Crowds and Speculation

A Study of Crowd Phenomena in the U.S. Financial Markets 1890 to 1940

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A study of crowd phenomena in the U.S. financial markets

1890 to 1940

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Frederiksberg, 2017

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Til Frida

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Kristian Bondo Hansen

Frederiksberg 28 April 2017

English abstract

This dissertation undertakes an explorative historical analysis of problems associated with crowd phenomena in the U.S. financial markets between 1890 and 1940. While a study of crowd-related problems in the financial markets invariably involves examinations of panics and crises, the dissertation shows that crowds were not exclusively seen as crisis phenomena, but were considered by many financial writers to be of much broader significance to the organisation and functioning of markets. The dissertation claims that it is necessary to explore the close connections between financial markets and crowd phenomena in order to fully understand how markets were perceived and conceptualised in the given historical period. Inspired by Michel Foucault's reflections on the analysis of *problematisations*, the dissertation explores how practical, academic and popular accounts of financial markets problematised (i.e. reflected upon, contested and responded to) various crowd phenomena as they occurred in the markets. As part of the historical exposition, the dissertation examines how financial writers employed tropes and terminology from late nineteenth century crowd theories when describing and seeking to explain the processes and practices of the markets. The dissertation argues that the way in which crowd phenomena were problematised as well as the attempts to address these alleged crowd problems influenced perceptions of financial markets and transformed approaches to market analysis and speculation. Drawing on an archive of handbooks on *how to* become a successful investor or speculator, scholarly work on financial markets (from the academic fields of economics, sociology and psychology) as well as a range of popular (fictional and non-fictional) textual accounts of trading in financial markets, the dissertation offers a broad, yet rigorously focused, historical perspective on crowd phenomena in financial markets. Furthermore, it explores how ideas about crowd action, imitation, herding and contagion were introduced to and became integral parts of the discourses on financial markets. Reiterations of such historically formed ideas about crowd phenomena in financial markets are still prominent in current discussions and the dissertation thus offers a historical contextualisation of a pertinent feature of contemporary debates on financial markets.

Danish abstract

Denne afhandling foretager en historisk undersøgelse af problemer omhandlende massefænomener i de amerikanske finansmarkeder i perioden 1890 til 1940. Selvom studier af masseproblematikker i finansmarkeder uundgåeligt vil involvere undersøgelser af finanskriser og tilfælde af panik i markeder, så viser afhandling, at masser ikke udelukkende ansås for at være krisefænomener. Massefænomener blev, i den pågældende periode, derimod tilskrevet langt større og bredere betydning for organiseringen af finansmarkeder samt måden de fungerede på. Det hævdes i afhandlingen, at det er nødvendigt at undersøge de tætte forbindelser mellem finansmarkeder og massefænomener for at få den fulde forståelse for hvorledes markeder opfattedes samt hvorledes de blev begrebsliggjort i den pågældende historiske periode. Med inspiration fra Michel Foucaults metodologiske refleksioner over begrebet 'problematisering' foretager afhandlingen en historisk analyse af måder hvorpå massefænomener i finansmarkeder er blevet problematiseret (dvs. gjort til genstand for refleksioner, diskussioner og løsningsforslag) i praktiske, akademiske og populære tekster. Som en del af den historiske undersøgelse, analyseres og diskuteres det i afhandlingen hvorledes termer og ideer fra masseteorier (udformet i 1890erne) flittigt blev brugt af 'markedsskribenter' i beskrivelser af og forsøg på at forklare markedspraksisser og -processer. I afhandlingen argumenteres der ligeledes for, at måden hvorpå massefænomener blev problematiseret samt måderne hvorpå disse påståede problemer blev forsøgt løst havde stor indflydelse på forskellige iagttageres opfattelser af finansmarkederne samt indvirkede konkret på tilgange til visse markedspraksisser. Det empiriske materiale, der analyseres i afhandlingen, består af håndbøger til vordende finansspekulanter, akademiske tekster (hentet fra økonomien, sociologien og psykologien) samt et udvalg af populære tekster omhandlende finanshandel. Afhandlingen bidrager med et bredt, men fokuseret blik på massefænomener i finansmarkeder samt et perspektiv på hvorledes ideer såsom imitation, smitte, flokadfærd og -mentalitet integreredes i markedsdiskursen. Da sådanne historiske ideer om massefænomener i finansmarkeder stadig diskuteres i markedslitteraturen, skal afhandlingen ydermere ses som en historisk kontekstualisering af et central element i samtidige diskussioner af finansmarkeder.

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Chapter 1: Introduction

In 2011, *Nature* published a paper in their 'Perspective' section in which it was claimed that the systemic failure of the financial sector during the 2007–2008 global financial crisis could be described and explained via an analogy to epidemiological networks of the spread of infectious diseases. The authors, the Executive Director of Financial Stability in the Bank of England, Andrew G. Haldane and Professor of Zoology at Oxford University, Robert M. May, further suggested that there were policy lessons to be learned from their 'deliberately oversimplified' analytic models of the financial 'ecosystem' (Haldane and May, 2011, p. 351). Essentially, Haldane and May argued that in order to develop a 'realistic caricature of markets' that could account for the interlinkages, dependencies and interaction dynamics in financial systems, it was necessary to draw on theories and models from outside the realm of financial economics (Haldane and May, 2011, p. 352). Hence, the crisis seemed to have showcased that there was an urgent need for new approaches to the study and regulation of financial markets.

This was not the first time Haldane and May had made the case for an epidemiological network-based approach to the study of so-called 'systemic events' in financial markets. A couple of years prior to the publication of the paper in *Nature*, Haldane gave a speech at the Financial Student Association in Amsterdam during which he juxtaposed the SARS epidemic of 2002 and the financial crisis of 2007–2008. He argued that 'the spread of epidemics and the disintegration of the financial system' were essentially different branches of 'the same network family tree' (Haldane, 2009, p. 3). Congruently, as May et al. asserted in a short 'News & Views' piece in *Nature*, studying systemic events in financial markets using epidemiological and ecological network models and not exclusively focusing on payment flows (as economists and central bankers allegedly have a habit of doing) would render it possible to take into account relevant social and political factors such as 'the spread of rumours' and 'the "contagion dynamic" of public perceptions' (May et al., 2008, p. 894). Viewing financial markets through the epidemiological network lens illuminates, following this line of reasoning, the 'contagion dynamics' that the authors considered to be of such great importance to the functioning and malfunctioning of these systems.

While the deliberate simplicity of Haldane and May's models and the suggestion that policy lessons could be drawn from their work have been met with criticism from scholars in a variety of academic fields such as behavioural economics (Lux, 2011), physics (Johnson, 2011), the history of medicine and virology (Peckham, 2013) and economic sociology (Cooper, 2011), my interest lies in the historical precedent of the specific way in which Haldane and May respond to a problem pertaining to the financial markets. By 'respond' I mean the way they turn to extra-economic terminologies and theories, such as an epidemiological conception of contagion, in order to deal with a concrete problem, which, in their case, is the alleged inability of the prevailing available theories and models to properly grasp the intricate systemic nature of the world of finance. Although there is something quite disconcerting about the idea that the most accurate way to understand the financial markets should be to compare them to a network within which a viral disease spreads, May and Haldane's attempt to rethink prevailing perceptions of financial markets (and therefore how researchers ought to approach them and how legislators should intervene in them) is not unprecedented in the history of finance.[1] Whereas Haldane and May discuss contagion dynamics in financial markets on a systemic level, the term 'contagion' has historically mostly been associated with the concerted action and inter-mental affectation in masses or crowds of market actors. The present study explores how collective action and collective emotion

[1] Peta Mitchell (2012) has, for example, shown that even though it was only from around the 1990s that the notion of 'contagion' found widespread use in economics and finance literature (see, e.g., Allen and Gale, 2000; Edwards, 2000; Kolb, 2011; Stiglitz, 2010), the use of the notion in discourses on financial markets has a much longer historical trajectory (Mitchell, 2012, pp. 131–132). Along similar lines, economist Peter Garber (2000) has criticised the use of notions such as 'contagion' (as well as the conceptual siblings, 'irrational exuberance' and 'herding'), which, he argues, surface after 'particularly volatile periods' in the financial markets. Garber asserts that these notions are and always have been employed in 'the jargon of economics and finance' in order to demonstrate the supposed irrationality of financial markets (Garber, 2000, pp. 123–126). There is, in other words, a long tradition of drawing on an epidemiological vocabulary when analysing financial markets. Apart from medical science and biology, other sciences have had a substantial impact on the formation of economic science (see, e.g., Mirowski, 1989).

in the U.S. financial markets were problematised as contagious *crowd phenomena* and were responded to through the employment of tropes and terminology from crowd psychology, a field of sociological and psychological research established in the late nineteenth century.

Objectives and research question

More specifically, the dissertation undertakes an explorative historical analysis of the ways in which crowd phenomena have been problematised and responded to in discourses on financial markets in the United States between approximately 1890 and 1940. Crowds and crowd action in the financial markets have for centuries been associated with disorder, instability, irrational social action and impending crisis (Kindleberger and Aliber, 2011, pp. 42–43; O'Hara, 2008, pp. 14–15; Poovey, 2008, p. 218). However, the objective of the dissertation is not to study crowd phenomena in markets as inextricably connected to financial crises nor is it to unveil a web of crowd dynamics hidden beneath the polished surface of financial markets and thereby assert that markets are and always have been influenced by irrational forces. On the contrary, the aim is to explore how writers described, sought to explain and proposed solutions to market problems that were believed to be somehow related to crowd phenomena. The dissertation demonstrates that the way crowd problems were reflected upon and sought solved influenced perceptions of financial markets and gave shape to new approaches to market analysis and speculation.

The aim of the dissertation can be narrowed down to the following three overarching objectives. First, the dissertation explores different ways in which economists, social theorists, financial journalists and authors of books on how to become successful in investment and speculation (i.e. how-to books) began to address challenges allegedly pertaining to crowd action, the spread of collective sentiment and irrational collective behaviour in connection to the financial markets in the late nineteenth and early twentieth centuries. By examining how writers, preoccupied with the processes and practices of the markets, dealt with contentious and seemingly contagious developments such as public participation in the financial markets, the mass media dissemination of market information and speculative panics, the analysis seeks to unearth how different crowd phenomena became objects of concern, controversy and conflict. Second, the dissertation studies how writers (from the abovementioned plethora of fields and genres) turned to the academic discipline of crowd psychology and the theories subsumed under that disciplinary category for theoretical substantiation of their responses to crowd-related concerns in the markets. In relation to this second objective of the dissertation, the analysis attempts to shed light on the socio- or collective-psychological factors allegedly influencing financial market processes and practices: These were factors that writers described as increasingly important in connection to the functioning and malfunctioning of financial markets. Third, the dissertation analyses how the practices of 'reading the markets' (Knight, 2016, 2012) and speculating in them were reconfigured and fundamentally altered through the problematisations of crowd phenomena in the financial markets. Narrowing the focus to a specific branch of how-to literature from the 1920s and 1930s, which advocated the so-called *contrarian approach*, the analysis focuses on how practices of speculation and of analysing markets were reconfigured and how new rules of conduct were prescribed in the market advice provided in these speculators' manuals.

In other words, the dissertation examines how crowd phenomena in the financial markets were problematised in diverse financial literatures and how these problematisations influenced perceptions of the organisation, functioning and practices of the financial markets. On that background, the dissertation poses the following research question:

> *How did different crowd phenomena emerge as problems in the U.S. financial markets from 1890 to 1940, and how and with what means were these market problems responded to?*

The research question is explored through an in-depth study of practitioners-oriented, academic and popular accounts of financial markets from the given historical period. (Later in this chapter, I outline and elaborate on the selection of the textual empirical material analysed in the dissertation.) When I say that the dissertation examines 'crowd phenomena' I am specifically referring to various physical and psychological phenomena involving a collective or a mass of market actors. An example of a crowd phenomenon in the financial markets could be the outbreak of a panic among traders densely packed on the trading floor of an exchange. It could also be a pure psychological phenomenon such as the assumed impact of public opinion on the fluctuations of prices in the markets or (somewhat related) it could be collective emotions allegedly shared by and affecting the judgement of investors and speculators. However, most of the crowd phenomena that are analysed in the dissertation are presented, in the examined literatures, as having a physical dimension (e.g. the seemingly frenzied interactions of traders during a panic on an exchange's trading floor) and a psychological dimension (e.g. the transmission of emotion, ideas, information and misinformation among the traders on the trading floor that, according to some accounts, amplified the panicked behaviour). These two dimensions are often perceived as inextricably connected in the analysed crowd phenomenon in the markets.

By studying how crowd phenomena were problematised and responded to, the dissertation is shedding light on ways in which the processes, procedures and practices of the financial markets were critically assessed and, in some cases, reconfigured during the given historical period. Thus, the dissertation claims that in order to provide a thorough historical account of how financial markets were perceived in the late nineteenth century and the first four decades of the twentieth, it is necessary to consider the great influence that different crowd phenomena had on academic, practical and popular discourses on markets. From a methodological point of view, the historical analysis undertaken in this dissertation is a so-called *historical problematisation analysis* inspired by and reconstructed on the basis of Michel Foucault's reflections on the notion of 'problematisation' and on the analysis of processes of problematisations. In the following part of the chapter, I will elaborate on Foucault's notion of 'problematisation' and sketch out what it entails to carry out, in this dissertation's case, a historical exploration of problematisations of crowd phenomena in the financial markets.

