees. Equally important, the fund was seen as positioning itself not purely as means of achieving returns but as a form of intermediation, providing access to expertise, insider networks and events to wealthy artworld novices, and thereby adding bespoke, interpersonal dimensions to its relationship with the limited partner, while also turning the fund into a kind of epistemic device.

Fourthly, a different kind of infrastructure was discussed, namely the freeport. As a physical structure, it was argued to emblemize the core concerns of financialization: rational organization, capital protection, tax 'efficiency', risk control, and divorce from social life. More importantly, freeports embody in their sleek architecture and promotion of art ecosystems the

aspiration of the art & finance sector to become the organizing principle, active participant in and backbone of the artworld as a whole. Finally, it was argued that the freeport must be understood as the physical counterpart to digital portfolio management or collection management tools; the repository enabling art's virtualisation into these systems, and often also the facilitation of additional financial services interfaced from such platforms.

What Chapter 2 served to illustrate was that in a fundamental way, the limitations to data listed in Chapter 1 have been beside the point. The outcomes of calculation have been sufficient as signals of art's transposition into the field of quantitative data, the highly contested and fragile nature of this transubstantiation notwithstanding. The wide reproduction – in the financial press, in conferences, and by art market players – of such outputs have sufficed in nurturing around art a quantitative episteme that reflects the 'portfolio society' (Davis, 2009) that is its demand base, and sufficient in its suggested embedding of art into the logic of portfolio construction, which subsumes the art object into the broader array of financial asset classes. To this extent, quantification has served more as what Streeck has called 'an instrument of social construction by persuasion (2011: 8) than it has as merely a knowledge-production tool.

Numbers, it was argued in Chapter 3, have served to define a community of interests; have served to link, coordinate and give coherence to that community internally by facilitating communication and by fostering a solidarity around the use of numbers; and have served – perhaps only incidentally, but nevertheless affirmatively – to draw a connection with a new demographic of HNWIs who are less ensconced in 'high-brow' cultural capital than they are in financial and technocratic forms of meaning-making. As a result, data was argued to be of primarily epistemological and communicative importance: it structures how members of the community it contours know, how they communicate what they know, and by extension informs and orients their modes of intervention as 'work that makes other work possible (Espeland and Stevens, 2008: 411). In this instance, calculation and communication, like the market activity of price-setting in Smith's analysis (2007: 2) 'serve as important sites for generating the shared meanings, understandings, mindsets and governing narratives intrinsic to market transactions'. By creating 'cognitive boundaries that embed societal practices in financial theory', data has catalysed both the legitimacy of the field as such, and dispersed interest in new forms of expertise which, in coming to be, likewise extend the reach of art & finance into new areas, emanating chains of supply and demand through networks. Conversely, concerns over the failure of the actual market to live up to its hypothesized perfected financial form – whether at the level of its coherence as unified system, its transparency, its practices, or other – and consequent endeavours to regularise it, were identified as one area where the models feeds back into real action, speaking to the 'tendency of market ideology' as Vosselman put it, to seek 'to remove all other externalities as distortions' (Vosselman, 2014: 189, 197). To this extent, representation was seen to be powerfully imbricated in the contouring and orienting of intervention; as embodying real capacities for action (Miller and Napier, 1993). My work was, as such, involved in thinking about a performativist question, 'that is, how do markets (through the production, mobilization and diffusion of technologies) stabilize the world around certain understandings?' (Fourcade, 2007: 1020).

The wider context of the financialization of the late capitalist economy, until then unaddressed, was introduced in Chapter 4 as a means of both locating and fleshing out patterns in the financialization of art. In particular, the connection between the globalization of finance

capital flows; the emergence of investment as ‘metagovernance structure’ (Lin and Tomaskovic-Devey, 2013); and the spread of rentier investments into the fact of circulation itself were seen as bearing very significant structural linkages with the rise of income and wealth inequality across the principal art markets. This inequality was seen, in turn, to provide momentum for the financialization of art specifically, insofar as art & finance services are contingent on both the possession of material economic resources by the buyer *and* sufficiently highly priced art. This served as a means for reflecting on the function of finance in fixating and perpetuating social stratification. In particular, it was argued that beyond concentration thresholds, the levels of inequality are able to restructure distributions of labour and organizational ecosystems by affecting economic incentives within the market. To use an old phrase from Harold Laski, ‘new material conditions, in short, g[i]ve birth to new social relationships’ (Laski, [1936] 2015: 12). It was clear that the financialization of art is one instance in which, for the most part, the beneficiaries of inequality are able to secure the existence and supply of forms of advisory, instruments, legal vehicles and strategies that serve to increase and protect that inequality. Sustained economic advantage was particularly clear as a goal again in the predominance of taxation as an area for financial strategizing, insofar as it is often involved in efficiently extending accrued resources to the next generation, including by arbitraging jurisdictional differences to the detriment of the state.

Section II provided the opportunity for a fundamentally different endeavour. The financialization of art – as a moment of late capitalism in which the art market and the neoliberal economy intersect – takes place within a historical context with which it can be usefully illuminated, not least to reveal the extent to which it was *not ever thus*. Chapter 5 therefore consisted of a *longue durée* account of changes in the status of artists, the values imputed in their work, and the means of both assessing and supporting such values. It was argued that Romanticism and Modernism on the one hand, and Post-Modernism on the other are both important forces in the contemporary art market in structuring value, though they operate in different ways and to different ends. While romanticism continues to subtend the imputation of value in art – qualities of ‘pricelessness’ in particular – consecrating its value by hierarchizing it in relation to the mundane, post-modernism expands the range of goods and activities that may be subjected to this ranking discrimination. The hermeneutic value of art was consequently seen to be of great import in saturating works with economic worth.

Legros has argued that ‘as long as interpretation is needed for works of art, and consumers value this dimension, artists can obtain revenues from their creative ideas’ (Legros, 2006: 304). Art consultant John Somerville, though with a more cynical view, has similarly observed that new collectors ‘seem to prefer [...] the art that that defies explanation yet is explained endlessly by its creators, promoters and aficionados’ (Somerville, 2013: 38). Such properties were taken to indicate both the consequences of a hermeneutic mode of valorisation and its means of fulfilment – illustrated in the chapter through excerpts of gallery press releases. More importantly, they were highlighted to contextualise the new pertinence of price as possessing insuperable advantages in terms of ease of cognition where other frames of reference have lost relevance and authority, particularly as a result of decades of institutional critique within and without the artworld of key components in its endorsement system.

The conclusion of the analysis was to posit a relationship between the spatial strain in post-modern thought and praxis and the emergence of quantitative forms of calculation as modes of accounting for various facets of the market. The nature of the relationship was again that quantitative forms of knowledge-production involve ‘powerful scaling processes that reduce the high dimensions and volume of data to legible forms of variation and pattern’ (Mackenzie et al., 2015: 377), providing superior tools by which to generate insights into the market precisely by assimilating its heterogeneity into a higher order and a new kind of knowledge. At the same time, a homologous relationship was discerned between the type of consumption implied by post-modernist production and the imperatives of portfolio diversification, both supporting and advancing their own forms of what is vaguely described as ‘omnivorousness’ (Peterson and Kern, 1996), but the latter effectively integrating this attribute within a structure (real or cognitive) wherein it serves to minimize risk.

Chapter 6 offered a series of reflections on shifts and facets of the art market perceived to be of import in situating art’s financialization. The aspects of the art market that were covered were: the shape of the distribution of economic rewards for artistic work; the industrialisation of cultural capital and the turn to experience of museums; the rise of the artist-entrepreneur; and the privatisation of the endorsement cycle. In the last instance, an additional elaboration was made on the structural configuration of the art market based on networks of cross-representation of artists between galleries. Throughout these reflections, patterns of inequality and private sector encroachment were made visible. Taken together, these oligopolistic formations, which appear also among auction houses and, increasingly, among art fairs, act like a mirror to the patterns discussed in Chapter 4, and reinforce the prepotency of the market.

Finally, in Chapter 7 – almost a coda – the current state of the online market, and its relevance in terms of the first four chapters in particular, was discussed. It was argued in line with rest of this research that the power of the online art market to effect the kinds of changes it has envisaged for itself may be limited. In practice, while new technology has produced a wide variety of new market participants, it has also reinforced the pre-existing power of bricks-and-mortar players with positions of dominance built over long-periods of time that have proven translatable into the online world. Thus, it was seen that the online art market intermediates more than it clears layers. However, as intermediaries, this also potentially where it can be most influential, not in fundamentally changing behavioural patterns or allocation systems, but in both reinforcing the notion that the art market is a single entity, and rendering that fact visible in various ways to users distributed across the globe.

Overall, it should be clear that capital, in a portfolio context, was considered to offer a singularly formidable exemplar of panopticism, imposing, as Malraux had envisaged photographs would do to art, a ‘rather specious unity [...] on a multiplicity of objects’ (quoted in Krauss, 2005: 243), neither of whose substance needs to be changed *per se* to be related to the governing objective of the framework. The portfolio view, as adopted by wealth managers to integrate areas of life not formerly in their purview, accepts that varying forms of capital (social, cultural, as well as economic) can be integrated under a single unifying principle, namely the appraising and management of wealth. At various points in this research, it was therefore argued to constitute a new monism, ‘endogenising’, to use the word of Boltanski & Chiapello (2005), the vast heterogeneity of fragmented space into a whole. The discussion in Chapter 2 provided examples of this centralising modality at work in different areas. The fund, of course, was one, but the

Freeport of Luxembourg was a more vivid example of the process described here, by virtue of its endeavour to become a one-stop platform where advisory, social networking, conservation, access to art, exhibitions, and the production of art are channelled, organized around a capital protection and potentially a tax evasion mechanism. It is therefore perhaps the best embodiment of the features of financialization which I have described and argued for in this research.

Lastly, it should be emphasized that this research was not implicitly or explicitly about the possibility of critical art, or the fact of capitalism's ability to absorb it. It held no judgement of works amenable or not to financialization. Nor did it, on the whole, seek to claim the existence of some kind of homogenising effect by capital on production. Homogenisation – which is always in the process of happening – is only ever the foil for heterogeneity in the market: the two constantly chase each other. The sheer volume of art itself is sufficient to create an effect of homogeneity based on saturation of effects of difference: if nothing isn't art, then everything can be, and so on. If any extrapolation were to be made upon artistic production, it is that the spread of investment mentality may be part of reinforcing a bifurcation that already largely exists, whereby some works have financial affordances and can enter the system which this thesis has described, and others perforce take place in a different kind of space. This is not say a segregation of merit – artists like Jeff Koons or Richard Prince have continued to be deeply polarising figures, pushing the envelope (and, to be sure, receiving an envelope in return) and to elicit discomfort and debate, even if in the artworld they are perceived to be fair game. Prince alone will likely have generated more legal scholarship and case precedents over the nature of art than any other artist.

The purpose of this research was rather to designate a field, and to draw upon a wide range of materials to map some of the concepts and features of financialization in order to stake a territory that in the future can be built upon in more targeted, localized ways.

Bibliography

Arts, Culture, Society: History, Theory, Criticism, Philosophy

Abazine, Lina. 2017. "Glocalization: An Analytical Path Towards Inclusive Contemporary Art?" *Journal of Extreme Anthropology* 1(2):6–12.

Accominotti, F. 2009. "Creativity from Interaction: Artistic Movements and the Creativity Careers of Modern Painters." *Poetics* 37(3):267–94.

Accominotti, F. 2008. "Marché et Hiérarchie: La Structure Sociale Des Décisions de Production Dans Un Marché Culturel." *Histoire & Mesure* 23(2):177–218.

Accominotti, Fabien. 2014. *The Price of Purity: Brokerage as Consecration in the Market for Modern Art*.

Ackerman, Martin S. 1986. *Smart Money and Art: Investing in Fine Art*. Barrytown: Station Hill Press.

Adam, Georgina. 2014. *Big Bucks: The Explosion of the Art Market in the 21st Century*. Farnham & Burlington: Lund Humphries.

Adler, Moshe. 1985. "Stardom and Talent." *The American Economic Review* 75(1):208–12.

Adorno, Theodor. 2001. *The Culture Industry: Selected Essays on Mass Culture*. London: Routledge.

Adorno, Theodor and M. Horkheimer. [1944] 1972. *Dialectic of Enlightenment*. New York: Seabury Press.

Adorno, Theodore W. 1991. "The Schema of Mass Culture." *The Culture Industry: Selected Essays on Mass Culture* 61–97.

Alberro, Alexander. 2003. *Conceptual Art and the Politics of Publicity*. Massachusetts: Massachusetts Institute of Technology.

Alper, Neil O. and Gregory H. Wassall. 2006. "Artists' Careers and Their Labor Markets." Pp. 813–64 in *Handbook of the Economics of Art and Culture*, vol. 1, edited by V. A. Ginsburgh and D. Throsby. Amsterdam: Elsevier B.V.

Amariglio, Jack, Joseph W. Childers, and Stephen E. Cullenberg, eds. 2009. *Sublime Economy: On the Intersection of Art and Economics*. New York: Routledge.

Anheier, Helmut K., Jurgen Gerhards, and Frank P. Romo. 1995. "Forms of Capital and Social Structure in Cultural Fields: Examining Bourdieu's Social Topography." *American Journal of Sociology* 100(4):859–903. Retrieved (<http://www.journals.uchicago.edu/doi/10.1086/230603>).

Arendt, Hannah. 1958. *The Human Condition*. Chicago: University of Chicago Press. Retrieved (https://monoskop.org/images/e/e2/Arendt_Hannah_The_Human_Condition_2nd_1998.pdf).

Ashenfelter, O. and K. Graddy. 2003. "Auctions and the Price of Art." *Journal of Economic Literature* 41(3):763–86.

Ashenfelter, Orley and Kathryn Graddy. 2006. "Art Auctions." Pp. 909–45 in *Handbook of the Economics of Art and Culture*, vol. 1, edited by V. A. Ginsburgh and D. Throsby. Amsterdam: Elsevier B.V.

Asselineau, Roger. 1999. *The Evolution of Walt Whitman*. Iowa City: University of Iowa Press.

Barker, Emma. 1999. "Introduction." Pp. 8–22 in *Contemporary Cultures of Display*, edited by E. Barker. New Haven and London: Yale University Press, with The Open University.

Baudrillard, Jean. 1981. *For a Critique of the Political Economy of the Sign*. Candor, NY: Telos Press.

Baudrillard, Jean. 1998. "The Ecstasy of Communication." Pp. 145–54 in *The Anti-Aesthetic: Essays on Post-Modern Culture*, edited by H. Foster. New York: The New Press.

Baumol, William J. 2006. "The Arts in the 'New Economy.'" Pp. 339–58 in *Handbook of the Economics of Art and Culture*, vol. 1, edited by V. A. Ginsburgh and D. Throsby. Amsterdam: Elsevier B.V.

Baxandall, M. 1972. *Painting and Experience in Fifteenth Century Italy*. Oxford: Oxford University Press.

Baxandall, M. 1985. *Patterns of Intention: On the Historical Explanation of Pictures*. New Haven: Yale University Press.

Baxandall, M. 1980. *The Limewood Sculptors of Renaissance Germany*. New Haven: Yale University Press.

Becker, H. S. 1982. *Artworlds*. Berkeley, LA: University of California Press.

Beech, David. 2015. "Art and Value: Art's Economic Exceptionalism in Classical, Neoclassical and Marxist Economics."

Belfiore, Eleonora and Oliver Bennett. 2008. *The Social Impact of the Arts: An Intellectual History*. Basingstoke & New York: Palgrave Macmillan.

Beljean, Stefan, Phillipa Chong, and Michèle Lamont. 2015. "A Post-Bourdiesuan Sociology of Valuation and Evaluation for the Field of Cultural Production." *Routledge International Handbook of the Sociology of Art and Culture* 38–48.

Bell, Daniel. 1972. "The Cultural Contradictions of Capitalism." *Journal of Aesthetic Education* 6(1/2):11–38.

Benhamou, F. 2002. *L'Economie Du Star-System (The Star-System Economy)*. Paris: Odile Jacob.

Benjamin, Walter. [1936] 1999. "The Work of Art in the Age of Mechanical Reproduction (Originally Published in 1936)." Pp. 297–307 in *Art in Modern Culture: An Anthology of Critical Texts*, edited by F. Frascina and J. Harris. London: Phaidon Press Limited & Open University.

Bennett, T. 2012. *Practical Aesthetics: Events, Affects and Art After 9/11*. London & New York: I. B. Tauris.

Bennett, Tony. 2011. "Culture, Choice, Necessity: A Political Critique of Bourdieu's Aesthetic." *Poetics* 39(6):530–46. Retrieved (<http://dx.doi.org/10.1016/j.poetic.2011.09.001>).

Bennett, Tony. 2011. "Guided Freedom: Aesthetics, Tutelage, and the Interpretation of Art." *Tate Papers* 1(15):1–16. Retrieved (<http://www.tate.org.uk/research/publications/tate-papers/15/guided-freedom-aesthetics-tutelage-and-the-interpretation-of-art>).

Berman, M. [1982] 2010. *All That Is Solid Melts Into Air: The Experience of Modernity*. London: Verso.

Bishop, Clare. 2012. *Artifical Hells: Participatory Art and the Politics of Spectatorship*. London: Verso.

Bisin, Alberto and Thierry Verdier. 2014. "Trade and Cultural Diversity." Pp. 439–84 in *Handbook of the Economics of Art and Culture*, vol. 2, edited by V. A. Ginsburgh and D.

Throsby. Amsterdam: Elsevier B.V. Retrieved (<http://dx.doi.org/10.1016/B978-0-444-53776-8.00017-9>).

Bogdanova, Elena. 2013. "Account of the Past: Mechanisms of Quality Construction in the Market for Antiques." in *Constructing Quality: The Classification of Goods in Markets*, edited by J. Beckert and C. Musselin. Oxford Scholarship Online.

Bois, Yve-Alain. [1986] 1999. "Painting: The Task of Mourning (Originally Published in 1986)." Pp. 326–30 in *Art in Modern Culture: An Anthology of Critical Texts*, edited by F. Frascina and J. Harris. London: Phaidon Press Limited & Open University.

Bourdieu, Pierre. [1979] 1984. *Distinction: A Social Critique of the Judgement of Taste*. London & New York: Routledge.

Bourdieu, Pierre. 1993. *The Field of Cultural Production*. Oxford: Polity Press.

Bourdieu, Pierre. 2000. *Pascalian Meditations*. Cambridge: Polity Press.

Bourdieu, Pierre. 1989. "Social Space and Symbolic Power." *Sociological Theory* 7(1):14–25. Retrieved (<http://www.jstor.org/stable/202060?origin=crossref>).

Bourdieu, Pierre, A. Darbel, and D. Schnapper. [1969] 1990. *The Love of Art: European Museums and Their Public*. Cambridge: Polity.

Bourdieu, Pierre and Alain Darbel. [1991] 1999. "The Love of Art (Originally Published 1991)." Pp. 174–80 in *Art in Modern Culture: An Anthology of Critical Texts*, edited by F. Frascina and J. Harris. London: Phaidon Press Limited & Open University.

Bourdieu, Pierre and Hans Haacke. [1994] 1995. *Free Exchange*. Cambridge: Polity Press.

Bowman, Matthew. 2015. "October's Postmodernism." 31(1):117–26.

Bryant, Antony. 2007. "Liquid Modernity, Complexity and Turbulence." *Theory, Culture & Society* 24(1):127–35.

Bryant, William D. A. and David Throsby. 2006. "Creativity and the Behavior of Artists." Pp. 507–29 in *Handbook of the Economics of Art and Culture*, vol. 1, edited by V. A. Ginsburgh and D. Throsby. Amsterdam: Elsevier B.V.

Bryson, Norman. [1988] 1999. "The Gaze in the Expanded Field." Pp. 87–114 in *Vision and Visuality: Discussions in Contemporary Culture*, edited by H. Foster. New York: New Press (1st published by Dia Art Foundation).

Bürger, Peter. [1974] 1999. "On the Problem of the Autonomy of Art in Bourgeois Society (Originally Published in German, 1974)." Pp. 51–63 in *Art in Modern Culture: An Anthology of Critical Texts*, edited by F. Frascina and J. Harris. London: Phaidon Press Limited & Open University.

Cameron, Catherine M. 1990. "Avant-Gardism as a Mode of Culture Change." *Cultural Anthropology* 5(2):217–30.

Campbell, RAJ and Christian Wichenkamp. 2008. "Credit Default Swaps and An Application to the Art Market: A Proposal." Pp. 53–66 in *Credit Risk: Models, Derivatives, and Management*, edited by N. Wagner. Boca Raton: CRC Press, Taylor & Francis. Retrieved (<http://arno.unimaas.nl/show.cgi?fid=15917>).

Casson, Mark. 2006. "Culture and Economic Performance." Pp. 359–97 in *Handbook of the Economics of Art and Culture*, vol. 1, edited by V. A. Ginsburgh and D. Throsby. Amsterdam: Elsevier B.V.

Castañer, Xavier. 2014. "Cultural Innovation by Cultural Organizations." Pp. 236–73 in *Handbook of the Economics of Art and Culture*, vol. 2, edited by V. A. Ginsburgh and D. Throsby. Amsterdam: Elsevier B.V. Retrieved (<http://dx.doi.org/10.1016/B978-0-444-53776-8.00011-8>).

Caves, Richard E. 2006. "Organization of Arts and Entertainment Industries." Pp. 533–66 in *Handbook of the Economics of Art and Culture*, vol. 1, edited by V. A. Ginsburgh and D. Throsby. Amsterdam: Elsevier B.V.

Chanin, Eileen. 1990. *Collecting Art: Masterpieces, Markets and Money*. Craftsman House.

Chave, Anna C. [1980] 1999. "Minimalism and the Rhetoric of Power (Originally Published in Arts Magazine, 1980)." in *Art in Modern Culture: An Anthology of Critical Texts*, edited by F. Frascina and J. Harris. London: Phaidon Press Limited & Open University.

Chiang, Tun Jen and Richard A. Posner. 2006. "Censorship versus Freedom of Expression in the Arts." Pp. 309–35 in *Handbook of the Economics of Art and Culture*, vol. 1, edited by V. A. Ginsburgh and D. Throsby. Amsterdam: Elsevier B.V.

Chiaravalloti, Francesco. 2014. "Performance Evaluation in the Arts and Cultural Sector: A Story of Accounting at Its Margins." *The Journal of Arts Management, Law, and Society* 44(2):61–89. Retrieved (<http://dx.doi.org/10.1080/10632921.2014.905400>).

Chomsky, Noam. [1977] 1999. "Politics and the Intelligentsia (Originally Published in 1977)." Pp. 32–35 in *Art in Modern Culture: An Anthology of Critical Texts*, edited by F. Frascina and J. Harris. London: Phaidon Press Limited & Open University.

Clark, T. J. 1999. *Farewell to an Idea: Episodes from a History of Modernism*. New Haven and London: Yale University Press.

Clark, Timothy J. [1980] 1999. "Preliminaries to a Possible Treatment of 'Olympia' in 1865 (Originally Published in Screen, 1980)." Pp. 105–20 in *Art in Modern Culture: An Anthology of Critical Texts*, edited by F. Frascina and J. Harris. London: Phaidon Press Limited & Open University.

Clark, Timothy J. [1985] 1999. "The Painting of Modern Life (Originally Published in 1985)." Pp. 40–50 in *Art in Modern Culture: An Anthology of Critical Texts*, edited by F. Frascina and J. Harris. London: Phaidon Press Limited & Open University.

Clark, Timothy J. 2008. *The Sight of Death: An Experiment in Art Writing*. New Haven: Yale University Press.

Cockcroft, Eva. [1974] 1999. "Abstract Expressionism, Weapon of the Cold War (Originally Published in Artforum, 1974)." Pp. 82–90 in *Art in Modern Culture: An Anthology of Critical Texts*, edited by F. Frascina and J. Harris. London: Phaidon Press Limited & Open University.

Coleman, James S. 1988. "Social Capital in the Creation of Human Capital." *American Journal of Sociology* 94(Supplement: Organizations and Institutions: Sociological and Economic Approaches to the Analysis of Social Structure):S95–120.

Crane, Diana. 1976. "Reward Systems in Art, Science, and Religion." *American Behavioral Scientist* 19(6):719–34.

Crimp, Douglas. 1998. "On the Museum's Ruins (Originally Published in October Magazine, Summer 1980)." Pp. 49–64 in *The Anti-Aesthetic: Essays on Post-Modern Culture*, edited by H. Foster. New York: The New Press.

Crogan, Patrick and Samuel Kinsley. 2012. "Paying Attention: Toward a Critique of the Attention Economy." *Culture Machine* (13):1–29. Retrieved (<http://eprints.uwe.ac.uk/17039/>).

Cukier, Ashley. 2013. "Case Comment Dali Gives Greater Clarity to the Resale Directive." *European Intellectual Property Review* 35(11):658–66.

Danto, Arthur C. 1964. "The Artworld." *Journal of Philosophy* 61(19):571–84. Retrieved (<http://ezproxy.cul.columbia.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=pif&AN=PHL1003916&site=ehost-live&scope=site>).

de la Fuente, Eduardo. 2007. "The 'New Sociology of Art': Putting Art Back into Social Science Approaches to the Arts." *Cultural Sociology* 1(3):409–25. Retrieved (<http://journals.sagepub.com/doi/10.1177/1749975507084601>).

De Marchi, Neil and Hans J. Van Miegroet. 2006. "The History of Art Markets." Pp. 69–122 in *Handbook of the Economics of Art and Culture*, vol. 1, edited by V. A. Ginsburgh and D. Throsby. Amsterdam: Elsevier B.V.

Deleuze, G. 1986. *Foucault*. Paris: Editions de Minuit.

DeNora, T. 2005. "Music and Social Experience." Pp. 147–59 in *The Blackwell Companion to the Sociology of Culture*, edited by M. D. Jacobs and N. W. Hanrahan. Oxford: Blackwell.

Dickie, George. 1971. *Aesthetics, an Introduction*. Cambridge: Pegasus.

Dickie, George. 1974. *Art and the Aesthetic: An Institutional Analysis*. New York: Cornell University Press.

Dimaggio, P. 1982. "Cultural Entrepreneurship in Nineteenth Century Boston I & II." *Media, Culture and Society* 4(1 & 2):33–50 & 303–22.

DiMaggio, Paul. 1987. "Classification in Art." *American Sociological Review* 52(4):440–55. Retrieved (<http://www.jstor.org/stable/2095290?origin=crossref>).

Duncan, Carol and Alan Wallach. 1978. "The Museum of Modern Art as Late Capitalist Ritual." *Marxist Perspectives* 4(Winter):28–51.

Eagleton, Terry. [1985] 1999. "Capitalism, Modernism And Postmodernism (Originally Published in New Left Review, 1985)." Pp. 91–100 in *Art in Modern Culture: An Anthology of Critical Texts*, edited by F. Frascina and J. Harris. London: Phaidon Press Limited & Open University.

Elliott, Anthony, ed. 2007. *The Contemporary Bauman*. London & New York: Routledge.

Essvale Corporation Limited. 2008. *Business Knowledge for IT in Private Wealth Management*. London: Essvale Corporation Limited.

Flessas, Tatiana. 2013. "The End of the Museum." *LSE Law, Society and Economy Working Papers* (14). Retrieved (www.lse.ac.uk/collections/law/wps/wps.htm).

Flynn, Tom. 2014. "Negotiating Authenticity: Contrasting Value Systems and Associated Risk in the Global Art Market." Pp. 109–24 in *Risk and Uncertainty in the Artworld*, edited by A. M. Dempster. London: Bloomsbury.

Foster, Hal. 2002. *Design and Crime (And Other Diatribes)*. London: Verso.

Foster, Hal. 1998. "Introduction." Pp. ix–xvii in *The Anti-Aesthetic: Essays on Post-Modern Culture*, edited by H. Foster. New York: The New Press.

Foster, Hal. 2003. "What's the Problem with Critical Art?" *London Review of Books* 35(19):14–15.

Foster, Hal. 2015. "After the White Cube." *London Review of Books* 37(6). Retrieved (<https://www.lrb.co.uk/v37/n06/hal-foster/after-the-white-cube>).

Foster, Hal. [1988] 1999. "Preface." Pp. ix–xiv in *Vision and Visuality: Discussions in Contemporary Culture*, edited by H. Foster. New York: New Press (1st published by Dia Art Foundation).

Foucault, M. [1966] 1989. *The Order of Things*. London: Routledge.

Foucault, M. 1984. "The Order of Discourse." in *Language and Politics*, edited by M. Shapiro. Oxford: Blackwell.

Foucault, M. [1969] 2002. *The Archeology of Knowledge*. London & New York: Routledge.

Frampton, Kenneth. 1998. "Towards a Critical Regionalism: Six Points for an Architecture of Resistance." Pp. 17–34 in *The Anti-Aesthetic: Essays on Post-Modern Culture*, edited by H. Foster. New York: The New Press.

Frank, T. 1998. *The Conquest of Cool: Business Culture, Counterculture, and the Rise of Hip Consumerism*. Chicago: University of Chicago Press.

Frascina, Francis and Jonathan Harris, eds. [1968] 1999. "Greenberg and The Group: A Retrospective View (Originally Published in Studio International, 1968)." Pp. 252–63 in *Art in Modern Culture: An Anthology of Critical Texts*. London: Phaidon Press Limited & Open University.

Frascina, Francis and Jonathan Harris. [1992] 1999. *Art in Modern Culture: An Anthology of Critical Texts*. edited by F. Frascina and J. Harris. London: Phaidon Press Limited & Open University.

Frey, Bruno S. and Stephan Meier. 2006. "The Economics of Museums." Pp. 1017–47 in *Handbook of the Economics of Art and Culture*, vol. 1, edited by V. A. Ginsburgh and D. Throsby. Amsterdam: Elsevier B.V.

Fyfe, Gordon. 1995. "A Trojan Horse at the Tate: Theorizing the Museum as Agency and Structure." *The Sociological Review* 43(1 S):203–28.

Galenson, David. 2009. "Conceptual Revolutions in Twentieth Century Art." *NBER Working Paper Series*. Retrieved (<http://www.nber.org/papers/w15073.pdf>).

Galenson, David W. 2009. *Conceptual Revolutions in Twentieth-Century Art*. Cambridge: Cambridge University Press.

Galenson, David W. and Simone Lenzu. 2015. *Pricing Genius: The Market Evaluation of Innovation*.

Galenson, David W. and Bruce A. Weinberg. 2000. "Age and the Quality of Work : The Case of Modern American Painters." *Journal of Political Economy* 108(4):761–77.

Galenson, David W. 2010. "Understanding Creativity." *Journal of Applied Economics* XIII(2):351–62.

Galenson, David W. 2009. "The State of Advanced Art: The Late Twentieth Century and Beyond." Pp. 343–64 in *Conceptual Revolutions in Twentieth-Century Art*. Cambridge: Cambridge University Press.

Galenson, David W. and Bruce A. Weinberg. 2001. "Creating Modern Art: The Changing Careers of Painters in France from Impressionism to Cubism." *The American Economic Review* 91(4):1063–71.

Gartman, David. 2012. "Bourdieu and Adorno: Converging Theories of Culture and Inequality." *Theory and Society* 41(1):41–72.

Gerlis, Melanie. 2014. *Art as an Investment?* Farnham: Lund Humphries.

Giddens, Anthony. 1984. *The Constitution of Society: Outline of the Theory of Structuration*. Cambridge: Polity Press.

Giddens, Anthony. [1991] 1999. "Modernity and Self-Identity: Self and Society in the Late Modern Age (Originally Published 1991)." Pp. 17–22 in *Art in Modern Culture: An Anthology of Critical Texts*, edited by F. Frascina and J. Harris. London: Phaidon Press Limited & Open University.

Gitman, Lawrence J. et al. 2008. "Real Estate and Other Tangible Investments." Pp. 539–73 in *Fundamentals of Investing*. Pearson.

Goetzmann, William N. 1995. "The Informational Efficiency of the Art Market." *Managerial Finance* 21(6):25–34. Retrieved (<http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.17.481&rep=rep1&type=pdf>).

Grampp, W. D. 1989. *Pricing the Priceless: Art, Artists and Economics*. New York: Basic Books.

Green, N. 1990. *The Spectacle of Nature: Landscape and Bourgeois Culture in Nineteenth Century France*. Manchester: Manchester University Press.

Greenberg, Clement. 1939. "Avant-Garde and Kitsch." *Partisan Review* 6(5):34–49. Retrieved (<http://blog.lib.umn.edu/mulli105/1601fall10/Greenberg-AvGd&Ktch.pdf>).

Greenberg, Clement. [1961] 1999. "Modernist Painting (Originally Published in 1961)." Pp. 308–14 in *Art in Modern Culture: An Anthology of Critical Texts*, edited by F. Frascina and J. Harris. London: Phaidon Press Limited & Open University.

