

## **'Elephants can't gallop': Performativity, knowledge and power in the market for lay-investing**

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### **Abstract**

This paper examines lay-investment in financial markets (investment by members of the general public) as a practice performed by marketing knowledge. It follows the market studies programme (Araujo, Finch, & Kjellberg, 2010) to examine a problem that puzzles researchers in finance: why do lay-investors remain in the market despite their poor returns? Using a qualitative study of lay-investors in the United Kingdom, it considers the devices, 'agencements' and discourses that structure investment behaviour. It uses Foucault's writing on governance under neo-liberalism to suggest that investors are constituted as self-entrepreneurs, sustained by antagonism to professional investors, heterodox market beliefs and a consumer allegiance to investment styles and products. Marketing knowledge is inscribed in market devices and structures market relations. Finally, it suggests that self-discipline and confession are normalising technologies that help investors cope with difficulties and losses in the market. The paper develops theoretical linkages between the literatures of performativity and governmentality.

Summary statement of contribution: The paper expands the market studies literature through an analysis of the governance of lay-investors and their construction as productive economic agents. Marketing knowledge is presented as performative and crucial in to coordinating the construction of economic agency.

### **Keywords**

Market studies; performativity; marketing; bio-politics; Foucault; lay-investor

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## Introduction

Recent developments in marketing research have begun to question some of the taken for granted assumptions of the discipline (Saren et al., 2007; Tadajewski, 2010). In particular, the project of (re)writing markets into marketing (Araujo et al., 2010:2) has critiqued marketing research for representing 'markets as passive backgrounds, against which marketers have got on with the serious business of organising sellers' exchanges with buyers'. Araujo et al. emphasise instead the practical nature of market outcomes and argue that marketing knowledge is 'performative': marketing knowledge co-ordinates and informs the 'feedback loops' (Barnes, 1983) of knowledge and action that constitute social life. Following Callon (1998) they suggest that that markets are better understood as the collective achievements of hybrid, distributed agents, and that transactions are framed by devices, categories and market scripts. Marketing knowledge is central to such distributed agencies: inscribed in the material, technical and linguistic architectures of markets it coordinates the production of market participants, and the development of the social 'embeddedness' (Granovetter, 1985) of market relations.

In this paper I hope to shed some light on a puzzle that has long preoccupied researchers in academic finance: the existence – or perhaps persistence – of non-professional, or 'lay-' investors. These individuals (loosely defined as those investing their own money, not employed or trading within financial institutions) are among the least respected and successful of market participants. Wall Street folklore holds that they are 'dumb' (De Bondt, 1998) and the activities of non-professional investors have been persistent source of concern for those researchers who have investigated them. A leading scholar in finance, De Bondt (1998:832) describes his survey of the 'Fox Valley investors' as 'a sorry picture', and a substantial body of research has demonstrated that their returns are systematically below those offered by the market (Barber & Odean, 2000; Barber, Lee, Liu, & Odean, 2009; Brennan, 1995; De Bondt, 1998, 2005; Kumar & Lee, 2006).

I suggest another reading of the lay-investor: as a docile body of neo-liberalism (Foucault, 2008), with investor subjectivities constructed by the discourses of the market and inscribed in its devices. To develop such an argument, I explore the points of contact between notions

of governance and performativity, between marketing knowledge and power. I make use of Michel Foucault's writing on power, and particularly Foucault's later work on 'governmentality' (Gordon, 1991), circulations and 'bio-politics' (Foucault, 2008); under the bio-political regime, the preeminent mode of subjectification is the entrepreneurial-self, disciplined and measured by market mechanisms (Munro, 2012). My approach parallels moves in consumer research, which has long recognized the role of objects in consumer identity and culture (Belk, 1988; Schouten & Alexander, 1995), to consider 'post-social' consumption objects including the stock market (Zwick & Dholakia, 2006). However, the paper's critically informed position offers a more cautious assessment of post-social consumption as embodying 'immaterial labour' and proliferating, recursive power relations than the utopian visions of, for example, Arvidsson's (2010) consumer publics.

I argue that non-professional investors are constructed by their interactions with the investment services market. Through products and services purchased in the consumer-oriented investment service market they come to understand the financial market as possessing particular ontological characteristics and demanding appropriate strategies. Investors make use of devices, for example, software programs, magazines and training courses and printed lists, investment shows and seminars, inscribed with such strategies to produce a version of the market in which they can participate. Marketing knowledge becomes market knowledge, a heterodox conception of market function that binds investors to investment service providers through entanglements of (sometimes secret) knowledge, discourse, specialised tools and personal, even emotional, relationships. Lay-investors define themselves in opposition to the professional finance industry, and see their activities as a means of taking control of their economic destiny and constructing a better future for themselves. The motif of self-entrepreneurship pervades investor narratives, simultaneously freeing and subjectifying, providing new opportunities for marketers and new possibilities for the circulation of capital. The interplay between performative knowledge and power, embedded in performative discourses and socio-material devices, becomes visible in the heterogeneous material agencements that is the lay-investor.

The paper will first of all develop a theoretical framework of market devices and neoliberal governance. It then presents an analysis of an empirical study of lay-investors conducted in the prolonged bull market leading up to 2008. The analysis follows the investor 'career' from decisions and motivations to invest to the development of individualised calculative agencies,

understood as investment subjectivities. I employ the Foucauldian notion of confession to examine the normalising devices by which investors stay in the market despite sustained poor performance. The paper then concludes.

### **Market devices and neo-liberal governance**

In this section I elaborate on analytic similarities and useful commonalities between the 'agencements' of market studies literature and the technologies of subjectification envisaged by Foucauldian scholars. I suggest that the narrow conception of power as calculative ability offered in 'market studies' analysis (e.g. Callon & Muniesa, 2005) can be strengthened through a Foucauldian perspective of governmentality (Gordon, 1991). I argue that the insights offered by a Foucauldian emphasis on discourses and scripts exercised in the construction of subjectivities (Foucault, 1977) may be elaborated by the ability of 'agencements' to accommodate multiple agencies within a market actor, understood as a heterogeneous calculative network.

My analysis complements existing moves to write markets back into marketing; Araujo et al. (2010:5) emphasise the performative nature of marketing knowledge in organising markets: market theories give shape to market exchange, as templates for cognitive action or inscribed in material architectures and calculative devices. Marketing knowledge, alongside other forms of technical economic reasoning, plays 'an important role in causing markets to exist as both objects of representation and intervention' (Araujo et al., 2010:7). The move to understand markets as the focal point of organisational efforts and social performances has been motivated by studies of the practice and production of science and technology (MacKenzie, 2009) and has been developed by the conceptual apparatus of science and technology studies (Latour, 2007). Markets come to be seen, not as things-in-themselves, but as products of the organizing and stabilizing of 'heterogeneous' (Law, 1999) material agents (Latour, 2007), held together by their material and linguistic arrangements (Çalışkan & Callon, 2009, 2010).