A history of problematisations

During one out of a series of lectures devoted to the Greek notion *parrhesia* (meaning 'frankness in speaking the truth') held at the University of California, Berkeley, in the fall of 1983, Foucault revealed to his audience that what he had tried to do in most of his work, including the ongoing seminar series, was to analyse processes of problematisation, i.e. 'how and why certain things (behaviour, phenomena, processes) became a *problem*' (Foucault, 2001 [1983], p. 171, italics in the original). A historical analysis of problematisations was, Foucault argued, concerned with 'the way people begin to take care of something, of the way they become anxious about this or that' (Foucault, 2001, p. 74). In other words, it is an analysis of how something reveals itself as a problem and how people start to reflect upon and possibly respond to the problem in question. In hindsight, Foucault argued that the notion of problematisation seemed to have given him 'a better perspective on the way [he] worked' (Foucault, 1992 [1984], p. 11). In a 1984 interview with the classical philologist André Berten, Foucault argued that he had pursued a 'history of problematization', which was, he explained in rather poetic phrases, a history that examined the following:

> how, within human practices, there is a moment when, in one sense, what is obvious becomes muddied, the lights go out, evening comes, and people begin to perceive that they are acting blindly and that, as a result, a new light is necessary. A new light is necessary, a new lighting, and new rules of behaviour. And here a new object appears: an object that appears as a problem. (Foucault, 2014 [1984], pp. 244–245)[2]

The problematisation process detailed in the quote can be divided into three 'moments': (1) a practical tension, i.e. the becoming muddied of that which was previously seen as obvious; (2) a reflection upon or discussion of this particular tension, i.e. the way in which the truth of the matter at hand is brought to question; (3) responses that provide

[2] In his Berkeley lectures, Foucault described the process of problematisation in a similar yet slightly less poeticised way, as 'the way an unproblematic field of experience, or a set of practices, which were accepted without question, which were familiar and "silent", out of discussion, becomes a problem, raises discussion and debate, incites new reactions, and induces a crisis in the previously silent behavior, habits, practices, and institutions' (Foucault, 2001, p. 74).

insight into the specific problem and suggestions on how to deal with it (Schwartz, 1998, p. 21). Thus, a process of problematisation is one through which some form of human behaviour, a set of practices or certain phenomena at a given moment become objects of reflection, concern and contestation and to which specific ways of responding to the problem are suggested.

Following Foucault's understanding of the analysis of problematisations, the historical analysis carried out in this dissertation should not be mistaken for an examination of a general and static problem of *the crowd* in the U.S. financial markets. What is pursued in the present study is rather an analysis of how certain forms of collective behaviour and types of market practices were, in certain historical situations and contexts, problematised and responded to by market observers and practitioners. To put it in problematisation-analytic wording, the dissertation examines how certain crowd phenomena in the markets became 'objects of concern' for writers occupied with the business conducted in the U.S. financial markets during the last decade of the nineteenth century and in the first four decades of the twentieth century (Foucault, 1992 [1984], pp. 23–24). As such, it is an analysis of 'forms' of problematisations of crowd phenomena in financial markets.

Though Foucault's late work encompassed several passages in which he reflects upon the notion of problematisation and the writing of the history of problematisations, he never made a systematic outline of precisely what an analysis of problematisations entailed.[3] The closest Foucault came to such an outline is the introduction to *The History of Sexuality II: The Use of Pleasure* (1992 [1984]) in which he made clear that the focus of his study was 'forms of problematization' of sexual behaviour in Antiquity (pp. 10–13, 23–24). The somewhat fragmentary nature of his discussions of the notion of problematisation and the lack of a more programmatic account of how

[3] Foucault reflected upon and discussed the notion of problematisation and his pursuit of a history of problematisations in the following texts: 'Problematics' (1996a [1983], p. 418, pp. 420–422); *Fearless Speech* (2001 [1983], pp. 71–74, 169–173); 'Polemics, Politics, and Problematizations: An Interview' (1991 [1984], pp. 384–390); 'Interview with André Berten' (2014 [1984], pp. 244–246); *The History of Sexuality II: The Use of Pleasure* (1992 [1984], pp. 11–13, 23–24); 'What is Enlightenment?' (1984, p. 49); 'The Concern for Truth' (1996b [1984], pp. 456–457).

problematisations should be studied is arguably part of the reason why the approach has, compared to other analytic notions from Foucault's oeuvre such as genealogy and archaeology, only attracted moderate scholarly attention. In the few but insightful studies that explicitly commit to the historical problematisation analysis, the authors stress that their analytic approaches are 'reconstructed' or 'distilled' from Foucault's work in the 1980s (see Borch, 2012, 2015; R. Johnsen, 2009; Lopdrup-Hjorth, 2013).[4] Apart from the studies that actually undertake a historical problematisation analysis, Foucault's elaborations on problematisations and his approach to the study of them have not gone completely unnoticed in philosophy and social theory (see Alvesson and Sandberg, 2011; Bacchi, 2012; Barnett, 2015; Burchell, 1993; Castel, 1994; Deacon, 2000; Frederiksen, Lomborg and Beedholm, 2015; Hodges, 2002; Koopman, 2011; Lemke, 2011; Lopdrup-Hjorth, 2013, 2015; T. May, 2014; Osborne, 2003; Raffnsøe, Gudmand-Høyer and Thanning, 2016; Schwartz, 1998).

One confusing aspect among some scholars is whether the notion of 'problematisation' should be understood as the object of analysis or as an analytical process through which something is problematised – or perhaps even both. In an effort to clarify what Foucault actually meant when he talked about problematisations, Gudmand-Høyer (2009) argues that many of the studies that discuss Foucault's notion of problematisation tend to 'misconstrue the problematization and take it to account for what is acted out *through* the analytical process' (pp. 4–5, italics in the original).[5] Instead of an analytical process, a problematisation is, Gudmand-Høyer adds, the object of

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[4] It should be noted that the cited studies that undertake the historical problematisation analysis are all, to some extent, influenced by Marius Gudmand-Høyer's painstakingly matriculate reconstruction of Foucault's historical problematisation analysis (see Gudmand-Høyer, 2009, 2013). The same counts for the present study.

[5] Thomas Lemke (2011), for instance, argues that 'problematization' is both an object of analysis and a practice of self-transgression by which a person problematises her or his experiences 'in order to move beyond the limits they impose'. In the second understanding of the term, a problematisation is thus, Lemke notes, 'no longer the object, but rather the objective of the critical investigation' (Lemke, 2011, p. 32). Roger Deacon (2000) ascribes the same ambiguous double meaning to the notion of problematisation which, he argues, 'refers both to the way in which specific historical practices give rise to or condition the emergence of objects of analysis, […] as well as to the ways in which genealogists are able to transform a "given" into a question and, in so doing, require the rethinking of politics, philosophy, and ethics' (p. 140).

analysis, and the analysis of this object is one that 'operates essentially by means of historical exploration given that problematizations themselves consists of historical processes' (Gudmand-Høyer, 2009, p. 5). In the present analysis of problematisations of crowd phenomena in financial markets, I subscribe to the abovementioned understanding of a problematisation as the object of an exploratory historical analysis and refrain from entering into any form of self-transgressional practices of critique such as those Lemke (2011) and Deacon (2000) suggest that Foucault was also referring to when he discussed problematisations. This obviously does not mean that an analysis of problematisations, including the one undertaken in the present study, is not concerned with 'practices of the self' (Foucault, 1992, p. 13). The practices of the self in question are, however, the ones that pertain to the specific 'field of experience' that is being explored and not those of the examiner, i.e. the researcher (Burchell, 1993, p. 277).

Instead of focussing on the alleged ambiguities of the notion of problematisation, I perceive and conduct the problematisation analysis as a critical history of thought that seeks to explore 'how the different solutions to a problem have been constructed; but also how these different solutions result from a specific form of problematization' (Foucault, 1996a [1983], p. 422). Another dimension central to the present analysis is therefore the configuration of responses to certain problems allegedly connected to crowd behaviour in markets. How were the responses to crowd-related problems in the markets formulated and by whom, and what effects, if any, did they have on market practices? It is thus a study of the relation between processes of problematisation and that which is being problematised as well as the attempts (responses) made to address the problems.

A study of problems and responses

Exploring problematisations of crowd phenomena in financial markets means inquiring into how and why crowd phenomena appeared as problems or sets of problems to various observers and stakeholders. However, the way something emerges as a problem is only one aspect of the process of problematisation. Another indispensable moment is the way particular problems are being addressed and responded to. Responses or proposed ‘practical solutions’ are, according to Foucault, directed towards something that has been problematised – i.e. something (behaviour, phenomenon, process) that has been identified as a problem by and for someone (Foucault, 1996a, p. 421). Though there is a relation between the thing that has been problematised and the efforts made to try to deal with the problem, the relation between problem and response is not causal. A response is, according to Foucault, ‘original, specific and singular’ and it is made by ‘definite individuals’ to a particular set of difficulties or challenges occurring in a certain situation or context (Foucault, 1996a, p. 421; 2001, pp. 172–173). An important aspect of a problematisation analysis is to explore the various responses made to a specific set of difficulties in order to attain a better understanding of how the particular difficulties were problematic to different people in a variety of ways (Foucault, 1991 [1984], p. 389).

Take, as an example of the asymmetric (non-causal) relationship between the thing being problematised and the variety of responses, the problem of public participation in financial markets (a problem I analyse in Chapter 3). In short, public participation became a heated issue among financial writers in the late nineteenth century and in the beginning of the twentieth century when an increasing number of people from the American middle-class began to take an interest and actively take part in the business conducted in the stock and commodity exchanges. The increased attention and gradual increase in public participation raised concerns as to whether the markets could and should allow what many writers described as a class of amateurs to partake in a business that had been more or less exclusively for rather affluent professionals. Additionally, the various possible consequences of public participation were perceived as threats to the functioning, status and reputation of the U.S. markets. Many different responses were made to alleviate or completely prevent the alleged problem of public participation and the problematic consequences that several observers thought it could potentially engender. Some writers suggested that the public should be kept out of the markets, while others proposed that the speculating public should be taught how to conduct themselves as market actors (which, they believed, would mitigate the risk of, e.g., irrational collective behaviour in the markets). The responses to the problem of public participation thus varied markedly, and some responses were, in fact, each other’s diametrical opposites. (Some, for example, saw regulation as the solution, while others pleaded for deregulation.) The point here is that the responses given were original, singular and from definitive individuals or groups of individuals who had specific affiliations and opinions that were, to some extent, reflected in their proposed problem responses. By analysing the responses to a specific problem such as public participation in financial markets, it is therefore possible to gain better understanding of how certain actors in or associated with the markets perceived the problem and furthermore how their specific responses reflected a more general normative perception of what the financial markets ought to be.[6]

When Foucault talks about the history of problematisations as the analysis of how something *became* a problem to someone through a process of problematisation, it gives rise to a question about the status of the 'real' – of *reality* – and whether processes of problematisation are in fact social constructs. Specifically relating to the questions of reality and construction, Foucault's approach has encountered criticism from historians who claim that he was simply '*fetishizing a culture's representations of the world*' and tended to forget the world itself (Osborne, 2003, p. 11, italics in the original; see also Castel, 1994). Defending Foucault's approach against this type of criticism, Thomas Osborne (2003) has stressed that Foucault was analysing the way behaviours, processes and phenomena had been rendered problematic and therefore not simply depicting representations of attitudes and mentalities (p. 11). Hence, Foucault was not attempting to write 'real history'; however, that did not mean that he neglected the 'real'. He was deeply concerned with the 'real' effects that the programmes or theoretical schematisations he

[6] As Gudmand-Høyer (2009) has argued, there is always 'embedded normativity', or 'imperative discourse' as Foucault called it, in processes of problematisation that informs the specific responses to given problems (Foucault, 2009, p. 3; Gudmand-Høyer, 2009, p. 7). The embedded normative perspectives were, I will argue, thinly veiled in the heated debates on public participation that unfolded during the last decade of the nineteenth century and the first couple of decades of the twentieth century (see Chapter 3).

studied – one of the most famous being Bentham's Panopticon – actually had on individual behaviour, the formation of institutions, etc. (see Borch, 2015b, pp. 7–8).[7]

Although Foucault notes that 'a problematization is always a kind of creation', he stresses that studying the problematisation of something is not a 'way of denying the reality' of a particular phenomenon and adds that '[t]he problematization is an "answer" to a concrete situation which is real' (Foucault, 2001, pp. 171–172). Thus, problematisation addresses real conditions, real behaviours, real practices, etc. The process of problematisation relates thought to reality, in the simple sense that it is difficulties connected to concrete situations that become objects of reflection, debate and contestation. It is in this relation between reality and thinking that the process of problematisation becomes concerned with truth and falsity at a particular moment in history. Foucault describes this as the way something becomes an object of thought:

> Problematization doesn't mean the representation of a pre-existent object, nor the creation through discourse of an object that doesn't exist. It's the set of discursive or nondiscursive practices that makes something enter into the play of the true and false, and constitutes it as an object for thought (whether under the form of moral reflection, scientific knowledge, political analysis, etc.). (Foucault, 1996b, pp. 456–457)

As something enters into the play of true and false, as Foucault puts it, it becomes an object of reflection, debate and contestation. It evokes a variety of responses that propose different ways to deal with this contentious object of thought. The problematisation of something and the responses made in order to somehow deal with

[7] Besides emphasising that he was not concerned with 'real' history, in the classical understanding of the term, Foucault also stressed that his aim was not to pursue 'a critical history which has as its aim to demonstrate that behind this so-called knowledge there is only mythology, or perhaps nothing at all' (Foucault, 1996a, p. 418). He further noted that the history of problematisations is not a history of ideas or concepts. A history of ideas involves, he expounded, 'the analysis of a notion from its birth, through its development, and in the setting of other ideas which constitute its context' (Foucault, 2001, p. 74). A historical analysis of the concept of 'the crowd' in the context of financial markets would therefore be a different analysis than an analysis of problematisations of crowd phenomena in the markets, which does not have the concept as its object of inquiry but instead the problematisation of a particular historic phenomenon. It is in this sense that a problematisation analysis differs from the history of concepts (see, e.g., Koselleck, 2002).

the problem in question affects practices. When, for example, public participation in financial markets was being problematised and diverse solutions were proposed (advocating regulation, deregulation, heightened individual capital requirements, public enlightenment, etc.), it had direct and indirect influences on institutional practices in the stock and commodity exchanges and on (academic, popular and practical) perceptions of markets. The problematisation of public participation, to adhere to that example, arguably informed and gave shape to perceptions of as well as approaches to market analysis and speculation in the U.S. financial markets during the late nineteenth and early twentieth centuries.