Grunenberg, Christoph. 1999. "The Modern Art Museum." Pp. 26–49 in *Contemporary Cultures of Display*, edited by E. Barker. New Haven and London: Yale University Press, with The Open University.

Guégan, S. 2011. "Manet in View, Manet on View." Pp. 27–42 in *Manet: The Man Who Invented Modernity*, edited by S. Guégan. Paris: Éditions Gallimard.

Guilbaut, Serge. [1980] 1999. "The New Adventures of the Avant-Garde in America: Greenberg, Pollock, or from Trotskyism to the New Liberalism of the 'Vital Center' (Originally Published in October Magazine, 1980)." Pp. 239–51 in *Art in Modern Culture: An Anthology of Critical Texts*, edited by F. Frascina and J. Harris. London: Phaidon Press Limited & Open University.

Habermas, Jurgen. 1998. "Modernity - An Incomplete Project (Originally Delivered as a Talk in 1980)." Pp. 2–15 in *The Anti-Aesthetic: Essays on Post-Modern Culture*, edited by H. Foster. New York: The New Press.

Haden-Guest, Anthony. 1996. *True Colors: The Real Life of the Artworld*. New York: The Atlantic Monthly Press.

Hanquinet, Laurie and Mike Savage. 2016. "Contemporary Challenges for the Sociology of Art and Culture: An Introductory Essay." *Routledge International Handbook of the Sociology of Art and Culture* 1–18.

Hanquinet, Laurie and Mike Savage. 2012. "'Educative Leisure' and the Art Museum." *Museum and Society* 10(1):42–59. Retrieved (<http://eprints.whiterose.ac.uk/67428/>).

Hansen, Miriam. 2001. "Mass Culture as Hieroglyphic Writing: Adorno, Derrida, Kracauer." *New German Critique* 56:43–73.

Hardt, Michael. 2011. "For Love or Money." *Cultural Anthropology* 26(4):676–82.

Harvey, David. [1987] 1990. "Flexible Accumulation through Urbanisation: Reflections on 'Post-Modernity' in the American City." *Antipode* 26(Theater, Theatricality, and Architecture):251–172.

Heath, J. and A. Potter. 2006. *The Rebel Sell: How the Counter Culture Became Consumer Culture*. Sussex: Capstone.

Hebdige, Dick. 1999. "A Report on the Western Front: Postmodernism and the 'Politics' of Style." Pp. 321–41 in *Art in Modern Culture: An Anthology of Critical Texts*, edited by F. Frascina and J. Harris. London: Phaidon Press Limited & Open University.

Hennion, A. and L. Grennier. 2001. "Sociology of Art: New Stakes in a Post-Critical Time." Pp. 341–55 in *The International Handbook of Sociology*, edited by S. Quah and A. Sales. London: Sage.

Hennion, Antoine. 2007. "Those Things That Hold Us Together: Taste and Sociology." *Cultural Sociology* 1(1):97–114.

Henry, Joseph. 2013. "Feelings and Forms: Jill Bennett's 'Practical Aesthetics.'" *Los Angeles Review of Books*, April 7. Retrieved (<https://lareviewofbooks.org/article/feelings-and-forms-jill-bennetts-practical-aesthetics/#!>).

Honneth. 2008. "Reification: A New Look at and Old Idea." in *Reification*, edited by M. Jay. Oxford: Oxford University Press.

Horowitz, Noah. 2011. *Art of the Deal: Contemporary Art in a Global Financial Market*. Princeton: Princeton University Press.

Hughes, Robert. [1984] 2012. "Art and Money (with a New Introduction by Derek Guthrie)." *neotericART*. Retrieved (<http://neotericart.com/2012/08/21/art-and-money-by-robert-hughes-with-a-new-introduction-by-derek-guthrie/>).

Hutter, Michael and Richard Shusterman. 2006. "Value and the Valuation of Art in Economic and Aesthetic Theory." Pp. 169–208 in *Handbook of the Economics of Art and Culture*, vol. 1, edited by V. A. Ginsburgh and D. Throsby. Amsterdam: Elsevier B.V.

Jacobs, Mark D. and Nancy Weiss Hanrahan. 2007. *The Blackwell Companion to the Sociology of Culture*.

Jameson, Frederic. [1977] 1999. "Aesthetics and Politics." Pp. 64–73 in *Art in Modern Culture: An Anthology of Critical Texts*, edited by F. Frascina and J. Harris. London: Phaidon Press Limited & Open University.

Jameson, Frederic. 1984. "Postmodernism, or The Cultural Logic of Late Capitalism." *New Left Review* I/146(July-August).

Jameson, Frederic. 1998. "Postmodernism and Consumer Society (Originally Presented as a Talk, 1982)." Pp. 127–44 in *The Anti-Aesthetic: Essays on Post-Modern Culture*, edited by H. Foster. New York: The New Press.

Jameson, Fredric. 2015. "The Aesthetics of Singularity." *New Left Review* 92(Mar/Apr):101–32.

Jay, Martin. [1988] 1999. "Scopic Regimes of Modernity." Pp. 3–28 in *Vision and Visuality: Discussions in Contemporary Culture*, edited by H. Foster. New York: New Press (1st published by Dia Art Foundation).

Joselit, David. 2009. "Painting Beside Itself." *October* 130(May 1991):125–34.

Joyeux-Prunel, Béatrice. 2008. "L'histoire de L'art et Le Quantitatif: Une Querelle Dépassée." *Histoire & Mesure* XXIII(2):3–34.

Joyeux-Prunel, Béatrice. 2008. "L'histoire de L'art et Le Quantitatif." *Histoire & Mesure* XXIII(2):3–34.

Kang, Jaeho. 2011. "The Spectacle of Modernity: Walter Benjamin and a Critique of Culture (Kulturkritik)." *Constellations* 18(1):74–90.

Kant, Immanuel. [1790] 2007. *Critique of Judgement*. Oxford: Oxford University Press.

Karp, Ivan. 1991. "Culture and Representation." Pp. 11–24 in *Exhibiting Cultures: The Poetics and Politics of Museum Display*, edited by I. Karp and S. D. Lavine. Washington and London: Smithsonian Institution Press.

Karpik, Lucien. 2010. *Valuing the Unique: The Economics of Singularities*. Princeton: Princeton University Press.

Keith Simonton, Dean. 2014. "Creative Genius in Literature, Music, and the Visual Arts." Pp. 15–48 in *Handbook of the Economics of Art and Culture*, vol. 2, edited by V. A. Ginsburgh and D. Throsby. Amsterdam: Elsevier B.V. Retrieved (<http://dx.doi.org/10.1016/B978-0-444-53776-8.00002-7>).

Krauss, Rosalind. [1988] 1999. "The Im/pulse to See." Pp. 51–78 in *Vision and Visuality: Discussions in Contemporary Culture*, edited by H. Foster. New York: New Press (1st published by Dia Art Foundation).

Krauss, Rosalind. [1988] 1999. "General Discussion." Pp. 79–86 in *Vision and Visuality: Discussions in Contemporary Culture*, edited by H. Foster. New York: New Press (1st published by Dia Art Foundation).

Krauss, Rosalind. 1998. "Sculpture in the Expanded Field (Originally Published in October Magazine, Spring 1979)." Pp. 35–48 in *The Anti-Aesthetic: Essays on Post-Modern Culture*, edited by H. Foster. New York: The New Press.

Krauss, Rosalind E. 1986. *The Originality of the Avant-Garde and Other Modernist Myths*. Cambridge, MA: MIT Press.

Krauss, Rosalind E. 2005. "Postmodernism's Museum Without Walls." Pp. 241–45 in *Thinking About Exhibitions*, edited by R. Greenberg, B. W. Ferguson, and S. Nairne. London & New York: Routledge.

Krippner, Greta R. and Anthony S. Alvarez. 2007. "Embeddedness and the Intellectual Projects of Economic Sociology." *Annual Review of Sociology* 33(1):219–40. Retrieved (<http://www.annualreviews.org/doi/10.1146/annurev.soc.33.040406.131647>).

Landes, William M. and Daniel B. Levine. 2006. "The Economic Analysis of Art Law." Pp. 211–51 in *Handbook of the Economics of Art and Culture*, edited by V. A. Ginsburgh and D. Throsby. Amsterdam: Elsevier B.V.

Latour, Bruno. 1987. *Science In Action: How to Follow Scientists and Engineers Through Society*. Cambridge, MA: Harvard University Press.

Legros, Patrick. 2006. "Copyright, Art and Internet: Blessing the Curse?" Pp. 285–308 in *Handbook of the Economics of Art and Culture*, edited by V. A. Ginsburgh and D. Throsby. Amsterdam: Elsevier B.V.

Leland, John. 2004. *Hip: The History*. New York: Harper Collins.

Lelio Iapadre, P. 2014. "Cultural Products in the International Trading System." Pp. 381–409 in *Handbook of the Economics of Art and Culture*, vol. 2, edited by V. A. Ginsburgh and D. Throsby. Amsterdam: Elsevier B.V. Retrieved (<http://dx.doi.org/10.1016/B978-0-444-53776-8.00015-5>).

Levine, D. and A. Rule. 2011. "International Art English: On the Rise – and the Space – of the Artworld Press Release." *Triple Canopy*. Retrieved (http://www.canopycanopycanopy.com/contents/international_art_english).

Liddiard, Mark. 1999. "'Museums into the Millennium' - The Construction, Reception and Future of the Past (PhD Thesis)." London School of Economics.

Locher, Paul J. 2014. "Contemporary Experimental Aesthetics: Procedures and Findings." Pp. 49–80 in *Handbook of the Economics of Art and Culture*, vol. 2, edited by V. Ginsburgh and D. Throsby. Amsterdam: Elsevier B.V. Retrieved (<http://dx.doi.org/10.1016/B978-0-444-53776-8.00003-9>).

Mackenzie, Adrian, Richard Mills, Stuart Sharples, Matthew Fuller, and Andrew Goffey. 2015. "Digital Sociology in the Field of Devices." *Routledge International Handbook of the Sociology of Art and Culture* 367–82.

Martínez Pérez, Lidia. 2017. "On the Artworld, Museum 'Prisons' and Artistic Freedom." *Journal of Extreme Anthropology* 1(2):26–30.

McAndrew, Clare. 2010. "An Introduction to Art and Finance." Pp. 31–62 in *Fine Art and High Finance: Expert Advice on the Economics of Ownership*, edited by C. McAndrew. New York: Bloomberg Press.

McAndrew, Clare and Rachel J. Campbell. 2010. "Art Risk." Pp. 87–116 in *Fine Art and High Finance: Expert Advice on the Economics of Ownership*2, edited by C. McAndrew. New York: Bloomberg Press.

McCain, Roger. 2006. "Defining Cultural and Artistic Goods." Pp. 147–67 in *Handbook of the Economics of Art and Culture*, vol. 1, edited by V. A. Ginsburgh and D. Throsby. Amsterdam: Elsevier B.V.

McCall, Vikki and Clive Gray. 2014. "Museums and the 'new Museology' - Theory, Practice and Organisational Change." *Museum Management and Curatorship* 29(1):19–35.

McGuigan. 2009. *Cool Capitalism*. London: Pluto Press.

Menger, Pierre Michel. 2006. "Artistic Labor Markets: Contingent Work, Excess Supply and Occupational Risk Management." Pp. 765–811 in *Handbook of the Economics of Art and Culture*, vol. 1, edited by V. A. Ginsburgh and D. Throsby. Amsterdam: Elsevier B.V.

Mew, Peter. 1973. "Facts in Fiction." *The Journal of Aesthetics and Art Criticism* 31(3):329–37.

Meyer, John W. and Brian Rowan. 1977. "Institutionalized Organizations: Formal Structure as Myth and Ceremony." *American Journal of Sociology* 83(2):340–63. Retrieved (<http://www.journals.uchicago.edu/doi/10.1086/226550>).

Mirković, Luka. 2017. "Hegemonies in Art: Struggles of an Aspiring Artist." *Journal of Extreme Anthropology* 1(2):35–40.

Moscovici, Serge. [1961] 2008. *Psychoanalysis: Its Image and Its Public*. Cambridge: Polity Press.

Mouzelis, N. 1995. *Sociological Theory: What Went Wrong? Diagnosis and Remedies*. London: Routledge.

Mulkay, Michael and Elizabeth Chaplin. 1982. "Aesthetics and the Artistic Career: A Study of Anomie in Fine-Art Painting." *Sociological Quarterly* 23(1):117–38.

Myers, F. 2002. *Painting Culture: The Making of an Aboriginal High Art*. Durham: Duke University Press.

Nairne, Sandy. 1999. "Exhibitions of Contemporary Art." Pp. 105–26 in *Contemporary Cultures of Display*, edited by E. Barker. New Haven and London: Yale University Press, with The Open University.

Nakassis, Constantine V. 2013. "Brands And Their Surfeits." *Cultural Anthropology* 28(1):111–26.

O'Doherty, Brian. 1976. *Inside the White Cube: The Ideology of the Gallery Space*. San Francisco: The Lapis Press.

Oster, Sharon and William N. Goetzmann. 2003. "Does Governance Matter? The Case of Art Museums." in *The Governance of not-for-profit organizations*, edited by E. L. Glaeser. Chicago: University of Chicago Press.

Pennings, Mark et al. 2011. "Art and Entertainment: Forum." *Australian and New Zealand Journal of Art* 11(1):66–78. Retrieved (<http://www.tandfonline.com/doi/full/10.1080/14434318.2011.11432617>).

Peterson, Richard A. and Roger M. Kern. 1996. "Changing Highbrow Taste: From Snob to Omnivore." *American Sociological Review* 61(5):900–906. Retrieved (<http://www.jstor.org/stable/2096460?origin=crossref>).

Petterson, Anders. 2014. "Value, Risk and the Contemporary Art Ecosystem." Pp. 67–86 in *Risk and Uncertainty in the Artworld*, edited by A. M. Dempster. London: Bloomsbury.

Pollock, Griselda. 2011. "What If Art Desires to Be Interpreted? Remodelling Interpretation after the 'Encounter-Event.'" *Tate Papers* 15(June 2010):1–15. Retrieved (<http://www.tate.org.uk/research/publications/tate-papers/15/what-if-art-desires-to-be-interpreted-remodelling-interpretation-after-the-encounter-event>).

Pollock, Griselda. 1980. "Artists, Mythologies and Media - Genius, Madness and Art History." *Screen* 21(3):57–96.

Pommerehne, Ww and Lp Feld. 1997. "The Impact of Museum Purchase on the Auction Prices of Paintings." *Journal of Cultural Economics* 21(3):249–71. Retrieved (<http://link.springer.com/article/10.1023/A:1007388024711>).

Portes, Alejandro. 2000. "The Two Meanings of Social Capital." *Sociological Forum* 15(1):1–12. Retrieved (<http://link.springer.com/article/10.1023/A:1007537902813>).

Potts, Jason. 2014. *New Technologies and Cultural Consumption*. edited by V. A. Ginsburgh and D. Throsby. Amsterdam: Elsevier B.V. Retrieved (<http://dx.doi.org/10.1016/B978-0-444-53776-8.00009-X>).

Pownall, Rachel A. J. 2014. "Art Price Risk, Emotional and Aesthetic Value." Pp. 165–86 in *Risk and Uncertainty in the Artworld*, edited by A. M. Dempster. London: Bloomsbury.

Pownall, Rachel, Kathryn Graddy, Lara Loewenstein, Jianping Mei, and Mike Moses. 2014. "Anchoring or Loss Aversion? Empirical Evidence." *ACEI Working Paper Series*.

Prieur, Annick and Mike Savage. 2013. "Emerging Forms of Cultural Capital." *European Societies* 15(2):246–67.

Rancière, Jacques. [2003] 2007. *The Future of the Image*. London: Verso.

Rancière, Jacques. [2003] 2007. *The Future of the Image*. London: Verso.

Rancière, Jacques and Steven Corcoran. 2004. "Introducing Disagreement." *Angelaki - Journal of the Theoretical Humanities* 9(3):3–9.

Read, B. [1936] 1967. *Art and Society*. London: Faber and Faber.

Resch, Magnus. 2015. *Management of Art Galleries*. Ostfildern: Hatje Cantz Verlag.

Robertson, Iain. 2016. *Understanding Art Markets: Inside the World of Art and Business*. London & New York: Routledge.

Rosen, S. 1981. "The Economics of Superstars." *American Economic Review* 71(5):845–58.

Rosler, Martha. 2013. "English and All That." *E-Flux* 45.

Rule, Alix and Peter Bearman. 2015. "Networks and Culture." *Routledge International Handbook of the Sociology of Art and Culture* 161–73.

Said, Edward W. 1998. "Opponents, Audiences, Constituencies and Community (Originally Published in Critical Enquiry, 1982)." Pp. 155–83 in *The Anti-Aesthetic: Essays on Post-Modern Culture*, edited by H. Foster. New York: The New Press.

Santagata, Walter. 2006. "Cultural Districts and Their Role in Developed and Developing Countries." Pp. 1101–19 in *Handbook of the Economics of Art and Culture*, vol. 1, edited by V. A. Ginsburgh and D. Throsby. Amsterdam: Elsevier B.V.

Saranovic, Saranovic. 2017. "Resisting the Pressures of the Global Art Market." *Journal of Extreme Anthropology* 1(2):13–20.

Schaeffer, Jean-Marie. [1992] 2000. *Art of the Modern Age: Philosophy of Art from Kant to Heidegger*. Princeton: Princeton University Press.

Schaeffer, Jean-Marie. [1996] 2015. *Beyond Speculation: Art and Aesthetics without Myths*. Kolkata: Seagull Books.

Schinkel, W. 2010. "The Autopoiesis of the Artworld after the End of Art." *Cultural Sociology* 4(2):267–90. Retrieved (<http://cus.sagepub.com/cgi/doi/10.1177/1749975510368476>).

Schulenberg, Ulf. 2015. *Romanticism and Pragmatism: Richard Rorty and the Idea of a Poeticized Culture*. Basingstoke & New York: Palgrave Macmillan.

Schuster, J. Mark. 2006. "Tax Incentives in Cultural Policy." Pp. 1253–98 in *Handbook of the Economics of Art and Culture*, vol. 1, edited by V. A. Ginsburgh and D. Throsby. Amsterdam: Elsevier B.V.

Shelley, Percy Bysshe. 1891. *A Defense of Poetry*. Ginn & Company.

Shiff, Richard. [1984] 1999. "Defining 'Impressionism' and 'Impression'" (Originally Published in 1984)." Pp. 181–88 in *Art in Modern Culture: An Anthology of Critical Texts*, edited by F. Frascina and J. Harris. London: Phaidon Press Limited & Open University.

Shimamura, Arthur P. and Stephen E. Palmer. 2011. *Aesthetic Science: Connecting Minds, Brains, and Experience*. Oxford Scholarship Online.

Shulman, Morton. 1977. *Anyone Can Make Big Money Buying Art*. New York: MacMillan Publishing Company.

Spaenjers, C. 2010. "Returns and Fundamentals in International Art Markets." November. Retrieved (<http://www.hec.unil.ch/documents/seminars/ibf/430.pdf>).

Spaenjers, Christophe and Luc Renneboog. 2015. "Investment Returns and Economic Fundamentals in International Art Markets." Pp. 129–46 in *Cosmopolitan Canvases: The Globalization of Markets for Contemporary Art*, edited by O. Velthuis and S. Baia Curioni. Oxford: Oxford University Press.

Stallabrass, Julian. 2014. "The Branding of the Museum." *Art History* 37(1):148–65.

Stallabrass, Julian. 2003. "Types and Prospects of Radical Art." *Australian and New Zealand Journal of Art* 4–5(July):189–201. Retrieved (http://www.courtauld.ac.uk/people/stallabrass_julian/essays/types_prospects_radical_art.pdf).

Stigler, George J. and Gary S. Becker. 1977. "De Gustibus Non Est Disputandum." *The American Economic Review* 67(2):76–90. Retrieved (<http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.650.7622&rep=rep1&type=pdf>).

Streeten, Paul. 2006. "Culture and Economic Development." Pp. 399–412 in *Handbook of the Economics of Art and Culture*, vol. 1, edited by V. A. Ginsburgh and D. Throsby. Amsterdam: Elsevier B.V.

Tanner, J. 2003. *The Sociology of Art: A Reader*. London: Routledge.

Tanner, Jeremy. 2010. "Michael Baxandall and the Sociological Interpretation of Art." *Cultural Sociology* 4(2):231–56.

Tester, Keith. 2004. *The Social Thought of Zygmunt Bauman*. Basingstoke & New York: Palgrave Macmillan.

Thomas, Anabel. 1999. "The National Gallery's First 50 Years: 'Cut the Cloth to Suit the Purse.'" Pp. 207–37 in *Academies, Museums, and Canons of Art*, edited by G. Perry and C. Cunningham. New Haven and London: Yale University Press, with The Open University.

Thompson, Don. 2014. *The Supermodel and the Brillo Box*. New York: Palgrave Macmillan.

Thornton, Sarah. 2008. *Seven Days in the Artworld*. New York: WW Norton. Retrieved (http://books.google.com/books?id=902d_FML-e8C&pgis=1).

Throsby, David and Anita Zednik. 2014. "The Economic and Cultural Value of Paintings: Some Empirical Evidence." Pp. 81–99 in *Handbook of the Economics of Art and Culture*, vol. 2, edited by D. Throsby and A. Zednik. Amsterdam: Elsevier B.V. Retrieved (<http://dx.doi.org/10.1016/B978-0-444-53776-8.00004-0>).

Towse, Ruth. 2006. "Human Capital and Artists' Labour Markets." Pp. 865–94 in *Handbook of the Economics of Art and Culture*, vol. 1, edited by V. A. Ginsburgh and D. Throsby. Amsterdam: Elsevier B.V.

Troyas, Alain and Valerie Arrault. 2017. *Du Narcissisme de l'Art Contemporain*. Paris: Editions l'Echappée.

Van Houdt, Toon. 1999. "The Economics of Art in Early Modern Times: Some Humanist and Scholastic Approaches." *History of Political Economy* 31:301–31.

Velthuis, Olav. 2014. "The Impact of Globalisation on the Contemporary Art Market." Pp. 87–108 in *Risk and Uncertainty in the Artworld*, edited by A. M. Dempster. London: Bloomsbury.

Velthuis, Olav. 2004. "An Interpretive Approach to Meanings of Prices." *Review of Austrian Economics* 17(4):371–86.

Velthuis, Olav. 2007. *Talking Prices: Symbolic Meanings of Prices on the Market for Contemporary Art*. Princeton: Princeton University Press.

Velthuis, Olav. 2014. "ArtRank and the Flippers: Apocalypse Now?" *Texte Zur Kunst* 24(96):34–49. Retrieved (<https://dare.uva.nl/search?identifier=985c66c4-89c2-4bc4-9e47-9081e29cf268>).

Virilio, Paul and Sylvère Lotringer. [1997] 2008. *Pure War*. Los Angeles: Semiotext(e) / MIT Press.

Wagner, Ethan and Thea Westreich Wagner. 2013. *Collecting Art for Love, Money and More*. London: Phaidon Press Limited.

Wagner, P. 2008. *Modernity as Experience and Interpretation*. Cambridge: Polity Press.

Wallach, Alan. [1991] 1999. "The Museum of Modern Art: The Past's Future (Originally a Paper Presented in 1991)." Pp. 282–91 in *Art in Modern Culture: An Anthology of Critical Texts*, edited by F. Frascina and J. Harris. London: Phaidon Press Limited & Open University.

Walsh, Linda. 1999. "Charles Le Brun, 'Art Dictator of France.'" Pp. 86–123 in *Academies, Museums, and Canons of Art*, edited by G. Perry and C. Cunningham. New Haven and London: Yale University Press, with The Open University.

White, Harrison and Cynthia A. White. 1965. *Canvases and Careers: Institutional Change in the French Painting World*. New York: John Wiley & Sons.

Williams, Raymond. 1994. "Selections from Marxism and Literature." Pp. 585–608 in *Culture, Power, History: A Reader in Contemporary Social Theory*.

Williams, Raymond. 1994. "Selections from Marxism and Literature." Pp. 585–608 in *Culture, Power, History: A Reader in Contemporary Social Theory*.

Williams, Raymond. 1994. "Selections from Marxism and Literature." Pp. 585–608 in *Culture, Power, History: A Reader in Contemporary Social Theory*.

Williams, Raymond. [1989] 1999. "When Was Modernism? (Originally Published in New Left Review, 1989)." Pp. 23–27 in *Art in Modern Culture: An Anthology of Critical Texts*, edited by F. Frascina and J. Harris. London: Phaidon Press Limited & Open University.

Williams, Raymond. [1981] 1999. "The Works of Art Themselves?" (Originally Published in 1981)." Pp. 315–18 in *Art in Modern Culture: An Anthology of Critical Texts*, edited by F. Frascina and J. Harris. London: Phaidon Press Limited & Open University.

Wolff, Janet. [1984] 1993. *The Social Production of Art*. New York: NYU Press.

Wölfflin, Heinrich. [1913] 1950. *Principles of Art History: The Problem of the Development of Style in Later Art*. New York: Dover Publications.

Wood, Paul. 1996. "Commodity." Pp. 257–80 in *Critical Terms for Art History*, edited by R. S. Nelson and R. Shiff. Chicago: University of Chicago Press.

Woodward, Ian. 2011. "Towards an Object-Relations Theory of Consumerism: The Aesthetics of Desire and the Unfolding Materiality of Social Life." *Journal of Consumer Culture* 11(3):366–84. Retrieved (<http://journals.sagepub.com/doi/10.1177/1469540511417997>).

Woodward, Ian and Michael Emmison. 2001. "From Aesthetic Principles to Collective Sentiments: The Logics of Everyday Judgements of Taste." *Poetics* 29(6):295–316.

Zangwill, Nick. 2002. "Against the Sociology of Art." *Philosophy of the Social Sciences* 32(2):206–18. Retrieved (<http://journals.sagepub.com/doi/10.1177/004931032002004>).

Ziff, Matthew. 2004. "Review: Painting Outside the Lines: Patterns of Creativity in Modern Art, by David W. Galenson." *The Journal of Aesthetic Education* 38(3):123–24.

Zolberg, V. 1990. *Constructing a Sociology of Art*. Chicago: University of Chicago Press.

Zorloni, Alessia. 2013. *The Economics of Contemporary Art: Markets, Strategies, and Stardom*. Berlin Heidelberg: Springer-Verlag.

Zorloni, Alessia and Antonella Ardizzone. 2016. "The Winner-Take-All Contemporary Art Market." *Creative Industries Journal*.

Indexes

Agnello, R. J. Richard J. and Renée K. R. K. Pierce. 1996. "Financial Returns, Price Determinants, and Genre Effects in American Art Investment." *Journal of Cultural Economics* 20(4):359–383. Retrieved (<http://www.springerlink.com/index/X3PY0G4QQT02XM5D.pdf>).

Agnello, Richard. 2010. "Race and Art: Prices for African American Painters and Their Contemporaries." *Journal of Black Studies* 41(1):56–70.

Anderson, Robert C. 1974. "Paintings as an Investment." *Economic Inquiry* 12(1):13–26.

Ashenfelter, Orley and Kathryn Graddy. 2003. "Auctions and the Price of Art." *Journal of Economic Literature* 41(3):763–86. Retrieved (<http://pubs.aeaweb.org/doi/abs/10.1225/002205103322436188>).

Ashenfelter, Orley and Kathryn Graddy. 2001. "A Study of Sale Rates and Prices in Impressionist and Contemporary Art Auctions."

Atukeren, Erdal and Aylin Seçkin. 2009. "An Analysis of the Price Dynamics between the Turkish and the International Paintings Markets." *Applied Financial Economics* 19(21):1705–14.

Bailey, Martin J., Richard F. Muth, and Hugh O. Nourse. 1963. "A Regression Method for Real Estate Price Index Construction." *Journal of the American Statistical Association* 58(304):933–42.

Baumol, William J. 1986. "Unnatural Value, Or Art Investment as Floating Crap Game." *American Economic Review* 76(2):10–14.

Bocart, Fabian. 2014. "Econometric Analysis of Alternative Assets with Applications to the Art Market (PhD Dissertation)." Université catholique de Louvain. Retrieved (<http://hdl.handle.net/2078.1/142462>).

Bocart, Fabian Y. R. P. and Christian M. Hafner. 2012. "Econometric Analysis of Volatile Art Markets." *Computational Statistics and Data Analysis* 56(11):3091–3104.

Bocart, Fabian Y. R. P. and Christian M. Hafner. 2015. "Volatility of Price Indices for Heterogeneous Goods with Applications to the Fine Art Market." *Journal of Applied Econometrics* 30(2):291–312.

Bocart, Fabian, Ken Bastiaensen, and Peter Cauwels. 2011. "The 1980s Price Bubble on (Post) Impressionism." *ACEI Working Paper Series*. Retrieved (<http://www.culturealeconomics.org/awp/AWP-03-2011.pdf>).

Buelens, Nathalie and Victor Ginsburgh. 1993. "Revisiting Baumol's 'Art as Floating Crap Game.'" *European Economic Review* 37(7):1351–71.

Burton, Benjamin J. and Joyce P. Jacobsen. 1999. "Measuring Returns on Investments in Collectibles." *Journal of Economic Perspectives* 13(4):193–212.

Campbell, Rachel J. 2008. "Art as a Financial Investment." *The Journal of Alternative Investments* (Spring):64–81.

Campos, Nauro F. and Renata Leite Barbosa. 2009. "Paintings and Numbers: An Econometric Investigation of Sales Rates, Prices, and Returns in Latin American Art Auctions." *Oxford Economic Papers* 61(1):28–51.

Candela, G. and A. E. Scorcu. 1997. "A Price Index for Art Market Auctions." *Journal of Cultural Economics* 21:175–96.

Candela, Guido, Paolo Figini, and Antonello E. Scorcu. 2004. "Price Indices for Artists - A Proposal." *Journal of Cultural Economics* 28(4):285–302.

Case, Bradford, Henry O. Pollakowski, and Susan M. Wachter. 1991. "On Choosing Among House Price Index Methodologies." *Real Estate Economics* 19(3):286–307.

Chanel, Olivier. 1995. "Is Art Market Behaviour Predictable?" *European Economic Review* 39(3–4):519–27.

Chanel, Olivier, Louis André Gérard-Varet, and Victor Ginsburgh. 1996. "The Relevance of Hedonic Price Indices: The Case of Paintings." *Journal of Cultural Economics* 20:1–24.

Clapham, Eric, Peter Englund, John M. Quigley, and Christian L. Redfearn. 2006. "Revisiting the Past and Settling the Score: Index Revision for House Price Derivatives." *Real Estate Economics* 34(2):275–302. Retrieved (<http://dx.doi.org/10.1111/j.1540-6229.2006.00167.x>).

Clapp, John M. and Carmelo Giaccotto. 1992. "Estimating Price Indices for Residential Property: A Comparison of Repeat Sales and Assessed Value Methods." *Journal of the American Statistical Association* 87(418):300–306.

Clapp, John M., Carmelo Giaccotto, and Dogan Tirtiroglu. 1991. "Housing Price Indices Based on All Transactions Compared to Repeat Subsamples." *Real Estate Economics* 19(3):270–85.

Coffman, Richard B. 1991. "Art Investment and Asymmetrical Information." *Journal of Cultural Economics* 15(2):83–94.

Collins, Alan, Antonello Scorcu, and Roberto Zanola. 2009. "Reconsidering Hedonic Art Price Indexes." *Economics Letters* 104(2):57–60.

Czujack, Corinna. 1997. "Picasso Paintings at Auction, 1963–1994." *Journal of Cultural Economics* 21(3):229–247. Retrieved (<http://www.springerlink.com/index/q5g6252655566467.pdf>).

De la Barre, M., Sophie Doclo, and Victor Ginsburgh. 1994. "Returns of Impressionist, Modern and Contemporary European Paintings 1962–1991." *Annales d'Economie et de Statistique* 35:143–181. Retrieved (<http://www.jstor.org/stable/20075962>).

Ekelund, Robert B., Rand W. Ressler, and John Keith Watson. 1998. "Estimates, Bias and 'No Sales' in Latin-American Art Auctions, 1977–1996." *Journal of Cultural Economics* 22(1):33–42. Retrieved (<https://doi.org/10.1023/A:1007471016277>).

Erdos, Péter and Mihály Ormos. 2010. "Random Walk Theory and the Weak-Form Efficiency of the US Art Auction Prices." *Journal of Banking and Finance* 34(5):1062–76.

Fase, M. M. G. 1996. "Purchase of Art: Consumption and Investment." *De Economist* 144(4):649–58. Retrieved (<http://link.springer.com/10.1007/BF01371944>).