Scholars in marketing have already incorporated these material and discursive market devices into marketing theory: the importance of market devices has been demonstrated, for example, in mass retail (Cochoy, 2008; Kjelberg, 2007), industrial markets (Azimont & Araujo, 2010)

and business to business marketing (Mason & Spring, 2011). Cochoy (2008), for example, draws attention to the importance of the socio-material architectures of the supermarket, mundane though they may be: the supermarket trolley becomes a central actor in a hybrid calculative process involving qualitative and quantitative logics, coordinating a group of shoppers and offering them a rule of thumb estimate of expenditure as they progress through the store. In Vargha's (2011) study, mortgage advisers and customers work to perform the financial products, often using computer-based visualisations, a process that stabilises and makes visible the needs and preferences of consumers while moving towards an eventual sale. In the high reaches of finance, investment bank traders encounter the market as an 'epistemic object', a 'flow architecture' always unrolling into the future (Knorr Cetina, 2005; Knorr Cetina & Bruegger, 2000). In each case, processes of consumption are active and ongoing – economies of qualities (Callon, Méadel, & Rabeharisoa, 2002), or epistemic projects – where the consumer is implicated in the business of developing and articulating value. These studies may, however, be differentiated from governmentality writings by the absence of notions of the responsibility of consumers as economic subjects: to consume. The intention of this paper is to explore marketing knowledge as a form of performative governmentality; to connect the literature of governance (Gordon, 1991) and of economic performativity (Callon, 1998). The foundations for my arguments are already in place. Performativity arguments imply that economic agency is governed and governable (Callon, 2008), that markets are a meeting place for politics and value (Kjellberg & Helgesson, 2010) and that power asymmetries manifest themselves through disparities in calculative resources. In order to develop commonalities between performativity and governmentality studies it is necessary to explore how localized, individual economic agencies, understood as agencements, come to be constituted as productive, docile economic citizens.

### *From market devices to governmentality*

In this paper I make use of Michel Foucault's writing on power, particularly his later works, to explore further the governance of economic agency. I ask how the performative nature of marketing knowledge gives rise to the subjectivities of individual economic actors, in this case lay-investors, and how these subjectivities are bound up in agencements of material devices and heterodox market theories. Foucault's early work saw power as focused on the body, where 'technologies of government' constitute the subjectivities of those governed, whether as 'docile bodies', productive and useful members of society or as carefully

classified misfits: the sick, or the insane (Foucault, 1976, 1978). In his later writing on 'bio-politics' however, of more relevance to this study, his attention shifts to the governance of populations through the bio-political sciences: statistics, demographics, and epidemiology, for example. His attention moves from architectural and optical surveillance of individuals to a society-wide mode of governance administered through normal distributions and knowledge of the population. Where earlier disciplinary apparatus 'encloses, fixes and confines,' the bio-political apparatus organizes the circulation of commodities, consumers and production, fragmenting identity and proliferating consumption (Munro, 2012), a limitless production of individual representations that is 'circular, recursive and self-reproducing' (Zwick & Knott, 2009).

For Foucault, the change in disciplinary gaze is accompanied by a transformation of the social contract, where the economic agent is no longer a partner in an exchange relationship, but an entrepreneurial self, and the embodiment of human capital. The neoliberal concept of economic agency demands 'continuous intervention and regulation within the social fabric to promote competitive social relations and entrepreneurial culture' (Munro, 2012:348). Under neoliberal economics, even consumption is the productive responsibility of the individual:

'The man of consumption, in so far as he consumes, is a producer. What does he produce? Well, quite simply, he produces his own satisfaction. And we should think of consumption as an enterprise activity by which the individual, precisely on the basis of the capital he has at his disposal, will produce something that will be his own satisfaction' (Foucault, 2008:226)

Foucault's later work found a ready audience, thanks to a few relatively early publications (Foucault, 1980; Gordon, 1991) and his notion of 'governmentality' prominence through the writing of Nikolas Rose and others, who explore 'the complex of mundane programs, calculations, techniques, apparatuses, documents and procedures through which authorities seek to embody and give effect to government ambitions' (Rose and Miller 1992:175, cited Azimont and Araujo, 2010: 96). More recently, Hardt and Negri's Marxist re-reading has brought forms of 'immaterial labour' to prominence in, for example, analyses of the online reputation economy of 'modders' and 'tweeters' (Arvidsson, 2010; Zwick & Knott, 2009). Crucial to the concept of immaterial labour is the notion that human nature is the raw material transformed through production (Munro, 2012:355): the self-entrepreneur must go to work first of all upon the resources offered by the self, and the aesthetic adventures of consumers become the raw material from which value can be extracted. Immaterial labour, tweets and

likes, constitute an 'untoward land', where 'every moment becomes an opportunity to both make a sale and explore the subsequent moments' (Thrift, 2013:146).

Often, market studies literature lends itself to a critical, governmentality retelling. Credit scores constitute a new form of borrower to be targeted by lenders, and a new conception of risk is malleable and calculable (Leyshon & Thrift, 1999). Through the entanglements of the credit score, the borrower is caught up in a novel, neoliberal, investor subjectivity: the homeowner, the small-scale property developer and rentier (Leyshon & French, 2009). The 'entrepreneurial self' comprises 'a kind of machination, a hybrid of flesh, artefact, knowledge, passion and technique' (Rose, 1996:153), where attachment and affect bind individuals and devices, as consumers seek out post-social, or quasi-social relationships. So, for example, in Deville's (2012) account of debt collection, agencies bind debtors to new relationships through 'affect': bodily action, emotion, obligation and anxiety. This process of attachment becomes of primary interest to researchers, and central to my investigation of the lay-investor.

#### *A 'performed' lay-investor*

Researchers in academic finance have been fascinated by lay-investors. Survey research (De Bondt, 1998, 2005) and extensive quantitative examinations of trading patterns (e.g. Barber et al., 2009) have stressed the poor returns achieved by these market participants. Lay-investors are thought to be 'noise traders', are irrational, and are closely linked to the many deviations from market efficiency that researchers have identified. Internet-based information sources are unreliable, prone to 'pump-and-dump' manipulation (Sabherwal, Sarkar, & Zhang, 2011); Antweiler and Frank (2004:1260) suggest that people posting on internet message boards are the 'real world counterparts of the noise traders that are so often invoked in financial theory'. As the efficient market hypothesis (Fama, 1970, 1991) has come under increasing pressure from behavioural economics and finance, researchers have supplied a huge body of evidence to support the conjecture that heuristic-based judgements give rise to sub-optimal market behaviour. Reviews and summaries of this extensive literature are offered by (Byrne & Brooks, 2008; Daniel, Hirshleifer, & Teoh, 2001).