The performative dimension in processes of problematisation

In an interview conducted in November 1983, Foucault argued that a problematisation 'conforms to the objectives which it presupposes' (Foucault, 1996a, p. 418). To think that problematisations and responses create effects that influence real practices and that the problematisation conforms to its own presuppositions is an idea that is quite similar to the assumption that theories or models have performative effects on the context in which they are employed.[8] The performativity perspective has become tremendously popular among contributors to the Social Studies of Finance (SFF) literature, especially due to the influential work of sociologists Michel Callon and Donald MacKenzie (see Callon, 1998, 2007; Callon and Muniesa, 2005; MacKenzie, 2003, 2004; 2006; MacKenzie, 2008; MacKenzie and Millo, 2003; Muniesa, Millo and Callon, 2007). According to Callon (1998), the idea of the performativity of economics rests on the assertion that 'economics, in the broad sense of the term, performs, shapes and formats the economy, rather than observing how it functions' (Callon, 1998, p. 2). Along similar lines, MacKenzie (2008) notes that performativity occurs when the academic discipline of economics does not 'stand outside the economy', but is rather becoming an 'intrinsic

[8] As Borch (2015) has noted, Foucault's emphasis on the prescriptive dimension pertaining to the objects he analysed and the examples he used is aligned with the performativity perspective, in the sense that the emphasis is on the way in which something gives shape to and evokes certain practices and modes of thinking about a particular phenomenon (pp. 7–8).

part of economic processes' (p. 16). In its strongest expression, performativity occurs when '[p]ractical use of an aspect of economics makes economic processes more like their depiction by economics' (MacKenzie, 2008, p. 17, 19).

The central difference between the analysis of problematisations and that of the performativity of economics is that the latter has 'the calculative tools' (Callon, 1998) – the models, equations, technical apparatuses, etc. – as its objects of inquiry, whereas the former has a given problematisation of something as its object of analysis. From a performativity perspective, it is the calculative tools and their effects on processes, practices and procedures, in the given context in which they are brought to use, that are important to examine. A problematisation analysis is, on the other hand, concerned with the relation between the process of problematisation and that which is problematised as well as the responses to the problem. In other words, the analysis of processes of performativity is focused on the way a certain material configuration (tool, model, apparatus, etc.) affects processes in a certain context, whereas the analysis of processes of problematisation is predominantly occupied with the way certain challenges or difficulties evoke reflection and responses. Thus, identifying effects and transformations of practices, procedures and processes is the main objective of a performativity analysis. An analysis of problematisations does not carry the same burden of proof pertaining to the effects of a particular model or apparatus, since the emphasis is simply on something else, namely the way a phenomenon is rendered problematic and sought dealt with.

The performativity perspective as advanced in the SSF literature has been criticised in various ways but in particular for arguably having too narrow of a focus on a specific model, technology or calculative tool to be able to adequately account for the broader sociological and political implications of a particular performativity process.[9] Along

[9] Performativity studies in the SSF literature have been met with criticism from various angles: Mirowski and Nik-Khah (2007) have criticised the performativity perspective for being blinded by its fascination with economic engineering; Felin and Foss (2009) have argued that the performativity perspective, by rendering the content of theories 'arbitrary ex ante', has made it impossible to assess the truth or falsity of other theories (p. 676); Riles (2010) has problematised the performativity perspective's 'narrow focus on trading practices and technologies' and asked whether 'SSF [Social Studies of Finance] is too tethered to its roots in the sociology of science to serve as an overarching framework for understanding markets in the first place' (pp. 795–796).

somewhat similar critical lines, Marion Fourcade (2007) suggests, in an attempt to point at future directions for the sociology of markets, that the 'performative analysis in the sociology of markets' could be inscribed in a broader historical context that would enable it to take into account 'the modern form of social regulation, whereby persons and entities (e.g. organizations, nation-states) are governed "at a distance," by calculable agencies that rate, rank, divide them up, and recombine them' (Fourcade, 2007, p. 1026). In the context of such an analysis, the important question is not so much how certain performative technologies function but rather, as Fourcade notes, questions such as the following:

> What kinds of meanings, sentiments, moral predicaments, and social bonds are these performative technologies intertwined with? How do economic artifacts connect to human relations – how do they change them, how are they changed by them, and what do they say about them? What kind of political representations are the discourse and social technologies of the market entangled with? (Fourcade, 2007, p. 1027)

Fourcade points to MacKenzie's 'rich descriptions' and historical contextualisation of his analyses as examples of 'exactly where the [performativity] theory needs to be going' (Fourcade, 2007, p. 1027).[10] Hence, Fourcade argues for a broader, 'neo-Foucauldian' approach to the study of performativity in the social studies of markets, which would more thoroughly explore the socio-economic and political contexts in which these alleged performativity processes are situated.[11]

[10] MacKenzie is not the only one in SSF who has made 'rich' historical descriptions in analyses of the performativity of particular economic models or market devices. Preda (2006) has, for example, examined the stock ticker as a technology or calculative device that intervened in, i.e. had performativity effects on, market transactions and the dissemination of price quotations from the exchanges. Another example of a historical study employing performativity theory is Knight's (2012) study of representations of the market in American magazine literature in the late nineteenth century. In his study, Knight examines the American magazine *Town Topics* as a 'performative technology' that arguably contributed to the 'normalization' as well as the 'questioning' of the market as an 'autonomous, coherent and depersonalized realm' (Knight, 2012, p. 1059).

[11] In relation to this, it is worth noting that there are scholars who have managed to combine a Foucauldian approach (although not the analysis of problematisation as such) with performativity theory and thereby have proven that it is not a matter of mutual exclusion. For example, in her book *Virtue, Fortune and Faith: A Genealogy of Finance* (2005), Marieke De Goede has convincingly shown that it is possible to merge a Foucault-inspired genealogical analysis with a study of

This brief discussion of performativity theory and the problematisation analysis should not be read as a dismissal of the performativity literature in SSF (which is, as an aside, more diverse than I have presented it here). Though there clearly are differences between analysing problematisations and adopting the performativity perspective, there seems to be a point where the two approaches intersect. This intersection point is, I will argue, a shared focus on the alterations of, in this case, market practices brought about or provoked by some sort of market intervention, be it regulatory, a technological improvement, the an introduction of a calculative tool, etc. Both approaches analyse how practices and perceptions are altered and moulded by something, such as a problematisation (e.g. a market difficulty of sorts) or a device (e.g. an economic model). As such, a problematisation analysis does not focus on a particular calculative tool (the material level) in order to detect how and to what extent it is performative and what the sociological and economic consequences of the performativity effects might be. Rather, a problematisation analysis, as already mentioned, is concerned with the way difficulties become objects of thought.

Before I turn to a discussion of the contributions of the study, I will briefly recapitulate on the methodological approach of the dissertation. In exploring forms of problematisations of crowd phenomena in markets, the analysis draws attention to the way market difficulties and challenges, i.e. *problems*, have been problematised by various

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performative practices. Drawing on Judith Butler's and J. L. Austin's notion of performativity instead of the technology- and model-centric performativity theory dominating the SSF literature, De Goede perceives finance as 'a discursive domain made possible through performative practices'. 'Understanding finance as a performative practice suggests', she adds, 'that processes of knowledge and interpretation do not exist in addition to, or of secondary importance to, "real" material financial structures, but are precisely *the way in which "finance" materializes*' (De Goede, 2005, p. 7, italics in the original). By perceiving finance as 'rendered possible through performative practices', De Goede shifts the emphasis away from images of finance as a 'rational and coherent whole' and unto 'the weaknesses, contingencies, and contradictions', which are exactly what is attended to in a genealogy (De Goede, 2005, p. 13, 19). Like De Goede, Paul Langley (2008) has combined the performativity perspective with, in Langley's case, a Foucault-inspired analysis of power relations. What Langley does more specifically is to draw on a conception of financial networks grounded in actor-network-theory (and in performativity theory), while using Foucault's notion of power in order to 'make explicit the power relations and politics at play as market networks are constituted through calculation and calculative tools' (Langley, 2008, p. 27, pp. 22–35).

financial writers. To this end, the study examines the variety of proposed practical solutions, i.e. *responses*, to certain crowd-related problems in the markets. Concomitant with the analysis of responses, the study investigates the *means* employed in the attempts to identify and propose the best possible solutions to the given problem at hand and the specific *contexts* in which the problems have arisen and in which the responses have been made. The examination of how crowd phenomena became financial market problems is therefore contingent on the analysis of specific *responses* to the difficulty or set of difficulties in question, the *means* employed in the problematisation process and the *contexts* in which these processes took place.

Contribution: Studies of markets and of crowds

The dissertation is situated where studies of the history of financial markets and studies of (the history of) crowds coincide. In studying problematisations of crowd phenomena in the financial markets and analysing them, primarily, through practical texts prescribing best practices and rules of conduct (i.e. how-to books), the contribution of this dissertation is its novel perspective on the study of both the history of the U.S. financial markets as well as the history of crowds. The novelty of the perspective lies in the way the study takes crowd phenomena in the markets seriously by exploring the central role such phenomena had in discussions of what the financial markets were, what they ought to be and what they risked becoming insofar as these alleged crowd-problems were not addressed in a proper way. The main contribution of the dissertation is that it shows that discussions of crowd phenomena greatly influenced the ways in which ideas, assumptions, perceptions and approaches to the financial markets were formed. Hence, it claims that it is impossible to give a thorough account of the U.S. financial markets, in the given historical period, without taking crowd phenomena into account. With respect to specific research literatures, the dissertation contributes (as I shall elaborate on below) to (a) the limited number of studies of crowds in financial markets; (b) studies of the cultural history of financial markets; (c) studies of the history of crowds, crowd phenomena and crowd psychology.

First, the study is influenced by but also contributes to the existing though limited research literature on crowds in financial markets. Most historical studies of crowds in financial markets focus on the relationship between crowd behaviour and panics and crises (see Kindleberger and Aliber, 2011; Preda, 2009, ch. 8; Zimmerman, 2006). The present dissertation is not an analysis of crowds and market panics, although panics and crises do receive significant attention because financial writers often perceived crowd behaviour as a cause or an effect of such market phenomena. David A. Zimmerman's *Panic! Market, Crisis & Crowds in American Fiction* (2006) is an example of a study that explores popular perceptions of the U.S. financial markets with a specific focus on the relation between crowds and panics. Zimmerman's exploration of the markets is carried out through a close reading of American fiction from the late nineteenth and the early twentieth centuries. As a central part of his study, Zimmerman examines how the terminology and central ideas from the then-budding research field of crowd psychology (as well as psychic research and psychology) came to play a prominent role in fiction writers' accounts of markets in the given period of U.S. financial market history. Urs Stäheli is another scholar who has explored crowds in markets through popular discourses on speculation in his book *Spectacular Speculation: Thrills, the Economy, and Popular Discourse* (2013). In his matriculate study Stäheli addresses the incipience of the concept of the crowd in the popular discourse on speculation in financial markets. He demonstrates how crowd theories were debated in the market context and how ideas and tropes from such theories were drawn upon in discussions of the regulation of markets and in the conceptualisation of investment strategies (Stäheli, 2013). When examining how the circulation of ideas from crowd theory in the popular discourse shaped investment strategies, Stäheli is particularly attentive to certain 'techniques of the self', which were formulated by members of 'the contrarian school of investment' as remedies against the alleged contagiousness of 'the market crowd' (Stäheli, 2013, ch. 5). (I will return to Stäheli's work in Chapter 5, when examining the emergence of the contrarian market philosophies.)

With respect to the choice of the empirical material and object of analysis, this dissertation's analysis coincides, to certain degrees, with the work of Zimmerman (2006), Stäheli (2013, see also 2006) and Preda (2009). However, unlike Stäheli's study, the present study is not a history of popular representations of crowds or crowd semantics in financial markets. Rather, it is a historical analysis of the processes by which crowd phenomena became objects of concern to financial writers and other observers of financial markets. In other words, it is a study of how these problematisations of crowd phenomena in the markets have altered perceptions of and approaches to certain market practices in the U.S. financial markets. Contrary to Zimmerman's analysis of crowds in American fiction, the present study is not merely a study of crowds in the markets understood as a panic phenomenon. Concerns about crowds and crowd behaviour in markets were, I argue, expressed in other and broader contexts than those of panics and crises. Additionally, the present study explores markets through a more diverse body of textual material than the one Zimmerman examines. Although Zimmerman focuses on what he terms 'panic novels', it is worth noticing that he does draw on other texts, including magazine and journal articles and handbook literature (Zimmerman, 2006, p. 1). The panic novel is, nevertheless, the primary lens through which he observes the markets.

Second, apart from being a historical study of crowd phenomena in financial markets, the present study is an examination of a specific period in the history of the U.S. financial markets. As an inarguably unorthodox history of financial markets, the dissertation is situated at the fringes of broader and arguably more conventional research literature on the cultural history of financial markets (see, e.g., Cowing, 1965; Fraser, 2005; Knight, 2016). One of the primary broad historical developments examined in the present dissertation is, as already mentioned, the popularisation of and public participation in financial markets, which made concerns about problems associated with mass participation in markets and the mass dissemination of market information in the media highly pertinent to financial writers. Several studies have examined the popularisation of speculation and investment in financial markets from different foci such as the issuing of *war bonds* during WWI (Ott, 2011), the emergence of *bucket shops* (Fabian, 1999; Hochfelder, 2006), the introduction of *the stock ticker* and the proliferation of its use (Hochfelder, 2006; Knight, 2013; Preda, 2006; Stäheli, 2003), the ambiguous relationship between *speculation and gambling* (Banner, 2017; Brenner and Brenner, 1990), the popular *financial press and magazine literature* (Knight, 2012, 2016) and *speculative (in)competence* among amateur market actors (Cowing, 1958). All of these studies provide information about how speculation and investment in financial markets were subjected to and influenced by mass participation, mass mediation and public conversation. Other studies have examined cultural and popular cultural representations of finance and financial markets in broader genealogical analyses of how modern finance have been shaped in various ways during different epochs in an interplay between the material (the concrete structures, practices and procedures of finance), cultural (the vernacular, public opinions, etc.) and academic (the abstract, theoretical) aspects of finance (see De Goede, 2005; Vogl, 2015). The present study contributes to the literature on the popularisation of finance and public participation in financial markets in the late nineteenth century and in the first decades of the twentieth century by exploring how these contentious developments were related to and expressed in the problematisations of crowd phenomena.