Freddie Mac. n.d. *Technical Description of the Freddie Mac House Price Index*. Retrieved (<http://www.freddiemac.com/research/pdf/FMHPI.pdf>).

Frey, Bruno S. and Reiner Eichenberger. 1995. "On the Return of Art Investment Return Analyses." *Journal of Cultural Economics* 19(3):207–20.

Frey, Bruno S. and Werner W. Pommerehne. 1989. "Art Investment: An Empirical Inquiry." *Southern Economic Journal* 56(2):396–409. Retrieved (http://www.jstor.org/stable/1059218?seq=1#page_scan_tab_contents%5Cnhttp://www.jstor.org/stable/10.2307/1059218).

Gatzlaff, D. and D. Haurin. 1997. "Sample Selection Bias and Repeat-Sales Index Estimates." *The Journal of Real Estate Finance and Economics* 14(1):33–50. Retrieved (papers://fe96a5a9-3761-4095-b916-be2777785369/Paper/p2182).

Ginsburgh, Victor and Philippe Jeanfils. 1995. "Long-Term Comovements in International Markets for Paintings." *European Economic Review* 39(3–4):538–48.

Ginsburgh, Victor, Jianping Mei, and Michael Moses. 2006. "The Computation of Prices Indices." Pp. 947–79 in *Handbook of the Economics of Art and Culture*, vol. 1, edited by V. A. Ginsburgh and D. Throsby. Amsterdam: Elsevier B.V.

Goetzmann, William N. 1993. "Accounting for Taste: Art and the Financial Markets Over Three Centuries." *American Economic Association* 83(5):1370–76.

Goetzmann, William N. 1996. "How Costly Is the Fall from Fashion? Survivorship Bias in the Painting Market." Pp. 71–84 in *Economics of the arts: selected essays*, edited by V. A. Ginsburgh and P. M. Menger. Amsterdam: Elsevier B.V.

Goetzmann, William N. and Liang Peng. 2002. "The Bias of the RSR Estimator and the Accuracy of Some Alternatives." *Real Estate Economics* 30(1):13–39.

Goetzmann, William N., Luc Renneboog, and Christophe Spaenjers. 2011. "Art and Money." *American Economic Review* 101(3):222–26.

Hansen, James. 2009. "Australian House Prices: A Comparison of Hedonic and Repeat-Sales Measures." *Economic Record* 85(269):132–45.

Hiraki, Takato, Akitoshi Ito, Darius A. Spieth, and Naoya Takezawa. 2009. "How Did Japanese Investments Influence International Art Prices?" *Journal of Financial and Quantitative Analysis* 44(6):1489–1514.

Hodgson, Douglas. 2011. "An Analysis of Pricing and Returns in the Market for French Canadian Paintings." *Applied Economics* 43(1):63–73.

Hodgson, Douglas J. and Keith P. Vorkink. 2004. "Asset Pricing Theory and the Valuation of Canadian Paintings." *Canadian Journal of Economics* 37(3):629–55.

Korteweg, Arthur, Roman Kräussl, and Patrick Verwijmeren. 2013. "Appendix to 'Does It Pay to Invest in Art? A Selection-Corrected Returns Perspective.'" 1–20.

Kräussl, Roman. 2010. "Art Price Indices." Pp. 63–86 in *Fine Art and High Finance: Expert Advice on the Economics of Ownership*, edited by C. McAndrew. New York: Bloomberg Press.

Kräussl, Roman and Jonathan Lee. 2010. "Art as an Investment : The Top 500 Artists." *Business* 31(February):1–26.

Kräussl, Roman and Robin Logher. 2010. "Emerging Art Markets." *Emerging Markets Review* 11(4):301–18.

Kräussl, Roman and Niels van Elsland. 2008. "Constructing the True Art Market Index: A Novel 2-Step Hedonic Approach and Its Application to the German Art Market." *Center for Financial Studies* (CFS Working Paper Series No. 2008/11). Retrieved (<http://publikationen.ub.uni-frankfurt.de/frontdoor/index/index/docId/94>).

Mandel, Benjamin R. 2009. "American Economic Association Art as an Investment and Conspicuous Consumption Good Art as an Investment and Conspicuous." *The American Economic Review* 99(4):1653–63.

Mandel, Benjamin R. 2014. "Investment in Visual Art: Evidence from International Transactions." Pp. 233–60 in *Handbook of the Economics of Art and Culture*, vol. 2, edited by V.

A. Ginsburgh and D. Throby. Amsterdam: Elsevier B.V. Retrieved (<http://dx.doi.org/10.1016/B978-0-444-53776-8.00010-6>).

Marinelli, Nicoletta and Giulio Palomba. 2011. "A Model for Pricing Italian Contemporary Art Paintings at Auction." *Quarterly Review of Economics and Finance* 51(2):212–24.

Meese, Richard and Nancy E Wallace. 1997. "The Construction of Residential Housing Price Indices: A Comparison of Repeat-Sales, Hedonic-Regression, and Hybrid Approaches." *The Journal of Real Estate Finance and Economics* 14:51–73.

Mei, Jianping and Michael Moses. 2002. "Art as an Investment and the Underperformance of Masterpieces." *American Economic Review* 92(5):1656–68.

Mok, Henry M. K., Vivian W. K. Ko, Salina S. M. Woo, and Katherina Y. S. Kwok. 1993. "Modern Chinese Paintings: An Investment Alternative?" *Southern Economic Journal* 59(4):808–16. Retrieved (<http://www.jstor.org/stable/1059742?origin=crossref>).

Nagaraja, Chaitra H., Lawrence D. Brown, and Susan M. Wachter. 2010. "House Price Index Methodology." 1–21. Retrieved (<http://fic.wharton.upenn.edu/fic/papers/11/11-04.pdf>).

Nahm, Joonwoo. 2010. "Price Determinants and Genre Effects in the Korean Art Market: A Partial Linear Analysis of Size Effect." *Journal of Cultural Economics*, 1–17.

Noland, Charles W. 1979. "Assessing Hedonic Indexes for Housing." *Journal of Financial and Quantitative Analysis* 14(4):783–800.

Oosterlinck, Kim. 2011. *The Price of Degenerate Art*.

Pesando, James E. and E. James. 1993. "Art as an Investment: The Market for Modern Prints." *American Economic Review* 83(5):1075–89. Retrieved (<http://www.jstor.org/stable/2117549>).

Pesando, James E. and Pauline M. Shum. 1996. "Price Anomalies at Auction: Evidence from the Market for Modern Prints." Pp. 113–36 in *Economics of the arts: selected essays*, edited by V. A. Ginsburgh and P. M. Menger. Amsterdam: Elsevier B.V.

Reitlinger, Gerald. 1961. *The Economics of Taste (Vols I-III)*. Barrie & Rockliff.

Renneboog, L. 2002. "The Monetary Appreciation of Paintings: From Realism to Magritte." *Cambridge Journal of Economics* 26(3):331–58. Retrieved (<https://academic.oup.com/cje/article-lookup/doi/10.1093/cje/26.3.331>).

Renneboog, Luc and Christophe Spaenjers. 2011. "The Iconic Boom in Modern Russian Art." *The Journal of Alternative Investments* 13(3):67–80. Retrieved (<http://www.iijournals.com/doi/abs/10.3905/jai.2011.13.3.067>).

Renneboog, Luc and Christophe Spaenjers. 2013. "Buying Beauty: On Prices and Returns in the Art Market." *Management Science* 59(1):36–53.

Scorcu, Antonello E. and Roberto Zanola. 2011. "The 'right' price for Art Collectibles: A Quantile Hedonic Regression Investigation of Picasso Paintings." *Journal of Alternative Investments* 14(2):89–99.

Stein, John Picard. 1977. "The Monetary Appreciation of Paintings." *Journal of Political Economy* 85(5):1021–36.

Taylor, Dominic and Les Coleman. 2011. "Price Determinants of Aboriginal Art, and Its Role as an Alternative Asset Class." *Journal of Banking and Finance* 35(6):1519–29.

von Habsburg, Elizabeth, Rachel Goodman, Gurr Johns, and Clare McAndrew. 2010. “Art Appraisals, Prices and Valuations.” Pp. 31–62 in *Fine Art and High Finance: Expert Advice on the Economics of Ownership*, edited by C. McAndrew. New York: Bloomberg Press.

Worthington, Andrew C. and Helen Higgs. 2006. “A Note on Financial Risk, Return and Asset Pricing in Australian Modern and Contemporary Art.” *Journal of Cultural Economics* 30(1):73–84.

Worthington, Andrew C. and Helen Higgs. 2003. “Art as an Investment: Short and Long-Term Comovements in Major Painting Markets.” *Empirical Economics* 28(4):649–68.

Economy, History, Theory, Sociology, Philosophy

Abbott, Andrew. 2005. “Linked Ecologies: States and Universities as Environments for Professions.” *Sociological Theory* 23(3 Sep.):245–74.

Abolafia, M. Y. 1998. “Markets as Cultures: An Ethnographic Approach.” *The Sociological Review Special Issue: The Laws of the Markets* 46(S1):69–85.

Abolafia, Mitchel Y. 1996. *Making Markets: Opportunism and Restraint on Wall Street*. Cambridge, MA: Harvard University Press.

Alstadsæter, Annette, Niels Johannesen, and Gabriel Zucman. 2017. “Tax Evasion and Inequality.” 1–59. Retrieved (<http://www.nber.org/papers/w23772.pdf>).

Amariglio, J. and D. F. Ruccio. 1999. “The Transgressive Knowledge of ‘Ersatz’ Economics.” Pp. 19–36 in *What Do Economists Know?*, edited by R. F. Garnett. London: Routledge.

Anand, Sudhir and Paul Segal. 2017. *Who Are the Global Top 1%?*

Appadurai, Arjun. 1986. “Introduction: Commodities and the Politics of Value.” Pp. 3–63 in *The Social Life of Things: Commodities in Cultural Perspective*, edited by A. Appadurai. Cambridge: Cambridge University Press.

Baker, Michael J. 2007. *Marketing Strategy and Management*. 4th Ed. Basingstoke: Palgrave Macmillan.

Beaverstock, Jonathan V., Sarah Hall, and Thomas Wainwright. 2013. “Servicing the Super-Rich: New Financial Elites and the Rise of the Private Wealth Management Retail Ecology.” *Regional Studies* 47(6):834–49. Retrieved (<http://www.tandfonline.com/doi/abs/10.1080/00343404.2011.587795>).

Beck, Ulrich and E. Beck-Gernsheim. 2002. *Individualization: Institutionalized Individualism and Its Social and Political Consequences*. London: Sage.

Beunza, Daniel and Fabrizio Ferraro. 2011. “Big Tent, New Tools: Institutional Change in the Responsible Investment Field.” *Paper Presented at the Annual Meeting of the SASE Annual Conference, Autonomous University of Madrid, Spain, Madrid, Spain*.

Boltanski, L. and E. Chiapello. [1999] 2005. *The New Spirit of Capitalism*. London: Verso.

Budgen, Sebastian. 1999. “Review: A New Spirit of Capitalism.” *New Left Review* 1:149–56.

Çalışkan, Koray and Michel Callon. 2009. “Economization, Part 1: Shifting Attention from the Economy towards Processes of Economization.” *Economy and Society* 38(3):369–98.

Çalışkan, Koray and Michel Callon. 2010. "Economization, Part 2: A Research Programme for the Study of Markets." *Economy and Society* 39(1):1–32.

Callon, M. 1998. "An Essay on Framing and Overflowing: Economics Externalities Revised by Sociology." *The Sociological Review* 46:244–69.

Callon, Michel. 1998. "Introduction: The Embeddedness of Economic Markets in Economics." *The Sociological Review* 46(S1):1–57.

Callon, Michel. 2008. "What Does It Mean to Say That Economics Is Performative?" Pp. 311–57 in *Do Economists Make Markets? On the Performativity of Economics*, edited by D. MacKenzie, F. Muniesa, and L. Siu. Princeton: Princeton University Press.

Castells, M. 1996. *The Information Age: Economy, Society, and Culture*. Malden: Blackwell.

Castoriadis, C. 1990. *Le Monde Morcelé: Les Carrefours Du Labyrinthe III*. Paris: Seuil.

Chappel, James G. 2015. "A Servant Heart." *Boston Review*, November 30. Retrieved (<http://bostonreview.net/books-ideas/james-chappel-servant-heart-religion-neoliberalism>).

Cialdini, R. 1993. *Influence: Science and Practice*. New York: Harper Collins.

Coase, Ronald H. 1937. "The Nature of the Firm." *Economica* 4:386–405.

Cochoy, Franck. 1998. "Another Discipline for the Market Economy: Marketing as a Performative Knowledge and Know-How for Capitalism." *The Sociological Review* 46(S1):194–221.

Coslor, Erica. 2010. "Hostile Worlds and Questionable Speculation: Recognizing the Plurality of Views about Art and the Market." (February):209–24. Retrieved (<http://www.emeraldinsight.com/doi/10.1108/S0190-1281%282010%290000030012>).

Coslor, Erica. 2016. "Transparency in an Opaque Market: Evaluative Frictions Between 'thick' valuation And 'thin' price Data in the Art Market." *Accounting, Organizations and Society* 50:13–26. Retrieved (<http://dx.doi.org/10.1016/j.aos.2016.03.001>).

Coslor, Erica and Christophe Spaenjers. 2016. "Organizational and Epistemic Change: The Growth of the Art Investment Field." *Accounting, Organizations and Society* 55:48–62. Retrieved (<http://dx.doi.org/10.1016/j.aos.2016.09.003>).

Couldry, Nick. 2015. "Researching Social Analytics: Cultural Sociology in the Face of Algorithmic Power." *Routledge International Handbook of the Sociology of Art and Culture* 383–95.

Cyert, R. and J. G. March. 1963. *A Behavioral Theory of the Firm*. New York: Wiley.

Davenport, T. H. and J. C. Beck. 2001. *The Attention Economy: Understanding the New Currency of Business*. Cambridge, MA: Harvard Business Press.

DiMaggio, P. and W. W. Powell. 1983. "The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields." *American Sociological Review* 48:147–60.

DiMaggio, P. and W. W. Powell, eds. 1991. *The New Institutionalism in Organizational Analysis*. Chicago: University of Chicago Press.

Dimaggio, Paul. 1999. "Introduction : Making Sense of the Contemporary."

Dodd, Nigel. 2014. *The Social Life of Money*. Princeton & Oxford: Princeton University Press.

Donnat, Olivier. 2015. "The Rising Power of Screens: Changing Cultural Practices in France, from 1973 to 2008." *Routledge International Handbook of the Sociology of Art and Culture* 396–408.

Fama, E. F. 1970. "Efficient Capital Markets-A Review of Theory and Empirical Work." *The Journal of Finance* 25(2):383–417. Retrieved (http://books.google.de/books?id=ox48PAAACAAJ&dq=intitle:Efficient+Capital+Markets+A+Review+of+Theory+and+Empirical+Work&hl=&cd=1&source=gbs_api).

Fang, Lily, Victoria Ivashina, and Josh Lerner. 2015. "The Disintermediation of Financial Markets: Direct Investing in Private Equity." *Journal of Financial Economics* 116(1):160–78. Retrieved (<http://dx.doi.org/10.1016/j.jfineco.2014.12.002>).

Fligstein, Neil. 1996. "Markets as Politics: A Political-Cultural Approach to Market Institutions." *American Sociological Review* 61(4):656–73.

Fligstein, Neil. 2001. *The Architecture of Markets: An Economic Sociology of Twenty-First-Century Capitalist Societies*. Princeton: Princeton University Press.

Fligstein, Neil, Orestes P. Hastings, and Adam Goldstein. 2015. *Keeping up with the Joneses: Lifestyle Competition and Housing Consumption in the Era of the Housing Price Bubble, 1999-2007*.

Franck, Georg. 1999. "The Economy of Attention." *Telepolis*. Retrieved (<https://www.heise.de/tp/features/The-Economy-of-Attention-3444929.html>).

Frank, Wehinger. 2013. "Fake Qualities: Assessing the Value of Counterfeit Goods." in *Constructing Quality: The Classification of Goods in Markets*, edited by J. Beckert and C. Musselin. Oxford Scholarship Online.

Gerlach, Philipp. 2013. "Evaluation Practices in Internal Labor Markets: Constructing Engineering Managers' Qualification in French and German Automotive Firms." in *Constructing Quality: The Classification of Goods in Markets*, edited by J. Beckert and C. Musselin. Oxford Scholarship Online.

Goetzmann, William and K. Geert Rouwenhorst. 2008. "The History of Financial Innovation." Pp. 19–43 in *Carbon Finance: Environmental Market Solutions to Climate Change*. New Haven: Yale School of Forestry & Environmental Studies.

Goldhaber, Michael H. and Michael H. Goldhaber. 1997. "The Attention Economy and the Net." *First Monday* 2(4). Retrieved (<http://firstmonday.org/article/view/519/440>).

Granovetter, Mark. 1985. "Economic Action and Social Structure: The Problem of Embeddedness." *American Journal of Sociology* 91(3):481–510.

Harrington, Brooke. 2016. "To Have and Have More: Wealth Management and the Growth of Global Inequality." *OECD Yearbook* 1–6.

Harrington, Brooke. 2012. "Trust and Estate Planning: The Emergence of a Profession and Its Contribution to Socioeconomic Inequality." *Sociological Forum* 27(4):825–46.

Harrington, Brooke. 2017. "Trusts and Financialization." *Socio-Economic Review* 15(1):31–63.

Harrington, Brooke. 2016. "The Extraordinary Intimacy Between the Ultra-Rich and Their Wealth Managers." *The Atlantic*, September 12. Retrieved January 16, 2018 (<https://www.theatlantic.com/business/archive/2016/09/wealth-managers/499064/>).

Harrington, Brooke and Doug Henwood. 2017. "How the Rich Stay Rich: An Interview with Brooke Harrington." *Jacobin*, November 20. Retrieved January 16, 2018

(<https://www.jacobinmag.com/2017/11/paradise-papers-wealth-managers-brooke-harrington-interview>).

Harrington, Brooke and Shankar Vedantam. 2016. “What’s It Like To Be Rich? Ask The People Who Manage Billionaires’ Money.” *WBAA*, October 25. Retrieved January 16, 2018 (<https://www.npr.org/2016/10/25/499213698/whats-it-like-to-be-rich-ask-the-people-who-manage-billionaires-money>).

Harvey, D. 2001. *Spaces of Capital: Towards a Critical Geography*. London & New York: Routledge.

Healy, Kieran. 2000. “Embedded Altruism: Blood Collection Regimes and the European Union’s Donor Population.” *American Journal of Sociology* 105(6):1633–57. Retrieved (<http://www.journals.uchicago.edu/doi/10.1086/210468>).

Hutchins, E. 1995. *Cognition in the Wild*. Cambridge, MA: Harvard University Press.

Kazemi, Hossein B., Keith H. Black, and Donald R. Chambers. 2009. *Alternative Investments (CAIA Level II)*. Hoboken, New Jersey: John Wiley & Sons.

Knorr-Cetina, Karin. 2003. “From Pipes to Scopes: The Flow Architecture of Financial Markets.” *Distinktion* 7:7–23. Retrieved (<http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.335.6825&rep=rep1&type=pdf>).

Kopytoff, Igor. [1979] 1986. “The Cultural Biography of Things: Commoditization as Process.” Pp. 64–91 in *The Social Life of Things: Commodities in Cultural Perspective*, edited by A. Appadurai. Cambridge: Cambridge University Press.

Kritzman, Mark. 1999. “Toward Defining an Asset Class.” *The Journal of Alternative Investments* 2(1):79–82.

Laski, Harold J. [1936] 2015. *The Rise of European Liberalism: An Essay in Interpretation*. New York: Routledge.

Leins, Stefan. 2017. “Review: Appadurai, Arjun: Banking on Words. The Failure of Language in the Age of Derivative Finance.” *Anthropos* 112.

Lodish, Leonard M. and Carl F. Mela. 2007. “If Brands Are Built Over Years, Why Are They Managed Over Quarters?” *Harvard Business Review* 85(7/8, July-August):104–12.

Mackenzie, A. 2006. *Cutting Code: Software and Sociality*. New York: Peter Lang.

Mackenzie, Adrian, Richard Mills, Stuart Sharples, Matthew Fuller, and Andrew Goffey. 2015. “Digital Sociology in the Field of Devices.” *Routledge International Handbook of the Sociology of Art and Culture* 367–82.

Mackenzie, Donald. 2014. *A Sociology of Algorithms: High-Frequency Trading and the Shaping of Markets (First Draft)*.

MacKenzie, Donald. 2006. *An Engine, Not a Camera: How Financial Models Shape Markets*. Cambridge: MIT Press.

Marx, Karl. [1848] 2008. “*Capital*”: A New Abridgment. Oxford: Oxford University Press.

McCloskey, Deirdre N. 2010. *Bourgeois Dignity: Why Economics Can’t Explain the Modern World*. Chicago: University of Chicago Press.

Muniesa, F. 2011. “Is a Stock Exchange a Computer Solution? Explicitness, Algorithms and the Arizona Stock Exchange.” *International Journal of Actor-Network Theory and Technological Innovation* 3(1):1–15.

Padgett, John F. and Paul D. McLean. 2006. "Organizational Invention and Elite Transformation: The Birth of Partnership Systems in Renaissance Florence." *American Journal of Sociology* 111(5):1463–1568. Retrieved (<http://www.journals.uchicago.edu/doi/10.1086/498470>).

Palazon-Vidal, M. and E. Delgado-Ballester. 2005. "Sales Promotions Effects on Consumer Based Brand Equity." *International Journal of Market Research* 47(2):179–204.

Pardo-Guerra, Juan Pablo. 2013. "Making Markets: Engineers, Infrastructures and the Moral Technologies of Finance." *Sociology of Market Microstructure Workshop, New York Stock Exchange*. Retrieved (<https://pardonguerra.files.wordpress.com/2014/11/141124-making-markets2.pdf>).

Parsons, Talcott and Neil J. Smelser. 1956. *Economy and Society: A Study in the Integration of Economic and Social Theory*. Glencoe: Free Press.

Pasquinelli, M. 2007. "ICW – Immaterial Civil War – Prototypes of Conflict within Cognitive Capitalism." Retrieved (<http://eipcp.net/policies/cci/pasquinelli/en/print>).

Piketty, Thomas; [2013] 2014. *Capital in the 21st Century*. Cambridge, MA: Harvard University Press.

Polanyi, K. [1944] 2001. *The Great Transformation: The Political and Economic Origins of Our Time*. Boston: Beacon Press.

Porter, Michael E. 1980. *Competitive Strategy: Techniques for Analyzing Industries and Competitors*. edited by F. Press. New York.

Pryke, Michael. 2010. "Money's Eyes: The Visual Preparation of Financial Markets." *Economy and Society* 39(4):427–59.

Rangaswamy, Arvind, Raymond R. Burke, and Terence Oliva. 1993. "Brand Equity and the Extendibility of Brand Names." *International Journal of Research in Marketing* 10:61–75.

Rao, Hayagreeva, Henrich R. Greve, and Gerald F. Davis. 2001. "Fool's Gold: Social Proof in the Initiation and Abandonment of Coverage by Wall Street Analysts." *Administrative Science Quarterly* 46(3):502–26. Retrieved (<http://www.jstor.org/stable/3094873?origin=crossref>).

Ross, Andrew. 2004. *No-Collar: The Humane Workplace and Its Hidden Costs*. Philadelphia: Temple University Press.

Sandel, Michael J. 2012. *What Money Can't Buy: The Moral Limits of the Market*. New York: Farrar, Straus and Giroux.

Savage, M. 2015. *Social Class in the 21st Century*. London & New York: Penguin Books, Limited. Retrieved (<https://books.google.co.uk/books?id=V3BErgEACAAJ>).

Savage, Michael. 2010. *Identities and Social Change in Britain Since 1940: The Politics of Method*. Oxford: Clarendon.

Savage, Mike. 2009. "Against Epochalism: An Analysis of Conceptions of Change in British Sociology." *Cultural Sociology* 3(2):217–38.

Savage, Mike et al. 2013. "A New Model of Social Class? Findings from the BBC's Great British Class Survey Experiment." *Sociology* 47(2):219–50.

Simmel, G. [1907] 2011. *The Philosophy of Money*. London & New York: Routledge Classics.

Simon, Herbert A. 1971. "Designing Organizations for an Information-Rich World." in *Computers, Communication, and the Public Interest*, edited by M. Greenberger. Baltimore: John Hopkins Press.

Simon, Herbert A. 1956. "Rational Choice and the Structure of the Environment." *Psychological Review* 63(2):129–38.

Smelser, Neil J. and Richard Swedberg, eds. 1994. *Handbook of Economic Sociology*. Princeton: Princeton University Press.

Smith, Terry. 2012. *Agamben and Nancy on Contemporainety and Art*.

Somers, Margaret R. and Fred Block. 2005. "From Poverty to Perversity: Ideas, Markets, and Institutions over 200 Years of Welfare Debate." *American Sociological Review* 70(2):260–87. Retrieved (<http://journals.sagepub.com/doi/10.1177/000312240507000204>).

Streeck, Wolfgang. 2011. "The Crisis of Democratic Capitalism." *New Left Review* 71(Sep Oct):5–29.

Suchman, M. C. 1995. "Managing Legitimacy: Strategic and Institutional Approaches." *Academy of Management Review* 20(3):571–610. Retrieved (<http://amr.aom.org/cgi/doi/10.5465/AMR.1995.9508080331>).

Sullivan, Sian. n.d. "Making Nature Investable: From Legibility to Leverageability in Fabricating 'Nature' as 'Natural Capital.'" *Science & Technology Studies* XX.

Titmuss, R. 1970. *The Gift Relationship: From Human Blood to Social Policy*. New York: New Press.

Tversky, Amos and Daniel Kahneman. 1974. "Judgment under Uncertainty: Heuristics and Biases." *Science, New Series* 185(4157):1124–31. Retrieved (<http://www.jstor.org/stable/1738360>).

van Zanten, Agnes. 2013. "A Good Match: Appraising Worth and Estimating Quality in School Choice." in *Constructing Quality: The Classification of Goods in Markets*, edited by J. Beckert and C. Musselin. Oxford Scholarship Online.

Varga, Zsuzsanna. 2013. "Realizing Dreams, Proving Thrift: How Product Demonstrations Qualify Financial Objects and Subjects." in *Constructing Quality: The Classification of Goods in Markets*, edited by J. Beckert and C. Musselin. Oxford Scholarship Online.

Veblen, Thorstein. [1899] 1994. *The Theory of the Leisure Class*. New York: Dover.

Velthuis, Olav and Erica Coslor. 2012. "The Financialization of Art." *The Oxford Handbook of the Sociology of Finance* (February):471–87.

Wallerstein, I. 1988. "The Bourgeois (Ie) as Concept and Reality." *New Left Review* (February):91–106. Retrieved (<http://www.iwallerstein.com/wp-content/uploads/docs/NLRBOURG.PDF%5Cnpapers2://publication/uuid/A0876865-FA93-4ADB-A0E8-2B94936E4679>).

White, Harrison C. 1981. "Where Do Markets Come From?" *American Journal of Sociology* 87(3):517–47. Retrieved (<http://www.journals.uchicago.edu/doi/10.1086/227495>).

Williams, Robin and David Edge. 1996. "The Social Shaping of Technology." *ELSEVIER Research Policy* 25:865–99.

Williamson, Oliver E. 1975. *Williamson, Oliver E., Markets and Hierarchies: Analysis and Antitrust Implications: A Study in the Economics of Internal Organization*. The Free Press. Retrieved (http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1496220).

Zott, Christoph and Quy Nguyen Huy. 2007. "How Entrepreneurs Use Symbolic Management to Acquire Resources." *Administrative Science Quarterly* 52(1):70–105. Retrieved (<http://journals.sagepub.com/doi/10.2189/asqu.52.1.70>).

Quantification and Objectivity

Akyel, Dominic. 2013. "Qualification under Moral Constraints: The Funeral Purchase as a Problem of Valuation." in *Constructing Quality: The Classification of Goods in Markets*, edited by J. Beckert and C. Musselin. Oxford Scholarship Online.

Arnold, P. J. 1998. "The Limits of Postmodernism in Accounting History: The Decatur Experience." *Accounting, Organizations and Society* 23(7):665–84. Retrieved (<http://linkinghub.elsevier.com/retrieve/pii/S0361368297000214>).

Beckert, Jens and Christine Musselin. 2013. "Introduction." in *Constructing Quality: The Classification of Goods in Markets*, edited by J. Beckert and C. Musselin. Oxford Scholarship Online.

Bogdanova, Elena. 2013. "Account of the Past: Mechanisms of Quality Construction in the Market for Antiques." in *Constructing Quality: The Classification of Goods in Markets*, edited by J. Beckert and C. Musselin. Oxford Scholarship Online.

Burchell, Stuart, Colin Clubb, Anthony Hopwood, John Hughes, and Janine Nahapiet. 1980. "The Roles of Accounting in Organizations and Society." *Accounting, Organizations and Society* 5(1):5–27.

Callon, Michel and Fabian Muniesa. 2005. "Peripheral Vision." *Organization Studies* 26(8):1229–50. Retrieved (<http://journals.sagepub.com/doi/10.1177/0170840605056393>).

Cooper, David J. and Michael J. Sherer. 1984. "The Value of Corporate Accounting Reports: Arguments for a Political Economy of Accounting." *Accounting, Organizations and Society* 9(3–4):207–32.

Daston, Lorraine. 1992. "Objectivity and the Escape from Perspective." *Social Studies of Science* 22(4):597–618. Retrieved (<http://journals.sagepub.com/doi/10.1177/030631292022004002>).

Dubuisson-Quellier, Sophie. 2013. "From Qualities to Value: Demand Shaping and Market Control in Mass Consumption Markets." in *Constructing Quality: The Classification of Goods in Markets*, edited by J. Beckert and C. Musselin. Oxford Scholarship Online.

Espeland, Wendy N. and Mitchell L. Stevens. 2007. "Rankings and Reactivity: How Public Measures Recreate Social Worlds." *Annual Review of Sociology* 113:1–40.

Espeland, Wendy Nelson and Mitchell L. Stevens. 2008. "A Sociology of Quantification." *European Journal of Sociology* 49(3):401–36. Retrieved (http://www.journals.cambridge.org/abstract_S0003975609000150).

Espeland, Wendy Nelson and Mitchell L. Stevens. 1998. "Commensuration as a Social Process." *Annual Review of Sociology* 24(1):313–43. Retrieved (<http://www.annualreviews.org/doi/10.1146/annurev.soc.24.1.313>).

Foucault, Michel. 2002. "The Subject and Power (Trans. Hurley, R. & Others)." Pp. 326–48 in *Essential Works of Foucault, 1954–1984, Volume Three: Power*, edited by J. D. Faubion. New York: The New Press.

Fourcade, Marion. 2007. "Theories of Markets and Theories of Society." *American Behavioral Scientist* 50(8):1015–34. Retrieved (<http://journals.sagepub.com/doi/10.1177/0002764207299351>).

Fourcade, Marion. 2011. "Cents and Sensibility: Economic Valuation and the Nature of 'Nature.'" *American Journal of Sociology* 116(6):1721–77. Retrieved (<http://www.journals.uchicago.edu/doi/10.1086/659640>).

Harman, Graham. 2009. *Prince of Networks: Bruno Latour and Metaphysics*. Melbourne: re.press.

Hoskin, Keith and Richard Macve. 1994. "From Inquisition to Accounting: New Apparatuses of Knowledge-Power." Pp. 74–97 in *Accounting as Social and Institutional Practice*, edited by A. G. Hopwood and P. Miler. Cambridge: Cambridge University Press.

Hoskin, Keith and Richard Macve. 1994. "Writing, Examining, Disciplining: The Genesis of Accounting's Modern Power." *Accounting as a Social and Institutional Practice* 67–97.

Jeacle, Ingrid and Chris Carter. 2011. "In TripAdvisor We Trust: Rankings, Calculative Regimes and Abstract Systems." *Accounting, Organizations and Society* 36(4–5):293–309. Retrieved (<http://dx.doi.org/10.1016/j.aos.2011.04.002>).

Kukla, Rebecca. 2008. "Naturalizing Objectivity." *Perspectives on Science* 16(3):285–302. Retrieved (<http://www.mitpressjournals.org/doi/abs/10.1162/posc.2008.16.3.285>).

Levin, Peter. 2008. "Culture and Markets: How Economic Sociology Conceptualizes Culture." *Annals of the American Academy of Political and Social Science* 619:114–29. Retrieved (<http://journals.sagepub.com/doi/10.1177/0002716208319904>).