Finance research focuses on individuals as rational, individuals possessed of free choice. Critical approaches in marketing, often motivated by Foucault's writing (e.g. Saren et al.,



2007), consider such freedom as a rhetorical legitimation of market arrangements, and have sought to establish the means by which such legitimation takes place. In marketing proposition, one might argue, there is considerable subtlety to 'the art of making free market behaviour, in staging very tightly the freedom of the actor while at the same time respecting it deeply' (Cochoy & Venn, 2007:205). This Foucauldian 'captation' seeks to explain how organized contexts, such as firms or administrations, seek to exert a hold over fluid publics. Approaching markets as collective achievements driven by marketing knowledge suggests, on the other hand, that analytical focus be directed upon the 'agencements' (Muniesa, Millo, & Callon, 2007) of market action. The emphasis must be to show how particular agencements, around individual investors, are formed: how the process of attachment takes place.

Central to my argument is the recursive dialectic of marketing and market knowledge. The market exists in no tangible form: it is instantiated through screens, telephones, and other such 'scoping' devices (Knorr Cetina, 2005). Thus, manifestations and knowledge of the market are inseparable from the means of production, which is itself governed by market knowledge; just as differing laboratory apparatus may produce differing yet equally valid 'worlds' from the same data (Law & Urry, 2004), or different clinical regimes may interpret the same cluster of symptoms in differing ways (Mol, 1999), so the arbitrageurs of high finance coax profits from anomalies between multiple market worlds conjured from uniform price data (Beunza & Stark, 2004). In the case of lay-investors the market must also be worked on to be consumed (Mayall, 2007; Zwick & Dholakia, 2006). Investors must purchase products to visualise and manipulate the market, and those products serve to stabilize and perform a particular market ontology; market knowledge is embedded in the scoping devices through which investors produce and consume the market. Thus profit opportunities, and so and the marketing of investment services as a source of those profit opportunities, is contingent upon a given knowledge of the market. The proliferation of market worlds, and associated opportunities – as many as there are competing investment devices – is a rich source of market differentiation and customer entanglement for investment service providers.

Screens and the interactions they permit are the basic component of market activity for lay-investors (Preda, 2009; Roscoe, 2013), although a reliance on technology to see the market is nothing new. Preda (2006) shows how lay-investment was initially coordinated by the

tickertape and has charted the development of technical analysis as a consequence of the relationship. Roscoe and Howorth (2009) (Roscoe & Howorth, 2009) show how different conceptions of market order, such as the existence of trends, or hidden patterns and numbers, necessitate different calculative strategies when investing. Investment methods are also influenced by investment discourses, which display a remarkable consistency around the globe, whether in the US (Harrington, 2007), Australia (Mayall, 2006) or Taiwan (Chen, 2013). In summary, the present paper develops these studies by reflecting on the role of marketing knowledge in performing the lay-investor: I argue that marketing knowledge is embedded in the heterodox discourses and devices of lay-investment, and enacted through hybrid agencements. At the same time it contributes to a performative discourse of entrepreneurial self-management, producing the differentiated subjectivity of, for example, the technical analyst, or the small-cap investor. By doing so I hope to frame and explore the initial question: why do investors keep on investing?

## **Methodology**

The intention of this project was to provide a holistic and contextualised understanding of the activities of non-professional investors that allow us to generate a plausible, trustworthy contribution to theory (Ahrens and Chapman, 2006). The potential issues of observer bias and limitations in data access, ever present in qualitative research, were addressed through the use of comprehensive description, multiple methods and observations, allowing us to corroborate findings across methods and data sources (Lincoln and Guba, 1985; Ahrens and Chapman, 2006). Data available for analysis comprised interview transcripts, field notes, responses to the survey questionnaire, media articles, specialist online sources, and marketing materials for investor products.

Non-professional investors are difficult to access due to the isolated and often invisible nature of their occupation; qualitative studies have tended to recruit volunteers through social gatherings, public meetings (Mayall, 2006) and investment clubs (Harrington, 2007). This project took a similar approach. I visited investment seminars and shows and used a short questionnaire to generate background data and as a means of facilitating interview requests. I attended a total of five days' of investor events. These comprised an annual, two day investor fair in London, which we visited in 2005 and 2006, with the permission of the organizer. The event attracts 5,000 or so individuals, and targets a broad base of non-professional investors. I

also visited two evening seminar events organized by an online financial media company. The events were held in London, near to the financial district, and targeted non-professional investors: the first focused on 'small-cap' investing, and the second billed itself as a 'Trader's evening' with a focus on technical analysis and leveraged products. At each there was an audience of about 70 individuals.

Three full days and two evenings of attendance at these events (with time equally divided between observation and questionnaire administration) yielded 95 questionnaires, generating 21 potential interviewees. Of these, 13 individuals were finally interviewed, others failing to return calls, agreeing to speak at a time when they proved unavailable, and leaving false or out of date contact details. As a corrective to the contingent nature of the recruiting process, advertisements were posted on bulletin boards and interviewees were asked to recommend colleagues who were willing to be interviewed (a snowballing method). A further six interviewees were contacted through these methods. In total 24 interviews were conducted with 19 non-professional investors. Five investors (Anne, George, Nigel, Simon and Stewart) were interviewed a second time after an interval of six months in order to investigate emerging topics. Interviews lasted between 25 and 50 minutes. Four interviews were conducted face to face and the remainder were conducted by telephone. Telephone interviewing allowed me to interview a geographically dispersed group of interviewees and it avoided potential ethical issues involved with interviewing individuals in their own homes. Despite my efforts, I was unable to gain access to an investment club, although clubs featured in interview material.

Table 1 presents basic data for each interviewee. Of the investors interviewed, just three had previously worked in the financial sector (Peter, Robert and Stewart). Others worked in a range of sectors, with several attempting to trade or invest for a living.

Data were analysed from an early stage in the research process through comparison and re-comparison (Boeije, 2002). Themes were identified within interviews and across interviews; thematically clustered matrices (Miles and Huberman, 1994) were built to incorporate themes from literature as well as emerging themes in the data. Themes were explored in later, more structured interviews (Glaser, 1965). Data saturation was considered to have been reached when analysis of interview and observation data contributed no new themes (Eisenhardt, 1991; Boeije, 2002); saturation was also evidenced by an increasing homogeneity of

accounts, with investors detailing similar methods and articulating similar discourses of investing, for example with stock phrases of investment activity occurring frequently in interviews. The accounts offered by investors recruited through advertisement or referral did not present any additional alternative or striking themes. There is a heavy weighting of older investors with correspondingly larger portfolios, often representing pension savings. This is likely to be a consequence of recruiting at day-time investor fairs, where retired individuals were more likely to attend. Once again, use of advertising and recruitment by referral help to compensate for this potential bias.