Third, the present study is also informed by literature on the history of crowd psychology. There exist several thorough and engulfing historical studies of the emergence and proliferation of the academic field of crowd psychology (see Barrows, 1981; Borch, 2012; McClelland, 2010 [1989]; Moscovici, 1985; Nye, 1975; van Ginneken, 2006 [1992]). Additionally, other scholars have examined the history of crowds and crowd psychology in connection to broader historical developments such as ideas about democracy in interwar Austria and Germany (Jonsson, 2013); ideas about democracy in the United States (Frezza, 2007); in connection to American social thought (Leach, 1986, 1992); the influx of French sociological and socio-psychological theory in the U.S. academic milieu in the late nineteenth and early twentieth centuries (Leys, 1994); the role of crowd psychology in connection to the problem of personality in individual psychology (Blackman, 2012, ch. 2); crowd psychology in the context of the making of the modern subject (Lawtoo, 2013).[12] The present study contributes to the research literature on crowds and crowd psychology in two ways: First, it provides a different perspective – the market perspective – on the 'migration' of French and Italian crowd theories to the U.S. academic milieu and social thought more broadly (see Frezza, 2007; Leach, 1986, 1992; Leys, 1994). A part of the present study focuses on how crowd theory was introduced into academic, practitioners-oriented and popular discourses on financial markets from the very beginning of the twentieth century onwards. Examining the employments of ideas from crowd theory in financial writing draws attention to an instrumental and often also strategic use of crowd theory in practice. Additionally and related, the analysis elucidates that crowd theory was used for a prescriptive purpose, i.e. to delineate what market actors should or should not do in situations where markets were dominated by crowd psychology. Second, in exploring how financial markets were perceived and analysed in work done by crowd theorists (see Chapter 2), the analysis attends to a theme that has not been touched upon in the research literature on late nineteenth and early twentieth century crowd psychology. The crowd theorists' application of their own ideas in critical reflections on situations in the financial markets discloses a critical stance towards economic rationality and a shift in attention away from the individual market actor to the relations between market actors.

Apart from contributions to the aforementioned research literature, the dissertation offers a perspective on the use and circulation of extra-economic terminology and tropes in discourses in investment and speculation in financial markets.[13] As part of the examination of the problematisations of crowd phenomena in the financial markets, the dissertation explores how crowd theory was employed in various types of literature that were in one way or the other concerned with markets. The dissertation thus provides a

[12] Furthermore, there are some studies of contemporary phenomena that draw on ideas from crowd psychology, including studies of crowds, contagion and imitation in the digital age (Parikka, 2007; Sampson, 2012) and crowd psychology and media studies (Blackman and Walkerdine, 2001).

[13] The way economics and finance have historically borrowed heavily from other academic disciplines such as mathematics, physics and computer science have been thoroughly examined by Philip Mirowski (see Mirowski, 1989, 1991, 2002).

perspective on the way in which crowd psychology has informed practical, academic and popular views of the financial markets as well as how these crowd psychology-informed articulations of certain market phenomena have circulated between different genres of financial writing. Hence, the dissertation contributes to a broadening of the understanding of what "counts" as market knowledge, of how it has been construed and from which sources it originates (cf. De Goede, 2005; Zimmerman, 2006; Preda, 2009; Stäheli, 2013; Vogl, 2015).

Historical delimitation of the study

Although the fear of unrestrained crowd action has been expressed in writings about financial markets for centuries, this dissertation's analysis is specifically concerned with a 50-year period in which certain market problems were increasingly being interpreted, described and explained as caused by or as the effects of crowd behaviour and crowd dynamics.[14] The analysis commences in the late nineteenth century (at the end of the so-

[14] As early as the late seventeenth century, the Portuguese merchant and poet Joseph De La Vega, in his book *Confusions de Confusiones* (1688), described how trading in the Amsterdam Stock Exchange was conducted in crowds. The trading often involved, as De La Vega noted, 'violent gestures' on the part of the speculator, whom he referred to as a 'toreador'; the practice did all in all involve a fair amount of 'absurdities', 'confusion' and 'madness' (De La Vega, 1957 [1688], pp. 10–11). One of the most cited works dealing with the theme of crowds in markets or rather crowd behaviour in connection to speculative crazes and bubbles is the Scottish journalist Charles MacKay's *Memoirs of Extraordinary Popular Delusions and the Madness of Crowds, I–II*, which was first published in 1841. (In Chapter 2 and Chapter 5, I return to a couple of reiterations of MacKay's accounts of outbursts of crowd behaviour during speculative manias.) It was, however, not exclusively in the popular discourse that articulations of crowd problems in the markets were found prior to 1890. Another example is found in the historian Martha Joanna Reade Nash Lamb's book *Wall Street in History* (1883). In a historical recollection of the events unfolding during the 'Black Friday' panic on 24 September 1869, Lamb explained how the unruliness of the market propagated to the masses gathering in Wall Street. The abstractness of the market panic received a concrete manifestation in Lamb's description of the physical masses gathering in and around the Stock Exchange stirring up excitement, which translated into outbursts of violence: 'In Wall Street masses of men gathered, and riots were anticipated. […] The Stock Exchange was suspected of weakness for a time, and throngs crowded its corridors, and overhung the stairway for a glimpse of the commotion, but could hear only the roar of the biddings. The run upon the banks in the street, the assaults of angry brokers, the threats of violence against those who were suspected of treachery, and wild outbreaks of despair from such as had been ruined, will never be obliterated from the memory of those who witnessed the scenes' (Lamb, 1883, p. 89). Therefore, collective action presented a threat to the stability and order of the markets long before the last decade of the nineteenth century.

called Gilded Age), which was a tumultuous period for the U.S. financial markets (Fraser, 2005, pp. 98–99). It was a time during which Americans increasingly began to take interest in the business conducted in and around the stock and commodity exchanges – a popularisation of finance that was propelled by the increasing attention given to financial markets in the press, in magazines as well as in fiction (Knight, 2016; Zimmerman, 2006). As Steve Fraser eloquently yet somewhat polemically writes, in the late nineteenth century, 'Wall Street had become a zone of frenzied speculation, of monomaniacal exaltation and panic: a hypnotic spectacle of moneymaking and money losing watched by millions' (Fraser, 2008, p. 30). The popularisation of and public participation in financial markets, gaining momentum in the late nineteenth century, made problems associated with mass action, the malleable public sentiment and crowd behaviour appear more pertinent to financial writers concerned with investment, speculation and the overall wellbeing of the financial markets.

Another development, which constitutes another reason why the present study commences around 1890, was the emergence of the academic field of *crowd psychology* in French and Italian academic milieus during the last decade of the nineteenth century. Most crowd theories contemplated during that particular decade suggested that the crowd possessed a collective mind that worked in a fundamentally different way than the mind of an individual. Crowd behaviour was generally perceived as irrational and often described as determined by the processes of *imitation*, *suggestion*, *sympathy* and *contagion*. The most prominent crowd theorists in these formative years of the theoretical field of crowd psychology were the Italian criminologist Scipio Sighele, the French sociologist and criminologist Gabriel Tarde and the latter's countryman, the polymath Gustave Le Bon (see Borch, 2012; McClelland, 2010; Moscovici, 1985; Nye, 1975).[15] The crowd

[15] Le Bon's book *Psychologie des foules* (*The Crowd: A study of the popular mind*), published in 1895, was the book that more than any other defined the academic field of crowd psychology. It played on the fear of crowds by drawing on examples from the French Revolution, workers' uprisings and, relatedly, the spread of socialism. Crowd problems were, however, not problems of the past, as Le Bon made clear in the introduction to the book when stating that '[t]he age we are about to enter will in truth be the ERA OF CROWDS' (Le Bon, 1896 [1895], p. xv). It is important to note that the academic interest in crowds did not begin with the emergence of crowd psychology in the late nineteenth century. In fact, as John S. McClelland (2010) has shown, political philosophy, in

theories of the likes of Le Bon, Tarde and Sighele quickly stirred debate among scholars outside of France and Italy. In the United States, the crowd-psychological perspective was received with some scepticism and apprehension in academic circles. Nevertheless, the theories gained a significant amount of attention because of their supposed ability to explain social processes connected to the great changes which American society underwent at that time (Frezza, 2007; Leach, 1992; Leys, 1994). The emergence of this type of crowd theory provided a vocabulary for and a particular way of viewing collective action and expressions of collective sentiment that made it possible to describe crowd problems pertaining to financial markets. In addition to serving as a descriptive tool, crowd theory also provided the theoretical means to explain or at least identify probable causes of certain collective dynamics in markets.

Thus, the analysis commences at a moment in history when the masses – due to the increased popularity of and public participation in markets – came to be seen as imminent threats to the stability and order of the markets. This coincided with the emergence and popularisation of academic studies of the psychology of crowds – theories that managed to put into words many of the collective psychological characteristics and problems that seemed to cling to the era's mass phenomena. Crowd theory not only described crowd behaviour in different contexts but also explained why normally reasonable people could act in the irrational and vile ways, as was often the case when brought together in dense crowds. In other words, crowd theory provided scientifically based accounts of irrational collective behaviour that could be used to explain why, e.g., a speculative panic could erupt on an exchange's trading floor and why the people involved acted the way they did.

At the other end of the historical delimitation of the study (i.e. 1940), it is the decreasing influence of sociological and psychological theories on economics that constitute the primary reason why the historical analysis ends around 1940. The turn

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particular, has been concerned with crowds since antiquity. However, the emergence of crowd psychology did mark a radical shift not only in the conception of the social but also of the individual; furthermore, it shaped sociology and psychology, which were still nascent disciplines in the late nineteenth century (Blackman, 2012; Borch, 2012; Leys, 1994).

away from rendering social and psychological factors important in the field of economics has been touched upon by Nobel Laurate Robert J. Shiller, who has strongly advocated that economists ought to take insights from sociology and, in particular, psychology seriously (see, e.g., Shiller, 2005). In his seminal article 'Stock Prices and Social Dynamics' (1984), Shiller controversially claimed that 'mass psychology may well be the dominant cause of movements in the price in the aggregate stock market' (p. 459). Shiller made this bold claim knowing full well that he aimed to revitalise a branch of academic research – 'research on market psychology' – that had been untouched for several decades:

> Academic research on market psychology… appears to have more or less died out in the 1950s, at about the time the expected-utility revolution in economics was born. Those who write about financial markets today are usually very careful to dissociate themselves from any suggestion that market psychology might be important, as if notions of market psychology have been discredited as unscientific. (Shiller, 1984, p. 458)[16]

A transformation process in the American business schools and corresponding research communities, which began in the 1950s, propelled the 'expected-utility revolution in economics' that, according to Shiller, coincided with the disappearance of academic research on market psychology. The development has been described as the 'scientification' or the 'academicization' of business and finance teaching and research in the United States (MacKenzie, 2008, p. 244; Whitley, 1986, p. 172). This development

[16] The disappearance from the realm of academic economics of crowd theory-informed market psychology was arguably part of a larger story of the diminishing academic influence of crowd theory in general (see Borch, 2012). From its inception but particularly from the 1920s onwards, crowd theory was criticised by sociologists and psychologists alike for its apparent lack of scientific stringency and rigour (see, e.g., Barnes, 1920). In the opening sentence of his article 'The Group Fallacy in Relation to Social Science' (1924), the American sociologist Floyd H. Allport stated that '[t]he theory that a crowd possess a mental life resulting purely from aggregation and superadded to the mental processes of its members seems to have perished at the hands of progress in social science' (p. 688). In the intersection of economics and sociology, Allport's colleague and compatriot Talcott Parsons, a decade later, argued that using crowd psychology (crowd theory) to explain market phenomena such as a bank run entailed a complete repudiation of the 'rôle of rationality' in economic life (Parsons, 1935, p. 440).

was accompanied by a broader 'mathematicization' of economics that took place both in the academic realm and in the practical world of 'real' finance (MacKenzie, 2008, pp. 8–12). The discipline of financial economics emerged from these developments. After WWII, academic studies of finance refrained, for the most part, from resorting to "softer" fields such as psychology, social psychology and sociology when searching for ways to address challenges and issues in the financial markets and instead leaned towards the hard sciences such as math and, later on, computer science (MacKenzie, 2008; Mirowski, 2002; Whitley, 1986). The analysis therefore ends when economists' academic interests in market psychology and hence in crowd theory dwindled.

While the academic interest in market psychology diminished in the middle of the twentieth century and, with it, the preoccupation with crowd dynamics in markets, authors of practical how-to handbooks continued to emphasise the importance of market psychology and of crowd psychology (see, e.g., Neill, 1975; Pring, 1993). Additionally, various quasi-scientific approaches to market analysis and speculation remained relatively popular in the handbook genre from the middle of the twentieth century onwards.[17] Therefore, it would have been possible to follow the problematisations of crowd phenomena in practical and popular discourses on financial markets beyond 1940. However, that would entail a shift away from the joint focus on practical, academic and popular accounts of market phenomena to only focussing on one strand of financial writing, namely practical literature. Since one of the dissertation's aims is to explore problematisations of crowd phenomena across discourses, meaning how crowds at a given moment have been problematised and responded to in various genres of writing, I refrain from extending the study any further than 1940.

To further elaborate on the delimitation of the study and in order to clarify what the body of empirical material under scrutiny consists of, the following sections of the chapter will provide an overview of the different types of textual empirical material

[17] For example, the contrarian approach to speculation and investment, which was developed in the how-to literature in the 1920s and 1930s (I return to this topic in Chapter 5), remained a somewhat popular niche among writers of practitioners-oriented financial writing throughout the second half of the twentieth century as well as into the twenty-first century (see Cortes, 2011; Dreman, 1998; Futia, 2009).

analysed in the dissertation. Hence, I briefly discuss the form of knowledge about the financial markets that was produced in the practical or so-called how-to genre of financial writing.