Leyshon, Andrew and Nigel Thrift. 1999. "Lists Come Alive: Eletronic Systems of Knowledge and the Rise of Credit-Scoring in Retail Banking." *Economy and Society* 28(3):434–66.

MacKenzie, Donald. 2006. *An Engine, Not a Camera: How Financial Models Shape Markets*. Cambridge: MIT Press.

March, J. G. and Herbert A. Simon. 1958. *Organizations*. New York: Wiley. Retrieved (<http://doi.apa.org/psycinfo/1958-15040-000>).

McKernan, John Francis. 2007. "Objectivity in Accounting." *Accounting, Organizations and Society* 32:155–80.

Mikes, Anette. 2009. "Risk Management and Calculative Cultures." *Management Accounting Research* 20:18–40.

Miller, Peter. 1998. "The Margins of Accounting." *The Sociological Review* 46(S1):174–93.

Miller, Peter. 1994. "Accounting as Social and Institutional Practice: An Introduction." *Accounting as Social and Institutional Practice* 1–39. Retrieved (<http://www.jstor.org/stable/2076997?origin=crossref>).

Miller, Peter and Christopher Napier. 1993. "Genealogies of Calculation." *Accounting, Organizations and Society* 18(7–8):631–47.

Miller, Peter and Ted O'Leary. 1987. "Accounting and the Construction of the Governable Person." *Accounting, Organizations and Society* 12(3):235–65.

Muniesa, Fabian. 2007. "Market Technologies and the Pragmatics of Prices." *Economy and Society* 36(3):377–95.

Muniesa, Fabian. 2011. "A Flank Movement in the Understanding of Valuation." *Sociological Review* 59(SUPPL. 2):24–38.

Muniesa, Fabian, Yuval Millo, and Michel Callon. 2007. "An Introduction to Market Devices." *Sociological Review* 55(Suppl. 2):1–12.

Prainsack, Barbara. 2008. "Book Review: Rose's The Politics of Life Itself: Biomedicine, Power and Subjectivity in the Twenty-First Century." *The British Journal of Sociology* 59(4):818–19.

Samiolo, Rita. 2012. "Commissuration and Styles of Reasoning: Venice, Cost-Benefit, and the Defence of Place." *Accounting, Organizations and Society* 37:382–402. Retrieved (<http://dx.doi.org/10.1016/j.aos.2012.04.001>).

Sauder, Michael and Wendy Nelson Espeland. 2009. "The Discipline of Rankings: Tight Coupling and Organizational Change." *American Sociological Review* 74:63–82. Retrieved (<http://journals.sagepub.com/doi/10.1177/000312240907400104>).

Smith, Charles W. 2007. "Markets as Definitional Practices." *The Canadian Journal of Sociology / Cahiers Canadiens de Sociologie* 32(1):1–39.

Stark, D. 2000. "For a Sociology of Worth." *Working Paper Series (Center on Organizational Innovation, NY: Columbia University)*. Retrieved (http://www.coi.columbia.edu/pdf/stark_fsw.pdf).

Talmud, Ilan. 2013. "Economic Sociology." *Sociopedia.isa* 1–15.

Vosselman, Ed. 2014. "The 'Performativity Thesis' and Its Critics: Towards a Relational Ontology of Management Accounting." *Accounting and Business Research* 44(2):181–203.

Zelizer, V. 2001. "Circuits of Commerce." Pp. 122–44 in *Self, social structure, and beliefs: explorations in sociology*, edited by J. Alexander, G. T. Marx, and C. Williams. Retrieved (<http://books.google.com/books?hl=en&lr=&id=tCOIoAGnz54C&oi=fnd&pg=PA122&dq=zelizer+r+circuits+within+commerce&ots=gAAFIIs29NW&sig=0bo3SkVHVwa9v0h4ZGuZJT922zc>).

Zelizer, V. A. 1979. *Morals and Markets: The Development of Life Insurance in the United States*. New York: Columbia University Press.

Zelizer, Viviana A. 1978. "Human Values and the Market: The Case of Life Insurance and Death in 19th-Century America." *American Journal of Sociology* 84(3):591–610. Retrieved (<http://www.journals.uchicago.edu/doi/10.1086/226828>).

Methods

Bakhtin, M. M. [1984] 2004. "The Problem of Speech Genres." Pp. 60–102 in *Speech Genres and Other Late Essays*. Texas: University of Texas Press.

Burawoy, Michael. 1991. "Extended Case Method." Pp. 271–300 in *Ethnography unbound: power and resistance in the modern metropolis*. Berkeley, LA: University of California Press.

Fairclough, N. L. n.d. "Language and Power." in *1989*. London: Longman.

Fairclough, Normal L. and Ruth Wodak. 1997. "Critical Discourse Analysis." Pp. 258–84 in *Discourse Studies, A Multidisciplinary Introduction Vol. 2, Discourse as Social Interaction*, edited by T. A. van Dijk. London: Sage.

Geertz, Clifford. 1973. "Thick Description: Toward an Interpretive Theory of Culture." in *The Interpretation of Cultures: Selected Essays*. New York: Basic Books.

Giddens, Anthony. 1976. *New Rules of Sociological Method: A Positive Critique of Interpretative Sociologies*. London: Hutchinson.

Glaser, B. G. and A. L. Strauss. 1967. *The Discovery of Grounded Theory: Strategies for Qualitative Research*. Retrieved (<http://lib.myilibrary.com/Open.aspx?id=620109&src=0>).

Knorr-Cetina, Karin. 1999. *Epistemic Cultures: How the Sciences Make Knowledge*. Cambridge, MA: Harvard University Press.

Kress, Gunther. 1985. *Linguistic Processes in Sociocultural Practice*. Victoria: Deakin University.

Kusenbach, Margarethe. 2005. "Across the Atlantic: Current Issues and Debates in US Ethnography." *Forum Qualitative Sozialforschung* 6(3).

Maingueneau, D. and J. Angermüller. 2007. "Discourse Analysis in France: A Conversation." *Forum Qualitative Sozialforschung* 8(2). Retrieved (<http://www.qualitative-research.net/index.php/fqs/article/view/254/559>).

Marcus, G. E. 1998. *Ethnography Through Thick and Thin*. Princeton: Princeton University Press.

Marcus, George E. 1998. "Chapter 3." Pp. 79–104 in *Ethnography through thick and thin*. Princeton: Princeton University Press.

McCloskey, D. 1988. "Thick and Thin Methodologies in the History of Economic Thought." Pp. 245–57 in *The Popperian Legacy in Economics*, edited by N. de Marchi.

Neff, Gina. 2005. "The Changing Place of Cultural Production: The Location of Social Networks in a Digital Media Industry." *The ANNALS of the American Academy of Political and Social Science* 597(1):134–52. Retrieved (<http://journals.sagepub.com/doi/10.1177/0002716204270505>).

Propp, V.IA. 1968. "Morphology of the Folk Tale." *Publications of the American Folklore Society Bibliographical and Special Series* (9):xxvi, 158 . Retrieved (<http://www.loc.gov/catdir/description/texas041/68065567.html%5Cnhttp://www.loc.gov/catdir/enhancements/fy0609/68065567-t.html>).

Rose, G. 2001. *Visual Methodologies: An Introduction to the Interpretation of Visual Materials*. London: Sage.

Tonkiss, Fran. 2004. "Analysing Text and Speech: Content and Discourse Analysis." Pp. 367–92 in *Researching Society and Culture*, edited by C. Seale. London: Sage.

van Dijk, Teun A. 2008. "Critical Discourse Analysis." in *The Handbook of Discourse Analysis*, edited by D. Schiffrin, D. Tannen, and H. E. Hamilton. New York: Wiley.

Visconti, L. M. 2010. "Ethnographic Case Study (ECS): Abductive Modelling of Ethnography and Improving the Relevance of Business Marketing Research." *Industrial Marketing Management* 39(1):25–39.

Whitehead, T. L. 2004. *What Is Ethnography? Methodological, Ontological, and Epistemological Attributes*.

Wodak, Ruth. 2006. "Dilemmas of Discourse (Analysis)." *Language in Society* 35(4):595–611. Retrieved (<http://ezproxy.library.uvic.ca/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2006-11717-006&site=ehost-live&scope=site%5Cn.r.wodak@lancaster.ac.uk>).

Reports

Alvaredo, Facundo, Lucas Chancel, Thomas Piketty, Emmanuel Saez, and Gabriel Zucman. 2018. *World Inequality Report (Executive Summary)*. World Inequality Lab.

Artprice.com. 2015. *The Art Market in 2015*. artprice.com.

Artprice.com. 2014. *The Art Market in 2014*. artprice.com.

Artprice.com. 2015. *The Contemporary Art Market Report*. artprice.com.

Artprice.com. 2013. *The Art Market in 2013*. artprice.com.

AXA Art Insurance. 2014. *Collecting in the Digital Age: International Collectors Survey*. AXA ART Insurance.

Baker, Suzanne Goldstein. 2010. *Tax Deferred Exchanges of Artwork: Maximizing Profits for Art Funds*. The Art Fund Association LLC.

Barclays. 2012. “Profit or Pleasure? Exploring the Motivations Behind Treasure Trends.” *Wealth Insights* 15.

Bocart, Fabian, Alexandra Labeyrie, and Ohana N’Kulufa. 2014. *Analysis of Holding Period for Young Artists since the 1980s*. Tutela Capital.

Bocart, Fabian, Alexandra Labeyrie, and Ohana N’Kulufa. 2014. *Contemporary Art Market in Bahrain*. Tutela Capital.

Bocart, Fabian, Alexandra Labeyrie, and Ohana N’Kulufa. 2014. *Léon Spilliaert: As A Safe Haven*. Tutela Capital.

Bocart, Fabian and Thomas Meinguet. n.d. *Case Study: Schwartz Art Fund*. Tutela Capital.

Bocart, Fabian, Ohana N’Kulufa, and Alexandra Labeyrie. 2014. *El Anatsui: A Contemporary Western African Artist*. Tutela Capital.

Capgemini. 2016. *World Wealth Report*. Capgemini.

Capgemini. 2017. *World Wealth Report*. Capgemini.

Capgemini. 2015. *United States Wealth Report*. Capgemini.

Capgemini. 2017. *Asia-Pacific Wealth Report*. Capgemini.

Capgemini and RBC Wealth Management. 2015. *World Wealth Report*. Capgemini and RBC Wealth Management.

Capgemini and RBC Wealth Management. 2012. *World Wealth Report*. Capgemini and RBC Wealth Management.

Dabla-Norris, Era, Kalpana Kochhar, Nujin Suphaphiphat, Frantisek Ricka, and Evridiki Tsounta. 2015. “Causes and Consequences of Income Inequality: A Global Perspective.” *IMF Staff Discussion Note* (15/13):1–39.

Deloitte. 2015. *Bringing Your Art Business to Luxembourg*. Deloitte Luxembourg. Retrieved (<https://www2.deloitte.com/lu/en/pages/art-finance/articles/bringing-art-business-luxembourg.html>).

Deloitte. 2014. *Seeing the Bigger Picture: Arts, Collectibles and Wealth Management*. Deloitte Luxembourg.

Deloitte and ArtTactic. 2017. *Art & Finance Report*. Deloitte and ArtTactic.

Deloitte and ArtTactic. 2011. *Art & Finance Report*. Deloitte & ArtTactic.

Deloitte and ArtTactic. 2013. *Art & Finance Report*. Deloitte & ArtTactic.

Deloitte and ArtTactic. 2016. *Art & Finance Report*. Deloitte & ArtTactic.

Deloitte and ArtTactic. 2014. *Art & Finance Report*. Deloitte & ArtTactic.

Haroon, Deborah. 2017. "An Economy for the 99%." *OXFAM Briefing Papers* (January). Retrieved (<https://oxf.am/2sozLKI>).

Haroon, Deborah, Ricardo Fuentes-Nieva, and Sophia Ayele. 2016. "An Economy for the 1%." *OXFAM Briefing Papers* 210(January). Retrieved (<https://policy-practice.oxfam.org.uk/publications/an-economy-for-the-1-how-privilege-and-power-in-the-economy-drive-extreme-inequ-592643>).

Hiscox and ArtTactic. 2017. *The Hiscox Online Art Trade Report*. Hiscox and ArtTactic.

Hiscox and ArtTactic. 2014. *The Hiscox Online Art Trade Report*. Hiscox and ArtTactic.

Hiscox and ArtTactic. 2013. *The Hiscox Online Art Trade Report*. Hiscox and ArtTactic.

Hiscox and ArtTactic. 2016. *The Hiscox Online Art Trade Report*. Hiscox and ArtTactic.

Hiscox and ArtTactic. 2015. *The Hiscox Online Art Trade Report*. Hiscox and ArtTactic.

Knight Frank. 2015. *The Wealth Report*. Knight Frank Research.

Knight Frank. 2015. *Wealth Report Update - Art Special: Luxury Investment Index*.

Knight Frank.

Liberman, Enrique and Javier Lumbreras. 2013. *Co-Investing in Art: What Every Art Fund Manager Needs to Know*. The Art Fund Association LLC.

Liberman, Enrique and Randall Willette. 2010. "Interview: Enrique Liberman, 'First Professional Body Dedicated to Art Investment.'" *Art Fund Tracker (Fine Art Wealth Management)* (7):1–5.

McAndrew, Clare. 2015. *TEFAF Art Market Report*. The European Fine Art Foundation (TEFAF) and Arts Economics.

McAndrew, Clare. 2014. *TEFAF Art Market Report*. The European Fine Art Foundation (TEFAF) and Arts Economics.

Museums Association. 2017. *Museums in the UK 2017*. Retrieved (<http://www.museumsassociation.org/download?id=1219029>).

Museums Association. 2015. *Cuts Survey 2015*. Retrieved (<https://www.museumsassociation.org/download?id=1155642>).

Picinati di Torcello, Adriano. 2010. *Why Should Art Be Considered as an Asset Class?* Deloitte Luxembourg.

Pownall, Rachel A. J. 2017. *TEFAF - Art Market Report: Online Focus*. The European Fine Art Foundation (TEFAF).

Pownall, Rachel A. J. 2017. *TEFAF Art Market Report*. The European Fine Art Foundation (TEFAF). Retrieved (www.ideebv.com).

Shorrocks, Anthony, James B. Davies, and Rodrigo Lluberas. 2017. *Global Wealth Report*. Credit Suisse.

Shorrocks, Anthony, James B. Davies, Rodrigo Lluberas, Markus Stierli, and Antonios Koutsoukis. 2014. *Global Wealth Report*. Credit Suisse.

Silber, Bohne and Tim Triplett. 2015. *A Decade of Arts Engagement: Findings From the Survey of Public Participation in the Arts, 2002–2012 (Report No. 58)*. NEA Research. Retrieved (<https://www.arts.gov/publications/decade-arts-engagement-findings-survey-public-participation-arts-2002-2012>).

Skate's. 2015. *The Global Art-Loans Report*. Skate's.

TEFAF. 2015. *Global Art Sales in 2014 Break All Known Records*. The European Fine Art Foundation (TEFAF).

UNESCO. 2016. *CULTURE: URBAN FUTURE - Global Report on Culture for Sustainable Urban Development*. Paris: UNESCO.

Wealth-X. 2015. *Decades of Wealth, Part II: The Next Ten Years in Wealth and Luxury*. Wealth-X.

Wealth-X. 2015. *Decades of Wealth, Part I: The Past Ten Years in Wealth and Luxury*. Wealth-X.

Wealth-X and UBS. 2014. *World Ultra Wealth Report*. Wealth-X and UBS.

World Bank Group. 2016. *Taking on Inequality: World Bank Group Poverty and Shared Prosperity 2016 Report*. Retrieved (<http://www.worldbank.org/en/publication/poverty-and-shared-prosperity>).

Podcasts

Arendt, David. 2014. "The Luxembourg Freeport - Presentation (9.30 - 10.15 Am)." in *Deloitte 7th Art & Finance Conference (18 Sep 2014)*. Luxembourg. Retrieved (<https://www.youtube.com/watch?v=zvTMdbq5w8s&index=8&list=PLBmvDbx0LXJtgazqQ-NyqBNy5PV2fashm>).

Baldauff, Olivier. 2011. "Opening Address (9.05 - 9.20 Am)." in *Deloitte 2011 Art & Finance Conference*. Miami Beach. Retrieved (<https://www.youtube.com/watch?v=qU48vgRx7UM&index=2&list=PLBmvDbx0LXJvPyI2FJziRIXd1sgd9Edun>).

Beard, Evan. 2015. "Introduction: Art: More than an Asset Class (13.25 - 13.30)." in *Deloitte 7th Annual Art & Finance Conference (5 Mar 2015)*. New York. Retrieved (https://www.youtube.com/watch?v=Cx_B1CkHL60).

Bellanca, Francesco. 2017. "Podcast: Francesco Bellanca – Feral Horses." *ArtTactic.com*, August 3. Retrieved December 27, 2017 (<https://arttactic.com/podcast/francesco-bellanca-feral-horses/>).

Birnie, Annabelle, Naomi Russell, Mike Betesh, Ryclef Rienstra, and Croisine Martin-Roland. 2013. "Art Philanthropy and the next Generation: Learning from Art Foundations (14.15 - 15.30)." in *Art & Finance Maastricht 2013 (Conference)*. Maastricht. Retrieved (<https://www.youtube.com/watch?v=S7Idr99ZkM8&list=PLBmvDbx0LXJvmwVzMMoMuqPKRCH3Tz-ks&index=6>).

Bocart, Fabian. 2013. "A New Online Platform for Art Business Professionals (9.15 - 10.00 Am)." in *Art & Finance Maastricht 2013 (Conference)*. Maastricht. Retrieved (<https://www.youtube.com/watch?v=IGOkc8uH3CM>).

Boloten, Jeffrey et al. 2011. "Emerging Markets Collectors Services Needs (14.45 - 15.45)." in *Deloitte 2011 Art & Finance Conference*. Miami Beach. Retrieved (<https://www.youtube.com/watch?v=COPWAQl1m-8&index=6&list=PLBmvDbx0LXJvPyI2FJziRIXd1sgd9Edun>).

Buckle-Wright, Oliver. 2014. "Luxembourg Freeport Stakeholders Presentations (14.00 - 15.00)." in *Deloitte 7th Art & Finance Conference (18 Sep 2014)*. Luxembourg. Retrieved

(<https://www.youtube.com/watch?v=3MCATtE1ZG4&list=PLBmvDbx0LXJtgazqQ-NyqBNy5PV2fashm&index=12>).

Bültmann, Ruth et al. 2012. “The Banking Sector – Ongoing Trends Regarding Art-Related Services.” in *Deloitte 5th Art & Finance Conference: The New Faces of Art Investment (15 Jun 2012)*. Basel. Retrieved (<https://www.youtube.com/watch?v=jksGaGUqqPA&list=PLBmvDbx0LXJtIlt9w3tCfbizYmeOCyDmt&index=3>).

Chevion, Dror. 2011. “New Business Model – Multilateral Trading Facility Dedicated to Artworks (9.30 - 10.30 Am).” in *Deloitte 2011 Art & Finance Conference*. Miami Beach. Retrieved (https://www.youtube.com/watch?v=87f9_A_x5j8).

Cloud, Julia, Doug Robb, and Paul Provost. 2015. “The Elkins Case: Tax & Estate Planning Implications (15.55 - 16.40).” in *Deloitte 7th Annual Art & Finance Conference (5 Mar 2015)*. New York. Retrieved (https://www.youtube.com/watch?v=Cx_B1CkHL60).

Cuno, James. 2013. “Closing Key-Note Speaker (17.15 - 17.55).” in *Art & Finance Maastricht 2013 (Conference)*. Maastricht. Retrieved (<https://www.youtube.com/watch?v=5xGyoCt5DE0&list=PLBmvDbx0LXJvmwVzMMoMuqPKRCH3Tz-ks&index=9>).

Cwilich, Sebastian et al. 2012. “Let’s Go Online – Latest Innovative Online Schemes in the Artworld (13.30 - 14.50).” in *Deloitte 5th Art & Finance Conference: The New Faces of Art Investment (15 Jun 2012)*. Basel. Retrieved (<https://www.youtube.com/watch?v=GXMaIdxY2Kk&list=PLBmvDbx0LXJtIlt9w3tCfbizYmeOCyDmt&index=5&pbjreload=10>).

de Pury, Simon. 2012. “Closing Key-Note Speaker (17.00 - 18.00).” in *Deloitte 5th Art & Finance Conference: The New Faces of Art Investment (15 Jun 2012)*. Basel. Retrieved (https://www.youtube.com/watch?v=ld5zZ_gyXo&list=PLBmvDbx0LXJtIlt9w3tCfbizYmeOCyDmt&index=8).

Deglas, Christian and Marc Valette. 2014. “Luxembourg Freeport - Tax and Customs Aspects.” in *Deloitte 7th Art & Finance Conference (18 Sep 2014)*. Luxembourg. Retrieved (<https://www.youtube.com/watch?v=LBYhC1nMmo4&list=PLBmvDbx0LXJtgazqQ-NyqBNy5PV2fashm&index=17>).

Findlay, Michael. 2017. “Podcast: Michael Findlay – Seeing Slowly: Looking at Modern Art.” *ArtTactic.com*, November 7. Retrieved December 27, 2017 (<https://arttactic.com/podcast/michael-findlay-seeing-slowly-looking-modern-art/>).

Freeman, Nate. 2017. “Nate Freeman – ARTnews.” *ArtTactic.com*, October 11. Retrieved December 27, 2017 (<https://arttactic.com/podcast/nate-freeman-artnews-3/>).

Frohlich, Johannes. 2017. “Podcast: Johannes Frohlich – Project Art.” *ArtTactic.com*, June 1. Retrieved December 27, 2017 (<https://arttactic.com/podcast/johannes-frohlich-project-art/>).

Gibbi, Francesco. 2017. “Podcast: Francesco Gibbi – Lot Art.” *ArtTactic.com*, August 18. Retrieved December 27, 2017 (<https://arttactic.com/podcast/francesco-gibbi-lot-art/>).

Gramagna, Pierre. 2014. “Opening Address (9.05 - 9.25 Am).” in *Deloitte 7th Art & Finance Conference (18 Sep 2014)*. Luxembourg. Retrieved (<https://www.youtube.com/watch?v=VcEmzyRQYWc&index=6&list=PLBmvDbx0LXJtgazqQ-NyqBNy5PV2fashm>).

Guillet de Monthoux, Pierre. 2014. "Closing Speech: 'Art as Value for Financial Businesses; Can Aesthetics Render Future Growth and Creativity?' (17.15 - 17.45)." in *Deloitte 7th Art & Finance Conference (18 Sep 2014)*. Luxembourg. Retrieved (<https://www.youtube.com/watch?v=-bJXGcwMg9M&list=PLBmvDbx0LXJtgazqQ-NyqBNy5PV2fashm&index=18>).

Hermann, Claude. 2014. "Luxembourg Freeport Stakeholders Presentations (14.00 - 15.00)." in *Deloitte 7th Art & Finance Conference (18 Sep 2014)*. Luxembourg. Retrieved (<https://www.youtube.com/watch?v=3MCATtE1ZG4&list=PLBmvDbx0LXJtgazqQ-NyqBNy5PV2fashm&index=12>).

Hoeltgen, T. 2013. "Concluding Remarks (17.55 - 18.00)." in *Art & Finance Maastricht 2013 (Conference)*. Maastricht. Retrieved (<https://www.youtube.com/watch?v=M389RyOADq4&index=10&list=PLBmvDbx0LXJvmwVzMMoMuqPKRCH3Tz-ks>).

Hoffman, Philip. 2013. "Philip Hoffman: How We Built the Largest Art Investment Firm | London Business School (04 Dec 2013)." in *London Business School TELL Series*.

Hunter, Tim. 2017. "Podcast: Tim Hunter – Falcon Fine Art." *ArtTactic.com*, August 10. Retrieved December 27, 2017 (<https://arttactic.com/podcast/tim-hunter-falcon-fine-art/>).

Kazakina, Katya. 2017. "Podcast: Katya Kazakina - Bloomberg News." *ArtTactic.com*, November 22. Retrieved December 27, 2017 (<https://arttactic.com/podcast/katya-kazakina-bloomberg-news-7/>).

Knox, James et al. 2011. "Museums Funding Issues (10.30 - 12.00)." in *Deloitte 2011 Art & Finance Conference*. Miami Beach. Retrieved (https://www2.deloitte.com/content/dam/Deloitte/lu/Documents/financial-services/artandfinance/lu_artfinanceagenda_02122011.pdf).

Kräussl, Roman. 2014. "Luxembourg Freeport Stakeholders Presentations (14.00 - 15.00)." in *Deloitte 7th Art & Finance Conference (18 Sep 2014)*. Luxembourg. Retrieved (<https://www.youtube.com/watch?v=3MCATtE1ZG4&list=PLBmvDbx0LXJtgazqQ-NyqBNy5PV2fashm&index=12>).

Kräussl, Roman, Henning zur Hausen, Johan Vanneste, Laurent Jossart, and Daniel Liebermann. 2014. "Luxembourg Freeport Ecosystem at the Luxembourg Airport: An International Hub for Valuable Assets (10.15 - 11.00 Am)." in *Deloitte 7th Art & Finance Conference (18 Sep 2014)*. Luxembourg. Retrieved (<https://www.youtube.com/watch?v=RIYK-FkDPyY&list=PLBmvDbx0LXJtgazqQ-NyqBNy5PV2fashm&index=9>).

Krens, Thomas. 2016. "The Power of Political Art (15 June 2016, 12.00)." in *16th IPS & Herzliya Conference*. Herzliya. Retrieved (<https://www.youtube.com/watch?v=w-50X4jxwW4>).

Layer, Elisabeth. 2012. "Art Funds – Auditing Process Pertaining to Art Funds (14.50 - 15.10)." in *Deloitte 5th Art & Finance Conference: The New Faces of Art Investment (15 Jun 2012)*. Basel. Retrieved (https://www.youtube.com/watch?v=u_JI103ZtRE&index=6&list=PLBmvDbx0LXJtIlt9w3tCfbizYmeOCyDmt).

Lever, Daniel. 2017. "Podcast: Daniel Lever – ArtRunners." *ArtTactic.com*, October 4. Retrieved December 27, 2017 (<https://arttactic.com/podcast/daniel-lever-artrunners/>).

Lewis, Ben. 2016. "The Banker's Guide to Art."

Loans, A. R. T. 2016. "Artelligence Podcast : Paul Becker of Art Money." 1–6.

Lorenz, Pierre. 2013. “Opening Address (9.05 - 9.15 Am).” in *Art & Finance Maastricht 2013 (Conference)*. Maastricht. Retrieved (<https://www.youtube.com/watch?v=ySG4dfYa27A&list=PLBmvDbx0LXJvmwVzMMoMuqPKRCH3Tz-ks&index=2>).

Luigi, Cortellessa et al. 2012. “Fakes and Forgeries - Protective Measures When Investing in Art (10.45 Am - 12.00 Pm).” in *Deloitte 5th Art & Finance Conference: The New Faces of Art Investment (15 Jun 2012)*. Basel. Retrieved (<https://www.youtube.com/watch?v=kL9ciRBwYXI&list=PLBmvDbx0LXJtIlt9w3tCfbizYmeOCyDmt&index=4>).

Lumbreras, Javier. 2017. “Podcast: Javier Lumbreras – Artemundi.” *ArtTactic.com*, January 13. Retrieved December 27, 2017 (<https://arttactic.com/podcast/javier-lumbreras-artemundi/>).

Mackel, Nicolas, Francois Pauly, Dietrich von Frank, Boris Liedtke, and Matthew Valencia. 2014. “The Luxembourg Freeport and the Luxembourg Financial Sector: How Can They Interact? (11.30 - 12.30).” in *Deloitte 7th Art & Finance Conference (18 Sep 2014)*. Luxembourg. Retrieved (<https://www.youtube.com/watch?v=IkmaCotxSTE&index=10&list=PLBmvDbx0LXJtgazqQ-NyqBNy5PV2fashm>).

Magness-Gardner, Bonnie et al. 2015. “Art Market Risk Mitigation Strategies (16.40 - 17.25).” in *Deloitte 7th Annual Art & Finance Conference (5 Mar 2015)*. New York. Retrieved (https://www.youtube.com/watch?v=Cx_B1CkHL60).

Mestat, Alain. 2014. “Luxembourg Freeport Stakeholders Presentations (14.00 - 15.00).” in *Deloitte 7th Art & Finance Conference (18 Sep 2014)*. Luxembourg. Retrieved (<https://www.youtube.com/watch?v=DCjXjFgz4G8&index=13&list=PLBmvDbx0LXJtgazqQ-NyqBNy5PV2fashm>).

Moeller, Karline and Josie Hines. 2017. “Podcast: Karline Moeller and Josie Hines – Art Frankly.” *ArtTactic.com*, March 22. Retrieved December 27, 2017 (<https://arttactic.com/podcast/karline-moeller-joseph-hines-art-frankly/>).

Moser, Ariane and Frank Morey. 2017. “Podcast: Ariane Moser and Frank Morey – The Art Due Diligence Group.” *ArtTactic.com*, June 15. Retrieved December 27, 2017 (<https://arttactic.com/podcast/ariane-moser-frank-morey-art-due-diligence-group/>).

Petterson, Anders et al. 2011. “New Art Investment Developments - Index Methodologies and Market Measurement.” in *Deloitte 2011 Art & Finance Conference*. Miami Beach. Retrieved (https://www.youtube.com/watch?v=_ej70BCjUZM&index=8&list=PLBmvDbx0LXJvPyI2FJziRIXd1sgd9Edun).

Phillips, Gerard. 2012. “Opening Address (9.10 - 9.20 Am).” in *Deloitte 5th Art & Finance Conference: The New Faces of Art Investment (15 Jun 2012)*. Basel. Retrieved (<https://www.youtube.com/watch?v=woWP-CBzI2k&index=2&list=PLBmvDbx0LXJtIlt9w3tCfbizYmeOCyDmt>).

Picinati di Torcello, Adriano. 2012. “Introduction (9.20 - 9.30 Am).” in *Deloitte 5th Art & Finance Conference: The New Faces of Art Investment (15 Jun 2012)*. Basel. Retrieved (<https://www.youtube.com/watch?v=jksGaGUqqPA&list=PLBmvDbx0LXJtIlt9w3tCfbizYmeOCyDmt&index=3>).

Picinati di Torcello, Adriano and Anders Petterson. 2014. “Art & Finance Report 2014 – Learning from the Results (15.00 - 15.45).” in *Deloitte 7th Art & Finance Conference (18 Sep 2014)*. Luxembourg. Retrieved (<https://www.youtube.com/watch?v=sHy6ZSmpWyQ&index=16&list=PLBmvDbx0LXJtgazqQ-NyqBNy5PV2fashm>).

Picinati di Torcello, Adriano and Anders Petterson. 2013. “Deloitte / ArtTactic Art & Finance Report 2013 – Learning from the Results (16.45 - 17.15).” in *Art & Finance Maastricht 2013 (Conference)*. Maastricht. Retrieved (<https://www.youtube.com/watch?v=x1cTDoHlzHI&index=8&list=PLBmvDbx0LXJvmwVzMM-oMuqPKRCH3Tz-ks>).

Pogrebin, Robin. 2017. “Podcast: Robin Pogrebin – The New York Times.” *ArtTactic.com*, June 28. Retrieved December 27, 2017 (<https://arttactic.com/podcast/robin-pogrebin-new-york-times-2/>).

Pownall, Rachel. 2017. “Podcast: Rachel Pownall – TEFAF.” *ArtTactic.com*, March 27. Retrieved December 27, 2017 (<https://arttactic.com/podcast/rachel-pownall-tefaf>).

Pownall, Rachel, Dan Scott, Arnoud Zevering, Jeremy Eckstein, and Greg B. Davies. 2013. “Silver Wine Art Gold (SWAG) Based Portfolio Management – Realizing Investment Potential out of Your SWAG Assets (10.00 - 11.00 Am).” in *Art & Finance Maastricht 2013 (Conference)*. Maastricht. Retrieved (<https://www.youtube.com/watch?v=kw7xkn6a5qY&index=4&list=PLBmvDbx0LXJvmwVzMM-oMuqPKRCH3Tz-ks>).

Real, Helena. 2017. “Podcast: Helena Real – .ART Registry.” *ArtTactic.com*, October 20. Retrieved December 27, 2017 (<https://arttactic.com/podcast/helena-real-art-registry/>).

Rennie, Bob. 2015. “Key Note Address: Should You Collect with Your Eye or Your Ear? (17.25 - 17.55).” in *Deloitte 7th Annual Art & Finance Conference (5 Mar 2015)*. New York. Retrieved (https://www.youtube.com/watch?v=Cx_B1CkHL60).