**Table 1: Interviewees**

Pseudonym	Gender	# of interviews	Age	Investor type	Portfolio size
Albert	M	1	60 or over	S,C	£101k-£150k
Anne	F	2	60 or over	S	£201k+
Chris	M	1	50-59	C	£151k-£200k
George	M	2	40-49	S,C	£201k+
James	M	1	60 or over	S,C	£101k-£150k
Karl	M	1	30-39	S	£51k-£100k
Max	M	1	40-49	C	£50k or less
Mickey	M	2	60 or over	C	*
Mike	M	1	60 or over	S	£101k-£150k
Nigel	M	2	30-39	S,C	£201k+
Peter	M	1	30-39	S	£101k-£150k
Robert	M	2	60 or over	S,C	£51k-£100k
Simon	M	2	40-49	S,C	*
Stewart	M	2	60 or over	S	£201k+
Sunil	M	†	40-49	*	*
Terry	M	1	30-39	C	£50k or less
Tony	M	1	40-49	C	£151k-£200k
Trevor	M	1	60 or over	S	£201k+
William	M	†	50-59	*	*

\* Not known †Interviews not recorded

S – Small-cap investor C - Chartist

## **The entrepreneurial 'agencements' of investment**

This section will explore how lay-investors acquire an understanding of the financial markets – how they purchase, quite literally, this understanding through the consumer-facing investment service market. As a conceptual structure, I follow the investor career. From the outset of their investing careers these individuals encounter the marketing knowledge of service providers as embedded in knowledge of the markets. That is to say: heterodox notions of market function, passed from service provider to investor, and between investors, become the marketing knowledge by which products and services are sold. That same knowledge is written into devices, perhaps by being used as the basis for software design, or by the production and dissemination of investment metrics; parallels from the world of professional finance can be found in a hedge fund's home-made yield calculator (Hardie & MacKenzie, 2007) or options prices sold to traders (MacKenzie, 2006). Market knowledge becomes the script according to which investment is practiced, the theoretical underpinning of the investment agencement, and as such it is also marketing knowledge. Market participants find themselves constituted as investors of a particular kind, tied to products, knowledge, and ways of understanding the market that bind them to particular providers.

### *First performative discourse: taking control of one's financial future*

In Foucault's analysis of contemporary economic governance, individuals are seen as making entrepreneurial projects of their selves. The consumer produces her own satisfaction through the capital she has at her disposal; human nature itself becomes the raw material for production and productive activities. Under neo-liberalism, self-entrepreneurship 'links up a seductive ethics of the self, a powerful critique of contemporary institutional and political reality, and an apparently coherent design for the radical transformation of contemporary social arrangements' (Rose, 1996:153). In other words, the responsibility for economic self-direction thrust upon the individual is matched by dissatisfaction with existing arrangements and the existence of imaginative possibilities about the future.

Marketing knowledge as first encountered by would-be investors takes the form of a performative entrepreneurial discourse concerning notions of fairness, appropriate rewards, self-determination and resistance to financial institutions. A recurring theme across interviews was that the original decision to become an investor was driven by hostility to the financial services sector and investment professionals. Individuals were motivated by a desire

to take control of their savings or pensions, rather than leaving them in the hands of professionals whom they perceived as condescending, greedy, and incompetent. Robert explains his decision to transfer his retirement savings and pensions into a self-managed scheme:

‘All my pensions got rolled up into Equitable Life a couple of years ago, and I realised that I’m losing a lot of money here, and I lost confidence in the financial services industry and decided I was going to have to do something myself with what I’ve got left.’

While Anne said:

‘It irritates me that I’ve got to pay all this money to somebody to manage [my portfolio], but the answer to that is ‘Of course, well, they can do a better job than you,’ [but] they don’t always get such wonderful results.’

Max, who was ‘quite cynical’ about professionals’ performance, felt that the focus on benchmarks, even in a falling market, does not constitute ‘good stewardship’, and Mike advised that new investors avoid the professional fund managers because ‘they don’t do very well.’ Investors were confident in their own ability to outsmart those who would exploit the naive investor, their common-sense reasoning exemplified by this comment from Albert:

‘Hot air, in a word. Two words. They are very dedicated people. A broker comes on the phone to me and starts talking about why don’t I buy such and such a share, the simple answer is if it’s so darn good he would have bought it himself and he wouldn’t be telling me about it.’ (Albert)

Like the debt collection agencies described by Deville (2012, 2013) the strategies of investment service firms relied on building affective attachment to those who are encouraged to better themselves financially. Strategies themselves necessarily differ - where agencies stimulated visceral reactions of panic and bodily engagement with letters and telephone calls – investment service firms offer excitement, risk, and the chance of ‘outsmarting the large brokers, finding good opportunities that are likely to do really, really well but nobody knows about them, because nobody investigates them’ (Simon). Equally, negative affects – hostility and anger – also tie investors to service providers, which were quick to capitalise on the investors’ distrust, and to present themselves as allies in a struggle against the monolithic financial sector. The investment writer Tom Bulford – whom Simon followed closely – promoted himself thus:

‘I love banking big stock market gains – especially if it’s on the blindside of other investors. Seven years ago I quit my high-flying career in the Square Mile to join a newsletter called...’

In contrast to faceless financial institutions, service providers presented themselves, or their ‘investment celebrity’ representatives, as personal figures with whom bonds and attachments could be made. Though never having met him Simon referred to ‘my friend Mr Bulford’, and trusted his judgement: ‘I have to rely on my friend Mr Bulford to say what effect [news] is going to have’. Other individuals made themselves available in person at shows and seminars, whether to exercise symbolic capital as an expert, or to build personal relationships with their clients. Albert remarked that he would follow one person, whom he had met at exhibitions ‘to the end of the earth’.

Once established as investors, the same feelings of hostility provided an ongoing motivation, as lay-investors positioned themselves in opposition to the larger players. Chris believed that ‘the financial markets...are manipulated quite cynically...you can actually see [the big players’] muddy footprints all over the market.’ Simon described his investing as a way of ‘outsmarting the large brokers, finding good opportunities that are likely to do really, really well but nobody knows about them, because nobody investigates them. And,’ he said, ‘it’s really satisfying’. According to Robert, the ‘small private investor’ stands against the ‘insiders’: ‘I know in theory all news is supposed to come out through the official channels but I’m not sure it does happen quite that way’. For Terry, facing the professionals is:

‘thrilling...you’ve got hundreds and hundreds of highly paid investment analysts... there’s me sitting at home... and those [analysts are] sitting there with millions of pounds of software and a couple of PhDs in mathematics and they’re still getting it wrong’.

*A second performative discourse: the promise of high returns*

Beating the professionals at their own game is not quite enough – investors want to do it in style. Although, with their emphasis on systems and rationality, investors would not classify themselves as gamblers, there remains a seductive discourse of high returns, particularly in the small company sector. George explained:

‘I invested from a seed-cap stage [into a company] that’s gone from minimal revenues, I think this year they are going to do something like 20 or 25 million in

revenues... got a market cap of something like 60 million. So that's the success story side of things, that's what I'm trying to replicate.'