Practical texts and other genres of financial writing

> The documents I will refer to are for the most part "prescriptive" texts – that is, texts whose main object, whatever their form (speech, dialogue, treatise, collection of precepts, etc.) is to suggest rules of conduct. […] The domain I will be analyzing is made up of texts written for the purpose of offering rules, opinions, and advice on how to behave as one should: "practical" texts, which are themselves objects of a "practice" in that they were designed to be read, learned, reflected upon, and tested out, and they were intended to constitute the eventual framework of everyday conduct. These texts thus served as functional devices that would enable individuals to question their own conduct, to watch over and give shape to it, and to shape themselves as ethical subjects […]. (Foucault, 1992, pp. 12–13)

With these words, Foucault describes the domain of texts through which he examines forms of problematisations of sexuality in Antiquity in *The History of Sexuality II: The Use of Pleasure*. The body of texts that constitutes the main part of the empirical material analysed in this dissertation, the so-called how-to books, share the conduct- and reflection-inducing characteristics of the texts that Foucault categorise as 'prescriptive' or 'practical'. How-to books are types of texts located in the threshold between the stringency of a manual and the self-care and self-moulding impetus of self-help literature.[18] The how-to genre constitutes a particular form of market knowledge that is less preoccupied with describing and explaining how the markets work than with explaining how people should act and behave in them. As mentioned the following sections of the chapter, I provide an overview of the empirical material analysed in the dissertation. I begin by outlining the characteristics of the main source of empirical

[18] Although I refer to the practical texts analysed in the dissertation as 'how-to books', I am aware that market advice was disseminated in a range of different outlets besides the book format including magazine articles, booklets by investment service firms and in market letters. I do draw upon these additional textual formats, yet I predominantly examine how-to books.

material, i.e. the how-to book, and briefly explain how the texts were identified, selected and collected. Thereafter, I describe the additional textual sources of empirical material, i.e. other genres of 'financial writing', that were analysed in the dissertation.[19]

The how-to book: Between a manual and a self-help book

The genre of texts that is captured by the term 'how-to' are, according to Christina Garsten and Christopher Grey (1997), texts 'which aim to provide practical guidance towards the achievement of certain goals' and furthermore texts which offer 'prescriptive expertise' in the form of 'techniques and programs for creating a coherent narrative of the self' (pp. 216–217). This definition of the how-to genre is almost identical to Foucault's description of practical texts: It highlights the relationship between prescriptive expertise and the moulding of the self, i.e. the ambiguous relation between the advice provided in the text and the action of the reader. While the genre of management how-to or self-help, which is the genre Garsten and Grey examine, has attracted a significant amount of scholarly attention, texts offering advice on how to succeed as an investor or speculator in the financial markets are more understudied.[20]

How-to books and other kinds of financial writing targeting the middle-classes began to circulate during the 1840s and became increasingly popular towards the end of the

[19] I subscribe to Mary Poovey's (2008) broad understanding of 'financial writing' which encompasses: pricelists and indices; standalone volumes of political economic theory; financial journalism in newspapers and in magazines; investment advice in (how-to) books and financial newspapers; scientific journals (pp. 30–35). I furthermore have to note that my definition of a how-to book is rather broad and encompasses handbooks, primers, manuals, brochures, etc. insofar as they are prescribing advice and/or rules of conduct.

[20] For critical inquiries of management handbook, how-to and self-help literature, see, e.g., Boltanski and Chiapello (2005 [1999]), Thrift (2000) and Johnsen (2015). Though I argue that how-to and handbook literature on speculation and investment is an understudied genre of financial writing, a range of studies of financial markets exists that draws upon that particular type of empirical data. Examples of historical studies drawing on this literature include Preda (2009), Stäheli (2013) and Knight (2016). Christian Borch and Ann-Christina Lange (2016) and Charles W. Smith (1999) have also referred to how-to literature in their studies of contemporary financial markets. Smith's book *Success and Survival on Wall Street: Understanding the mind of the market* is a curious hybrid case comprising an ethnographic study of securities markets with an entire section of the book providing practical advice to individual investors. Smith thus merged a research and a how-to agenda in a sociological publication.

nineteenth century (Preda, 2009, pp. 88–89). The late-nineteenth-century popularisation of how-to texts on investment and speculation coincided with the inception and proliferation of the self-help genre in the United States (Woodstock, 2005, 2006). How-to texts on investment and speculation incorporated the self-transformational and -disciplining dimensions associated with the self-help genre and combined them with more basic knowledge about the markets in the form of price charts, graphs as well as explanations of technical terms. How-to books therefore typically consisted of a descriptive as well as a prescriptive dimension.

The "archive" of how-to books that I have pieced together consists of more than 230 books published between 1890 and 1940. In assembling the archive of how-to books, I used a "snowballing" strategy. I first retrieved how-to books that were examined in contemporary academic studies of markets (see Arnoldi and Borch, 2007; Borch, 2007; Stäheli, 2006, 2013; De Goede, 2005; Knight, 2016). I then collected additional work by the books' authors and examined these books for references to work done by their peers.[21] One of the how-to book authors whose name appears the most in academic studies of the contrarian approach to investment and speculation is Humphrey Bancroft Neill (see Arnoldi and Borch, 2007; Borch, 2007; Stäheli, 2006, 2013). In August 2014, I visited Neill's home in Saxtons River, Vermont (which now belongs to his daughter-in-law Dolapo Adeniji-Neill) and was allowed to search through his private library. While there, I also obtained access to personal correspondences and early issues of Neill's market letter *Neill Letters of Contrary Opinion* which I had not been able to retrieve from the library at the University of Vermont.

[21] It has to be noted that applying such a "snowballing" method to searches in this type of literature is difficult, since it was not customary for authors of how-to books to use citations or make reference lists. However, some authors of how-to books did refer to the work of peers, and some even recommended books that they found particularly worthwhile reading. Furthermore, it was not uncommon to find advertisements for other how-to books published by the same publisher on the final pages or the back covers of the books. Besides browsing through libraries, many of the literature searches occurred in digitised online archives such as hathitrust.com, archive.org and gutenberg.org. While conducting these literature searches, I came across two massive bibliographies of business books – *2400 Business Books and Guide to Business Literature* (Morley and Knight, 1920) and *Bibliography of 2700 business books* (Smitley, 1922) – from the 1920s. The bibliographies have given me an indication of how many how-to books were written in the late nineteenth and in beginning of the twentieth centuries.

Although it would be incorrect to say that every how-to book published from the late nineteenth century to the middle of the twentieth century is identical, I will argue that there are some general characteristics that can be found in most how-to books from the given period. Apart from being prescriptive, and in addition to being objects of a specific practice or practices, most of the how-to books examined in the dissertation share some common characteristics with regards to purpose, content and the targeted readership. In order to illustrate what these common characteristics are, I use the financial writer Maurice Cowen's how-to book *Common Sense in Stock Speculation: a treatise on stock speculation and investment, including the experiences of successful traders* (1922) as an exemplar (see Figure 1.1). It almost goes without saying that only retrospectively has it been possible to carve out the following general characteristics of the how-to books examined in the dissertation. Although it may appear premature to state these considerations prior to the actual analysis of the texts, the reason why I nevertheless do so is that it gives an impression of the composition and the type of knowledge being disseminated in this rather unorthodox genre of financial writing.

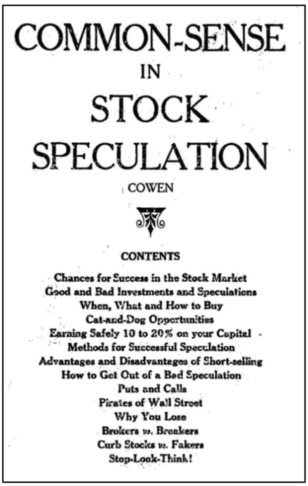
COMMON-SENSE
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Figure 1.1: Cover page of Maurice Cowen's *Common Sense in Stock Speculation*, 1922.

Cowen opened *Common Sense in Stock Speculation*, as authors of how-to books had a habit of doing, with an explanation of the purpose of the book. 'This book is not written as a defence of stock speculation,' Cowen plainly stated, adding that it was instead aimed to expose the 'virtues and faults' of speculation 'in order to guide those who intend to speculate, through the dark forest of speculative activities and safely past the rocks and quicksands [sic] of ignorant, stupid and blind ventures' (Cowen, 1922, p. 5).[22] The book was intended for the 'average speculator' who was either a complete 'novice' to the trade or who was not yet a professional speculator (Cowen, 1922, p. 23, 27). Since professional speculators and investors made a living off their investments, they were generally not perceived of as being in need of guidance and basic advice on how to prevent losses and increase the possibility of profits. It was therefore the small investors and speculators and not experts who were thought of as the beneficiaries of the advice disseminated in the how-to literature.[23]

Another characteristic of the how-to books examined in the dissertation lies in the kinds of advice they offered. Much of the advice was supposed to help readers avoid the many pitfalls of speculation. One of the simple pieces of advice Cowen offered was that people ought to abstain from speculating on margin (a purchase where only a percentage of the asset price is paid by the purchaser and the rest is covered by the broker in the form of a loan), since, according to Cowen's estimates, approximately 98% of all margin speculators eventually lost their money (Cowen, 1922, p. 23). This straightforward type of advice, common in the how-to literature, consisted of a simple rule of thumb and an

[22] As with many other contributions to the how-to genre, Cowen's short book was also a somewhat subliminal advertisement of an investment advisory firm of sorts. In Cowen's case, it was the stock trading advisory firm Compass Advisory Bureau. On the final page of the booklet, Cowen briefly outlined the services the Compass Advisory Bureau provided. Before expounding what services the firm actually provided, Cowen explicated that the firm did not 'furnish glittering generalities' and 'ambiguous suggestions as to what to do'. Instead, it allegedly offered expert opinions on specific stocks, and it had a standing rate of one dollar for an opinion on one stock, and fifty cents per opinion on additional stocks (Cowen, 1922, p. 28).

[23] In an early how-to book *"Points" for 1885: Being a collection of facts and figures for small speculators* (1885), Horace A. Chipman explicated that his market advice was intended 'for the benefit of that class of small speculators outside the "charmed circle," who, having no definite plan or theory of their own, have adopted a sort of a go-as-you-please system in betting, and one which invariably produces a profit on the wrong side of the ledger' (p. 3).

equally simple assertion about market behaviour. Additionally, the how-to literature encouraged its readers to build, nurture and preserve an adamant character. Having the right character was often considered as being as important as possessing in-depth knowledge of the functioning of the financial markets and the practices of investment and speculation. Basic personal traits were crucial, Cowen argued, when the market actor sought to evade the many pitfalls of the trade:

> It is rather difficult matter to discover a cure-all for every kind of bad speculation, yet by the application of a little common sense, courage and patience a way out can be found for practically any dilemma or bad situation into which a speculator may have placed himself. (Cowen, 1922, p. 18)

Hence, the problems associated with the practice of speculation and more generally with the business conducted in the financial markets were often described as entangled with the personal traits of the individual market actor. The people to whom the how-to book was intended were, to use Cowen's words, 'gullible near-investors' who lacked the market knowledge and poise required in order to become successful speculators (Cowen, 1922, p. 22, 5). In the how-to literature, speculation was construed as a practice involving individual emotional restraint in addition to knowledge about the functioning of the markets. The individual's ability to temper emotions and detect the factors in the markets that instigated excitement was highlighted as essential characteristics of the prolific speculator. When reduced to a practice of following advice in a book, speculation was a completely individualised practice, but it was an individualised practice that often was aimed at *not* becoming swayed by the acts and ways of thinking of others, i.e. the public, the majority and the crowd. As Cowen proclaimed, speculation was 'a battle of wits, whether in Wall Street or elsewhere; the majority lose, the minority win' (Cowen, 1922, p. 28).

Regardless of the topic or practice, how-to, self-management and self-help literatures are characterised by *I*-centrism. (The fundamental premise of the how-to and self-help book is that the individual who shall aid her- or himself by following the precepts of the book at hand, which makes it a profoundly individualised process.) The idea of the individual and individual action found in these types of practical literature has often been formulated in opposition to an idea of the crowd and crowd action. A crowd was the antithesis to individuality but in many cases also the benchmark against which the strength and appreciation of individuality was measured.[24] In many how-to books, individual success was conveyed as *not* imitating the actions of everyone else. This rationale made perfect sense in the context of financial markets, as represented in the how-to literature. Stock and commodities markets were, as mentioned, mostly presented as places where a minority were successful, while the great majority were not. With trading basically being regarded a zero-sum-game, it was clear that profits in speculative markets were made at the expense of others, i.e. the majority.

Apart from having the characteristics of a manual, the how-to texts had, as described, a self-help dimension. The very idea of self-help was discussed as early as the mid-nineteenth century in the book *Self-help; with illustrations of character and conduct* (1859) authored by the Scottish reformist Samuel Smiles. Smiles opened *Self-help* with a description of 'the spirit of self-help':

[24] In her management handbook *The Psychology of Management: The functioning of the mind in determining, teaching and installing methods of least waste* (1914), published in the slipstream of Frederic Winslow Taylor's iconic *The Principles of Scientific Management* (1911), Lillian M. Gilbreth prescribed ways to optimise work through the study of psychology as it applied to the work of 'the manager and the managed' (p. 4). Although this is not an analysis of the psychology of management, it seems worthwhile pausing for a moment with Gilbreth's definition of individuality. Gilbreth defined the individual as 'a single thing' and 'a unit' (Gilbreth, 1914, p. 21). This mechanistic perception of the individual was in complete accord with Taylor's perception of the worker. However, apart from defining the individual as a unit, Gilbreth defined the individual as 'opposed to the crowd'; individual action as 'opposed to associate action'; and individual interests as 'opposed to common or community interests' (Gilbreth, 1914, p. 21). This notion of individuality also ran through much of the how-to literature on speculation and investment in the financial markets. It furthermore reflected a lingering fear of and contempt for crowds and the infectious madness allegedly emanating from them. Unearthing the qualities of the individual in contrast to the inferiorities of crowds was ingrained in American cultural history of the nineteenth century. In the essay *Self-Reliance* (1841) Ralph Waldo Emerson described how the greatness of individuality was best measured up against the crowd: 'It is easy in the world to live after the world's opinion; it is easy in solitude to live after our own; but the great man is he who in the midst of the crowd keeps with perfect sweetness the independence of solitude' (Emerson, 1928 [1841], p. 39). This idealised description of the 'great man' as someone who remain independent in a crowd was the epitome of the successful trader, investor or speculator who was often presented as an aspirational figure yet also often as an unattainable ideal in the popular and practical literature on financial markets.