Robertson, Iain et al. 2011. “Corporate Collections Tangible and Intangible Benefits (13.45 - 14.45).” in *Deloitte 2011 Art & Finance Conference*. Miami Beach. Retrieved (<https://www.youtube.com/watch?v=xJEDebwcCPo&list=PLBmvDbx0LXJvPyI2FJziRIXd1sgd9Edun&index=5>).

Robertson, Iain and Serge Tiroche. 2012. “China, N°1 Art Market – How Will China Impact the Emergence of Art as an Asset Class? (15.10 - 15.50).” in *Deloitte 5th Art & Finance Conference: The New Faces of Art Investment (15 Jun 2012)*. Basel. Retrieved (<https://www.youtube.com/watch?v=0f2B92qu6hw&index=7&list=PLBmvDbx0LXJtIlt9w3tCfbizYmeOCyDmt>).

Schachter, Kenny. 2017. “Podcast: Kenny Schachter.” *ArtTactic.com*, May 19. Retrieved December 27, 2017 (<https://arttactic.com/podcast/kenny-schachter-7/>).

Schiff, Lisa. 2017. “Podcast: Lisa Schiff – SFA Advisory.” *ArtTactic.com*, May 11. Retrieved December 27, 2017 (<https://arttactic.com/podcast/lisa-schiff-sfa-advisory/>).

Shindell, Lawrence M. 2011. “Clear Legal Title - the Foundation to Market Liquidity and Value, a Key Consideration to the Development of Art as a Financial Asset (16.15 - 1.45).” in *Deloitte 2011 Art & Finance Conference*. Miami Beach. Retrieved (<https://www.youtube.com/watch?v=HNW81JEaz4&list=PLBmvDbx0LXJvPyI2FJziRIXd1sgd9Edun&index=7>).

Sinclair, Christopher Stuart. 2013. "Alternative Investment Fund Managers Directive – New Regulatory Framework for Art Investment Funds (15.30 - 16.15)." in *Art & Finance Maastricht 2013 (Conference)*. Maastricht. Retrieved (<https://www.youtube.com/watch?v=IbHDrU0MYkU&index=7&list=PLBmvDbx0LXJvmwVzM> MoMuqPKRCH3Tz-ks).

Tanasoica, Liviu and Balint Ferenczy. 2017. "Podcast: Liviu Tanasoica & Balint Ferenczy – Vastari." *ArtTactic.com*, July 13. Retrieved December 27, 2017 (<https://arttactic.com/podcast/liviu-tanasoica-balint-ferenczy-vastari/>).

Thompson, Don. 2017. "Podcast: Don Thompson – The Orange Balloon Dog: Bubbles, Turmoil and Avarice in the Contemporary Art Market." *ArtTactic.com*, November 13. Retrieved December 27, 2017 (<https://arttactic.com/podcast/don-thompson-orange-balloon-dog-bubbles-turmoil-avarice-contemporary-art-market/>).

Tiroche, Serge. 2017. "Podcast: Serge Tiroche – Art Vantage." *ArtTactic.com*, March 14. Retrieved December 27, 2017 (<https://arttactic.com/podcast/serge-tiroche-art-vantage-2/>).

Vincent, Gauthier and Noah Horowitz. 2015. "Welcome (13.00 - 13.15)." in *Deloitte 7th Annual Art & Finance Conference (5 Mar 2015)*. New York. Retrieved (https://www.youtube.com/watch?v=Cx_B1CkHL60).

Viveros-Faune, Christian et al. 2015. "A Debate on the Financial Performance of Art (14.40 - 15.30)." in *Deloitte 7th Annual Art & Finance Conference (5 Mar 2015)*. New York. Retrieved (https://www.youtube.com/watch?v=Cx_B1CkHL60).

von Frank, Dietrich, Andy Augenblick, Ramsay Slugg, Kemp Stickney, and Jan Prasens. 2015. "The Evolution of Art in Private Banking and Wealth Management (13.30 - 14.25)." in *Deloitte 7th Annual Art & Finance Conference (5 Mar 2015)*. New York. Retrieved (https://www.youtube.com/watch?v=Cx_B1CkHL60).

von Frank, Dietrich, Philip Hoffman, Patrick van Maris, Michael Darriba, and James Willington. 2013. "Fragmentation of Players in Art & Finance – Common Denominators or Rivaling Agendas? (11.30 Am - 12.45 Pm)." in *Art & Finance Maastricht 2013 (Conference)*. Maastricht. Retrieved (<https://www.youtube.com/watch?v=mdurvDQRmPg&index=5&list=PLBmvDbx0LXJvmwVzM> MoMuqPKRCH3Tz-ks).

von Poblitz, Adam and Suzanne Gyorgy. 2015. "Art Lending Cases (14.25 - 14.40)." in *Deloitte 7th Annual Art & Finance Conference (5 Mar 2015)*. New York. Retrieved (https://www.youtube.com/watch?v=Cx_B1CkHL60).

Art Market Agency

Anon. 2016. *AMA Newsletter 244, April 25*. Art Media Agency.

Anon. 2017. *AMA Newsletter 269, January 6*. Art Media Agency.

Anon. 2016. *AMA Newsletter 245, May 2*. Art Media Agency.

Anon. 2017. *AMA Newsletter 270, January 13*. Art Media Agency.

Anon. 2016. *AMA Newsletter 247, May 17*. Art Media Agency.

Anon. 2017. *AMA Newsletter 272, January 27*. Art Media Agency.

Anon. 2016. *AMA Newsletter 263, November 11*. Art Media Agency.

Anon. 2016. *AMA Newsletter 234, January 28*. Art Media Agency.

Anon. 2016. *AMA Newsletter 264, November 18*. Art Media Agency.

Anon. 2015. *AMA Newsletter 199, April 23*. Art Media Agency.

Anon. 2016. *AMA Newsletter 262, November 8*. Art Media Agency.

Anon. 2016. *AMA Newsletter 233, January 21*. Art Media Agency.

Anon. 2016. *AMA Newsletter 267, December 9*. Art Media Agency.

Anon. 2016. *AMA Newsletter 243, April 16*. Art Media Agency.

Anon. 2016. *AMA Newsletter 257, September 30*. Art Media Agency.

Anon. 2016. *AMA Newsletter 268, 16 December*. Art Media Agency.

Anon. 2016. *AMA Newsletter 242, April 9*. Art Media Agency.

Anon. 2016. *AMA Newsletter 255, September 16*. Art Media Agency.

Anon. 2016. *AMA Newsletter 266, December 2*. Art Media Agency.

Anon. 2016. *AMA Newsletter 256, September 23*. Art Media Agency.

Anon. 2015. *AMA Newsletter 196, April 2*. Art Media Agency.

Anon. 2016. *AMA Newsletter 254, September 9*. Art Media Agency.

Anon. 2016. *AMA Newsletter 252, June 27*. Art Media Agency.

Anon. 2015. *AMA Newsletter 195, March 26*. Art Media Agency.

Anon. 2016. *AMA Newsletter 260, October 21*. Art Media Agency.

Anon. 2015. *AMA Newsletter 198, April 16*. Art Media Agency.

Anon. 2016. *AMA Newsletter 261, October 28*. Art Media Agency.

Anon. 2016. *AMA Newsletter 258, October 7*. Art Media Agency.

Anon. 2015. *AMA Newsletter 197, April 9*. Art Media Agency.

Anon. 2016. *AMA Newsletter 259, October 19*. Art Media Agency.

Anon. 2016. *AMA Newsletter 240, June 6*. Art Media Agency.

Anon. 2016. *AMA Newsletter 248, May 27*. Art Media Agency.

Anon. 2014. *AMA Newsletter 178, November 13*. Art Media Agency.

Anon. 2015. *AMA Newsletter 194, March 19*. Art Media Agency.

Anon. 2014. *AMA Newsletter 168, September 4*. Art Media Agency.

Anon. 2014. *AMA Newsletter 177, November 6*. Art Media Agency.

Anon. 2016. *AMA Newsletter 250, June 12*. Art Media Agency.

Anon. 2017. *AMA Newsletter 271, January 20*. Art Media Agency.

Anon. 2016. *AMA Newsletter 246, May 11*. Art Media Agency.

ArtBanc

ArtBanc thought-piece. 2013. “Should the Buyer’s Premium Be Viewed as a Tax on Sellers?” *ArtBanc Market Intelligence* (5, September):18–21.

ArtBanc thought-piece. 2014. “Online Fine Art Sales Platforms: Separating Truth from Fiction.” *ArtBanc Market Intelligence* (6, January):19–22.

Barnes, Scott A. 2014. “Determining Fair Market Loan Rates on Fine Art.” *ArtBanc Market Intelligence* (8, September):29–24.

Barnes, Scott A. 2013. “Fairness Opinions in Fine Art Transactions.” *ArtBanc Market Intelligence* (3, March):8–10.

Binnington, Alan and Pearsonm Wayne. 2013. "Mixing Business with Pleasure: Safeguarding Your Art." *ArtBanc Intelligence* (4, June):5–7.

Capildeo, Rudy. 2015. "When Fools Rush In: Exercising Due Diligence When Buying Art." *ArtBanc Market Intelligence* (10, October):28–31.

Davies, Greg B. 2014. "Why Buy Art?" *ArtBanc Market Intelligence* (6, January):7–11.

Dewar, Lindsay. 2014. "Artists' Resale Royalties in the United States: An Update." *ArtBanc Market Intelligence* (8, September):35–38.

Eckstein, Jeremy. 2013. "The 2012-2013 Art Market Season – a Statistical Overview." *ArtBanc Market Intelligence* (5, September):8–11.

Eckstein, Jeremy. 2013. "Conventional Wisdom and Art Market Prices." *ArtBanc Intelligence* (4, June):11–13.

Eckstein, Jeremy and Ariane Moser. 2014. "Valuing Artist Resale Rights - Implications on Artist Estates and Beneficiaries." *ArtBanc Market Intelligence* (6, January):12–15.

Fairman, Darlene. 2014. "The True Cost of Authentication Litigation." *ArtBanc Market Intelligence* (6, January):16–18.

Forster, James. 2014. "ArtBanc Focus: Fine Art Valuations." *ArtBanc Market Intelligence* (8, September):6–9.

Frances, Jessica. 2015. "The Rising Value of Art Experts." *ArtBanc Market Intelligence* (9, January):10–13.

Goepel, David. 2015. "The Art of Succession: An E.U. Perspective." *ArtBanc Market Intelligence* (10, October):18–21.

Graham, Fiona. 2013. "Taxing the Art of Non-DOMs." *ArtBanc Intelligence* (3, March):5–7.

Hall, Lance S. 2015. "Discounted Art Results in a \$14-Million Estate Tax Refund." *ArtBanc Market Intelligence* (9, January):20–22.

Kallir, Jane. 2014. "The Investment Game." *ArtBanc Market Intelligence* (8, September):25–28.

Kallir, Jane. 2013. "Some Thought on the Current Art Market." *ArtBanc Market Intelligence* (5, September):5–7.

Lumbra, Javier. 2013. "Securitization of Art as an Investment Vehicle." *ArtBanc Intelligence* (3, March):16–19.

Lumbra, Javier. 2013. "What Is the True Reason Behind Christie's and Sotheby's Increase in Buyer's Premiums?" *ArtBanc Intelligence* (4, June):14–16.

McCoubrey, Stephen. 2014. "Public, Private, Corporate: Art and Company Culture in the 21st Century." *ArtBanc Market Intelligence* (8, September):21–24.

Moseley, Fiona. 2014. "Using Life Insurance to Preserve Family Art Collections: Opportunities and Limitations." *ArtBanc Market Intelligence* (7, April):10–13.

Nelson, Arthur Byng. 2015. "ArtBanc Focus: Art as a Trust Asset." *ArtBanc Market Intelligence* (9, January):14–19.

Petterson, Anders. 2013. "Understanding Economic Value in Contemporary Art." *ArtBanc Intelligence* (4, June):8–10.

Pollen, Susannah. 2014. "The Post-War and Contemporary Art Market." *ArtBanc Market Intelligence* (8, September):48–50.

Pollen, Susannah. 2013. "The Modern British Art Market." *ArtBanc Market Intelligence* (5, September):26–30.

Pollen, Susannah. 2014. "The Post-War Contemporary Art Market." *ArtBanc Market Intelligence* (6, January):32–33.

Pollen, Susannah. 2015. "The Modern British Art Market." *ArtBanc Market Intelligence* (9, January):36–37.

Rappa, Anna. 2013. "The Effect of Superstorm Sandy on Fine Art Insurance: A Practical Guide to Collectors , Advisors and Dealers." *ArtBanc Market Intelligence* (5, September):22–25.

Slugg, Ramsay H. 2015. "Legacy Planning for Your Art Collection: A U.S. Perspective." *ArtBanc Market Intelligence* (10, October):39–46.

Somerville, John. 2013. "The Old Master Market: A Take on the 2012-2013 Season." *ArtBanc Market Intelligence* (5, September):36–38.

Somerville, John. 2014. "The Old Master Art Market." *ArtBanc Market Intelligence* (8, September):52–53.

Somerville, John. 2015. "The Old MAster Art Market." *ArtBanc Market Intelligence* (9, January):40–42.

Wertimer, Thomas A. 2015. "Collection Management Systems and Services: To Protect and Serve." *ArtBanc Market Intelligence* (9, January):6–9.

Wertimer, Thomas A. and Scott A. Barnes. 2015. "The Results of the Auction System for Fine Art." *ArtBanc Market Intelligence* (10, October):08–17.

News Articles

Acton, Gemma. 2016. "Wanted: Death, Divorce or Bankruptcy Need to Jumpstart This Market." *CNBC*, August 12. Retrieved (<https://www.cnbc.com/2016/08/12/art-investing-death-divorce-or-bankruptcy-needed-to-jumpstart-this-market.html>).

Adam, Georgina. 2017. "Centre Pompidou to Pop up in Shanghai Shanghai." *The Art Newspaper*, February 21. Retrieved December 27, 2017 (<http://theartnewspaper.com/news/centre-pompidou-to-pop-up-in-shanghai>).

Adam, Georgina. 2015. "Salamé by the Sea." *Financial Times*, October 30. Retrieved (<http://www.ft.com/cms/s/0/f936eaa2-7d65-11e5-98fb-5a6d4728f74e.html>).

Adam, Georgina. 2011. "Hidden Persuaders." *Financial Times*, August 4. Retrieved (<https://www.ft.com/content/21874020-a71d-11e0-b6d4-00144feabdc0>).

Adam, Georgina. 2015. "Big-Money Trophies Obscure a Mixed Picture in the Art Market." *Financial Times2*, November 12. Retrieved (<https://www.ft.com/content/731538e4-8935-11e5-90de-f44762bf9896>).

Adam, Georgina. 2017. "How Transparent Is the Art Market?" *Financial Times*, April 28. Retrieved December 27, 2017 (<https://www.ft.com/content/77cba886-251b-11e7-a34a-538b4cb30025>).

Alberge, Dalya. 2015. "Is It a Canaletto or a Bellotto? Don't Ask an Art Historian...." *The Guardian*, November 15. Retrieved (<https://www.theguardian.com/education/2015/nov/15/art-historians-fail-spot-differences-paintings-canaletto-bellotto>).

Alden, William. 2015. "Art for Money's Sake." *The New York Times*, February 3. Retrieved (<https://www.nytimes.com/2015/02/08/magazine/art-for-moneys-sake.html>).

Arkell, Roland. 2017. "Art and Antiques Industry Reacts to Impending Closure of Christie's South Kensington." *The Art Newspaper*, March 13. Retrieved December 27, 2017 (<https://www.antiquestradegazette.com/news/2017/art-and-antiques-industry-reacts-to-impending-closure-of-christies-south-kensington/>).

Artpice.com. 2015. "Artpice: The All-Time Highest-Grossing Fine Art Auction Sets New World Records (Updated with the Results of Yesterday Evening's Auction)." *Artpice.com*, May 12. Retrieved (<https://www.artprice.com/artmarketinsight/artprice-the-all-time-highest-grossing-fine-art-auction-sets-new-world-records-updated-with-the-results-of-yesterday-evening-s-auction>).

Artpice.com. 2014. "Global Auction Market: Figures for First Half of 2014." *Artpice.com*, September 2. Retrieved (<https://www.artprice.com/artmarketinsight/global-auction-market-figures-for-first-half-of-2014>).

Aspden, Peter. 2015. "Art and the End of Capitalism." *Financial Times*, March 6. Retrieved (<http://www.ft.com/intl/cms/s/2/c705e7a8-c259-11e4-ad89-00144feab7de.html>).

Baker, Stephanie and Katya Kazakina. 2015. "Auction Wars: Christie's, Sotheby's, and The Art of Competition." *Bloomberg*, June 22. Retrieved (<https://www.bloomberg.com/news/articles/2015-06-21/auction-wars-christie-s-sotheby-s-and-the-art-of-competition>).

Baker, Stephanie and Hugo Miller. 2015. "The Billionaire, the Dealer, and the \$186 Million Rothko." *Bloomberg*, April 28. Retrieved (<http://www.bloomberg.com/news/articles/2015-04-27/a-186-million-rothko-pits-russian-tycoon-against-art-merchant>).

Beard, Evan and Ramsay H. Slugg. 2016. "Six Characteristics of NextGen Art Collectors." *WealthManagement.com*, June 27. Retrieved (<http://www.wealthmanagement.com/estate-planning/six-characteristics-nextgen-art-collectors>).

Beardsley, Ed. 2016. "Predictions for 2016: Partnering in the Online Era." *Blouin ArtInfo*, January 10. Retrieved (<http://www.blouinartinfo.com/news/story/1308872/predictions-for-2016-partnering-in-the-online-era>).

Beech, Mark. 2016. "Auctions Transformed as Millennials Buying Online Overtake Traditional Buyers, Barnebys Says." *Blouin ArtInfo*, September 23. Retrieved (<http://uk.blouinartinfo.com/news/story/1590309/auctions-transformed-as-millennials-buying-online-overtake>).

Benhamou-Huet, Judith. 2017. "Oscar Murillo: What Happens to a Young Artist Who Was the Subject Intense Speculation and Is Represented by David Zwirner?" Retrieved December 27, 2017 (<http://judithbenhamouhuet.com/report/oscar-murillo-what-happens-to-a-young-artist-who-was-the-subject-of-intense-speculation-and-is-represented-by-david-zwirner/>).

Bernstein, Jake. 2016. "The Art of Secrecy." *ICIJ - The International Consortium of Investigative Journalists - The Panama Papers*, April 7. Retrieved (<https://panamapapers.icij.org/20160407-art-secrecy-offshore.html>).

Bershidsky, Leonid. 2015. "Today's Art Market Hides Masterpieces." *Bloomberg*, May 1. Retrieved (<http://www.bloombergview.com/articles/2015-05-01/todays-art-market-hides-masterpieces>).

Bilefsky, Dan and Doreen Carvajal. 2014. “A Capital of the Arts Is Forced to Evolve.” *The New York Times*, October 27. Retrieved (<https://mobile.nytimes.com/2014/10/28/world/europe/a-capital-of-the-arts-is-forced-to-evolve.html?referrer=>).

Bilton, Nick. 2017. “Is Silicon Valley Destroying the Art Market?” *Vanity Fair*, August 25. Retrieved December 27, 2017 (<https://www.vanityfair.com/news/2017/08/is-silicon-valley-destroying-the-art-market>).

Bodick, Noelle. 2015. “A Fine Line: The Ins and Outs of Copyright Law.” *Blouin ArtInfo*, July 29. Retrieved (<http://www.blouinartinfo.com/news/story/1208105/a-fine-line-the-ins-and-outs-of-copyright-law>).

Bodick, Noelle. 2015. “Quoted: Collector Liu Yiqian on Knowing ‘Nothing’ About Art.” *Blouin ArtInfo*, December 9. Retrieved (<http://blogs.artinfo.com/artintheair/2015/12/09/quoted-collector-liu-yiqian-on-knowing-nothing-about-art/>).

Bodick, Noelle. 2015. “Sotheby’s Doubles Credit Line to \$1B, UK Bars Export of £13M Cézanne, and More.” *Blouin ArtInfo*, June 23.

Bodick, Noelle. 2015. “How Do You Sell Participatory Art in the Gallery?” *Blouin ArtInfo*, December 24. Retrieved (<http://www.blouinartinfo.com/news/story/1301652/how-do-you-sell-participatory-art-in-the-gallery>).

Borbet, Jason T. 2015. “Eight Questions To Ask An Artist About Their Market.” *Forbes*, June 19. Retrieved (<http://www.forbes.com/sites/jasonborbet/2015/06/19/eight-questions-to-ask-an-artist-about-their-market/2/>).

Boucher, Brian. 2017. “‘This Whole World Is Ridiculous’: Collector Bert Kreuk’s New Book ‘Art Flipper’ Spills the Market’s Dirty Secrets.” *ArtNet News*, April 28. Retrieved December 27, 2017 (<https://news.artnet.com/artworld/new-book-collector-bert-kreuk-936707>).

Bowley, Graham and Doreen Carvajal. 2016. “One of the World’s Greatest Art Collections Hides Behind This Fence.” *The New York Times*, May 28. Retrieved (<http://nyti.ms/25sqpKV>).

Breiding, James. 2016. “Veteran Dealer Robert Landau on How Art Basel Has Changed.” *Financial Times*, June 16. Retrieved (<https://www.ft.com/content/db76b3c0-33af-11e6-bda0-04585c31b153>).

Brown, Mark. 2016. “Peter Bazalgette Resigns as Arts Council England Chair.” *The Guardian*, January 15. Retrieved (<http://www.theguardian.com/culture/2016/jan/15/peter-bazalgette-resigns-arts-council-england-chair>).

Brown, Mark. 2016. “Reynolds Painting Accepted in Lieu of £4.7m Inheritance Tax.” *The Guardian*, August 10. Retrieved (<https://www.theguardian.com/artanddesign/2016/aug/10/reynolds-painting-accepted-by-nation-in-lieu-of-47m-inheritance-tax>).

Bryant, Eric. 2015. “Art Basel Director Noah Horowitz Takes the Long View.” *Blouin ArtInfo*, December 1. Retrieved (<http://www.blouinartinfo.com/news/story/1288556/art-basel-director-noah-horowitz-takes-the-long-view>).

Buffenstein, Alyssa. 2017. “Auctionata Files for Insolvency in Berlin.” *ArtNet News*, January 19. Retrieved (<https://news.artnet.com/artworld/auctionata-insolvency-proceedings-822965>).

Bui, Quoctrung. 2015. "The Fall And Rise Of U.S. Inequality, In 2 Graphs." *NPR*, February 11. Retrieved December 27, 2017 (<https://www.npr.org/sections/money/2015/02/11/384988128/the-fall-and-rise-of-u-s-inequality-in-2-graphs>).

Burgos, Jonathan and Netty Ismail. 2015. "New York Apartments, Art Top Gold as Stores of Wealth, Says Fink." *Bloomberg*, April 21. Retrieved (<http://www.bloomberg.com/news/articles/2015-04-21/new-york-apartments-art-top-gold-as-stores-of-wealth-says-fink>).

Burns, Charlotte. 2015. "How 2015 May Have Marked the End of the Art Market's Boom Years." *The Guardian*, December 29. Retrieved (<https://www.theguardian.com/artanddesign/2015/dec/29/how-2015-may-have-marked-the-end-of-the-art-markets-boom-years>).

Burns, Charlotte. 2015. "Art Market News Eric Fischl Leaving Mary Boone Gallery after 30 Years London's." *The Art Newspaper*, May 26, 3–5. Retrieved (<http://www.theartnewspaper.com/market/artmarketnews/%0D155972/>).

Byrne, John Aidan. 2015. "\$141M Sculpture May 'point' to Top." *New York Post*, June 14. Retrieved (<https://nypost.com/2015/06/14/141m-sculpture-may-point-to-top/>).

Caines, Matthew. 2017. "Bringing Artificial Intelligence to the Artworld." *The Telegraph*, January 20. Retrieved (<http://www.telegraph.co.uk/connect/small-business/artfinder-bringing-ai-to-the-artworld/>).

Capellazzo, Amy. 2016. "5 Lessons in Today's Art Market From a Sotheby's Advisor." *Vulture*, April 22. Retrieved January 1, 2018 (<http://www.vulture.com/2016/04/art-market-lessons-from-a-sothebys-advisor.html>).

Caradonio, Jackie. 2017. "The 8 Rules Every Art Collector Needs to Know." *Robb Report*, February 20. Retrieved December 27, 2017 (<http://robbreport.com/shelter/art-collectibles/8-rules-every-art-collector-needs-know-265402>).

Caradonio, Jackie. 2017. "Meet the Middle Eastern Monarchs Who Are Ruling the Artworld." *Robb Report*, July 23. Retrieved December 27, 2017 (<http://robbreport.com/shelter/art-collectibles/paul-cezanne-frank-gehry-zaha-hadid-paul-gauguin-2724276>).

Carpentier, Laurent. 2015. "Inside the Mind of the Museum-Goer." *The Guardian*, October 19. Retrieved (<http://www.theguardian.com/culture/2015/oct/19/science-art-exploring-mind-museum-goer>).

Carvajal, Doreen. 2016. "Trial Offers Rare View of Wildenstein Family and." *The New York Times*, September 20.

Carvajal, Doreen. 2015. "As Germany Tries to Hold On to Its Art, Some Works Drop From View." *The New York Times*, July 19. Retrieved (<http://nyti.ms/1JpyYFN>).

Charlesworth, J. J. 2015. "JJ Charlesworth On Why the Art Market Is a Bubble That's Not Going to Burst." *ArtNet News*, July 6. Retrieved (<https://news.artnet.com/opinion/art-and-money-super-rich-312541>).

Chen, Chris. 2015. "How Do You Paint 10,000 Paintings a Month?" *Instapainting Blog*, October 29. Retrieved (<https://www.instapainting.com/blog/company/2015/10/28/how-to-paint-10000-paintings/>).

Cheng, Selina. 2017. "Sotheby's Is Holding Its First-Ever Erotic Art Auction in Honor of Valentine's Day." *Quartz*, February 14. Retrieved December 27, 2017

(<https://qz.com/910641/sexy-valentines-day-art-goes-on-sale-at-sothebys-london-for-the-first-time-ever/>).

Chrisafis, Angelique. 2017. "Former Paris Stock Exchange to Be Reborn as Major New Art Museum." *The Guardian*, June 26. Retrieved December 26, 2017 (<https://www.theguardian.com/world/2017/jun/26/former-paris-stock-exchange-to-be-reborn-as-major-new-art-museum>).

Cigainero, Jake. 2015. "FIAC 2015 Opens With Strong Sales." *Blouin ArtInfo*, October 22. Retrieved (<http://www.blouinartinfo.com/news/story/1262819/fiac-2015-opens-with-strong-sales>).

Cigainero, Jake. 2015. "FIAC 2015 Draws Crowds on VIP Day." *Blouin ArtInfo*, October 22. Retrieved (<http://www.blouinartinfo.com/news/story/1262372/fiac-2015-draws-crowds-on-vip-day>).

Cochard, Catherine. 2015. "The Unstoppable Art Market: Is A Billion- Dollar Painting On Its Way?" *World Crunch*, May 17.

Cohen, Patricia. 2015. "Tax Status of Museums Questioned by Senators." *The New York Times*, November 29. Retrieved (<http://nyti.ms/1OoWQjL>).

Cole, Hannah. 2017. "Why Mid-Tier Galleries Leave New York." *Art F City*, July 20. Retrieved December 27, 2017 (<http://artfcity.com/2017/07/10/why-mid-tier-galleries-leave-new-york/>).

Cooper, Anneliese. 2015. "Danh Vo's Gallerist Slams Kreuk Court Decision." *Blouin ArtInfo*, July 7. Retrieved (<http://blogs.artinfo.com/artintheair/2015/07/07/danh-vos-gallerist-slams-kreuk-court-decision/>).

Cooper, Anneliese. 2014. "'We Are in Mania Mode': The Future of the Art Market at Blouin Creative Leadership Summit." *Blouin ArtInfo*, September 25. Retrieved (<http://www.blouinartinfo.com/news/story/1055382/we-are-in-mania-mode-the-future-of-the-art-market-at-blouin>).

Cooper, Anneliese. 2015. "Guggenheim Foundation Elects Two New Trustees." *Blouin ArtInfo*, March 26.

Cooper, Anneliese. 2015. "De Blasio Signs New Cultural Study Bill, Booming Auctions Rouse Debate, and More." *Blouin ArtInfo*, May 19.

Cooper, Anneliese. 2015. "Forget Gold, Stock Up on Contemporary Art and Apartments." *Blouin ArtInfo*, April 22. Retrieved (<http://blogs.artinfo.com/artintheair/2015/04/22/forget-gold-stock-up-on-contemporary-art-and-apartments/>).

Cooper, Anneliese. 2015. "\$500M Gift for Art Institute of Chicago, Germany Urges UN to Protect Iraqi Sites, and More." *Blouin ArtInfo*, April 22.

Cooper, Anneliese and Noelle Bodick. 2015. "Nepal Seeks \$2B for Restoration, New Collectors Flip Old Masters, and More." *Blouin ArtInfo*, June 2. Retrieved (<http://www.blouinartinfo.com/news/story/1170608/nepal-seeks-2b-for-restoration-new-collectors-flip-old>).

Cooper, Anneliese and Noelle Bodick. 2015. "Report Finds Majority of Museum Leaders Are White, Getty's New Bernini Raises Criminal Concerns, and More." *Blouin ArtInfo*, August 4. Retrieved (<http://www.blouinartinfo.com/news/story/1211469/report-finds-majority-of-museum-leaders-are-white-gettys-new>).

Cooper, Anneliese and Noelle Bodick. 2015. "ISIS Sells Antiquities on eBay, Royal Academy Seeks Charles I's Scattered Art, and More." *Blouin ArtInfo*, June 29. Retrieved (<http://www.blouinartinfo.com/news/story/1188499/isis-sells-antiquities-on-ebay-royal-academy-seeks-charles-is>).

Cooper, Anneliese and Anna Kats. 2015. "Chinese Artist Detained for Mocking President, New \$2.8M Fund for Persecuted Artists, and More." *Blouin ArtInfo*, May 29. Retrieved (<http://www.blouinartinfo.com/news/story/1168927/chinese-artist-detained-for-mocking-president-new-28m-fund>).

Corbett, Rachel. 2016. "Crowdfunding Offers Small Investors the Lure of Big." *The Art Newspaper*, January 18.

Crow, Kelly. 2017. "Newcomers Muscle Into Art Market's High End." *The Wall Street Journal*, July 19. Retrieved October 10, 2017 (<https://www.wsj.com/articles/newcomersmuscleintoartmarketshighend1500440400>).

Crow, Kelly. 2016. "A Widespread Chill in Art Sales." *The Wall Street Journal*, January 28. Retrieved (<https://www.wsj.com/articles/a-widespread-chill-in-art-sales-1454012388>).

Crow, Kelly. 2014. "The Race to Find New Art Collectors." *The Wall Street Journal*, August 7. Retrieved (<http://www.wsj.com/articles/sothebysandchristiesracetofindnewartcollectors1406831484>).

Crow, Kelly. 2016. "Sotheby's Cleans House." *The Wall Street Journal*, May 16. Retrieved January 22, 2018 (<https://www.wsj.com/articles/sothebys-cleans-house-1462483820>).

Crow, Kelly. 2016. "Sotheby's Buys Blue-Chip Art Advisory Firm." *The Wall Street Journal*, January 11. Retrieved (<http://www.wsj.com/articles/sothebysbuysbluechipartadvisoryfirm1452513943>).

Crow, Kelly. 2015. "Art-Auction Rivals Aim to Hammer Each Other." *The Wall Street Journal*, November 3. Retrieved (<http://www.wsj.com/articles/art-auction-rivals-aim-to-hammer-each-other-1446602763?alg=y>).

Culpan, Daniel. 2015. "Computer Algorithm Picks History's 'most Creative' Paintings." *Wired*, June 12. Retrieved (<http://www.wired.co.uk/article/art-algorithm>).

D'Angelo, Madelaine. 2016. "How Galleries Are Adapting to Changing Times in the Art Market." *Huffington Post*, October 19. Retrieved (https://www.huffingtonpost.com/madelaine-dangelo/how-galleries-are-adaptin_b_12561582.html).

D'Angelo, Madelaine. 2016. "How Mid-Market Galleries Are Shaking Up the Artworld." *Huffington Post*, December 10. Retrieved (https://www.huffingtonpost.com/madelaine-dangelo/how-mid-market-galleries_b_12456516.html).

Dafoe, Taylor. 2016. "Report From Detroit: Culture Lab 2016." *Blouin ArtInfo*, September 21. Retrieved (<http://www.blouinartinfo.com/news/story/1566328/report-from-detroit-culture-lab-2016>).