The discourse can be summed up by variants of the phrase 'elephants don't gallop' even followed by 'fleas can jump ten times their own height'.

'Shares will rocket up on a very thin story. And they have got more chance of rocketing up in price...the old [saying] elephants don't gallop...if the capitalisation is only £100m it's got a chance of doubling.' (Robert)

'The advantage of an AIM stock is that it's much more volatile and if you get it right the volatility works in your favour, as I've said to you elephants don't run.' (Albert)

The metaphor of earthbound pachyderms has been attributed to the famous investment guru Jim Slater and appears frequently in the investment media, as in this example, from 'Incademy Investor Education': '*Elephants don't gallop*; fleas can jump ten times their own height. Therein lies the attraction of small caps'<sup>1</sup>. Simon attributed his knowledge of the phrase, and the accompanying discourse, directly to the marketing materials that he consumes:

'The thing about small-caps is, we get told a lot that they are more agile than larger companies...they can change their direction to suit current market conditions...'

'We get told a lot? By whom?'

'I guess by people in the press, by people at seminars, they say elephants don't run....

“ ” “ ” “ ”

The relatively small portfolios of many interviewees necessitate higher returns, especially for those who desire to make a living as investors. The expectation of high returns is therefore a precondition of the lifestyle and career choice. Entrepreneurial discourses stress the nimbleness of the small, private investor, who might discover something that brokers do not: '[small companies are] not actively followed because [the broker] can't afford the time even to send someone out to visit them' (Stewart). Figures in the region of 20% to 30% annually were quoted often. This expectation of high return is extremely resilient, and is able to withstand considerable evidence to the contrary. For example, having spent several minutes discussing the potential upside offered by smaller companies, Simon volunteered that his best performing investment has been MAN Group, an international behemoth at the time listed in the FTSE 100.

<sup>1</sup> [http://www.incademy.com/pages/subject\\_index.htm?ginPtrCode=10002](http://www.incademy.com/pages/subject_index.htm?ginPtrCode=10002) [accessed 16 June 2010]



Such expectations constitute a general motivation for engaging in the activity, rather than a specific attachment to a given investment provider. In the next section I will consider how these attachments are achieved.

*Developing attachments: formatting calculative agencies*

As investors work to develop their skills and understanding of the markets, they begin to form more specific attachments to material devices, and also to specific individuals. Marketing knowledge, in the form of heterodox theories of market function and corresponding investment strategies, is performed through the devices that make the market present and visible: screens, telephones, and modes of calculation combine to instantiate the market (Hardie & MacKenzie, 2007; Knorr Cetina, 2005). These 'scoping' (Knorr Cetina, 2005) devices carry marketing knowledge, for the marketing of products depends on profitable opportunities being made visible by certain understandings of market function. It follows that the adoption of a particular style of investing, driven by personality, identity and consumption preference has long-lasting effects and consequences: it specifies the agencement of an investor, it frames investment decisions, highlighting some factors as important and others as irrelevant, and it embeds the investor in a tightknit network of power relations that are performed through the distribution of calculation across the marketplace. Zwick and Dholakia (2006) have positioned investors as co-producers of the market understood as an epistemic consumption object, yet this is not a production without rules. Investor subjectivities are constituted by the tools and networks that are made available for the task: highly fragmented, individualised and attached to specific providers by knowledge, technology and affect.

Narratives followed a common pattern as individuals struggled to develop their expertise. The investment service industry offered them a wide variety of means to develop and understand their investing practice. They might, for example, read magazines and books or buy audio-visual material – for Anne, the Investors Chronicle magazine was a 'bible' in her early days: Chris, was 'totally self-taught', through books and instructional videos; Terry purchased 'fantastically expensive' training CDs. Karl made use of a simulator, offered by one of the lay- focused brokers to draw in new custom:

'Around that time there was a computer simulation game called City Comment, you invest a virtual hundred thousand pounds, so I did that and brushed up on how you

invest in the stock market ... and I find I was that I was quite good at this, I wasn't too bad at this in fact, so I decided that I would read a bit more into it and have a go at investing for myself'

Many of the interviewees attended training courses. Some, such as the free seminars I attended, were run by brokers and investment service firms as part of their marketing activities. Investors visited the City, spoke to experts and traded war stories for an evening. Market and marketing knowledge are present in the presentation of the trader on the podium; personal attachments are stimulated by acceptance of methods, theories and the associated purchase of materials. The excitement, investment worldliness and 'secret knowledge' shared by the speaker gives rise to affective bonds between consumers, heterodox knowledges and the technologies necessary to unpack the market's mysteries. Investors become productive and engaged consumers, deploying their resources and investing their intellectual and financial capital in pursuit of capital growth and affective satisfaction. Another model was the high tariff – costing anything up to £2500 for a weekend – course offered by a 'market expert', frequently in conjunction with a particular piece of software or proprietary method. In each case, choice of investment strategy and platform becomes linked with the individual's social identity and conception of their self. In the end, Max said, the choice of investing strategy 'went down to *personality and what you like the feel of*' (my italics). Just as an individual's consumption choices become bound up with their identity (Bocock, 1993; McCracken, 1988) the choice of investing equipment and style is a matter of consumption preference, personality and identity. The decision, once taken, will construct the individual's agency in entirely different ways: while the chartist uses prices to predict the future, the 'fundamental' investor hunts for value and potential in the accounts and media presentations of smaller quoted companies.

At seminars and on the stands of investment shows, the representatives of investment service firms extolled the virtues of particular practices or techniques, and manufacturers of software explained how one aspect of market function (easily detectable through their secret algorithm) might be harnessed to deliver endless profits. Investors sought out strategies and methods, each representing a different kind of marketing knowledge, linked to the expertise and prestige of an individual. Max, a chartist, explained this process, emphasising the need for courses to present a 'system':

‘The Robert Newgrosh new skills I ended up doing first, because I could go on that one, and his approach, he had different topics over five days in those days were spread out so you had plenty of time to integrate it... For those five days it cost me probably less than half it would have cost for a weekend with Greg Secker, but [offered] *no particular system*. The other one, the Sandy Jedeja one, effectively did provide, or appeared to *provide a whole system*, and I'll elaborate as to why that was. That was one day, it was just under 500 quid, so I thought it was quite good value.’

Max's comments illustrate the linkages between marketing knowledge, individuals, and technologies. The attachments that began as investors first learnt their way into the market continue as they explore and develop new skills. Objects, events and phenomena of the market are rendered ‘tractable’ and ‘mobile’ through devices such as numbers, graphs and spreadsheets (Azimont & Araujo, 2010:96), until, as Mickey said:

‘With a charting package it's *dead easy* because ... I select Fibonacci, and I click once on a high point with my mouse and click once on the low point and the lines are automatically drawn...’