> […] the root of all genuine growth in the individual; and, exhibited in the lives of many, it constitutes the true source of national vigour and strength. Help from without is often enfeebling in its effects, but help from within invariably invigorates. (Smiles, 1859, p. 1)

According to Smiles, self-help required the cultivation of a 'self-culture' (consisting of a perpetual self-training of the moral, intellectual and physical 'parts of a man's nature') as well as individual exercising of self-control and self-discipline (Smiles, 1859, p. v, 240). The essence of self-help was that an improvement of the self was achieved through a process of introspection and not through reliance on external guidance (Woodstock, 2005). For Smiles, self-help was a practice and a moral and political imperative, yet as self-help became a practice prescribed in the textual form, it became a fundamentally paradoxical phenomenon.

In a study of contemporary self-help literature, Heidi Marie Rimke (2000) defines self-help as 'an individualized voluntary enterprise, an undertaking to alter, reform or transform the self, or some 'intrinsic' aspects of it, which is contingent upon a person's seeking of some external form of authoritative assistance' (p. 62).[25] Hence, the textual form has made the 'enfeebling' help from without a prerequisite of the practice of helping oneself from within. The very practice of self-help rests upon the paradox that 'reading a self-help book is characterised as the single requirement for its readers to fulfil their quest for self-help, while… that invocation of reading is in itself insufficient for

[25] In the article titled 'Governing Citizens Through Self-Help Literature', Rimke argues that self-help literature appropriates neoliberal conceptions of individuality and the social. The self-help literature describes the self, according to Rimke, 'as a unified centre of personal agency which can act upon itself, others and the world. This conception presents the individual as the sole ontological pivot of experience. Further, the self is conceived as possessing an inner reservoir of power that can be accessed. This suggests an intense accountability, responsibility and sense of obligation that can be enlisted for choices and decisions' (Rimke, 2000, p. 64). Several Foucault-inspired studies of self-help literature, including Rimke's, have made the argument that self-help is essentially an affirmation of a neoliberal rationale (see Hazleden, 2003; Salmenniemi and Vorona, 2014; Bröckling , 2005; Blackman, 2004; Gregg, 2015). This dissertation's analysis shows that even though self-help and how-to literature may accentuate neoliberal rationalities, they are not products of neoliberalism, since the literatures in themselves predate the emergence of neoliberalism. That being said, there is a strong libertarian impetus in many books in the genre, which is arguably a vestige of classical liberalism and, in the American context, the intellectual individualism advanced by transcendentalist writers such as Emerson, Henry David Thoreau and Walt Whitman.

self-help' (Cherry, 2008, p. 337). Another paradox or arguably another way of phrasing the same paradox that seems to cling to self-help literature lies in the way self-help is being communicated and essentially the way it is advertised to readers. The author of a self-help book has to appear as an authority and expert, while simultaneously creating doubt as to whether external guidance plays any productive role in the subjectification process encouraged by the self-help book (Bröckling, 2005, p. 9). These paradoxes are also found in many of the how-to texts analysed in the present dissertation. For example, in *How To Invest and How to Speculate: Explanatory of the details of stock exchange business, and the main classes of securities dealt in together with a glossary of terms in common use* (1901), C. H. Thorpe stressed that market actors should seek out the challenges they encountered in the markets themselves and avoid taking advice from others because such advice almost always veiled an ulterior motive to somehow scam the receiver of the advice:

> The investor must use no inconsiderable amount of common sense, he must be able to work out the problems himself, and only when he has a *primâ facie* case for or against a stock need he trouble to hunt information on the point. As a rule, the gratuitous is not worth having, and journals which devote much space to the writing up of various more or less gambling securities are often not to be trusted. Half the "tips" to buy originate from quarters in the City which are interested in selling to the public. (Thorpe, 1901, p. 27, italics in the original)

The paradox obviously consists in the fact that Thorpe was offering advice on how to invest and speculate, while reminding readers not to trust 'tips'.[26] In spite of or perhaps

[26] Another aspect of how-to literature that was perhaps not a paradox but at least something that critics found perplexing was the fact that the authors of how-to books were willing to share their advice. It puzzled critics that someone who claimed to have a recipe for success in speculation and investment did not keep it a secret and followed it her- or himself. Being able to state that they had practised what they were preaching was one of the most effective responses how-to book authors could give to this kind of criticism. For example, the introduction to the speculator turned financial writer Victor de Villiers' *Financial Independence at Fifty* (1919) directly addressed the 'argument that so many sceptical persons make against the using of advice given by financial writers, namely, that most of them *cannot make their theories and advice applicable in their own cases*'. To refute the argument, the author of the introduction (who was not the author of the book) noted that de Villiers' book 'puts at your command the principles and methods employed by the author in accomplishing a feat in which he has admirably succeeded' (Villiers, 1919, p. 7, italics in the original).

because of its paradoxical genus, the how-to book represents an intriguing entry into the complex and often mystified realm of finance. It produced a type of market knowledge that was non-academic, practical and often supplemented by normative and moralistic considerations about certain market practices. Before addressing the specific form of market knowledge being produced in the how-to literature, I will briefly outline the additional textual sources analysed in the dissertation.

Additional textual material: Magazines and academic literature

In addition to the practical how-to literature, the dissertation utilises other types of textual empirical material, namely magazine articles as well as academic journal articles and monographs.[27] In the late nineteenth century, it had become common to see market reports as well as articles on and fictional short stories about finance circulating in newspapers and popular magazines. These types of texts were the American public's primary source of information about the markets, and it was through these channels that the public became attracted to and to some extent familiarised themselves with the business carried out in financial markets (Knight, 2016, pp. 24–28). While I refrain from examining the financial pages of newspapers, I do draw upon articles from a range of different magazines (presented below). The magazine literature on finance was the face of the market as presented to the literate public, and it played an important role in shaping the popular perception of financial markets. It is therefore also a crucial part of how the public and financial markets intersect (a relation I will thoroughly examine in Chapter 3).

There were many different American magazines publishing articles and stories on finance in the late nineteenth and early twentieth centuries. Magazines such as *The*

[27] Besides using practical, academic and popular texts on financial markets, investment and speculation, I also utilise (though only in Chapter 4) reports drafted by federal regulatory agencies. More specifically, I examine reports on the state of the U.S. futures markets drafted by the Federal Trade Commission and the Grain Trade Administration published in the 1920s. I draw on these regulatory reports because they ascribed significance to the psychology of crowds in the futures markets (and in connection to specific events or phenomena in the futures markets). Crowd psychology and market psychology had not been attended to in reports by these agencies prior to the ones published in the 1920s, which I examine in Chapter 4 of this dissertation.

Atlantic Monthly (later renamed *The Atlantic*), *The Forum*, *Munsey's Magazine, The Century Magazine* and *Harper's Monthly* (later renamed *Harper's Magazine*) focussed on a broad spectrum of topics such as literature, politics, culture, the arts and finance.[28] Apart from the aforementioned outlets, there were also more exposé and reform oriented magazines such as *McClure's Magazine* (*Munsey's* arguably also fell into that category) that had a highly critical view on financial markets. Finally, there were specialised outlets such as *The Ticker* (later renamed *The Ticker and Investment Digest* and later again *The Magazine of Wall Street*) and *The Bankers Magazine* directed towards those who were active or planning to become active investors and who therefore were in need of practical knowledge on specific issues and practices pertaining to investment and speculation.[29]

Whereas the how-to book was a source of accessible practical knowledge about the markets that was easily converted into actual action on the part of the reader, the magazine stories and articles on finance provided the American public with a combination of often dramatised and politicised depictions of events that had unfolded in the exchanges and more sober yet still straightforward descriptions of financial markets and the actors operating in them. I draw on magazine stories and articles on finance and more specifically financial markets in order to identify how crowd-related problems such as mass participation, crowding on the exchanges' trading floors and mental contagion in the marketplace were described in the popularised discourse.[30]

Another source of empirical textual material drawn upon in the dissertation is academic literature (both journal articles and standalone monographs) on economics and

[28] During the first decade of the twentieth century, *The Forum*, for instance, had a series of articles entitled 'finance' written by the renowned financial journalist Alexander Dana Noyes in which topics such as banking, investment and speculation were analysed and explained in an accessible yet thorough manner. Similarly, *Munsey's Magazine* ran a segment called the 'financial department' between 1910 and 1913, which was written by another prominent financial journalist, John Grant Dater.

[29] This is not an exhaustive list of magazines publishing articles on finance in the late nineteenth century and the beginning of the twentieth century. Other magazines (such as, e.g., *Town Topics*) existed that also covered the topic of finance (see Knight, 2012, 2016, ch. 1).

[30] The majority of the magazine articles utilised in the dissertation have been retrieved from the digitised online archive unz.org – a website that digitally reproduces, inter alia, articles from American magazines.

finance as well as on collective and crowd psychology. The academic monographs utilised in the dissertation are works in the fields of political economy, business and economics as well as in social psychology and sociology. Pertaining to the same scholarly fields, the academic articles drawn upon as empirical material were predominantly retrieved from journals such as *Journal of Political Economy*, *Quarterly Journal of Economics* and *American Journal of Sociology*. I selected the academic work from the fields of sociology and social psychology based on the following three criteria: (a) their status in, contribution to and influence on crowd theory; (b) if the texts attended to crowd phenomena in the market sphere and in economic life; (c) if the theories presented in the texts were explicitly employed in the practical or the academic literature on financial markets. As the third criteria implies, the relevance of work in the crowd-theoretical tradition has not been determined concurrent with the collection of the primary empirical material (the how-to literature). The academic journal articles and monographs utilised in the dissertation were selected on the basis of the second and third of the abovementioned criteria.[31]

I draw upon academic literature for two reasons. First, I turn to theoretical texts for conceptual clarification. Here, I specifically think of the clarification of concepts deriving from crowd theory. When, for instance, terminology from crowd theory is deployed in a how-to book, I resort to the crowd theoretical tradition in order to theoretically situate the term or concept being used. The purpose of this theoretical contextualisation is *not* to reconstruct what the author of a given how-to book actually meant when she or he employed notions such as, e.g., 'contagion', 'imitation' or 'sympathy'. On the contrary, the purpose is to illuminate the theoretical vestiges that are implicitly or explicitly posited in the discourse when such terminology was employed. Second, I resort to academic texts in order to locate academic responses to problems associated with crowd behaviour

[31] I conducted a keyword search in the jstor.org online archive in order to find articles in finance and economics journals published between 1890 and 1940 that attend to crowd problematics. The keywords used in the search were as follows: 'crowd', 'crowd psychology', 'the psychology of crowds', 'mob', 'mob psychology', 'the psychology of mobs', 'contagion', 'contagious', 'epidemic', 'infection', 'infectious', 'imitation', 'imitative' and 'sympathy'. Articles (and book reviews) from sociology journals such as *American Journal of Sociology* are mainly drawn upon in order to account for the reception of the French and Italian crowd theory traditions in the American academic milieu.

and crowd psychology in the context of financial markets. The academic literature is furthermore examined in order to find out how and to what extent debates pertaining to crowds in markets took place in and across different literatures and if, for example, the practical literature informed the academic and/or vice versa. If, for instance, a how-to book articulated mental contagion as a concrete threat to the efficiency of trading in the stock and commodity exchanges, locating similar problematisations of mental contagion in other genres of financial writing, such as in texts from the fields of political economy, business and economics, can tell something about the prevalence of the problematisation.

Vernacular market knowledge

The form of knowledge generated in practical texts such as the how-to book is, as I have already touched upon, different from the knowledge produced in academic texts concerned with financial markets. How-to books offered practical knowledge intended for people who were or had an ambition of becoming practitioners. Theorising was in itself seldom an aim in this genre of financial writing. Whereas the academic literature was predominantly focussed on describing, analysing and explaining, the primary objective of the how-to book was prescriptive. (Describing market conditions and practices were a means to a prescriptive end.) I will argue that the practical texts examined in the present dissertation adhere to a category of economic knowledge that has been designated 'vernacular economics' (Preda, 2004, 2009), 'vernacular finance' (Knight, 2012, 2013; Poitras, 2011), 'everyday economic discourses' (Ruccio, 2008) or 'grassroots economic theory' (Knight, 2012). According to Preda, vernacular economics is understood to do the following:

> comprise heterogeneous sets of practices, know-how techniques, and rationalization procedures that help social actors make sense of their economic environment and the economic consequences of their own actions. Rather than a body of homogeneous, abstract, and formalized explanations of economic processes, vernacular economics is grounded in tacit, commonly shared assumptions and knowledge about economic processes. (Preda, 2004, p. 354)

Hence, the purpose of vernacular economics is to enable the individual social actor to comprehend the economic context, i.e. environment, she or he is in and to make the right decisions in that particular situation. Being concerned with heterogeneous forms of vernacular economics or finance does not provide explanations as to the assumptions made about market processes and practices. Forms of vernacular finance make an otherwise seemingly abstract financial market seem mundane and more tangible by presenting market activities as well as market success as accessible to a much larger part of the public (Knight, 2012, p. 59).[32]

Preda outlines three ways in which vernacular economics can be conceptualised in relation to academic economics: (a) as a less rigorous and frivolously formulated version of academic economics; (b) as a form of economic knowledge that seeks to solve everyday problems (and that is not concerned with the 'unified conceptual frame' as the academic counterpart is); (c) as a form of knowledge that is radically different from academic economics in terms of aims and principles (Preda, 2004, p. 354). What is lacking in these conceptualisations of vernacular economics is, according to Preda, the possibility that vernacular economics actually can inform and influence academic economics. Preda argues that 'vernacular knowledge actively influences academic theories', pointing out that 'it provides them with rationalization devices, formulates competing explanatory models, and articulates interests that are later integrated into academic theories' (Preda, 2004, p. 355). Since vernacular knowledge arguably can have performative effects on academic theories, Preda further claims that studying the connections between the two forms of knowledge can 'lead to a better understanding of

[32] Besides being perceived as a practice-oriented and practice-regulating source of financial knowledge, vernacular finance has also been identified as a source of financial market knowledge that challenges prevailing perceptions of what finance is and how financial markets should be perceived. David Ruccio (2008) argues that 'everyday economic discourses' are at one and the same time 'stylized parodies' of academic economics as well as 'conceptual strategies' that pave the way for 'alternative economic practices and institutions' (p. 897). Along the same lines, Stäheli (2008) has argued that heterodox forms of market knowledge meddle with the boundary between what is considered to be 'the economic' and 'the non-economic' and thus 'create a realm of economic possibilities and impossibilities, that also defines the limit of financial economy' (p. 244).

the cognitive, cultural, and social processes that acted as a background for the scientific approach to financial market operations' (Preda, 2004, p. 356).