Dalley, Jan. 2017. "From Bilbao to Buenos Aires: Can Art Revitalise a City?" *Financial Times*, November 7. Retrieved December 27, 2017 (<https://www.ft.com/content/b98f675a-c3a2-11e7-b2bb-322b2cb39656>).

Danziger, Charles and Thomas Danziger. 2015. "Brothers in Law: When Conceptual Art Certificates of Authenticity Go Up in Smoke." *Blouin ArtInfo*, November 20. Retrieved (<http://www.blouinartinfo.com/news/story/1282175/brothers-in-law-when-conceptual-art-certificates-of>).

Davidoff Solomon, Steven. 2014. “A Truce at Sotheby’s After a Costly and Avoidable Battle.” *The New York Times*, May 5. Retrieved (<https://dealbook.nytimes.com/2014/05/05/a-truce-at-sothebys-after-a-costly-and-avoidable-battle/>).

Davis, Ben. 2013. “‘International Art English,’ the Joke That Forgot It Was Funny.” *Blouin ArtInfo*, June 6. Retrieved September 16, 2015 (<http://www.blouinartinfo.com/news/story/911210/international-art-english-the-joke-that-forgot-it-was-funny#>).

Davis, Ben. 2016. “How the Rich Are Hurting the Museums They Fund.” *The New York Times*, July 22. Retrieved (<http://nyti.ms/2a30XkN>).

Davis, Ben. 2015. “Art Flippers Unload Suicide Girls Version of Richard Prince Work.” *ArtNet News*, August 13. Retrieved (<https://news.artnet.com/market/art-flippers-suicide-girls-richard-prince-prints-324580>).

Davis, Ben. 2017. “Google Sets Out to Disrupt Curating With ‘Machine Learning.’” *ArtNet News*, January 14. Retrieved (<https://news.artnet.com/artworld/google-artificial-intelligence-812147>).

de la Merced, Michael J. 2015. “Online Auction House Aims to Give Big Houses a Run for Their Money: Paddle8’s Plans to Disrupt Auctions.” *The New York Times*, October 27. Retrieved (<https://www.nytimes.com/2015/10/28/business/dealbook/online-auction-house-aims-to-give-big-houses-a-run-for-their-money.html?mtrref=www.google.co.uk&gwh=63614076CE8A166EB29281E59A9DF9ED&gwt=pay>).

DeBruzzi, John R. 1980. “The Art Of Investing in Art.” *Orange Coast*, February, 76–77. Retrieved (https://books.google.co.uk/books?id=axIEAAAAMBAJ&lpg=PA76&ots=LT_2uu8IKG&dq=The%20Art%20Of%20Investing%20in%20Art%20debruzzi&pg=PA76#v=onepage&q=The%20Art%20Of%20Investing%20in%20Art%20debruzzi&f=false).

Deresiewicz, William. 2015. “The Death of the Artist—and the Birth of the Creative Entrepreneur.” *The Atlantic*. Retrieved (<http://www.theatlantic.com/magazine/archive/2015/01/the-death-of-the-artist-and-the-birth-of-the-creative-entrepreneur/383497/>).

Dizard, John. 2017. “Art Market Ripe for Disruption by Algorithms.” *Financial Times*, May 26. Retrieved December 27, 2017 (<https://www.ft.com/content/20ae62be-41ef-11e7-82b6-896b95f30f58>).

Dizard, John. 2016. “The Business of Lending against Art Has Never Been Better.” *Financial Times*, February 5. Retrieved (http://www.ft.com/cms/s/0/0d4a50f0cbff11e5a8efea66e967dd44.%0Dhtml?ftcamp=traffic/partner/feed_headline/us_yahoo/auddev#axzz3zWU0hKA2).

Dobrzynski, Judith H. 2015. “How Auction Houses Orchestrate Sales for Maximum Drama.” *The New York Times*, October 28. Retrieved (<https://www.nytimes.com/2015/11/01/arts/design/how-auction-houses-orchestrate-sales-for-maximum-drama.html>).

Dorment, Richard. 2015. “‘After 30 Years, I Look Back with Amazement.’” *The Telegraph*, June 23. Retrieved (<http://www.telegraph.co.uk/culture/art/11692238/Richard-Dorment-After-30-years-I-look-back-with-amazement.html>).

Douglas, Sarah. 2017. "A Recent History of Small and Mid-Size Galleries Closing [Updated]." *ARTnews*, June 27. Retrieved (<http://www.artnews.com/2017/06/27/a-recent-history-of-small-and-mid-size-gallery-closures/>).

Duray, Dan. 2017. "Is Instagram-Friendly Contemporary Art Killing the Market For Old Masters?" *WMagazine*, June 9. Retrieved December 27, 2017 (<https://www.wmagazine.com/story/classic-art-market-instagram>).

Duray, Dan. 2014. "Stefan Simchowitz vs. the Artworld." *Observer*, July 5. Retrieved (<http://observer.com/2014/05/stefan-simchowitz-vs-the-artworld/>).

Duray, Dan and Julia Halperin. 2016. "Scholarly Debate Will Be Stifled after Knoedler: Abstract Expressionism Experts Forced to Watch What They Write and Say." *The Art Newspaper*, March 4.

Edmund Ingham. 2015. "Say Hello To The Online Art Rental Market; Can It Make A Dent In A €50bn Industry?" *Forbes*, April 23, 1–5. Retrieved (<http://www.forbes.com/sites/edmundingham/2015/04/23/say-hello-to-the-online-art-rental-market-can-it-make-a-dent-in-a-50bn-industry/>).

Ekelund, Robert. 2015. "Why the Booming Contemporary Art Market Is Bad for Art Museums." *The Washington Post*, August 4. Retrieved (https://www.washingtonpost.com/posteverything/wp/2016/08/04/why-the-booming-contemporary-art-market-is-bad-for-art-museums/?utm_term=.e6d022b69aff).

Ellis-petersen, Hannah. 2017. "How the Artworld Airbrushed Female Artists from History." *The Guardian*, February 6. Retrieved December 27, 2017 (<https://www.theguardian.com/lifeandstyle/2017/feb/06/how-the-artworld-airbrushed-female-artists-from-history>).

Ellis-Petersen, Hannah. 2017. "British Museums and Art Galleries Hit by 1.4m Fall in Visitors." *The Guardian*, February 2. Retrieved (<https://www.theguardian.com/culture/2017/feb/02/british-museums-art-galleries-hit-by-2m-fall-visitors>).

Ellis-Petersen, Hannah. 2015. "Middle Class People Dominate Arts, Survey Finds." *The Guardian*, November 23. Retrieved (<http://www.theguardian.com/artanddesign/2015/nov/23/middle-class-people-dominate-arts-survey-finds>).

Ellis, Adrian. 2013. "Museums' Robust DNA." *The Art Newspaper / AEA Consulting*, December. Retrieved (https://aeaconsulting.com/insights/museums_robust_dna).

Ellis, Adrian. 2014. "All Those New Museums? Now, The Facts..." *The Art Newspaper / AEA Consulting*, November. Retrieved (https://aeaconsulting.com/insights/all_those_new_museums_now_the_facts).

Ellwood, Mark. 2016. "Forget the Loft: The Newest Trend in Luxury Real Estate Is Walls." *Bloomberg*, March 3. Retrieved (<https://www.bloomberg.com/news/articles/2016-03-03/forget-the-loft-the-newest-trend-in-luxury-real-estate-is-walls>).

Feldman, Jeff. 1982. "The Art Investment Picture." *Orange Coast*, June, 25–37. Retrieved (<https://books.google.co.uk/books?id=ORYEAAAAMBAJ&lpg=PA138&ots=3gMwbPUwLW&dq=orange+coast+magazine+june+1982&pg=PA26#v=onepage&q=orange+coast+magazine+june+1982&f=false>).

Ferro, Shane. 2015. "Why 'Investing' in Art Is a Terrible Idea." *Business Insider*, April 21. Retrieved (<http://uk.businessinsider.com/why-investing-in-art-is-a-terrible-idea-2015-4?r=US>).

Finkel, Jori. 2014. "The Story of the Original and Greatest Art Fund." *The Art Newspaper*, July 31. Retrieved (<http://ec2-79-125-124-178.eu-west-1.compute.amazonaws.com/articles/The-story-of-the-original-and-greatest-art-fund/33141>).

Finkel, Jori. 2007. "Museums Solicit Dealers' Largess." *The New York Times*, November 18. Retrieved January 1, 2018 (<http://www.nytimes.com/2007/11/18/arts/design/18fink.html>).

Fischl, Eric. 2014. "Mary Boone." *Interview Magazine*, October 22. Retrieved (<https://www.interviewmagazine.com/art/mary-boone>).

Fontevecchia, Agustino. 2014. "Christie's And Sotheby's Sold More Than \$1.78B-Worth Of Art In One Week." *Forbes*, November 13. Retrieved (<https://www.forbes.com/sites/afontevecchia/2014/11/13/christies-and-sothebys-sold-more-than-1-78b-worth-of-art-in-one-week/#ea2e0e022e7f>).

Forbes, Alexander. 2016. "The 10 Most Important Takeaways from the 2016 TEFAF Art Market Report." *Artsy*, March 11. Retrieved (<https://www.artsy.net/article/artsy-editorial-the-10-most-important-takeaways-from-the-2016-tefaf-art-market-report>).

Forbes, Alexander. 2015. "Three Art-Market Lessons to Learn from New York's Record-Breaking Spring Auctions." *Artsy*, May 22. Retrieved (<https://www.artsy.net/article/artsy-editorial-three-art-market-lessons-to-learn-from-new>).

Forrest, Nicholas. 2016. "Sotheby's to Launch Digital Hub for Creative Content." *Blouin ArtInfo*, August 8. Retrieved (<http://www.blouinartinfo.com/news/story/1479759/sothebys-to-launch-digital-hub-for-creative-content>).

Forrest, Nicholas. 2016. "Frédéric de Senarclens Launches New Online Art Marketplace." *Blouin ArtInfo*, August 21. Retrieved (<http://www.blouinartinfo.com/news/story/1493310/frederic-de-senarclens-launches-new-online-art-marketplace>).

Forrest, Nicholas. 2015. "Interview: Marcus Graf on Contemporary Istanbul 2015." *Blouin ArtInfo*, November 9. Retrieved (<http://www.blouinartinfo.com/news/story/1274456/interview-marcus-graf-on-contemporary-istanbul-2015>).

Forrest, Nicholas. 2015. "Interview: Cécile Schall, Founder of the Fotofever Photography Fair." *Blouin ArtInfo*, November 10. Retrieved (<http://www.blouinartinfo.com/news/story/1275511/interview-cecile-schall-founder-of-the-fotofever-photography>).

Forrest, Nicholas. 2015. "The 20 Most Expensive Artworks Sold at Auction in 2015." *Blouin ArtInfo*, December 22. Retrieved (<http://www.blouinartinfo.com/news/story/1301382/the-20-most-expensive-artworks-sold-at-auction-in-2015>).

Forrest, Nicholas. 2016. "2016 TEFAF Art Market Report Shows US Increase, Global Drop." *Blouin ArtInfo*, March 10.

Forrest, Nicholas. 2015. "Tate Sensorium Makes Tasting and Smelling Art a Reality." *Blouin ArtInfo*, August 11. Retrieved (<http://uk.blouinartinfo.com/news/story/1215939/tate-sensorium-makes-tasting-and-smelling-art-a-reality>).

Frank, Robert. 2015. "Art Scandal Threatens to Expose Mass Fraud in Global Art Market." *CNBC*, March 13, 11–14. Retrieved (<http://www.cnbc.com/2015/03/13/art-scandal-threatens-to-expose-mass-fraud-in-global-art-market.html>).

Frank, Robert. 2014. "Art Is a Bubble: Here's How to Short It." *CNBC*, April 3. Retrieved (<https://www.cnbc.com/2014/04/03/art-is-a-bubble-heres-how-to-short-it.html>).

Frank, Robert. 2015. "Here's How China Could Crash the Art Market." *CNBC*, July 30. Retrieved (<https://www.cnbc.com/2015/07/30/heres-how-china-could-crash-the-art-market.html>).

Freeman, Nate. 2017. "Sotheby's Raises Buyer's Premiums for Live Auctions, Does Away With Buyer's Premiums for Online Sales." *ArtNet News2*, August 22. Retrieved December 27, 2017 (<http://www.artnews.com/2017/08/22/sothebys-raises-buyers-premiums-for-live-auctions-does-away-with-buyers-premiums-for-online-sales/>).

Freeman, Nate. 2016. "House Arrest: How One Topsy-Turvy Season at Sotheby's Could Change the Auction World Forever." *ARTnews*, August 10. Retrieved (<http://www.artnews.com/2016/08/10/house-arrest-how-one-topsy-turvy-season-at-sothebys-could-change-the-auction-world-forever/>).

Freeman, Nate. 2016. "Lisa Cooley to Close Gallery After Eight Years on Lower East Side." *ARTnews*, August 28. Retrieved (<http://www.artnews.com/2016/08/28/lisa-cooley-to-close-gallery-after-eight-years-on-lower-east-side/>).

Furness, Hannah. 2016. "People Who Spend Millions on Art Are 'de Facto Crazy', Chair of National Gallery Says." *The Telegraph*, June 4. Retrieved (<http://www.telegraph.co.uk/news/2016/06/04/people-who-spend-millions-on-art-are-de-facto-crazy-chair-of-nat/>).

Gander, Kashmira. 2016. "Wydr: How the Tinder for Artists and Buyers Could Turn the Art Industry Upside down." *The Independent*, July 25. Retrieved (<http://www.independent.co.uk/arts-entertainment/wydr-how-the-tinder-for-artists-and-buyers-could-turn-the-art-industry-upside-down-a7151266.html>).

Gapper, John and Elizabeth Paton. 2014. "Auction Houses: Troubleshooters." *Financial Times*, December 5. Retrieved (<https://www.ft.com/content/dd5de9a2-7c7b-11e4-9a86-00144feabdc0>).

Gerlis, Melanie. 2017. "Beyond Buying: Alternative Ways to Collect Art." *Financial Times*, June 9. Retrieved December 27, 2017 (<https://www.ft.com/content/a399e06c-49cf-11e7-a3f4-c742b9791d43>).

Gerlis, Melanie. 2017. "Do the Prices at Auction Muddy Our Interpretation of Art?" *Apollo*, June 26. Retrieved December 27, 2017 (<https://www.apollo-magazine.com/do-the-prices-at-auction-muddy-our-interpretation-of-art/>).

Gerlis, Melanie. 2016. "The Art Market: Estate of the Arts The Art Market." *Financial Times*, September 30. Retrieved (<https://www.ft.com/content/5ec5137e-854b-11e6-8897-2359a58ac7a5>).

Gerlis, Melanie. 2016. "The Art Market: London Hosts Frieze and 1:54 African Art Fair The Art Market." *Financial Times*, October 7. Retrieved (<https://www.ft.com/content/9f08e606-8ba7-11e6-8cb7-e7ada1d123b1>).

Gerlis, Melanie. 2017. "The Art Market: Manhattan Dealer Moves with the Times." *Financial Times*, January 13. Retrieved (<https://www.ft.com/content/f6241a6a-d827-11e6-944b-e7eb37a6aa8e>).

Gerlis, Melanie. 2016. "The Price Is Right? Galleries Would 'rather Not Say.'" *The Art Newspaper*, January 7.

Gerlis, Melanie and Julia Halperin. 2016. "Why a Growing Number of Museum Veterans Are Crossing over to the Commercial Sector." *The Art Newspaper*, September 7.

Ghorabi, Hannah. 2015. "What Is 'Simco's Club,' Stefan Simchowitz's New Website?" *ARTnews*, May 19. Retrieved (<http://www.artnews.com/2015/05/19/what-is-simcos-club-stefan-simchowitzs-new-web-site/>).

Gibbs, Nick. 2017. "Rolls-Royce Taps Artworld to Raise Custom Game with New Phantom." *Automotive News*, July 27. Retrieved December 27, 2017 (<http://www.autonews.com/article/20170727/OEM03/170729767/rolls-royce-taps-artworld-to-raise-custom-game-with-new-phantom>).

Gilbert, Laura. 2017. "Lawsuit against Art Historian over Fake Rothko Settled out of Court." *The Art Newspaper*, April 11. Retrieved December 27, 2017 (<http://theartnewspaper.com/news/lawsuit-against-art-historian-over-fake-rothko-settled-out-of-court>).

Glazek, Christopher. 2014. "The Artworld's Patron Satan." *The New York Times Magazine*, December 30. Retrieved (http://www.nytimes.com/2015/01/04/magazine/the-artworlds-patron-satan.html?partner=rss&emc=rss&smid=tw-nytimes&_r=1).

Gleadell, Colin. 2017. "As Christie's Retreats, Bonhams and Phillips Seize Their Moment at London's June Contemporary Auctions." *ArtNet News*, June 29. Retrieved December 27, 2017 (<https://news.artnet.com/market/bonhams-phillips-contemporary-sale-june-2017-1010834>).

Gleadell, Colin. 2017. "Sleeping with the Enemy? Dealers and Galleries Work with Sotheby's to Shine Light on under-Recognised Artists." *The Telegraph*, June 13. Retrieved December 27, 2017 (<http://www.telegraph.co.uk/luxury/art/sleeping-enemy-dealers-galleries-work-sothebys-shine-light-under/>).

Gleadell, Colin. 2017. "The Problem with Selling Contemporary Art at Auction: The Artist Pension Trust Withdraws 18 Lots from Sotheby's." *The Telegraph*, April 18. Retrieved December 27, 2017 (<http://www.telegraph.co.uk/luxury/art/problem-selling-contemporary-art-auction-artist-pension-trust/>).

Gleadell, Colin. 2015. "Art Sales: The £95 Million Painting." *The Telegraph*, April 7. Retrieved (<http://www.telegraph.co.uk/luxury/art/66803/art-sales-the-95-million-painting.html>).

Gleadell, Colin. 2015. "Market News: Sotheby's Bares All." *The Telegraph*, November 17. Retrieved (<http://www.telegraph.co.uk/luxury/art/91309/market-news-sothebys-bares-all.html>).

Gleadell, Colin. 2006. "Art Sales: Charting Artists' Rise and Fall." *The Telegraph*, March 7. Retrieved (<http://www.telegraph.co.uk/culture/art/3650783/Art-sales-charting-artists-rise-and-fall.html>).

Gleadell, Colin. 2015. "Market News: The Modern Art Comeback." *The Telegraph*, November 3. Retrieved (<http://www.telegraph.co.uk/luxury/art/89884/marketnewsthemodernartcomeback.%0Dhtml>).

Gleason, Ma. 2014. "Art Fairs: Are They Eclipsing Art Museums?" *Huffington Post*, December 26. Retrieved (https://www.huffingtonpost.com/mat-gleason/art-fairs-are-they-eclips_b_6381472.html).

Goel, Vindu. 2015. "Purchasing Fine Art Is Increasingly Just a Click Away." *The New York Times*, October 28. Retrieved (<https://www.nytimes.com/2015/11/01/arts/design/purchasing-fine-art-is-increasingly-just-a-click-away.html>).

Goldstein, Andrew M. 2015. "Carlos Rivera on the Truth About Art Rank's Grand Data Play and His Newest Disruptive Business." *Artspace*, June 19. Retrieved (https://www.artspace.com/magazine/interviews_features/expert_eye/carlos-rivera-art-rank-interview-part-2-52930).

Goldstein, Andrew M. 2016. "LISTE Director Peter Bläuer on the Homogenizing Threat of the Art Market — and How to Combat It." *Artspace*, June 6. Retrieved (https://www.artspace.com/magazine/interviews_features/expert_eye/peter-blauer-interview-liste-2016-53874).

Goldstein, Andrew M. 2015. "Art Rank Founder Carlos Rivera on Why He's Leading the Flipper Revolution—and Why It Can't Be Stopped." *Artspace*, June 11. Retrieved (https://www.artspace.com/magazine/interviews_features/expert_eye/carlos-rivera-art-rank-interview-52904).

Gopnik, Adam. 2015. "Art and Money." *The New Yorker*, June 1. Retrieved (<https://www.newyorker.com/magazine/2015/06/01/art-and-money-gopnik>).

Grant, Daniel. 2017. "Art Auction Houses Offer Cash Advances." *The Wall Street Journal*, March 27. Retrieved December 27, 2017 (<https://www.wsj.com/articles/art-auction-houses-offer-cash-advances-1490582246>).

Grant, Daniel. 2016. "How to Create an Income Stream From the Art You Sell." *The Wall Street Journal*, January 31. Retrieved (<http://www.wsj.com/articles/how-to-create-an-income-stream-from-the-art-you-sell-1454295678>).

Grant, Daniel. 2015. "In 2015, Art Museums Scrambled to Beef Up Holdings of African-American Artists." *Observer*, December 22. Retrieved (<http://observer.com/2015/12/in-2015-art-museums-scrambled-to-beef-up-holdings-of-african-american-artists/>).

Grant, Daniel. 2015. "The Ins and Outs of Art Gallery Waiting Lists." *The Wall Street Journal*, November 3. Retrieved (<http://www.wsj.com/articles/the-ins-and-outs-of-art-gallery-waiting-lists-1446433529?alg=y>).

Grant, Daniel. 2015. "With 1031 Exchanges, Art Investors Avoid Taxes." *The Wall Street Journal*, February 1. Retrieved (<https://www.wsj.com/articles/1031-exchanges-help-art-investors-avoid-taxes-1422849602>).

Grant, Daniel. 2014. "Bidding Up: Escalating Prices Are Putting Pressure on Dealers to Double Down on Their Own Artists." *Observer*, August 13. Retrieved (<http://observer.com/2014/08/bidding-up-escalating-prices-are-putting-pressure-on-dealers-to-double-down-on-their-own-artists/>).

Grant, Daniel. 2015. "Art Donors Give to Smaller Nonprofits." *The Wall Street Journal*, November 1. Retrieved (<https://www.wsj.com/articles/art-donors-give-to-smaller-nonprofits-1446433546>).

Greenhalgh, Hugo. 2015. "Rise of Art Advisers Hints at Frothy Market." *Financial Times*, August 14. Retrieved (<https://www.ft.com/content/ad600480-3cf9-11e5-bbd1-b37bc06f590c>).

Gross, Michael. 2015. "The Rise, Fall, and Rise of Aby Rosen." *Centurion Magazine*, 72–78. Retrieved (<https://s3.amazonaws.com/100e53rd-site-assets/orionjs/e1321385-31f4-4150-98fa-eee219550ea4.pdf>).

Grosvenor, Bendor. 2015. "How Old Masters Can Work in Contemporary." *Financial Times*, June 12. Retrieved (<http://www.ft.com/cms/s/2/85d5ea18-0aa1-11e5-98d3-00144feabdc0.html>).

Grosvenor, Bendor. 2015. "Is the Old Master Market Dead ? (Ctd.)." *Art History News*, December 21. Retrieved (http://www.arthistorynews.com/articles/3724_Is_the_Old_Master_market_dead_ctd).

Guida, John. 2014. "If David Byrne Does Not Care About Contemporary Art, Should We ?" *The New York Times*, October 29. Retrieved (<https://op-talk.blogs.nytimes.com/2014/10/29/if-david-byrne-does-not-care-about-contemporary-art-should-we/>).

Halperin, Julia. 2015. "Almost One Third of Solo Shows in US Museums Go to Artists Represented by Just Five Galleries." *The Art Newspaper*, April 2. Retrieved (<http://www.theartnewspaper.com/articles/Almost-one-third-of-solo-shows-in-US-museums-go-to-artists-represented-by-just-five-galleries/37402>).

Halperin, Julia. 2016. "US Museums Spent \$5bn to Expand as Economy Shrunk." *The Art Newspaper*, April 4.

Halperin, Julia. 2017. "Art-Fair Economics: Why Small Galleries Do Art Fairs Even When They Don't Make Money." *ArtNet News*, June 13. Retrieved December 27, 2017 (<https://news.artnet.com/market/art-fair-economics-small-galleries-gamble-989555>).

Halperin, Julia. 2017. "Jeff Koons Radically Downsizes His Studio, Laying Off Half His Painting Staff." *ArtNet News*, June 20. Retrieved (<https://news.artnet.com/artworld/jeff-koons-radically-downsizes-his-studio-laying-off-half-his-painting-staff-998666>).

Hanke, Steve. 2017. "The Art Markets' Less Than Stellar Financial Returns." *Forbes*, June 30. Retrieved (<https://www.forbes.com/sites/stevehanke/2017/06/30/the-art-markets-less-than-stellar-financial-returns/#823ae3c18609>).

Hanson, Sarah P. 2017. "Collectors Reserve Space as New York's First Art Freeport Prepares for Summer Launch." *The Art Newspaper*, April 5. Retrieved December 27, 2017 (<http://theartnewspaper.com/news/collectors-reserve-space-as-new-yorks-first-art-freeport-prepares-for-summer-launch>).

Hanson, Sarah P. 2016. "The Art Data Arms Race Is on: Artnet Acquires Tutela Analytics." *The Art Newspaper*, November 22.

Harris, Gareth. 2016. "Art among the Penguins: Inaugural Antarctic Biennale to Launch next Year." *The Art Newspaper*, April 12.

Hatherley, Owen. 2017. "The Architecture of Neoliberalism by Douglas Spencer Review – Privatising the World." *The Guardian*, January 12. Retrieved (<https://www.theguardian.com/books/2017/jan/12/the-architecture-of-neoliberalism-douglas-spencer-review>).

Hawkins, Rebecca. 2014. "Art Law Foundation 'Risk, Rules and Opportunities in Art Investment' Conference." *PrivateArtInvestor*, December 11. Retrieved (<http://www.privateartinvestor.com/art-risk/art-law-foundation-risk-rules-and-opportunities-in-art-investment-conference/>).

Heddaya, Mostafa. 2015. "MoMA Workers Protest Healthcare Cuts at Garden Party." *Blouin ArtInfo*, June 3.

Heddaya, Mostafa. 2016. "Quoted: Pliny the Elder on the Death of Painting." *Blouin ArtInfo*, February 5. Retrieved (<http://blogs.artinfo.com/artintheair/2016/02/05/quoted-pliny-the-elder-on-the-death-of-painting/>).

Heddaya, Mostafa. 2016. "Q&A: Adrian Cheng On K11 Art Malls and 'Incubating Communities.'" *Blouin ArtInfo*, April 12. Retrieved (<http://uk.blouinartinfo.com/news/story/1375780/qa-adrian-cheng-on-k11-art-malls-and-incubating-communities>).

Heddaya, Mostafa. 2015. "Tech Art Down, Tech Money Up at Seattle." *Blouin ArtInfo*, July 31. Retrieved (<http://www.blouinartinfo.com/news/story/1209834/tech-art-down-tech-money-up-at-seattle-art-fair-debut>).

Heddaya, Mostafa. 2014. "Tip of the Iceberg: The Vast Underbelly of the Art Market." *HyperAllergic*, August 18. Retrieved (<https://hyperallergic.com/144020/tip-of-the-iceberg-the-vast-underbelly-of-the-art-market>).

Heddaya, Mostafa. 2015. "Offshore Onshore? Fritz Dietl On His New Delaware Freeport." *Blouin ArtInfo*, October 27. Retrieved (<http://www.blouinartinfo.com/news/story/1265553/offshore-onshore-fritz-dietl-on-his-new-delaware-freeport>).

Heddaya, Mostafa. 2015. "Disaster Waiting to Happen? Freeports and the Risk of Storing Art." *Blouin ArtInfo*, November 19. Retrieved (<http://www.blouinartinfo.com/news/story/1281627/disaster-waiting-to-happen-freeports-and-the-risk-of-storing>).

Helmore, Edward. 2014. "Buy! Sell! Liquidate! How ArtRank Is Shaking up the Art Market." *The Guardian*, June 23. Retrieved (<https://www.theguardian.com/artanddesign/2014/jun/23/artrank-buy-sell-liquidate-art-market-website-artists-commodities>).

Helmore, Edward. 2016. "Art Market in 'Mania Phase' and Risks Bursting of the Bubble, Report Says." *The Guardian*, January 17. Retrieved (<http://www.theguardian.com/artanddesign/2016/jan/17/art-market-mania-phase-bubble-report>).

Hensher, Philip. 2006. "When Even the Most Monstrous Works of Art Cost Millions, It's Time for a Price Crash." *The Guardian*, February 13. Retrieved (<https://www.theguardian.com/artanddesign/2006/feb/13/art.culture>).

Herriman, Kat. 2016. "How Millennials Are Transforming the Online Art Marketplace." *Blouin ArtInfo*, April 19. Retrieved (<http://www.blouinartinfo.com/news/story/1381631/how-millennials-are-transforming-the-online-art-marketplace>).

Higgins, Charlotte. 2006. "'Every Day There's a New Gallery': How Tate and Frieze Fuel London Art Boom." *The Guardian*, October 7. Retrieved (<https://www.theguardian.com/uk/2006/oct/07/arts.artsnews1>).

Higgins, Charlotte. 2016. "Nicholas Serota: Art's Modern Champion." *The Guardian*, September 8. Retrieved (<https://www.theguardian.com/artanddesign/2016/sep/08/how-nicholas-serota-art-modern-champion-tate-arts-council-england>).

Hill, Anna, Antoine Cadeo de Iturbe, and Pierre Naquin. 2015. "11 Tax Secrets Every Art Collector Needs to Know." *Artsy*, April 14. Retrieved (<https://www.artsy.net/article/artsy-editorial-11-tax-secrets-every-art-collector-needs-to>).

Hobson, Jeremy. 2015. "Chicago's Art Receives \$500 Million Art Donation [Radio Conversation with Douglas Druick, Head of the Art Institute of Chicago]." *WBUR*, April 23. Retrieved (<http://www.wbur.org/hereandnow/2015/04/23/art-institute-chicago-donation>).

Hodges, Jane. 2015. "Art You Can Own but Not Have." *The Wall Street Journal*, March 8.

Holcomb-Holland, Lori. 2015. "Sotheby's, Christie's and Other Auction Houses Adapt to Serve the Next Generation." *The New York Times*, October 28. Retrieved (<https://www.nytimes.com/2015/11/01/arts/design/sothebys-christies-and-other-auction-houses-adapt-to-serve-the-next-generation.html>).

Horwitz, Andy. 2016. "Who Should Pay for the Arts in America?" *The Atlantic*, January 31. Retrieved (<https://www.theatlantic.com/entertainment/archive/2016/01/the-state-of-public-funding-for-the-arts-in-america/424056/>).

Hyde, Caroline. 2015. "Art Investment Platform Draws CrowdFunders Into the Scene [Video]." *Bloomberg*, September 16. Retrieved (<https://www.bloomberg.com/news/articles/2015-09-16/art-investment-platform-draws-crowdfunders-into-the-scene>).

IMG. 2016. "WME | IMG and Frieze Announce Strategic Partnership." April 14.

James, Surowiecki. 2017. "Where the Second Avenue Subway Went Wrong." *The New Yorker*, January 23. Retrieved (<https://www.newyorker.com/magazine/2017/01/23/where-the-second-avenue-subway-went-wrong>).

Jenkins, David. 2016. "John Kasmin: The Rogue and His Gallery." *Financial Times*. Retrieved January 25, 2018 (<https://www.ft.com/content/c00aeb2a-a6cc-11e6-8898-79a99e2a4de6>).

Johnson, Andrew. 2009. "Contemporary Art Is a Fraud, Says Top Dealer." *The Independent*, February 22. Retrieved (<http://www.independent.co.uk/arts-entertainment/art/news/contemporary-art-is-a-fraud-says-top-dealer-1628929.html>).

Johnson, Paddy and Rhett Jones. 2016. "Jeff Koons Lays Off Workers Amidst Reports of Unionization." *Art F City*, July 18. Retrieved (<http://artfcity.com/2016/07/18/jeff-koons-lays-off-workers-amidst-reports-of-impropriety/>).

Jones, Jonathan. 2015. "Sex Sells : Why Modigliani's 98-Year-Old Hymn to Lust Is Worth \$170m." *The Guardian*, November 10. Retrieved (<https://www.theguardian.com/artanddesign/2015/nov/10/nu-couche-amedeo-modigliani-sold-for-170m>).

Jones, Rupert. 2015. "Punk Rock Brand: The Sex Pistols to Feature on a Range of Credit Cards." *The Guardian*, June 9. Retrieved (http://www.theguardian.com/music/2015/jun/09/punk-rock-brand-the-sex-pistols-to-feature-on-a-range-of-credit-cards?CMP=share_btn_fb).