A chartist's identification with and commitment to a particular style of investing involves an intellectual commitment to an often idiosyncratic understanding of market ontology. The following comes from an ‘advertorial’ in a trading magazine:

‘The Delta Phenomenon states that each and every market has an innate order that it follows. This innate order makes highs and lows predictable as far into the future as you want to go. The order of the market is based on the dynamic forces of nature. The Delta Phenomenon is based on the concept of time and space. It states that turning points in the market come at certain times which it is possible to determine long in advance. The time cycles are the result of the interaction between the sun, moon and the earth.’ (Albert, 2005:69)

Mechanisms such as the ‘Delta Phenomenon’ are made credible by a belief, clearly articulated by interviewees, in hidden organising principles in the market. Terry, a chartist, links market movement to numbers found in tides, waves, pine cones, and the human body. He is a devotee of Elliott, from which Delta is derived:

‘[Elliott] is a wave structure, a simple wave structure which is basically a series of impulse waves followed by a series of retracement waves, and the impulse is broken into a series of five simple waves upwards, and then you have two retracement waves, and then a series of ‘a’, ‘b’ and ‘c’ waves... a series of five simple waves up followed

by three simple waves down... They are not always simple, sometimes they're complex and so the retracement patterns are not *always easy to see*...'

Yet it is possible to find these patterns, given the right equipment, for the relevant market knowledge is inscribed into the software, here algorithms for detecting shapes in the noise of market data. Terry has spent several thousand pounds on purchasing training CDs and charting software, and attending courses, and invested most of his spare time for nine months on testing out new methods, with the hope of becoming a full-time investor in the near future. When one method disappointed he has moved onto another. Each is linked to a particular 'expert', many of whom he has met in person on their training courses and whom he discussed by name during the interview. His investment devices configure the choices available to him by framing, disentangling, and offering possibilities, or *promissions*, for action (Callon, 2007). Terry's charting simulations play out overnight on a four-screen, two-computer laboratory, offering him each morning *promissions* for investment activity; his agencement as a chartist comprises computers, screens, software and data flows, his own ingenuity and action, a particular set of beliefs about the way the world is, and the principles of evaluation that stem from those beliefs.

The small-cap investors, on the other hand, eschew technical wizardry for old-fashioned strategies, yet still find themselves reliant upon market devices to distribute (Hutchins, 1995) the calculative burden of investing. Stewart, for example, follows a 'value-based' (Graham, 1973) approach in his small company portfolio. Here, he explains how he uses a printed directory of AIM-listed companies to quickly screen a market numbering hundreds of companies:

'I can rule out maybe 90% of them by just flicking over and seeing what they are doing and the names. What they are involved in and looking at the very minimal stuff [headline financial numbers and ratios]...I can see at a glance, that [many companies are] not going to interest me.'

The directory is an unobtrusive, material device, inscribed with a particular cluster of scripts for selecting companies, including ratios for analysing stock value and performance. Complexities of decision are rendered into single, comparable numbers, such as the PEG ratio, its use explained by an analyst during an evening seminar thus: 'typically a PEG of 0.75 to 1 is good'. Anne assembles a scrapbook of cuttings, and consults her 'bible', the Investors Chronicle magazine. Trevor makes extensive use of a website, which:

‘...has a very, very detailed way of assessing companies, not simply on the bog standard kind of fundamentals, but they used all sorts of complicated algorithms as well, heaven knows how it all works out...It is very detailed...’

The proprietary measure of Trevor's preferred website is expressed as a number, specified to two decimal places. Yet, according to the website, the decimal places matter much less than the absolute polarity of the number: less than one is a 'red flag', and more than one a buy signal. Complex market information and a theory of investment practice are reduced to a choice between red and green flags, and Trevor is caught up in an agencement dedicated to a particular mode of market agency.

In all instances the performativity of marketing knowledge, itself inseparable from market knowledge, is visible. It is seen in the discourses of market operation, which serve to frame investor decisions, and it is inscribed in the material agencements through which they share calculation and arrive at possibilities of action. The nonprofessional investor acts within a market-world that only makes sense to an outsider in the light of the relevant market(ing) knowledge: it illuminates and explains their actions. At the same time, the marketing knowledge captures and binds the investor to an investment service provider, through a discourse of possibility and change, through bodily affect and a carefully staged resistance to professional finance, and through the elaboration of divisions between different kinds of investor, so that being a follower of, for example, Elliott and Pivot at the same time would mean holding on to almost contradictory sets of belief about the way the market works (Roscoe & Howorth, 2009). Attachments are developed through specialised knowledge, embedded in proprietary tools, through the deployment of symbolic expertise by the celebrities of the investment service world, and through the emotional and intellectual commitments – the affects – that must be made by individual investors.

### *Staying in the game: Discipline and confession*

Expectations of steady profit, whether delivered by the 'holy grail' (Chris) of perfect charting indicators, or through outwitting the professionals in the small company markets, sit uncomfortably with the overwhelming empirical evidence that lay-investors perform less well than the rest of the market (Barber & Odean, 2001; Barber et al., 2009; Barberis & Thaler, 2002). Persisting with investment in the face of growing losses requires investors to invoke the seductive possibilities of future success, and manage responsibility for market losses. The

alternative would be to accept a bitter truth: that there is no easy money to be made in the markets, that there are no holy grails or magic formula, and that trading costs will soak up what little profits can be made (Odean, 1999).

Investors may disguise losses through strategies of mental accounting (Thaler, 1999). Some investors, such as Anne, treated investment monies as distinct from other money, as suggested by Zelizer (1994, 2005). Others committed wholeheartedly to the exercise, throwing pension funds, life savings, and future career possibilities to the cause of investing. Although self-deception and separate monies may explain the willingness to weather temporary losses, it does not appear to provide a satisfactory answer to the much broader question of why investors exist at all, under such circumstances. More specifically, how do the carefully crafted subjectivities of individual investors survive extended losses? Interviews appeared to move from method to method – for example Terry's progress through charting courses – but not one of my interviewees had any intention of giving up on the whole enterprise. Instead, in a mirror of the governmentalist strategy of judging individuals against the population (Munro, 2012) individuals took personal responsibility for failings to achieve returns equivalent to the market. This responsibility became apparent in interviews and in the public spaces of investing in the shape of war stories and confessions. I suggest that investors' continued acceptance of poor performance may be dependent upon a final disciplinary technology, the confession: a normalising, disciplinary device, a ritual through which the confessant unburdens themselves and is healed (Foucault, 1978; Munro & Randall, 2007).