Along similar lines, I argue that the vernacular knowledge produced in the how-to literature examined in the dissertation dealt with market problems that were also being addressed in the academic literature. One of the aspects explored in the analysis is how the problematisations of crowd phenemena in markets in one genre of financial writing were echoed in another, e.g. how the issue of mental contagion in market crowds were often similarly touched upon and presented in how-to books and in academic texts. Examining financial markets through how-to books can thus provide a different perspective on how popular perceptions and shared assumptions about market processes were turned into new rules of market conduct and thereby arguably shaped concrete market practices.

Structure of the dissertation

As presented in this chapter, the present dissertation examines the problematisations of crowd phenomena in the U.S. financial markets between 1890 and 1940. The aim of the study is to (a) shed light on *how* crowds and crowd-associated phenomena became problems in markets during the given historical period; (b) explore *what* characterised these crowd problems in the markets and *to whom* they were problematic; (c) discuss *how* the problematisations of crowd phenomena in the financial markets informed approaches to certain market practices such as speculation and market reading. These three dimensions of the problematisations of crowd phenomena in markets are attended to in the dissertation's analysis. The dissertation is structured as follows. In addition to the present chapter, it consists of four analytical chapters and a sixth and final chapter comprising concluding remarks and two contemporary perspectives on the study of crowd phenomena in financial markets.

Chapter 2 introduces central concepts from late nineteenth century crowd theory such as *imitation*, *contagion*, *suggestion* and *sympathy* and engages with problems pertaining to collective action and mental contagion in financial markets, as examined and critically discussed by crowd theorists Gustave Le Bon, Gabriel Tarde and the lesser known Boris Sidis. Financial markets were not the most frequently used examples in late nineteenth century crowd theory, yet in work by the aforementioned crowd theorists, markets were reflected upon and analysed as sites where crowd dynamics and crowd behaviour thrived. I argue that the crowd theorists, in their elaborations on finance and speculation, tended to conflate market and crowd problems and thereby made it more or less two sides of the same coin. What they did was to analyse market practices and malfunctions as socio-psychological processes specific to their particular perception of collective behaviour.

Chapter 3 examines how the notion of 'the public' in the financial markets came to be considered a problematic class of market participants towards the end of the nineteenth century and in the first couple of decades of the twentieth century. With the business conducted in the stock and commodity exchanges becoming gradually more popular among people from the American middle-class, concerns grew over what should be done, if anything, about public participation in the markets. What role should and could the 'newcomers' play in the markets, and, more importantly, what problems were associated with letting 'amateurs' trade in markets that had until then primarily been sites occupied by affluent financiers? The concern with the market public and thus with public participation was expressed as a concern with the public's alleged (a) lack of *competencies* and *qualifications*, (b) *misconceptions about the functioning of markets* and (c) *suggestibility* and *lack of mental tenacity*. The public was perceived as a unified mass of more or less equally inexperienced, incompetent and underqualified persons who tended to follow the crowd, because they were incapable of exercising independent judgement when it came to market matters. Consequentially, more financial writers across genre boundaries began to account for and elaborate on the importance of the psychology of the public, which was in close accord with, in particular, Le Bon's characterisation of the psychology of the crowd.

Chapter 4 engages with the idea of *the psychological moment* in connection to what I have termed the *psychologisation* of discourses on financial markets in the second and third decades of the twentieth century. The psychologisation process is explored in three different strands of financial writing: practitioners-oriented how-to books, academic literature as well as reports from federal regulatory agencies. With increased attention given to the allegedly whimsical market public in discourses on financial markets, more financial writers began to argue that studying the psychology of the market was a prerequisite for obtaining a comprehensive understanding of how markets functioned. The ability to anticipate when prices were about to fall or rise was increasingly being articulated as a matter of detecting the psychological moment, which was the transient moment when the market was about to change direction. The chapter examines the increased importance ascribed to the psychological factors that, according to several writers, influenced the actual formation of prices in financial markets made ideas and theories from the academic fields of (crowd and social) psychology *explanatorily*, *descriptively* and *prescriptively* relevant in the analysis of financial markets.

Chapter 5 examines contrarian approaches to speculation formulated in how-to books from the 1920s and 1930s. Contrarian approaches were based on the assumption that the majority of people in the markets tended to follow the crowd, especially at times when it was least favourable to do so. Drawing on precepts from crowd theory, the contrarians provided their readers with advice on how to read the crowd psychology inherent in market processes and offered techniques for how to prevent the incipient influence of the crowd from contaminating their minds. It is examined how contrarian market philosophies attempted to alter the practices of the market actor: From the contrarian point of view, market action involved the analysis of the psychology of market crowds (either exclusively or in conjunction with the analysis of technical and fundamental conditions). Apart from the reorientation of the market analysis, the contrarians drew at least as much attention to the element of individual self-preservation and self-mastery. Whereas the general idea of the successful investor or speculator was someone who had in-depth knowledge of the fundamental conditions of the markets and/or excelled as a technical analyst, the contrarian speculator or investor was someone who was primarily an apt student of crowd psychology.

The concluding chapter, Chapter 6, summarises the arguments and findings associated with the exploration of problematisations of crowd phenomena in markets carried out in the preceding analytical chapters. Additionally, it points to two discussions of crowds in contemporary discourses on investment and speculation in financial markets: (a) the wisdom of crowds argument and (b) crowds and herding in behavioural finance. Arguments and elements of this chapter have formerly been published in Hansen, K. B. 'Contrarian investment philosophy in the American stock market: On investment advice and the crowd conundrum', *Economy and Society*, 44(4) (2015).

Chapter 2: Crowds and financial markets

> The center space should be about five feet in diameter, or as large as may be, without admitting enough to crowd.
>
> Rueben S. Jennings, 'Improvement in trading-pits', 1878

On 19 December 1877, Rueben S. Jennings filed a patent application titled 'Improvements in trading-pits' to the United States Patent Office (Jennings, 1878). The invention was supposed to improve the open-outcry trading of commodity futures conducted at The Chicago Board of Trade.[33] Jennings' improved pit was an octagonal trading platform placed upon or sunk below the floor, with steps on the inside toward the centre and on the outside to ease the passage to and throw the pit (see Figure 2.1). Each step in the construction was wide enough to allow 'one person passing behind another without serious inconvenience to either', and the height difference between the levels permitted 'a man of ordinary height to see over the heads of those in front of him'. Furthermore, cold and hot air pipes were fitted into the platform in order to provide proper heating and ventilation of the trading environment (Jennings, 1878). The advantages of the structure were, according to Jennings, that it made trading more convenient for the traders: It increased their manoeuvrability and visibility as well as improved their access to the pit. The primary inconvenience that Jennings' pit promised to eradicate was 'crowding' (Jennings, 1878). Besides being inconvenient to the traders who spent their workdays on the floor of the exchange, crowding could render the communication between buyers and sellers difficult. The hampering of the communication between traders could ultimately diminish the efficiency of the trading. Hence, Jennings' pit was an architectural response to the problems of inconvenience and

[33] Open outcry trading was a form of trading carried out on the floor of the stock or commodity exchanges. Buying and selling was made on a face-to-face basis with ask and bid prices being communicated orally or by a system of hand signals. Open outcry trading was the dominant form of financial transaction from the inception of the organised modern financial markets up until the computerisation of markets gained momentum from the 1970s onwards (MacKenzie, 2004, pp. 86–87; see also Borch, Hansen and Lange, 2015).

trading inefficiency that occurred when the trading floor at an exchange was over-crowded with traders.

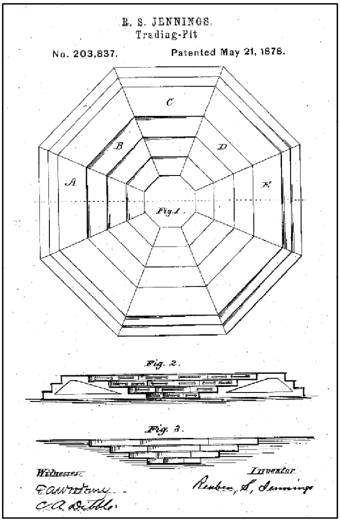

Figure 2.1: Rueben S. Jennings' drawing of his improved trading pit, patented on 21 May 1878.

During the last decade of the nineteenth century, crowds and the calamities they allegedly were causing in modern societies became a tremendously popular research topic, especially among French and Italian sociologists, criminologists, physiologists and psychologists. These were the formative years of crowd psychology or crowd theory. One of the most prominent figures in the crowd theoretical tradition, Gabriel Tarde, claimed that crowds facilitated a rapid spread of ideas, beliefs and emotions as well as an intensification and harmonisation of beliefs and emotions among the people gathered in them. These characteristics of crowds were, Tarde stressed, reflected in a range of 'epidemics' prevalent in modern societies, such as epidemics of 'luxury', 'gambling' and 'stock-speculation' (Tarde, 1903, pp. 145–146, n. 1). Hence, the intensification, spread and harmonisation of emotions, desires and beliefs that tended to happen when people were closely gathered in crowds were, according to Tarde, potential problems in all social settings, including financial markets. In financial panics and speculative crazes, among other market phenomena, Tarde and other social theorists and psychologists identified some of the same socio-psychological dynamics they attributed to the psychology of the crowd. Viewed from a crowd theoretical perspective, Jennings' pit presented a response to the corporeal and physical dimension of the problem of crowding of the trading floor. However, it also presented a possible solution to the aforementioned socio-psychological dimension of the crowd problem. The relation between the physical and the psychological dimensions of crowd phenomena was central in problematisations of collective action in the financial markets: The bodily impact of crowding has often been perceived as inextricably related to the mental discomfort allegedly caused by crowding.

In this chapter, I examine financial markets through the lenses of late nineteenth century crowd theorists. As I will argue, exploring the financial markets through *sociological and social psychological crowd theories* of the late nineteenth century reveals how market behaviour and phenomena could be perceived in socio-psychological terms. Similar in many respects, to the conservative crowd theories that emerged as a response to an instable and rapidly changing modern society, the crowd theorists' accounts of markets were responses to the panic- and manipulation-ridden U.S. financial markets that did not appear to be serving the common good. I argue that in applying their crowd theoretical framework to market phenomena, the crowd theorists conflated market and crowd dynamics, rendering it possible for them to describe how non-economic factors such as (a) the atmosphere on the floor of the stock or commodity exchange; (b) the leader-follower dynamic and (c) the emotions of market actors played crucial roles in the functioning or malfunctioning of markets. Another layer in this exploration of the entanglements of crowds and markets consists of examining how ideas developed in, and the terminology associated with, crowd theory were deployed and resuscitated in *discourses on financial markets*. Some scholars from the field of economics, for instance, found in crowd psychology a vocabulary and a set of notions with which they attempted to explain market phenomena that seemed to defy economic laws. While the latter layer in the analysis will primarily be unfolded in the chapters to come, I do give one example of how crowd theoretical ideas and the associated vocabulary have been utilised to describe as well as explain the dynamics of the trading floor of the exchange.

The chapter is divided into three parts. I begin by examining and discussing a critique of late nineteenth century financial capitalism advanced by Gustave Le Bon in *The Psychology of Socialism* (1898, Eng. tr. 1899). Le Bon's critique revolves around what was, in his opinion, a particularly contemptuous and scandalous event – an attempt to corner the wheat market at the Chicago Board of Trade during the late 1890s – from which he reads all the alleged problems of financial capitalism. I argue that the problems Le Bon associated with the financial markets coincided with the problems he associated with crowds, which collapsed or at least blurred the boundary between purposeful and supposedly calculable market action on one hand, and the ephemeral and unruly behaviour of crowds on the other. For the purpose of clarification, I infer a subsection in the first part of the chapter in which I briefly expound two of the most influential crowd theorists' – Le Bon's and Tarde's – views on crowds, crowd psychology and crowd emergence. The second part of the chapter deals with the social psychological theory of the (compared to Le Bon and Tarde) lesser-known scholar Boris Sidis, who perceived financial markets as socio-psychological phenomena and therefore studied them as so. I examine Sidis' theory of suggestion, which was both an individual psychological theory and a social or crowd psychological theory, and discuss how his perception of financial markets was shaped in its image. The third and final part of the chapter discusses the concrete socio-psychological processes that some crowd theorists assumed were unfolding on the exchanges' trading floor. In the analysis, I zoom in on one particular trading floor on one particular day, namely the trading floor of the New York Stock Exchange during the panic on 9 May 1901. I explore Tarde's assessment of the event in his *Psychologie Économique* (1902) and in connection to this examine his idea of stock exchanges as 'laboratories of collective psychology' (1902a, p. 225). Tarde's analysis of the stock exchange did conclude that markets were subjected to the same socio-psychological processes and dynamics that he perceived as the fabric of the social as such. Consequentially, I argue, it was impossible, following Tarde, to fully grasp the functioning of financial markets if the psychological and social dimensions of market actions and relations were not studied.

The overall argument in the chapter is that crowd theory tended to conflate crowds and markets – or perhaps rather study market phenomena as if they were crowd phenomena. Crowd theory also provided a vocabulary and a set of notions that appeared well suited to describe market phenomena which did not resonate with the dictates of economic theory and which countered the idea that financial markets were ordered institutions serving the interests of society at large. Furthermore, conflating market and crowd phenomena (market and crowd behaviour) supposedly rendered it possible to identify the probable causes that occasionally destabilised markets and threw them into panics and crises.