Karabell, Shellie. 2017. "6 Things Art Can Teach You About Brands & Marketing That You Won't Learn In Business School." *Forbes*, July 30. Retrieved December 27, 2017 (<https://www.forbes.com/sites/shelliekarabell/2017/07/30/6-things-art-can-teach-you-about-brands-marketing-that-you-wont-learn-in-business-school/#4a6438f857a7>).

Karabell, Shellie. 2017. "Just How Big Is The Art Market? Leaders Do Some Serious Numbers-Crunching." *Bloomberg*, March 15. Retrieved January 5, 2018

(<https://www.forbes.com/sites/shelliekarabell/2017/03/15/just-how-big-is-the-art-market-leaders-do-some-serious-numbers-crunching/>).

Kazakina, Katya. 2017. “Can a New Domain Finally Bring the Artworld Into the 21st Century? Is It Necessary?” *Bloomberg*, May 3. Retrieved December 27, 2017 (<https://www.bloomberg.com/news/articles/2017-05-03/the-domain-art-and-the-quest-to-bring-order-to-the-art-market>).

Kazakina, Katya. 2015. “An Art Flipper Made 220% on This Painting in Six Months.” *Bloomberg*, June 2. Retrieved (<https://www.bloomberg.com/news/articles/2015-06-02/art-flippers-target-masterpieces-as-french-painting-gains-220->).

Kazakina, Katya. 2015. “Gilded Age of Art Draws Billionaires to Basel Fair.” *Bloomberg*, June 15, 15–17. Retrieved (<https://www.bloomberg.com/news/articles/2015-06-15/gilded-age-of-art-draws-billionaires-to-3-4-billion-basel-fair>).

Kazakina, Katya. 2015. “Sotheby’s New Boss Focuses on Art of Branding.” *BusinessDay*, April 3. Retrieved (<http://www.bdlive.co.za/business/management/2015/04/08/sothebysnewbossfocusesonartofbranding>).

Kazakina, Katya. 2015. “Before Paddles Are Even Raised, \$1 Billion of Art Already Has Buyers.” *Bloomberg*, October 29. Retrieved (<http://www.bloomberg.com/news/articles/2015-10-29/before-paddles-are-raised-1-billion-of-art-already-has-buyers>).

Kazakina, Katya. 2015. “Steve Cohen Is Trading Art Like Stocks.” *Bloomberg*, November 4. Retrieved (<http://www.bloomberg.com/news/articles/2015-11-04/cohen-always-trading-said-to-sell-65-million-art-at-auction>).

Kazakina, Katya. 2016. “Phillips’ Dolman Says Art Market Is in Period of Consolidation.” *Bloomberg*, March 2. Retrieved January 1, 2018 (<http://www.bloomberg.com/news/articles/2016-03-02/phillips-dolman-says-art-market-is-in-period-of-consolidation>).

Kazakina, Katya. 2017. “Bankers Drawn by \$3 Billion of Art Follow Wealthy to Basel Fair.” *Bloomberg*, June 12. Retrieved December 27, 2017 (<https://www.bloomberg.com/news/articles/2017-06-12/bankers-drawn-by-3-billion-of-art-follow-wealthy-to-basel-fair>).

Kazakina, Katya. 2015. “Allen Lures Tech Billionaires to Seattle.” *Bloomberg*, July 29. Retrieved (<https://www.cnbc.com/2015/07/30/heres-how-china-could-crash-the-art-market.html>).

Kazakina, Katya. 2017. “Advisers to the Ultra-Rich Try to Treat Art as Just Another Asset.” *Bloomberg*, April 27. Retrieved December 27, 2017 (<https://www.bloomberg.com/news/articles/2017-04-27/advisors-to-the-ultra-rich-try-to-treat-art-as-just-another-asset>).

Kazakina, Katya. 2015. “Sotheby’s Boosts Art-Loan Financing with \$1 Billion Line.” *Bloomberg*, June 23. Retrieved (<https://www.bloomberg.com/news/articles/2015-06-23/sotheby-s-boosts-art-loan-financing-with-1-billion-line>).

Kazakina, Katya. 2015. “Art, Not Sotheby’s Profit, at Records in Fight for Works.” *Bloomberg*, August 8. Retrieved (<https://www.bloomberg.com/news/articles/2015-08-08/art-not-sotheby-s-profit-at-records-in-fight-for-works>).

Kee, Edwin. 2014. "Virtual Galleries Pave The Way For New Art Markets." *Ubergizmo*, December 16. Retrieved (<http://www.ubergizmo.com/2014/12/virtual-galleries-pave-the-way-for-new-art-markets/>).

Kennedy, Randy. 2015. "'Cultural Corridor' Proposed for Northern Berkshires." *The New York Times*, December 5. Retrieved (<http://nyti.ms/1PIpyxM>).

Kerr, Dylan. 2016. "MoMA Curator Laura Hoptman on How to Tell a Good Painting From a 'bogus' Painting." *Artspace*, October 29. Retrieved (https://www.artspace.com/magazine/interviews_features/expert_eye/laura-hoptman-moma-interview-54326).

Khare-Ghose, Archana. 2015. "Q&A With Murray Macaulay, Director of the Multiplied Art Fair." *Blouin ArtInfo*, October 13. Retrieved (<http://www.blouinartinfo.com/news/story/1253685/qa-with-murray-macaulay-director-of-the-multiplied-art-fair>).

Kinsella, Eileen. 2015. "How Checkbook Art History Elevated Gustav Klimt To The \$100 Million Club." *Huffington Post*, April 6. Retrieved (<https://news.artnet.com/exhibitions/gust-klimt-100-million-club-284649>).

Kinsella, Eileen. 2015. "Great Summer Reading: The Art of The Con Exposes Secret World of Fakes and Forgeries." *ArtNet News*, July 13. Retrieved (<https://news.artnet.com/market/book-review-art-fraud-312076>).

Kinsella, Eileen. 2016. "What Does TEFAF 2016 Art Market Report Tell Us About The Global Art Trade?" *Artnet News*, March 9. Retrieved (<https://news.artnet.com/market/tefaf-2016-art-market-report-443615>).

Kinsella, Eileen. 2017. "Vying for Tech Collectors, Dealers at the Seattle Art Fair Try a Novel Approach: Old-Fashioned Art." *ArtNet News*, August 4. Retrieved December 27, 2017 (<https://news.artnet.com/market/seattle-art-fair-2017-opening-night-1041896>).

Kinsella, Eileen. 2017. "'We've Been Chasing Unicorns for Decades': Is the Elusive Tech Collector Real? Not Quite Yet, Dealers Say." *ArtNet News*, August 25. Retrieved December 27, 2017 (<https://news.artnet.com/artworld/elusive-wealthy-tech-art-collector-1058471>).

Kinsella, Eileen and Benjamin Genocchio. 2015. "Will Sotheby's Again Fall Victim to Corporate Hubris With Dan Loeb, Tad Smith Takeover?" *ArtNet News*, March 23. Retrieved (<https://news.artnet.com/artworld/sothebys-takeover-dan-loeb-tad-smith-278897>).

Kleiner, Emma. 2014. "The Race for a Tax Break: How Buyers Circumvent 'Use Taxes' on Art." *Center for Art Law*, May 6. Retrieved (<https://itsartlaw.com/2014/05/06/the-race-for-a-tax-break-how-buyers-circumvent-use-taxes-on-art/>).

Knight, Sam. 2016. "The Bouvier Affair." *The New Yorker*, February 8. Retrieved (<https://www.newyorker.com/magazine/2016/02/08/the-bouvier-affair>).

Landi, Ann. 2015. "Wall Talk: Do We Even Need Museum Labels?" *ARTnews*, December 21. Retrieved (<http://www.artnews.com/2015/12/21/wall-talk-do-we-even-need-museum-wall-labels/>).

Langner, Eric. 2015. "The Seattle Art Fair Arrives, with Dealers on the Hunt for Tech Money." *ARTnews*, January 8. Retrieved (<http://www.artnews.com/2015/08/01/seattle-art-fair-2015-review/>).

Levius, Travis. 2015. "Artist Damien Hirst and Architect Frank Gehry Collaborate with London's Sexy Fish Restaurant." *Thedailymeal.com*, October 5. Retrieved

(http://www.thedailymeal.com/eat/artist-damien-hirst-and-architect-frank-gehry-collaborate-london-s-sexy-fish-restaurant?_mobile=1).

Lewis, Michael J. 2015. "How Art Became Irrelevant." *Commentary Magazine*, July 1. Retrieved (<https://www.commentarymagazine.com/articles/how-art-became-irrelevant/>).

Lipsky-Karasz, Elisa. 2016. "The Art of Larry Gagosian's Empire." *The Wall Street Journal*, April 26. Retrieved January 1, 2018 (<https://www.wsj.com/articles/the-art-of-larry-gagosians-empire-1461677075>).

Little, Harriet Fitch. 2016. "Is Loyalty to an Art Gallery Outdated?" *Financial Times*, September 23. Retrieved (<https://www.ft.com/content/6ddffe70-7e5a-11e6-8e50-8ec15fb462f4>).

Loader-Wilkinson, Tara. 2010. "How Artworld Expenses Stack Up." *The Wall Street Journal*, September 20. Retrieved (<https://www.wsj.com/articles/SB10001424052748703959704575453162597091330>).

MacLellan, Mac. 2015. "4 Things You Need to Consider before Investing in Art." *CNBC*, October 2. Retrieved (<http://www.cnbc.com/2015/10/01/4-things-you-need-to-consider-before-investing-in-art.html>).

Maertens, Marie. 2013. "Dans Le Secret Des Ports Francs." *Connaissance Des Arts* Janvier. Retrieved (<https://www.connaissancedesarts.com/marche-de-lart/dans-le-secret-des-ports-francs-11136/>).

Malik, Suhail. 2007. "A Boom Without End? Liquidity, Critique and the Art Market." *Mute*, August 13. Retrieved (<http://www.metamute.org/editorial/articles/boom-without-end-liquidity-critique-and-art-market>).

Maneker, Marion. 2016. "Without Serious Art History Education, Will the World's Investment in Art Infrastructure Falter?" *Art Market Monitor*, October 17. Retrieved (<http://www.artmarketmonitor.com/2016/10/17/without-serious-art-history-education-will-the-worlds-investment-in-art-infrastructure-falter/>).

Maneker, Marion. 2016. "Much Ado About 'Online' Sales to Little Effect." *Art Market Monitor*, November 7. Retrieved (<http://www.artmarketmonitor.com/2016/11/07/muchadoaboutonlinesalestolittleeffect/>).

Maneker, Marion. 2016. "US Attorney Indicts on Art Sales Tax Evasion with Indictment of Morris Zukerman." *Financial Times*, April 17. Retrieved (<https://news.artnet.com/market/us-attorneys-office-indicts-morris-zukerman-art-tax-evasion-amid-ongoing-crackdown-503459>).

Maneker, Marion. 2016. "'Distorted' Markets, Just Not By Guarantees." *Art Market Monitor*, February 21. Retrieved (<http://www.artmarketmonitor.com/2016/02/21/distortedmarketsjustnotbyguarantees/>).

Maneker, Marion. 2016. "How Sotheby's Realty Provides Revenue and Brand Visibility to the Auction House." *Art Market Monitor*, January 5. Retrieved (<http://www.artmarketmonitor.com/2016/01/05/how-sothebys-realty-provides-revenue-and-brand-visibility-to-the-auction-house/>).

Maneker, Marion. 2016. "Do American Museums Make Good Use of the Private Funds They Raise to Build & Operate?" *Art Market Monitor*, July 26. Retrieved (<http://www.artmarketmonitor.com/2016/07/26/do-american-museums-make-good-use-of-the-private-funds-they-raise-to-build-operate/>).

Maneker, Marion. 2016. "Sotheby's Starts to Speak in Amy-isms: Private Sales Are 'Infinitely Scalable.'" *Art Market Monitor*, January 22. Retrieved

(<http://www.artmarketmonitor.com/2016/01/22/sothebys-starts-to-speak-in-amy-isms-private-sales-are-infinitely-scalable/>).

Maneker, Marion. 2017. "Christie's Hammers Down Its Position in the Art Market." *Art Market Monitor*, November 16. Retrieved December 27, 2017
(<http://www.artmarketmonitor.com/2017/11/16/christies-hammers-down-its-position-in-the-art-market/>).

Maneker, Marion. 2016. "Art Agency Partners Revenue Revealed." *Art Market Monitor*, August 8. Retrieved (<http://www.artmarketmonitor.com/2016/08/08/art-agency-partners-revenue-revealed/>).

Maneker, Marion. 2015. "Sotheby's Contemporary Evening Sale = \$379,676,000." *Art Market Monitor*, May 12. Retrieved December 20, 2017
(<http://www.artmarketmonitor.com/2015/05/12/sothebys-contemporary-evening-sale-379676000/>).

Maneker, Marion. 2016. "With Contemporary Art at the Top of the Social Pyramid, Does the Met Suffer from Donor Envy?" *Art Market Monitor*, August 4. Retrieved
(<http://www.artmarketmonitor.com/2016/08/04/with-contemporary-art-at-the-top-of-the-social-pyramid-does-the-met-suffer-from-donor-envy/>).

Maneker, Marion. 2016. "Street Art Pioneer Lazarides Takes Investment, Moves to Mayfair, Expands E-Commerce." *Art Market Monitor*, February 10. Retrieved
(<http://www.artmarketmonitor.com/2016/02/10/streetartpioneerlazaridestakesinvestmentmovestomayfairexpandsecommerce/>).

Maneker, Marion. 2016. "Hurvin Anderson: A Lesson in Art Market Economics." *Art Market Monitor*, September 12. Retrieved (<http://www.artmarketmonitor.com/2016/09/12/hurvin-anderson-a-lesson-in-art-market-economics/>).

Maneker, Marion. 2016. "How a Strategy to Stop Flipping Actually Makes It Too Tempting for Collectors to Pass Up." *Art Market Monitor*, September 23. Retrieved
(<http://www.artmarketmonitor.com/2016/09/23/how-a-strategy-to-stop-flipping-actually-makes-it-too-tempting-for-collectors-to-pass-up/>).

Maneker, Marion. 2016. "Three's a Crowd in the Gallerist-Collector-Advisor Triangle." *Art Market Monitor*, September 27. Retrieved
(<http://www.artmarketmonitor.com/2016/09/27/threes-a-crowd-in-the-gallerist-collector-advisor-triangle/>).

Maneker, Marion. 2016. "Rush to Find Meaning in Panama Papers Denigrates Ganz Collection's Market Appeal." *Art Market Monitor*, April 13. Retrieved
(<http://www.artmarketmonitor.com/2016/04/13/rush-to-find-meaning-in-panama-papers-denigrates-ganz-collections-market-appeal/>).

Maneker, Marion. 2016. "What We Learn from the Wildenstein Trial." *Art Market Monitor*, September 30. Retrieved (<http://www.artmarketmonitor.com/2016/09/30/what-we-learn-from-the-wildenstein-trial/>).

Maneker, Marion. 2016. "Artists in Museum Storage by the Numbers." *Art Market Monitor*, January 21. Retrieved (<http://www.artmarketmonitor.com/2016/01/21/artists-in-museum-storage-by-the-numbers/>).

Maneker, Marion. 2016. "Who Are the Top Ten Artists Collected by Private Museums?" *Art Market Monitor*, January 19. Retrieved (<http://www.artmarketmonitor.com/2016/01/19/who-are-the-top-ten-artists-collected-by-private-museums/>).

Maneker, Marion. 2015. "Switzerland Asks for Greater Anti-Money Laundering Oversight at Geneva Freeport." *Art Market Monitor*, June 1. Retrieved (<http://www.artmarketmonitor.com/2015/06/01/switzerland-asks-for-greater-anti-money-laundering-oversight-at-geneva-freeport/>).

Maneker, Marion. 2016. "In The Russian Provinces, A City Bets on Culture for Revival but Runs Afoul of a Regime." *Art Market Monitor*, August 30. Retrieved (<http://www.artmarketmonitor.com/2016/08/30/in-the-russian-provinces-a-city-bets-on-culture-for-revival-but-runs-afoul-of-a-regime/>).

Maneker, Marion. 2016. "Bloomberg Trolls Sotheby's Over Guarantee Fees." *Art Market Monitor*, June 10. Retrieved (<http://www.artmarketmonitor.com/2016/06/10/bloomberg-trolls-sothebys-over-guarantee-fees/>).

Maneker, Marion. 2016. "A Few Rich Galleries Are Sponsoring Lots of Museum Shows, Guess Whose Idea It Was." *Art Market Monitor*, March 7. Retrieved (<http://www.artmarketmonitor.com/2016/03/07/a-few-rich-galleries-are-sponsoring-lots-of-museum-shows-guess-whose-idea-it-was/>).

Maneker, Marion. 2016. "To Play in the Secondary Market, You Have to Be in NY or London." *Art Market Monitor*, September 8. Retrieved (<http://www.artmarketmonitor.com/2016/09/08/to-play-in-the-secondary-market-you-have-to-be-in-ny-or-london/>).

Maneker, Marion. 2016. "Sotheby's Buys Art Agency, Partners to Expand the Auction House Into Advisory Work." *Art Market Monitor*, January 11. Retrieved (<http://www.artmarketmonitor.com/2016/01/11/sothebysbuysartagencypartnerstoexpandtheauctiothouseintoadvisorywork/>).

Maneker, Marion. 2016. "Frieze Art Fair Takes Investment from Hollywood Agency to Expand Digital Presence." *Art Market Monitor*, April 15. Retrieved (<http://www.artmarketmonitor.com/2016/04/15/frieze-art-fair-takes-investment-from-hollywood-agency-to-expand-digital-presence/>).

Maneker, Marion. 2016. "Wang Wei On Collecting Foreign Art and Following the Auction Houses' Lead." *Art Market Monitor*, February 1. Retrieved (<http://www.artmarketmonitor.com/2016/02/01/wang-wei-on-collecting-foreign-art-and-following-the-auction-houses-lead/>).

Marcuse, Herbert. 2015. "Herbert Marcuse : Power of Repressive Tolerance Follow 'Economic Sociology and Economy .'" 1-2.

Mashberg, Tom. 2015. "Art Forgers Beware: DNA Could Thwart Fakes." *The New York Times*, October 12. Retrieved (http://www.nytimes.com/2015/10/13/arts/design/developing-dna-as-a-standard-for-authenticating-art.html?hp&action=click&pgtype=Homepage&module=second-column-region®ion=top-news&WT.nav=top-news&_r=0&mtrref=www.nytimes.com&gwh=784F43037773DEA72297AA046E78).

Mathis-Lilley, Ben. 2015. "Jeb Is Planning a Pop Art–Themed Fundraiser at Art Basel." *Slate*, October 30. Retrieved

(http://www.slate.com/blogs/the_slatest/2015/10/30/jeb_bush_pop_art_fundraiser_scheduled_for_art_basel.html).

Mauk, Ben. 2015. “The Rise of the Private Art ‘Museum.’” *The New Yorker*, May 28. Retrieved (<http://www.newyorker.com/business/currency/the-rise-of-the-private-art-museum>).

Mayer, Catherine. 2015. “Damien Hirst: ‘What Have I Done? I’ve Created a Monster’.” *The Guardian*, June 30. Retrieved (<http://www.theguardian.com/artanddesign/2015/jun/30/damien-hirst-what-have-i-done-ive-created-a-monster>).

McCarthy, Bonnie. 2016. “Elite Home Stagers Decorate with Gallery, Museum Art.” *LA Times*, April 23. Retrieved (<http://www.latimes.com/business/realestate/hot-property/la-fi-hp-0423-open-houses-art-20160423-story.html>).

McGarry, Kevin. 2015. “At Tony Salamé’s Aishti Foundation Art and Commerce Get Too Close for Comfort.” *ArtNet News*, November 2. Retrieved (<https://news.artnet.com/artworld/aishti-art-commodity-351914>).

McKeough, Tim. 2017. “In New Condos, Art Is Now a Crucial Part of the Deal.” *The New York Times*, July 28. Retrieved December 27, 2017 (<https://www.nytimes.com/2017/07/28/realestate/in-new-condos-art-is-now-a-crucial-part-of-the-deal.html>).

Melloy, John. 2014. “This Chart Says Stocks Are Not in a Bubble.” *CNBC*, December 29. Retrieved (<https://www.cnbc.com/2014/12/29/this-chart-says-stocks-are-not-in-a-bubble.html>).

Mendoza, Menchie. n.d. “Artist Sells Instagram Photos Of Other People For As Much As \$90,000 And He Can Do It To.” *Tech Times*. Retrieved (<http://www.techtimes.com/articles/55513/20150526/artist-sells-instagram-photos-of-other-people-for-as-much-as-90-000-and-he-can-do-it-to-you-too.htm>).

Michalska, Julia. 2015. “German Culture Ministry Tones down Controversial Cultural Property Bill.” *The Art Newspaper*, September 15.

Miller, M. H. 2015. “Elaine Wynn on \$142.5 M. Bacon Triptych: ‘I Was Afraid I Wasn’t Going to Own It.’” *ARTnews*, August 17. Retrieved (<http://www.artnews.com/2015/08/17/elaine-wynn-on-142-5-m-bacon-triptych-i-was-afraid-i-wasnt-going-to-own-it/>).

Miller, M. H. 2015. “A Brief History of The New York Times’ Coverage of Selling Art Online.” *ARTnews*, October 30. Retrieved (<http://www.artnews.com/2015/10/30/a-brief-history-of-the-new-york-times-coverage-of-selling-art-online/>).

Miller, M. H. 2016. “‘This Institution Has Always Been Underfunded’: Anne Pasternak Offers Candid Thoughts on the Future of the Brooklyn Museum.” *ARTnews*, April 14. Retrieved (<http://www.artnews.com/2016/04/14/this-institution-has-always-been-underfunded-anne-pasternak-offers-candid-thoughts-on-the-future-of-the-brooklyn-museum/>).

Miller, M. H. 2015. “Sotheby’s Had to Up Guarantee from \$350m. to \$500m. to Win Taubman Collection, Says ‘Major Artworld Player.’” *ARTnews*, November 2. Retrieved (<http://www.artnews.com/2015/11/02/sothebys-had-to-up-guarantee-from-350-m-to-500-m-to-win-taubman-collection-says-major-artworld-player/>).

Miquiabas, Bong. 2015. “As China’s Appetite For Art Grows, A Private Bank Helps Collectors Feed Their Passion.” *Forbes*, June 16. Retrieved (<https://www.forbes.com/sites/bongmiquiabas/2015/06/16/as-chinas-appetite-for-art-grows-a-private-bank-helps-collectors-feed-their-passion/#146157f4572d>).

Mitchell, Heidi. 2015. "How Art Became Real Estate's Hottest Sales Tool." *New York Post*, May 12. Retrieved (<http://nypost.com/2015/05/12/how-art-became-real-estates-hottest-sales-tool/>).

Moore, Susan. 2017. "Something Has Gone Very Wrong at Christie's." *Apollo*, March 9. Retrieved (<https://www.apollo-magazine.com/something-gone-wrong-christies/>).

Morgan-Feir, Caoimhe. 2016. "I Want to Be Instagram Famous, and Elena Soboleva Wants to Help Me." *Canadian Art*, July 13. Retrieved (<https://canadianart.ca/features/instagram-famous-elena-soboleva/>).

Moynihan, Colin. 2015. "Brooklyn Museum, Acknowledging Criticism, Reaches Out to Conference Protesters." *The New York Times*, November 8. Retrieved (<https://artsbeat.blogs.nytimes.com/2015/11/08/brooklyn-museum-acknowledging-criticism-reaches-out-to-conference-protesters/>).

Mugar, Martin. 2013. "Zombie Formalism: The Lingering Life of Abstraction in New York That Just Won't Die." *Martinmugar.blogspot*, December 14. Retrieved (<http://martinmugar.blogspot.co.uk/2013/12/zombie-artthe-lingering-life-of.html>).

Murray Brown, Griselda. 2016. "The Market for Monumental Art: Who's Buying?" *Financial Times*, June 10. Retrieved (<https://www.forbes.com/sites/ranisingh/2016/06/30/last-year-i-personally-sold-3-billion-worth-of-art-says-christies-global-president/#3e631e75dff>).

Nechepurenko, Ivan. 2016. "Moscow Crushes an Uprising, This Time an Artistic One." *The New York Times*, August 24. Retrieved (<http://nyti.ms/2bzKiWV>).

Neuendorf, Henri. 2017. "Stefania Bortolami on How Smaller Galleries Can Innovate to Survive the Age of the Mega-Gallery." *ArtNet News*, July 6. Retrieved December 27, 2017 (<https://news.artnet.com/artworld/stefania-bortolami-interview-1005776>).

Neuendorf, Henri. 2015. "Switzerland's Tough New Stance on Freeports Will Shake the Artworld." *ArtNet News*, November 19. Retrieved (<https://news.artnet.com/market/switzerland-freeport-regulations-367361>).

Noto, Anthony. 2015. "Sotheby's and Christie's May Soon Feel the Sting of Star-Studded Startup Competition." *New York Business Journal*, October 28. Retrieved (<http://www.bizjournals.com/newyork/news/2015/10/28/sothebys-and-christies-may-soon-feel-the-sting-of.html>).

O'Connor, William. 2015. "How to Navigate the Artworld." *The Daily Beast*, May 4. Retrieved (<https://www.thedailybeast.com/how-to-navigate-the-artworld>).

O'Donnell, Nicholas. 2014. "Art Finance and Investment, London Recap and January 26, 2015 Geneva Preview." *The Art Law Report*, December 15. Retrieved (<http://www.artlawreport.com/2014/12/15/artfinanceandinvestmentlondonrecapandgenevapreview/>).

O'Donnell, Nicholas. 2014. "The Art Law Report Art Finance And Law Conference Series in London and Geneva." *The Art Law Report*, November 11. Retrieved (<http://blog.sandw.com/artlawreport/2014/11/11/art-finance-and-law-conference-series-in-london-and-geneva/>).

O'Donnell, Nicholas. 2015. "The Art Law Report Finance , Art and Law — How Does Fine Art Shape Up as an Asset?" *The Art Law Report*, January 30. Retrieved (<http://www.artlawreport.com/2015/01/30/financeartandlawhowdoesfineartshapeupasanasset/>).

O'Kelly, Emma. 2014. "British Auction Houses Rebooted." *The Telegraph*, December 9. Retrieved (<http://www.telegraph.co.uk/luxury/collectables/53974/british-auction-houses-rebooted.html>).

O'Murchu, Cynthia. 2015. "Swiss Businessman Arrested in Art Market Probe." *Financial Times*, February 26. Retrieved (<https://www.ft.com/content/bd248468-bde7-11e4-8cf3-00144feab7de>).

Parker, Jennifer. 2016. "A Gallery of Your Own, Courtesy Christie's." *Blouin ArtInfo*, April 15.

Passariello, Christina. 2015. "What Venture Capital and Art Have in Common." *The Wall Street Journal*, October 9. Retrieved (<http://blogs.wsj.com/digits/2015/10/09/what-venture-capital-and-art-have-in-common/>).

Paumgarten, N. 2013. "Dealer's Hand: Why Are so Many People Paying so Much Money for Art? Ask David Zwirner." *The New Yorker*, December 2. Retrieved (http://www.newyorker.com/reporting/2013/12/02/131202fa_fact_paumgarten?currentPage=all).

Peccarelli, Brian. 2017. "The Great Wealth Transfer Is Here...Now What?" *CFO.com*, May 8. Retrieved (<http://www.cfo.com/tax/2017/05/great-wealth-transfer-now/>).

Perman, Stacy. 2015. "Pop Goes the Art Market." *Fortune*, March 28. Retrieved (<http://fortune.com/2015/03/28/art-art-auctions/>).

Pes, Javier. 2017. "Asia's New Rich Help Cushion Global Market's Fall, Economist Clare McAndrew Reports." *The Art Newspaper*, March 22. Retrieved December 27, 2017 (<http://theartnewspaper.com/news/asias-new-rich-help-cushion-global-markets-fall-economist-clare-mcandrew-reports>).

Pes, Javier. 2017. "Thomas Campbell on Why He Stepped down from the Met." *The Art Newspaper*, July 1. Retrieved December 27, 2017 (<http://theartnewspaper.com/news/thomas-campbell-on-why-he-stepped-down-from-the-met>).

Pfotzer, Elizabeth. 2014. "Art in America – Classism or Ca\$hism ?" *Voice of America (VOA) News*, December 26. Retrieved (<http://blogs.voanews.com/all-about-america/2014/12/26/art-in-america-classism-or-cahism/>).

Phillips, Tom. 2015. "Beijing Shuts down Art Exhibition on Violence against Women." *The Guardian*, November 26. Retrieved (<https://www.theguardian.com/world/2015/nov/26/beijing-shuts-down-art-exhibition-on-violence-against-women>).

Pickford, James. 2017. "London Art Market Boosted by Record Auction Prices." *Financial Times*, March 2. Retrieved December 27, 2017 (<https://www.ft.com/content/77d74784-ff5c-11e6-8d8e-a5e3738f9ae4>).

Pickford, James. 2017. "Hammer Falls on Traditional Auction House Practices." *Financial Times*, March 18. Retrieved December 27, 2017 (<https://www.ft.com/content/a462ff4c-0a5f-11e7-ac5a-903b21361b43>).

Pickford, James. 2017. "Buy an Artwork — Fund an Artist's Pension." *Financial Times*, February 3. Retrieved (<https://www.ft.com/content/23945c44-e971-11e6-967b-c88452263daf>).

Pirici, Alexandra, Berlin Wall, and Skulptur Projekte. 2017. "The Rise of Performance Art." *The Economist*, June 22, 2017. Retrieved December 27, 2017 (<https://www.economist.com/news/books-and-arts/21723805-years-biggest-art-events-medium-once-political-and-difficult-now-exciting>).

Plummer, Libby. 2016. "Is This a Masterpiece? Scientists Reveal How We See Ordinary Objects Labelled as Art Differently - Confirming a 200- Year-Old Theory." *Daily Mail Online*, September 19. Retrieved (<http://www.dailymail.co.uk/sciencetech/article-3796752/Is-masterpiece-Scientists-reveal-ordinary-objects-labelled-art-differently-confirming-200-year-old-theory.html>).

Podgers, James. 1980. "Art Investment Mixes Aesthetics, Economics." *American Bar Association Journal*, July, 832. Retrieved (<https://books.google.co.uk/books?id=63Sp1tcZQqAC&lpg=PA832&ots=UOAonQhYSc&dq=Art%20Investment%20Mixes%20Aesthetics%2C%20Economics%20podgers&pg=PA832#v=onepage&q=Art%20Investment%20Mixes%20Aesthetics,%20Economics%20podgers&f=false>).

Pogrebin, Robin. 2017. "Art Gallery Closures Grow for Small and Midsize Dealers." *The New York Times*, June 25. Retrieved December 27, 2017 (<https://nyti.ms/2t6UzFw>).

Pogrebin, Robin. 2015. "MoMA to Organize Collections That Cross Artistic Boundaries." *The New York Times*, December 15. Retrieved (<http://nyti.ms/1m5jQJf>).

Pogrebin, Robin. 2016. "Sotheby's , in a Gamble, Acquires Boutique Art Advisory Firm." *The New York Times*, January 11. Retrieved (<http://nyti.ms/1RFKmoL>).

Pogrebin, Robin. 2017. "Sotheby's Investment in Change Brings Mixed Earning Results." *The New York Times*, August 3. Retrieved December 27, 2017 (<https://www.nytimes.com/2017/08/03/arts/design/sothebys-quarterly-report-mixed-earnings-results.html>).

Pogrebin, Robin. 2017. "When an Artist Calls the Shots: Mark Grotjahn's Soaring Prices." *The New York Times*, July 30. Retrieved December 27, 2017 (<https://www.nytimes.com/2017/07/30/arts/design/mark-grotjahn-auction-gallery.html>).

Pogrebin, Robin. 2018. "A Mega-Dealer Expands: David Zwirner Plans a New Art Gallery." *The New York Times*, January 8. Retrieved (<https://www.nytimes.com/2018/01/08/arts/design/david-zwirner-expands-in-chelsea.html>).

Pogrebin, Robin. 2016. "Art Galleries Face Pressure to Fund Museum Shows." *The New York Times*, March 7. Retrieved (<http://nyti.ms/1U706SM>).

Pogrebin, Robin. 2016. "How a Dealer Prepares for the 'Most Important' Art Fair of the Year." *The New York Times*, June 8. Retrieved (<http://nyti.ms/1WFp4eK>).

Powhida, William. 2015. "William Powhida's Guide to Making the Most of Frieze Week." *Blouin ArtInfo*, May 12. Retrieved (<http://www.blouinartinfo.com/news/story/1155802/william-powhidias-guide-to-making-the-most-of-frieze-week>).