First of all, there are narratives of possibility. Terry, who hoped to give up his job and become a full-time investor, enthused about the possibilities offered by a career in investment and trading. He compared the speed of returns to other careers, arguing that his nine months is nothing against the years spent becoming a doctor or dentist, and described his vision of working from wherever he wished. A career in trading, he said, 'gives you the ultimate freedom because all you need is an Internet connection and a computer, and you could be anywhere in the world'. There is a similar sentiment in the comments of Chris, a long-term day trader:

'I enjoy the independence, and I enjoy the potential to make good money sometime in the future when I can get on top of myself. It's a very creative occupation, and also it does have the promise of a lot of money if you get it right'

Then there are narratives of necessary pain, of endurance in pursuit of a goal. Chris added: 'They say you've got to pay for your education one way or the other. I decided to pay for it by losing money in the market.' This is the hard grit of investing: expertise, determination and sacrifice are necessary components of investment success. Mickey defined himself as a serious investor, forced by redundancy to earn his living this way. He is scornful of dilettantes and hobby investors:

'A chap I know for instance said "Yeah, I think [options trading] is great fun, I really enjoy it, I put £1000-£1500 in the kitty every 18 months, it normally lasts me about 18 months" I thought "For heaven's sake!".'

Simon and Max were using savings from previous employment to try out investing 'careers'. For Mickey, being a professional means putting more money into the market, taking risks, and most of all taking investing seriously. He rejects the cosseted life of hobby investors out of hand:

'I went on a two day course at Hammersmith and I only lasted one day. I just couldn't stand it any more ... there was something like 20 helpers to check you in and show you around and make sure you're having a good time and all of this rubbish, it's just hangers on who had been to this course before. I didn't find any of them were making too much money.'

When success remains elusive, investors blame themselves for letting emotion cloud their judgement. Chris spoke of the potential to 'make good money sometime in the future when I can get on top of myself'. Investors guarded against attachment to any share and were rigorous in watching the prices on their portfolios. Albert cautioned that 'One of the golden rules about it is have no sentiment whatsoever for the share you're buying. The silly statement is the share doesn't know you've bought it'. Karl spent about half an hour a day and two hours at the weekend 'to review what happened during the week...to make sure I don't ever lose sight of what I'm doing and don't ever get cocky'. Albert too reviewed his gains and losses in price terms on a daily basis:

'Every night I work out precisely to the penny how much I have made or lost that day. Because I've found that if you take your eye off the ball a week becomes a fortnight... and that particular share has dropped 35% in a fortnight, and by then from bitter experience I know it's too late.'

Mike and Stewart both talked about investing 'rationally', while Robert talked about his 'systems' and 'databases'. Trevor said:

'Emotion does get in the way. If you can trade, or invest, without any emotion at all then you're at a big advantage to other people. If you take all the emotional baggage out of it, it's going to do you a lot of good...when it's your own money you're much more emotionally involved.'

Optimism and self-discipline notwithstanding, performance often fell below the expectations of investors. Interviews became venues for confession, normalisation, and perhaps even healing, as individuals sought to justify their continued investment activity. Mike complained:

'The investing I did for my mother and sister, they have made quite a bit of money. But being very cautious, they were in shares like Glaxo and BP, which were going up steadily and paying dividends. My history of investing in small companies has always been a disaster.'

These investor laments were distinguished by regrets and should-haves. Robert saw a year's worth of profits wiped out by one bad trade:

'I met a bit of a reverse on that one, so my net position on the year is actually negative which is not too good... I should have sold it, but ...I kept holding it, and it went down and down and down and down'

These sentiments were shared in interviews but are typical of many conversations between investors, online and off-line. The war stories of investors at meetings have a ritual element, serving to normalize the risks, losses and possibilities of success, and to lionize those who can cope with all three. At one evening seminar Sunil told me that he had lost £5,000 on his early attempts at high risk margin trading, trapped in positions that he found difficult to escape. The meeting places provided by investment clubs and online bulletin boards serve as venues where investors can confirm their intention to participate in the market and commiserate over failure (Roscoe, 2013). Albert told the story of the founder of his investment club, who wrote:

'an open letter in the *Investors Chronicle*, and said 'I'm retired, I'm doing this and it's a very lonely business and I'm very, very dismayed at how badly I'm doing. If there are any fellow travellers out there who'd like to meet for lunch once a month and commiserate and chat over the stock market, please write'.



60 replied to the letter and 40 attended the first meeting: success is perhaps more elusive than investors might readily admit. Ironically, the first meeting was held in a broker's office, and subsequent meetings quickly turned into opportunities for the broker to push more services towards investors, who were forced to find their own private spaces in the public houses of the city.

Confession and commiseration provide a means for investors to normalise their losses and to construct actives that attribute blame and offer possibilities for better futures. Talk of rationality, systems and of removing emotional baggage, or even of sheer bad luck suggests that losses are the result of freak circumstances, rather than a systematic problem relating to the size, ability and informational resources of lay-investors. The investors' self-supervision has a panoptic quality, as if they have internalised the disciplinary gaze levelled on them by investment service providers. Yet it is noticeable that investors must provide their own spaces for commiseration, or at least subvert those already offered to them: the lunch club attendees pushed out of the broker's office, the small group huddled in the corner of an investment seminar trading war stories, or the message board discussion that slides towards a private e-mail exchange. The agencements of discourse and material devices that construct investor subjectivities are panoptic, in the sense that they leave no room for dissent, yet the problem of poor performance is so pressing that investors must find a means of managing it. I suggest they do so through making niches in the apparatus of investment spaces, online and off, as places where they may confess, normalise and work through their investment problems. As the open letter shows, the confessional is talked into existence in by the investors themselves, and the confession, in that sense, is owned by the investors. It represents a necessary mechanism for the balancing of individual agencies with the unproductive yet inescapable material agencements of investment. As such, it forms an essential part of the captation of investors, and offers a theoretical linkage between notions of governmentality and theories of hybrid material agency.

## **Conclusion**

This paper has set out to examine non-professional investment as a practice performed by marketing knowledge. From the starting point that marketing knowledge is performative (Araujo et al., 2010) it has invoked the late-Foucauldian writings on governance under neo-

liberalism to suggest that power relations are circular, recursive and self-reproducing (Zwick & Knott, 2009), embedded in the agencements of non-professional investment. Finally, it has argued that investment spaces provide sites for confessional activities where investors can manage the conflicts between the promise and obligation of investment and the frequent lack of success that the occupation brings.