Prince, Russ Alan. 2015. "Wealth Management For Successful Art Collectors." *Forbes*, September 14. Retrieved (<https://www.forbes.com/sites/russalanprince/2015/09/14/wealth-management-for-successful-art-collectors/#31481cff1c47>).

Prystay, Cris. 2010. "Singapore Bling." *The Wall Street Journal*, May 21. Retrieved (<https://www.wsj.com/articles/SB1000142405274870369180457525551995870746>).

Rankin, Jennifer. 2015. "How Monet Became Blue Chip: The Language of Wealthy Art Buyers." *The Guardian*, January 30. Retrieved (<https://www.theguardian.com/artanddesign/2015/jan/30/how-monet-became-blue-chip>).

Reyburn, Scott. 2017. "The Biggest-Selling Artist at Auction Is a Name You May Not Know." *The New York Times*, June 2. Retrieved December 27, 2017 (<https://www.nytimes.com/2017/06/02/arts/china-art-auction-zhang-daqian.html>).

Reyburn, Scott. 2016. "It's Auctions vs. Galleries." *The New York Times*, September 30. Retrieved (<https://www.nytimes.com/2016/10/01/arts/design/its-auctions-vs-galleries.html>).

Reyburn, Scott. 2017. "Collectors Shy Away From Art Market's Former Darlings." *The New York Times*, June 9. Retrieved December 27, 2017 (<https://www.nytimes.com/2017/06/09/arts/art-19th-century-auctions-gerome.html>).

Reyburn, Scott. 2017. "Live Auctions End at Christie's South Ken . Will Online Sales Fill the Void?" *The New York Times*, July 21. Retrieved December 27, 2017 (<https://www.nytimes.com/2017/07/21/arts/design/christies-south-kensington-auction.html?mtrref=www.google.co.uk&gwh=B1AA842325A252250157287B75683F24&gwt=pay>).

Reyburn, Scott. 2015. "Wealth, Mystery and Huge Profits at Recent Art Sales." *The New York Times*, May 21. Retrieved (<http://nyti.ms/1KIVC7j>).

Reyburn, Scott. 2016. "When Collecting Wasn T All About the Money." *The New York Times*, January 8. Retrieved (<http://nyti.ms/1OfuTHd>).

Reyburn, Scott. 2017. "The Art Market Is Still Waiting for an Online Revolution." *The New York Times*, May 5. Retrieved December 27, 2017 (<https://nyti.ms/2pNYNAD>).

Reyburn, Scott. 2017. "Art Goes Political, but Will That Fly on the London Market?" *The New York Times*, April 28. Retrieved December 27, 2017 (<https://www.nytimes.com/2017/04/28/arts/design/art-goes-political-but-will-that-fly-on-the-london-market.html>).

Rhodes, Margaret. 2017. "Inside Artsy's Quest to Make You Love Art As Much As Music." *Wired*, March 5. Retrieved (<https://www.wired.com/2017/05/inside-artsy-quest-make-love-art-much-music/>).

Robinson, Walter. 2014. "Flipping and the Rise of Zombie Formalism." *Artspace*, April 3. Retrieved January 1, 2018 (https://www.artspace.com/magazine/contributors/see_here/the_rise_of_zombie_formalism-52184).

Roland, Gabriel. 2017. "In the Studio: Kasper Sonne (Interview)." *Collectors Agenda*. Retrieved (<https://www.collectorsagenda.com/en/in-the-studio/kasper-sonne>).

Rosenbaum, Lee. 1979. "Conflict with Interest: Citibank Meets Parke Bernet." *New York Magazine*, October 22, 43–46.

Rosenbaum, Lee. 2014. "CultureGrrl Bad News: NY Times as Insert for Christie's Advertising Section (plus: Me at NYU)." *ArtsJournal*, October 29. Retrieved (http://www.artsjournal.com/culturegrrl/2014/10/bad-news-ny-times-as-insert-for-christies-advertising-section-plus-me-at-nyu.html?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+artsjournal%2FXHaF%28CultureGrrl%29).

Roubini, Nouriel. 2015. "Seven Things You Should Know About the Art Market." *EconoMonitor*, February 28. Retrieved (<http://archive.economonitor.com/nouriel/2015/02/28/seven-things-you-should-know-about-the-art-market/>).

Roy, Nilanjana. 2017. "At Last — an Artist's Statement That Tells It like It Is." *Financial Times*, August 22. Retrieved December 27, 2017 (<https://www.ft.com/content/da628f5a-86c3-11e7-8bb1-5ba57d47eff7>).

Salisbury, Stephan. 2017. "Eye-Popping Fund-Raising Goal for Art Museum: \$525 Million." *The Philadelphia Enquirer*, March 30. Retrieved December 27, 2017 (<http://www.philly.com/philly/entertainment/arts/Fundraising-goal-for-Philadelphia-Museum-of-Art-525-million-Gehry-Lenfest.html>).

Salmon, Felix. 2015. "The Death of the Art Gallery Has Been Greatly Exaggerated." *Splinter*, November 4. Retrieved (<https://splinternews.com/the-death-of-the-art-gallery-has-been-greatly-exaggerated-1793852562>).

Salmon, Felix. 2014. "The Not So Special Hundred-Million Dollar Giacometti." *The New Yorker*, November 5. Retrieved (<https://www.newyorker.com/business/currency/the-hundred-million-dollar-giacometti>).

Saltz, Jerry. 2011. "The Long Slide: Museums as Playgrounds." *New York Magazine*, December 4. Retrieved January 1, 2018 (<http://nymag.com/arts/cultureawards/2011/museums-as-playgrounds/#print>).

Saltz, Jerry. 2014. "Art Review: The Great, Inscrutable Robert Gober." *Vulture*, September 30. Retrieved (<http://www.vulture.com/2014/09/great-robert-gober-like-koons-but-grosser.html>).

Saltz, Jerry. 2015. "The 'New' New Museum." *Vulture*, April 19. Retrieved (<http://www.vulture.com/2015/04/jerry-saltz-on-new-whitney-museum.html>).

Saltz, Jerry. 2017. "10 Thoughts About The New York Times' Mark Grotjahn Profile." *Vulture*, July 31. Retrieved December 27, 2017 (<http://www.vulture.com/2017/07/10-thoughts-about-the-new-york-times-mark-grotjahn-profile.html>).

Schachter, Kenny. 2015. "Kenny Schachter's New York Auctions Diary: Big-Game Hunters, Flipping In-N-Outers, and Passionistas." *Vulture*, May 18. Retrieved (<http://www.vulture.com/2015/05/kenny-schachters-new-york-auctions-diary.html>).

Schachter, Kenny. 2015. "Uber Art." *Hunger TV*, March 2. Retrieved (<http://www.hungertv.com/feature/uber-art/>).

Schachter, Kenny. 2015. "The Sky Is Falling on the Art Market, or Is It?" *The Art Newspaper*, November 17. Retrieved (<http://old.theartnewspaper.com/comment/the-sky-is-falling-on-the-art-market-or-is-it/>).

Schjeldahl, Peter. 2015. "Big Ideas: A Frank Stella Retrospective." *The New Yorker*, November 9. Retrieved (<https://www.newyorker.com/magazine/2015/11/09/big-ideas-the-artworld-peter-schjeldahl>).

Schjeldahl, Peter. 2015. "A Fearful Frenzy: The Art Market Now." *The New Yorker*, July 13. Retrieved (<https://www.newyorker.com/culture/cultural-comment/a-fearful-frenzy-the-art-market-now>).

Schmidt, Will. 2015. "You Don't Have to Be Rich to Collect Art." *Tech.co*, August 27. Retrieved (<https://tech.co/tara-reed-kollecto-interview-2015-08>).

Schneider, Tim. 2017. "Why the Marciano Foundation Embodies the Existential Crisis Facing All Private Museums." *ArtNet News*, May 24. Retrieved December 27, 2017 (<https://news.artnet.com/market/new-marciano-foundation-existential-crisis-private-museums-everywhere-971639>).

Schneider, Tim. 2017. "The Gray Market: Why You Can't Trade Art Like Stocks (and Other Insights)." *ArtNet News*, May 15. Retrieved December 27, 2017 (<https://news.artnet.com/market/the-gray-market-art-stocks-960038>).

Schneider, Tim. 2017. “The Dealer Will See You Now: Why Gallery Waiting Lists Are the Ultimate Art-Market Paradox.” *ArtNet News*, June 22. Retrieved December 27, 2017 (<https://news.artnet.com/market/book-excerpt-great-reframing-waiting-list-1001498>).

Schott, Paul. 2017. “Cohen Foundation Makes Eight-Figure Donation to MoMA.” *Stamford Advocate*, June 27. Retrieved December 27, 2017 (<http://www.stamfordadvocate.com/business/article/Cohen-Foundation-makes-eight-figure-donation-to-11250632.php>).

Schuster, Angela M. H. 2016. “Brand Ambassadors: TEFAF Plans Its Move to New York.” *Blouin ArtInfo*, August 3. Retrieved (<http://uk.blouinartinfo.com/news/story/1348250/brand-ambassadors-tefaf-plans-its-move-to-new-york>).

Schwartz, Shelly. 2015. “Wealthy Investors Dabble in Art Investment Funds.” *CNBC*, May 29. Retrieved (<https://www.cnbc.com/2015/05/29/wealthy-investors-dabble-in-art-investment-funds.html>).

Seed, John. 2013. “An Alluring Woman With Fries and McDonaldization in.” *Huffington Post*, December 27.

Seed, John. 2012. “When Fame Replaces Art.” *Huffington Post*, February 2. Retrieved (https://www.huffingtonpost.com/john-seed/damien-hirst-art_b_1250175.html).

Seed, John. 2015. “On Taste, Richard Serra and Green Eggs and Ham Syndrome.” *Huffington Post*, July 13. Retrieved (https://www.huffingtonpost.com/john-seed/why-i-dont-like-richard-serra_b_3241678.html).

Seed, John. 2015. “Hell Has Frozen Over: Figurative Art Is Poised to Become the ‘Next Big Thing.’” *Huffington Post*, November 30. Retrieved (https://www.huffingtonpost.com/john-seed/hell-has-frozen-over-figu_b_8683186.html).

Seed, John. 2011. “When Appreciating Works of Art, Being There Is Always Best.” *Huffington Post*, December 8. Retrieved (https://www.huffingtonpost.com/john-seed/virtual-art-experiences-s_b_925034.html).

Seed, John. 2012. “Towards Eclecticism.” *Huffington Post*, September 8. Retrieved (https://www.huffingtonpost.com/john-seed/towards-eclecticism_b_1757136.html).

Seed, John. 2015. “Is Having an ‘Eye’ for Art a Thing of the Past?” *Huffington Post*, April 23. Retrieved (https://www.huffingtonpost.com/john-seed/is-having-an-eye-for-art_b_7128004.html).

Seed, John. 2013. “Has the Art Market Gone Medieval?” *Huffington Post*, April 22. Retrieved (https://www.huffingtonpost.com/john-seed/how-the-current-art-marke_b_3109827.html).

Seed, John. 2014. “What Makes a Jackson Pollock Painting Worth Millions?” *Huffington Post*, February 2. Retrieved (https://www.huffingtonpost.com/john-seed/jackson-pollock_b_4709529.html).

Shaheen, Stephen. 2015. “Fake It to Make It: The Dilemma of Delegating Fabrication.” *Blouin ArtInfo*, April 22. Retrieved (<http://www.blouinartinfo.com/news/story/1139919/fake-it-to-make-it-the-dilemma-of-delegating-fabrication>).

Shaw, Anny. 2016. “Sotheby’s Raises Buyer’s Premium in Bid to ‘offset Margin Pressure.’” *The Art Newspaper*, October 18.

Shaw, Anny. 2017. “New Online Auction Site Connects Collectors with Art-School Graduates.” *The Art Newspaper*, December 1. Retrieved December 27, 2017 (<http://theartnewspaper.com/news/new-online-auction-site-aims-to-connect-collectors-with-the-cream-of-british-art-school-graduates>).

Shaw, Anny. 2015. “Sotheby’s Holds First Online-Only Auction in Partnership with Artsy.” *The Art Newspaper*, October 27. Retrieved (<http://theartnewspaper.com/market/art-market-news/160470/>).

Shaw, Anny. 2016. “Sotheby’s Raises Buyer’s Premium in Bid to ‘offset Margin Pressure.’” *The Art Newspaper*, October 18.

Sheets, Hilarie M. 2015. “Blurring the Museum-Gallery Divide.” *The New York Times*, June 18. Retrieved (<http://nyti.ms/1BqfFOO>).

Sheffer, Adam. 2016. “Predictions for 2016: Reinventing the Gallery.” *Blouin ArtInfo*, January 3. Retrieved (<http://www.blouinartinfo.com/news/story/1305554/predictions-for-2016-reinventing-the-gallery>).

Siegal, Nina. 2016. “Van Gogh Museum Wants to Share Its Expertise, for a Price.” *The New York Times*, May 4. Retrieved January 17, 2018 (<https://www.nytimes.com/2016/05/04/arts/design/van-gogh-museum-wants-to-share-its-expertise-for-a-price.html>).

Siegal, Nina. 2015. “Instagram Takes on Growing Role in the Art Market.” *The New York Times*, August 4, 1–5. Retrieved (http://www.nytimes.com/2015/08/05/arts/international/instagram?takes?on?growing?role?in?the?art?market.html?_r=0).

Simon, Scott. 2015. “People Love Art Museums - But Has the Art Itself Become Irrelevant? [Interview with Michael Lewis].” *NPR*, August 15. Retrieved (<https://www.npr.org/2015/08/15/432356563/people-love-art-museums-but-has-the-art-itself-become-irrelevant>).

Singh, Rani. 2016. “‘Last Year I Personally Sold \$3 Billion Worth Of Art,’ Says Christie’s Global President.” *Forbes*, June 30. Retrieved (<https://www.forbes.com/sites/ranisingh/2016/06/30/last-year-i-personally-sold-3-billion-worth-of-art-says-christies-global-president/#3e631e75dff>).

Skate’s. 2015. “High-End Art Traded at Auctions Is Increasingly the Same.” *Skate’s*, October 20. Retrieved (<http://www.skatepress.com/market-notes/high-end-art-traded-at-auctions-is-increasingly-the-samefontana-surges-to-26-spot-in-skates-ranking-of-most-valuable-artists/>).

Smith, Lucien. 2015. “Lucien Smith’s ‘Bronx-Is-Burning’ Party Comes Under Fire.” *Blouin ArtInfo*, November 2. Retrieved (<http://blogs.artinfo.com/artintheair/2015/11/02/lucien-smiths-bronx-is-burning-party-comes-under-fire/>).

Smith, Melissa. 2014. “MoMA’s Endowment Is about the Same Size as the Budget of 150 Museums in 1989 Combined.” *Quartz*, May 24. Retrieved (<https://qz.com/207299/momas-endowment-is-about-the-same-size-as-the-budget-of-150-museums-in-1989-combined/>).

Smith, Roberta. 2013. “Large Visions in a Large Space: ‘Dieter Roth. Björn Roth’ at Hauser & Wirth.” *The New York Times*, February 7. Retrieved January 1, 2018 (<http://www.nytimes.com/2013/02/08/arts/design/dieter-roth-bjorn-roth-at-hauser-wirth.html>).

Soboleva, Elena. 2015. “How Collectors Use Instagram to Buy Art.” *Artsy*, April 19. Retrieved (<https://www.artsy.net/article/lena-soboleva-how-collectors-use-instagram-to-buy-art>).

Spence, Rachel. 2015. "Venice Biennale: India-Pakistan Art Collaboration." *Financial Times*, May 1. Retrieved (<http://www.ft.com/cms/s/0/a2f0a180-ecc2-11e4-a81a-00144feab7de.html>).

Spero, Josh and James Pickford. 2016. "Art Market Ripe for Abuse, Say Campaigners." *Financial Times*, April 17. Retrieved (<https://www.ft.com/content/d5098c7e-018c-11e6-ac98-3c15a1aa2e62#axzz46BD4TQNS>).

Steadman, Ryan. 2015. "Yale Art Dean Robert Storr on How Today's Art Critics Suck, Especially Jerry Saltz." *Observer*, October 4. Retrieved (<http://observer.com/2015/04/yale-art-dean-rob-storr-on-how-todays-art-critics-suck-especially-jerry-saltz/>).

Steadman, Ryan. 2015. "Artists Beware! Auction Success May Actually Hurt, Not Help, Your Career." *Observer*, May 5. Retrieved (<http://observer.com/2015/05/artistsbewaresellingyourworkatauctioncouldactuallyhurtnothelpyourcareer/>).

Steadman, Ryan. 2015. "Is Art Now Too Expensive for Museums?" *Observer*, June 19. Retrieved (<http://observer.com/2015/06/is-art-now-too-expensive-for-museums/>).

Stewart, James B. 2014. "With Art, Investing in Genius." *The New York Times*, November 28. Retrieved (<https://www.nytimes.com/2014/11/29/business/with-art-investing-in-genius.html>).

Stokel-Walker, Chris. 2016. "Selfies, Instagram and Pinterest: How Do Museums Adapt?" *Newsweek*, September 3. Retrieved (<http://www.newsweek.com/social-media-galleries-exhibitions-instagram-pinterest-how-do-museums-adapt-495406>).

Stone, Madeline. 2015. "There's a Cool New Thing Tech Billionaires Are Spending Millions on instead of Ferraris and Private Islands." *Business Insider*, June 9. Retrieved (<http://uk.businessinsider.com/techbillionaireschoosepicassosoverferraris20156?%0Dr=US>).

Stonor Saunders, Francis. 1995. "Modern Art Was CIA 'Weapon.'" *The Independent*, October 22. Retrieved (<http://www.independent.co.uk/news/world/modern-art-was-cia-weapon-1578808.html>).

Sutton, Benjamin. 2015. "As Pace Expands, New York Galleries Start Dwarfing Museums." *HyperAllergic*, April 3. Retrieved (<https://hyperallergic.com/196217/as-pace-expands-new-york-galleries-start-dwarfing-museums/>).

Tarmy, James. 2015. "Hope You Weren't Planning to Pay for That Warhol in Euros." *Bloomberg Businessweek*, January 29. Retrieved (<https://www.bloomberg.com/news/articles/2015-01-29/declining-euro-currency-jolts-art-market>).

Tarmy, James. 2015. "Quiz: Could You Cut It as an Art-Buying Billionaire?" *Bloomberg*, October 29. Retrieved (<http://www.bloomberg.com/news/articles/2015-10-29/fall-auction-quiz-could-you-cut-it-as-an-art-buying-billionaire->).

Tarmy, James. 2016. "This App Will Change The Way You Buy Art." *Bloomberg*, April 8. Retrieved (<https://www.bloomberg.com/news/articles/2016-04-08/magnus-app-wants-to-be-the-shazam-of-artworld>).

Tarmy, James. 2015. "What Happens to Stolen Art After a Heist?" *Bloomberg*, June 15. Retrieved (<https://www.bloomberg.com/news/articles/2015-06-15/what-happens-to-stolen-art-after-a-heist->).

Tarmy, James. 2015. "Why Do So Many Art Galleries Lose Money?" *Bloomberg*, July 30. Retrieved ([https://www.bloomberg.com/news/articles/2015-07-30/why-do-so-many-art-galleries-lose-money-\)](https://www.bloomberg.com/news/articles/2015-07-30/why-do-so-many-art-galleries-lose-money-).

Tarmy, James. 2015. "How the World of Fine Art Gets Financing." *Bloomberg*, April 24. Retrieved (<http://www.bloomberg.com/news/articles/20150424/%0Dhowartmethighriskinvestinginparkavenuespaperpurchase>).

Tarmy, James. 2015. "How to Buy Your Way Into the Artworld." *Bloomberg*, June 3. Retrieved (<https://www.bloomberg.com/news/articles/2015-06-03/how-to-buy-your-way-into-the-artworld>).

Thackara, Tess. 2015. "What's At Stake in the Artist's Resale Right Debate?" *Artsy*, July 31. Retrieved (<https://www.artsy.net/article/artsy-editorial-what-s-at-stake-in-the-artist-s>).

The Editors of ARTnews. 2015. "How Are Art-Business Stocks Doing This Year?" *ARTnews*, July 25. Retrieved (<http://www.artnews.com/2015/07/25/art-stocks-year-to-date/>).

Thompson, Don. 2016. "The Anatomy of the Art Market." *Fortune*, January 22. Retrieved (<http://fortune.com/2016/01/22/christies-auction-amedeo-modigliani-record-art-sale/>).

Tomkins, Calbin. 2016. "The Met and the Now." *The New Yorker*, January 25. Retrieved (<https://www.newyorker.com/magazine/2016/01/25/the-met-and-the-now>).

Tradingandipo.com. 2014. "Artpice: The Art Market Disruptor; IPO of Its Subsidiary Artmarket.com." *Euronext*, August 20. Retrieved (<https://www.euronext.com/nl/node/506859>).

Tully, Judd. 2015. "Can the Single-Venue Gallery Survive?" *Blouin ArtInfo*, October 26. Retrieved (<http://www.blouinartinfo.com/news/story/1263644/canthesinglevenuegalleriesurvive>).

Tully, Judd. 2015. "Sotheby's \$377M 'A. Alfred Taubman: Masterworks' Sale." *Blouin ArtInfo*, November 5. Retrieved (<http://juddtully.net/auctions/sothebys-377m-a-alfred-taubman-masterworks-sale/>).

Tully, Judd. 2015. "Picasso Painting Shatters Record at Christie's Blockbuster Auction." *Blouin ArtInfo*, May 12. Retrieved (<http://www.blouinartinfo.com/news/story/1155088/picasso-painting-shatters-record-at-christies-blockbuster>).

Tully, Judd. 2015. "On the Block: Contemporary Sales to Watch During Frieze Week London." *Blouin ArtInfo*, October 9. Retrieved (<http://test.blouinartinfo.com/news/story/1252219/on-the-block-contemporary-sales-to-watch-during-frieze-week>).

Tully, Kathryn. 2014. "How Useful Are Art Indices?" *Forbes*, September 5. Retrieved (<https://www.forbes.com/sites/kathryntully/2014/09/05/how-useful-are-art-indices/#5afab5404a4c>).

Urist, Jacoba. 2015. "These Scientists Are Trying to Quantify Your Taste in Art." *The Cut, New York Magazine*, December 1. Retrieved (<https://www.thecut.com/2015/12/can-science-explain-your-taste-in-art.html>).

Verhage, Julie. 2015. "There's A Big Debate About Whether Booming Art Auctions Are a Warning to Investors." *Bloomberg*, May 18. Retrieved (<https://www.bloomberg.com/news/articles/2015-05-18/there-s-a-big-debate-about-whether-booming-art-auctions-are-a-warning-to-investors>).

Viveros-Fauné, Christian. 2015. "Why the Artworld's Raging Narcissism Epidemic Is Killing Art." *ArtNet News*, December 1. Retrieved (<https://news.artnet.com/artworld/artworld-narcissism-epidemic-373139>).

Wachs, Joel. 2016. "Predictions for 2016: A Tale of Two Artworlds." *Blouin ArtInfo*, January 2. Retrieved (<http://stremmelgallery.com/predictions-for-2016-a-tale-of-two-artworlds/>).

Weiss, Miles. 2014. "Goldman Sachs Supports Cohen With Loan Backed by Fine Art." *Bloomberg*, May 6. Retrieved (<https://www.bloomberg.com/news/articles/2014-05-06/goldman-sachs-supports-cohen-with-loan-backed-by-fine-art>).

Wells, Georgia. 2016. "Google's Computers Paint Like Van Gogh, and the Art Sells for Thousands." *The Wall Street Journal*, February 29. Retrieved (<http://blogs.wsj.com/digits/2016/02/29/googles-computers-paint-like-van-gogh-and-the-art-sells-for-thousands/>).

Williams, Grace L. 2015. "Investing In Art : What To Know Before Buying That One-Of-A-Kind Warhol." *Forbes*, October 31. Retrieved (<http://www.forbes.com/sites/gracelwilliams/2015/10/31/investing-in-art-what-to-know-before-buying-that-one-of-a-kind-warhol/>).

Williams, Maxwell. 2015. "Meet the Ari Gold of the Artworld." *Vulture*, May 5. Retrieved (<http://www.vulture.com/2015/05/meetthearigoldoftheartworld.%0Dhtml>).

Wullschlager, Jackie. 2016. "How Tate Modern Transformed the Way We See Art." *Financial Times*, May 27. Retrieved (<https://www.ft.com/content/8c961a2c-2192-11e6-9d4d-c11776a5124d>).

Yoon, Sangwon. 2015. "Islamic State Is Selling Looted Art Online for Needed Cash." *Bloomberg*, June 29. Retrieved (<http://www.bloomberg.com/news/articles/2015-06-28/isis-has-new-cash-cow-art-loot-it-s-peddling-on-ebay-facebook>).

Anon. 2014. "A World Premiere: Technical Analysis of the Art Market Based on Artprice's Exclusive Data." *Artprice.com*, November 10. Retrieved (<https://www.artprice.com/artmarketinsight/a-world-premiere-technical-analysis-of-the-art-market-based-on-artprice-s-exclusive-data>).

Anon. 2016. "Art Advisory E-Bulletin 53." *1858 Ltd International Art Advisory*, April.

Anon. 2015. "In the Land of Black Gold." *Artprice.com*, April 28. Retrieved (<https://www.artprice.com/artmarketinsight/in-the-land-of-black-gold>).

Anon. 2015. "New York, the Global Capital of Art...and the Art Market." *Artprice.com*, August 25. Retrieved (<https://www.artprice.com/artmarketinsight/new-york-the-global-capital-of-art-and-the-art-market>).

Anon. 2011. "Frank Crystal & Co . Establishes Art Finance." *Insurance Journal*, December 15. Retrieved (<https://www.insurancejournal.com/news/national/2011/12/15/227559.htm>).

Anon. 2015. "Beirut: An Artistic Eye." *The Light of Now*, October 23. Retrieved (<https://thelightofnow.com/en/r98/culture/a2135/aishti-foundation-tony-salame/>).

Anon. 2014. "Art Is Not Always Expensive." *Artprice.com*, August 26. Retrieved (<https://www.artprice.com/artmarketinsight/art-is-not-always-expensive>).

Anon. 2015. "When Art Upsets...." *Artprice.com*, August 18. Retrieved (<https://www.artprice.com/artmarketinsight/when-art-upsets>).

Anon. 2014. "Female Artists and Big Money Results...." *Artprice.com*, July 22. Retrieved (<https://www.artprice.com/artmarketinsight/female-artists-and-big-money-results>).

Anon. 2014. "The Art Basel Effect." *Artprice.com*, December 9. Retrieved (<https://www.artprice.com/artmarketinsight/the-art-basel-effect>).

Anon. 2016. "Art Advisory E-Bulletin 56." *1858 Ltd International Art Advisory*, September.

Anon. 2013. "Contemporary Art: On a Wing and a Prayer." *The Economist (Special Report on Museums)*, December 21. Retrieved (<https://www.economist.com/news/special-report/21591705-why-so-many-museums-are-venturing-new-works-wing-and-prayer>).

Anon. 1974. "The Art of Investing in Art." *Changing Times: The Kiplinger Magazine* 28(2, February):19–21. Retrieved ([https://books.google.co.uk/books?id=OAUAAAAMBAJ&lpg=PA19&ots=HT_ZNKjRQ&dq=Kiplinger's Personal Finance the art of investing in art 1974&pg=PA19#v=onepage&q=Kiplinger's Personal Finance the art of investing in art 1974&f=false](https://books.google.co.uk/books?id=OAUAAAAMBAJ&lpg=PA19&ots=HT_ZNKjRQ&dq=Kiplinger's%20Personal%20Finance%20the%20art%20of%20investing%20in%20art%201974&pg=PA19#v=onepage&q=Kiplinger's%20Personal%20Finance%20the%20art%20of%20investing%20in%20art%201974&f=false)).

Anon. 2014. "Contemporary Art: The Choice of Medium." *Artprice.com*, September 9. Retrieved (<https://www.artprice.com/artmarketinsight/contemporary-art-the-choice-of-medium>).

Anon. 2015. "Art Advisory E-Bulletin 50." *1858 Ltd International Art Advisory*, November.

Anon. 2015. "Art Advisory E-Bulletin 49." *1858 Ltd International Art Advisory*, October.

Anon. 2015. "Sotheby's Dominates the London Market." *Artprice.com*, July 15. Retrieved (<https://www.artprice.com/artmarketinsight/sotheby-s-dominates-the-london-market>).

Anon. 2015. "Auctionata Acquires Valuation Site ValueMyStuff." *ArtDaily.org*, October 28. Retrieved (http://artdaily.com/index.asp?int_sec=11&int_new=81756#.WjkHiVSFhBx).

Anon. 2016. "Art Advisory E-Bulletin 52." *1858 Ltd International Art Advisory*, March.

Anon. 2013. "Feeding the Culture-Vultures." *The Economist (Special Report on Museums)*, December 21. Retrieved (<https://www.economist.com/news/special-report/21591709-what-museums-must-do-satisfy-increasingly-demanding-public-feeding>).

Anon. 2013. "FOCUS on Research & Innovation in Luxembourg." *FOCUS on Research & Innovation in Luxembourg* 8.

Anon. 2013. "2013 in Review : Influential Art Market Columnists." *Artprice.com*, December 17. Retrieved (<https://www.artprice.com/artmarketinsight/2013-in-review-influential-art-market-columnists>).

Anon. 2015. "Art Advisory E-Bulletin 43." *1858 Ltd International Art Advisory*, February.

Anon. 2015. "Art Advisory E-Bulletin 47." *1858 Ltd International Art Advisory*, September.

Anon. 2015. "Art Advisory E-Bulletin 45." *1858 Ltd International Art Advisory*, May.

Anon. 2015. "The French Art Market and Its Affordable Works." *Artprice.com*, June 2. Retrieved (<https://www.artprice.com/artmarketinsight/the-french-art-market-and-its-affordable-works>).

Anon. 2015. "Impressionist and Modern Art – Sotheby's Substantially Outsell Christie's in London." *Artprice.com*, June 30. Retrieved

(<https://www.artprice.com/artmarketinsight/impressionist-and-modern-art-sotheby-s-substantially-outsells-christie-s-in-london>).

Anon. 2014. "Art Advisory E-Bulletin 39." *1858 Ltd International Art Advisory*, September.

Anon. 2014. "26 Novembre 2014: Art Finance and Law Conference Series." *ArtLaw.org*, November 14.

Anon. 2016. "Art Advisory E-Bulletin 57." *1858 Ltd International Art Advisory*, December.

Anon. 2013. "Mad about Museums." *The Economist (Special Report on Museums)*, December 21. Retrieved (<https://www.economist.com/news/special-report/21591710-china-building-thousands-new-museums-how-will-it-fill-them-mad-about-museums>).

Anon. 2013. "The Bilbao Effect." *The Economist (Special Report on Museums)*, December 21. Retrieved (<https://www.economist.com/news/special-report/21591708-if-you-build-it-will-they-come-bilbao-effect>).

Anon. 2015. "Art Advisory E-Bulletin 42." *1858 Ltd International Art Advisory*, January.

Anon. 2014. "Once Again, Artprice Is Changing the Way the Art Market Functions by Launching Free and Paid Dashboards and Indexes as of September 2, 2014." *Artprice.com*, September 9. Retrieved (<https://www.artprice.com/artmarketinsight/once-again-artprice-is-changing-the-way-the-art-market-functions-by-launching-free-and-paid-dashboards-and-indexes-as-of-september-2-2014>).

Anon. 2014. "Art Advisory E-Bulletin 40." *1858 Ltd International Art Advisory*, October.

Anon. 2013. "Über-Warehouses for the Ultra-Rich." *The Economist*, November 23. Retrieved (<https://www.economist.com/news/briefing/21590353-ever-more-wealth-being-parked-fancy-storage-facilities-some-customers-they-are>).

Anon. 2014. "The World's Most profitable" Artists." *Artprice.com*, December 15. Retrieved (<https://www.artprice.com/artmarketinsight/the-world-s-most-profitable-artists>).

Anon. 2015. "Big Means Expensive...." *Artprice.com*, January 13. Retrieved (<https://www.artprice.com/artmarketinsight/big-means-expensive-8230>).

Anon. 2013. "Museums: Temples of Delight." *The Economist (Special Report on Museums)*, December 21. Retrieved (<https://www.economist.com/news/special-report/21591707-museums-world-over-are-doing-amazingly-well-says-fiammetta-rocco-can-they-keep>).

Anon. 2016. "Art Advisory E-Bulletin 54." *1858 Ltd International Art Advisory*, May.

Anon. 2015. "The Art Market Takes over the Biennials." *Artprice.com*, September 12. Retrieved (<https://artmarketinsight.wordpress.com/2015/09/12/the-art-market-takes-over-the-biennials-by-artprice/>).