What does it mean to suggest in this context that power relations are circular, recursive and self-reproducing? Financial markets constitute a particular form of post-industrial consumption. Their immateriality means that they must be produced, made visible, and worked upon, and they comprise a relativist playground where there is no 'real' price, but a tug of war between rival valuations to be settled by capital and organizational power. Those working in financial institutions benefit not only from resources of capital, but also from organizational infrastructures (Beunza & Stark, 2004) and specialized technologies (Beunza & Muniesa, 2005). Working as scientist and toolmaker (Knorr Cetina & Bruegger, 2000), the professional trader is a sense-maker, who, paraphrasing Law and Urry (2004), uses her laboratory of screens and calculators to create multiple market worlds, all different yet equally valid. The global financial market is endlessly performed by, and embedded in, the specialized knowledge and tools of its participants. Lay-investors also perform the market, yet their performance is wrapped up in circulating notions of market function which are, at the same time, the marketing knowledge through which products and services are sold. The market unrolls for lay-investors, not as a vast, homogenous tapestry (Knorr Cetina, 2005) but as a highly fragmented and differentiated place of post-social consumption in which individuals are entangled, labouring to produce a version of the market in which they might discover a career, a pension, or freedom from faceless financial institutions. Marketing knowledge is performative in the sense that it is also market knowledge, what MacKenzie (2006) calls a 'Barnesian performativity': use of analytical theories or tools constructing localized investment worlds that resemble those theories or tools.

As a caution, I must recognize the self-fulfilling aspect of my own analysis, where the intervention of the researcher becomes a case of performativity in its own right. Interviews became spaces for confession and the interviewer thereby another channel of governmentality; individual lay-investors' spoken performances of market function and profit-seeking become idiosyncratic constructions of markets. This is, perhaps, a specific instance of more general complaints over the status of sociology of knowledge (Pickering,

1992). A scrupulously symmetrical approach necessitates reflexivity regarding my own argument, and the recognition that it is as fragile a construction as the performances of the investors, just one of many possible laboratory worlds (Law & Urry, 2004). However, a reflective awareness over the limitations of knowledge production does not, I suggest, invalidate an investigation of the material agencements surrounding individual investors. Just as diagnostic machinery functions away from the ethnographic gaze, so investor performances are anchored in material devices inscribed with structures of text and discourse – ways of doing and seeing in the market – that persist beyond the moment of interview or the non-participant observation of a social gathering. I have attempted to give these market devices a voice through the reflections of the investors themselves, hardly naive realists when it comes to market ontologies. Recognizing the agency of market devices, not least in terms of their ability to configure bespoke market actors for investment service firms, offers a powerful means of problematizing naïve assumptions about the reality of market process and order, and opens up investment activity to a critical and political reading.

We can characterize lay-investing as a form of ‘immaterial labour’, as multiplying market productions form an ‘untoward land’ (Thrift, 2013) where new value for marketers can be found. Investors’ selves are the raw material of production, with personal judgements and ‘what you like the feel of’ the basis of the decision to become an investor of a particular kind. I suggest that, in a shareholder democracy, the activities of shareholders themselves have been added to the regime of post-Fordist production. The investor becomes self-entrepreneur, producer of her own satisfaction, manager of her own capital, and foundational member of the social contract under neoliberalism. In the end, as the notion of confession and commiseration suggests, it is the responsibility of individuals to stay in the game, to keep working towards an imagined future prosperity. New modes of investment proliferate: novel individual subjectivities, not chartist or fundamentalist, but a follower of Fibonacci, or Delta, or a hunter of gymnastic fleas. The governance of non-professional investors is centripetal and circulatory, not centrifugal and static (Munro, 2012). In each case the agencement gathered around the investor provides the technical and material apparatus of market agency, as a given subjectivity demands. When such a variety of knowledges are on offer, it is the weight of capital, or lack of it, that most affects lay-investors. MacKenzie’s (2006) demonstrations of the performativity of options pricing imply that global institutions enjoy enough power to bend the market to the shape of their theory. The heterodox models and market conceptions of lay-investors, on the other hand, exist in a permanent state of friction

with those envisaged by more powerful actors. Power in the market is represented not only by calculative ability, or specialised discourses and secret knowledge, but also pure capital collected in the bridgeheads of global finance (Clark, 2005).

Understanding power relations as circular and recursive, yet still bound up in calculative ability and marketing knowledge, offers a means of further theorizing the attachment (Knorr Cetina & Bruegger, 2000; Zwick & Dholakia, 2006) of investors to the market, to service providers, and to each other. I have drawn particular attention to the role of affect (Deville, 2013) in encouraging investment activity and stabilising relationships with service providers. There are many parallels with Deville's analysis of debt collection: relationships do not stem solely from a direct commercial transaction (although investors are at least indirectly buyers of investment services, unlike debtors in default) but are sustained by a network of associations with market knowledge, discourses of antagonism, success and triumph, and a bodily engagement with investment services, via the internet message board or the City seminar room. Investment firms, like debt collectors, seek to stabilise both the product – one of many possible presentations of the market – and the consumer, and to 'solidify and intensify' affective bonds between customer and provider (ibid. p11-12). Preda (2009) has shown how solitary investors seek to dramatize their market interactions, speaking imagined others out of the screens, just as the day traders studied by Zaloom (2003) delighted in battling the imaginary 'spoofer'. Investors build relationships with others known only online (Roscoe, 2013), and subvert the spectacular spaces of shows and exhibitions as venues for confession and commiseration. Such webs of attachment and affect may be further complemented by an understanding of investment as aesthetics (Aspara, 2009), although it is beyond the scope of the present paper. It is likely to be the case that those who invest in collective settings, such as investment clubs, encounter other modes of stabilizing and solidifying, and other networks – as do those who choose investments on the basis of collectively negotiated brand judgements: no Lay-z-boy sofas or Harley Davidson motorbikes (Harrington, 2007). Yet the individualizing nature of market knowledge encountered among my interviewees puts them naturally at odds with investment clubs, as their frustrated comments show, and justifies a methodological engagement at the level of individual investors.

Marketing knowledge and market devices are increasingly understood to play a performative role in the construction of market participants, and the calculative strategies, decisions and

investment performances of lay-investors have been extensively researched from this perspective. Consumer researchers within marketing have long recognized the role of objects in consumer identity and culture (Belk, 1988; Schouten & Alexander, 1995), and investment has also been studied as a consumption activity in the social settings of investment clubs (Harrington, 2007). More recently, researchers have begun to consider 'post-social' consumption objects including the stock market (Zwick & Dholakia, 2006; Zwick & Knott, 2009), and associated modes of production and novel possibilities for ethics and commons (Arvidsson, 2010). Critical perspectives on marketing have emphasised the role of discourses in constructing subjectivities of consumption (Saren et al., 2007). In this paper I have sought to elaborate commonalities between studies of market agents as collective, distributed achievements, and the flourishing literature of governance through marketing knowledge. The activities of lay-investors illustrate how devices may perform calculative market agents and outcomes, and at the same time constitute investor subjectivities: productive, docile consumers of investments and investment technologies, capable of disciplining themselves in the face of continued difficulties in the market. In doing so, I have sought to provide a novel account of a long-standing problem: why do lay-investors invest? Only one instance did an investor indicate that he was no longer prepared to continue. Simon eventually concluded that galloping elephants were nothing more than a 'marketing ploy', and that he was abandoning value investing. Instead, he became a chartist. The 'sorry state' (De Bondt, 1998:832) of lay-investing is a complex, technical achievement.

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