The crowd problem of late nineteenth century financial capitalism

> What shall we say of speculations like that of the young American millionaire who, at the time of the Spanish-American war, bought at one stroke all the wheat [*blé*] obtainable in almost all the markets of the world, to re-sell it only when the commencement of the scarcity he had provoked had greatly increased the price? The affair should have brought him in four million pounds; but it provoked a crisis in Europe, famine and riots in Spain and Italy, and plenty of poor devils died of hunger. Are Socialists really in the wrong when they compare the authors of such speculations to common pirates, and declare that they deserve the hangman's rope? (Le Bon, 1899, p. 16, translation corrected)[34]

The unnamed young American millionaire whose speculative venture Le Bon was referring to in this excerpt from *The Psychology of Socialism* (1899) was none other than 'the Napoleon of Wheat', Joseph Leiter. In April 1897, at the age of 29, Leiter, the son of the Chicago merchant and multimillionaire real-estate owner Levi Zeigler Leiter, began to buy up all the cash wheat as well as the wheat futures he could get his hands on at the Chicago Board of Trade (Marcosson, 1909b). Even though he refused to admit it, what

[34] In the English translation of *Psychologie du Socialisme* the French word 'blé' was translated into 'corn'. However, the correct translation of 'blé' is 'wheat' and not 'corn'. The reason why I have corrected this seemingly puny translation error is that, in this particular case, it is of major importance. Since Le Bon did not disclose the name of the 'young American' in question, it is crucial to know whether he bought up all obtainable 'corn' or 'wheat'.

Leiter commenced in the spring of 1897 was an attempt to 'corner' the wheat market.[35] Leiter swept the market of physical (cash) wheat, which gave him an advantage over the short sellers who did not own the physical equivalent to the wheat they were selling short. Thus when the short sellers had to meet their obligations in their futures deals and deliver the physical crop, they were in need of the wheat that Leiter now owned. They therefore suddenly found themselves completely at Leiter's mercy. The prospect of falling short on their commitments generated a sense of panic among the short-sellers, who, as a consequence and out of pure necessity, started to run up the price on wheat to the benefit of Leiter (Marcosson, 1909b, pp. 874-876; R. E. Smith, 1901, pp. 26-30).

As with most attempts to corner the market, Leiter's efforts proved futile. Regardless of whether it was due to overconfidence, recklessness, greed or simply bad timing, what happened was that he 'overstayed the market' and ultimately lost control of it (Marcosson, 1909b, p. 875).[36] Although he did not succeed, Leiter's audacious speculative endeavour did not pass unnoticed. On the contrary, it attracted a great deal of popular interest, mainly due to the extraordinary scale of the operation and its worldwide repercussions. The story of the Leiter corner became the subject of many magazine and newspaper articles and furthermore served as the main source of inspiration for novelist Frank Norris when he was writing his bestselling novel *The Pit*

[35] A corner was created when one speculator or a syndicate of speculators had acquired sufficient control of a particular security that allowed the speculator or syndicate to manipulate prices. Futures markets had, historically, been subjected to the most corners. The reason for the prevalence of corners in the futures markets was that futures trading allowed traders (short sellers) to sell what they did not own (with the promise of delivering at the terminal date of the futures contract). Consequently, if the majority of the particular commodity was owned by one or a group of conspiring speculators, this individual or group of individuals could dictate the price that the short sellers had to pay in order to fulfil their delivery commitment inscribed in the futures contract. The successful corner was thus often at the expense of the short sellers, who either had to buy the quantity needed to settle their commitment at an unprofitably high rate or simply default and risk prosecution. It was a popular saying at the time that '[h]e who sells what isn't his'n Must buy back or go to prison' (Lefèvre, 1901b, p. 431). These were the facts that short sellers had to face when trading in futures. 'The cornerer' was described as 'the deadly enemy of the "bears"', i.e. the short sellers (Marcosson, 1913, p. 5).

[36] Leiter's and other daring financiers' mostly unsuccessful attempts to corner the commodity and produce markets are thoroughly depicted in a quartet of articles written by Isaac Frederic Marcosson in *Munsey's Magazine* titled 'The Perilous Game of Cornering a Crop, I–IV' (Marcosson, 1909a, 1909b, 1909c, 1909d).

(1903). Although the novel was inspired by Leiter's story, Norris took certain artistic liberties and deviated from the actual events for drama's sake (Biers, 2011; C. Kaplan, 1953). Norris depicted the Chicago wheat pit – while the corner was a sparking, tremendous trading activity – as a place occupied by a 'vehement crowd of white faces and glittering eyes' stupefied by an untamed 'infinite immeasurable power' able to deafen the ears, blind the eyes and numb the mind (Norris, 1920 [1903], p. 387). Norris' dramatic portrait of trading in the Chicago Board of Trade during the years 1897 and 1898 were filled with descriptions of ferocious crowds of traders struggling to secure the best deals in the 'whirlpool' of the pit and of the sublime force of the market overpowering and ultimately crushing individuals, as it happened to the novel's protagonist and Leiter's fictive counterpart Curtis Jadwin (Biers, 2011; Zimmerman, 2006, Ch. 3).

Contrary to Norris' dramatic depiction in *The Pit*, the break of the Leiter corner, which happened on 13 June 1898, was considered by financial journalists and by Leiter himself to have been a rather undramatic event. The renowned financial journalist and editor Isaac Frederick Marcosson recalled that there had been no tumultuous scenes in the Chicago wheat pit that day, since Leiter, who was well-aware that his luck had run out, simply gave up and handed over his cash holdings of wheat to his creditors (Marcosson, 1909b, p. 876). Perhaps wanting to defuse the debacle surrounding his corner attempt, Leiter, denying that he had cornered the market, told the Associated Press that what had happened was simply 'a case where the tail has begun to wag the dog' (cited in Los Angeles Herald, 15 June 1898). He explained that he had been caught off guard by the rapid fall in wheat prices as so many speculators had experienced before him. The so-called break of the corner had not, according to Marcosson and Leiter, caused or been accompanied by vile and irrational crowd behaviour in the wheat pit of the Board of Trade as Norris had envisioned it in *The Pit*. Even though the culmination of Leiter's corner might not have been as spectacular as Norris had portrayed it, the repercussions of the corner were as palpable as they were pervasive.

In *The Psychology of Socialism*, Le Bon noted that the corner had provoked a crisis in Europe, and Marcosson argued that the ramifications were felt as far away as Argentina, India and even Russia (Le Bon, 1899, p. 16; Marcosson, 1909b, p. 876). To Le Bon, Leiter's attempt to capitalise on the hunger of populations was an emblematic example of a general 'demoralisation of the upper strata of society' and an 'unequal and often unequitable partition of wealth' in society (Le Bon, 1899, p. 16). As a consequence, the masses were, Le Bon argued, growing increasingly discontent and irritated with the manipulative games of these 'common pirates' (Le Bon, 1899, p. 16).[37] The corner symbolised to Le Bon the unbridled greed and lack of morals of the bourgeoisie financiers that tended to push the masses towards socialism (the propagation of socialism in the late nineteenth century was the dominant theme in *The Psychology of Socialism*). Though Le Bon emphasised the unequal distribution of wealth in society, to which the manipulations of financiers contributed, his debunking of the financiers' schemes should not be read as if he sympathised with the deprived masses.[38]

[37] Like Le Bon, the author of a *Munsey's Magazine* article covering Leiter's shenanigans, Rollin E. Smith, had no great enthusiasm for corner-instigators. As a member of the Chicago Board of Trade and the Minneapolis Chamber of Commerce, Smith had experienced cornering at close quarters. Apart from his commercial activities, Smith wrote magazine articles and books on investing and speculation. In one of his books, *Wheat Fields and Markets of the World* (1908), Smith used unflattering wording when describing the speculators who instigated corners. Corner instigators and other manipulators were, Smith stated, 'men who ignore commercial ethics, defy trade opinion, and who endeavor to draw the public in to the market and finally, during the excitement of the bull market, sell out and let the public "hold the bag"' (R. E. Smith, 1908, p. 261). The cornerers gave futures trading a bad reputation and discredited the grain trade as a whole. Even worse, Smith argued that they inflamed the public's 'passion for gambling' in order to profit from it. The historical equivalent of these manipulating speculators was, he thought, the 'buccaneer'. What differentiated the 'modern-day manipulator' from the scrupulous pirate was, Smith noted, that the former did not force his victim to walk the plank (R. E. Smith, 1908, p. 261). Although corners were damaging to the markets in various ways, Smith did not encourage legislative intervention against cornering. He instead believed that members and directors of the exchange should show the sufficient moral courage to supress the financial buccaneers (R. E. Smith, 1908, p. 261). It was not uncommon for speculators to be associated with or referred to as buccaneers or pirates such as Le Bon and Smith did. For example, the then famous wheat trader B. P. Hutchinson ('Old Hutch'), who engineered a corner of the wheat market a decade before Leiter, in 1888, went by the nickname of 'the Pirate of the Pit' (Marcosson, 1909b, p. 873).

[38] There was no Marxian romanticising of the working class in Le Bon's work. Unlike in Marxian thought, Le Bon did not think that the working class possessed any 'dignity, autonomy and revolutionary creativity' (Leach, 1992, p. 13). Instead, when flaunting their alleged riotous inclination the working class was, according to Le Bon, primitive, violent, destructive and completely devoid of autonomy (Leach, 1992, p. 13). Although Le Bon feared the uprising of socialism and devoted an entire volume to the examination of the problems associated with it, he did not regard crowd behaviour as solely being a class phenomenon. In fact, everyone was, Le Bon

The 'polymath prophet of Western decadence', as historian Eugene E. Leach (1986, p. 101) fittingly calls Le Bon, foresaw great societal calamities associated with the increasing power of financial capitalism. 'One of the great problems of the future will be', Le Bon prophesied, 'to find the means of escaping from the sovereign and demoralising powers of the cosmopolitan financiers' (Le Bon, 1899, p. 82). Le Bon characterised this limited yet immensely powerful group of cosmopolitan financiers as 'masters of public opinion' who extended the scope of their manipulation of the public by ceasing control of newspapers and journals and by anonymously shaping public opinion to their liking (Le Bon, 1899, p. 82).[39] By swaying the sentiments of the masses, financiers such as Leiter were assuming the role of the crowd leader that Le Bon had thoroughly described in his seminal work on crowds, *The Crowd: A Study of the Popular Mind* (1895, Eng. tr. 1896 book II, Ch. 3, §1). Le Bon arguably boiled the problem of financial markets down to an asymmetrical and unidirectional relationship between powerful financiers and the rest, i.e. the masses. The latter group was, as described, completely subjugated to the former group's will, which meant that much if not all of the business conducted in the markets was perceived as involving some element of manipulation and exploitation. Thus, the problem of late nineteenth century financial

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assumed, susceptible to crowd behaviour. It was not only the proletariat that possessed the inclination to end up in a violent, unthinking crowd (Borch, 2012, p. 41). Even the bourgeoisie could become swept away by emotional contagion, which was what happened when the French nobility, in the wake of the French Revolution, renounced all their privileges on 4 August 1789. According to Le Bon, this would never have happened had they not been in a state of excitement (Le Bon, 1896, p. 14).

[39] The press' moulding of public opinion was a frequently discussed topic in crowd theory as well as among social scientists more broadly. In the essay 'Opinion and Conversation' from 1898, Tarde discussed how public opinion and thus sociality in itself was being created and shaped through the press (pp. 297–318). Years later, another prominent social scientist Max Weber suggested that the press' influence on the modern individual as well as on modern society and culture ought to be the subject of an independent sociological inquiry. In a proposal for a 'Sociology of the Press' outlined in a report presented to the German Sociological Society in Frankfurt in October 1910, Weber suggested that the press played a major role in creating 'the great cultural problems of the present' (Hennis, 1998, p. 107; Weber, 1998, p. 111). The press was one of the 'means of moulding the *subjective* individuality of modern man' through the 'psychic means of suggestion' (Weber, 1998 [1911], p. 111, italics in the original). Weber furthermore noted that the newspaper was the most important determinant of public opinion, which made the press 'a component of the *objective* individuality of modern *culture*' (Weber, 1998 [1911], p. 111, italics in the original).

capitalism, as identified by Le Bon in *The Psychology of Socialism*, essentially coincided with what he perceived as the overarching problem of the present age and the coming 'era of crowds' – namely, the problem presented by crowds (Le Bon, 1896, p. v, xv).

Crowds, contagion and imitation

While Joseph Leiter's failed attempt to corner the wheat market in 1897–98 shrugged the financial markets and added fuel to an already fiery criticism of the speculation conducted on the U.S. stock and commodity exchanges, the publication of *The Crowd* stirred controversy in its own right. Several allegations of plagiarism were, for instance, directed at Le Bon (Borch, 2012, p. 34). Some of the harshest accusations came from the Italian criminologist Scipio Sighele, who claimed that Le Bon had stolen ideas from other scholars – including Sighele himself, who had dealt with masses and crowds in *La Foule Criminelle* (1891) – and used them in *The Crowd* as if they were his own.[40] Plagiarism

[40] Le Bon later responded to Sighele's allegations with a very cunning and snide attack on the Italian. In a lengthy footnote in *The Psychology of Socialism*, Le Bon referred to *The Criminal Masses* as a book hardly containing any traces of 'personal thought' (Le Bon, 1899, p. 100, n. 1). He then went on to accuse Sighele of having started the plagiarism rumour in order to make his own book known among his compatriots. After complaining about having grown accustomed to having his own books unscrupulously used as a 'public mine' of ideas for other people to shamelessly dig into, Le Bon finished his counterattack by claiming that it was in fact Sighele and not him who was the actual copycat: 'I am happy, therefore, to see Signor Sighele profit from the perusal of my books, and will confine myself to asking him to observe that before complaining so loudly of French writers who, for the greater part, do not know his name, he should have refrained from availing himself of so many loans, and above all of such dissimulated loans such as that which figures on page 38, lines 12 et seq., of his little work on *The Psychology of Sects*, in which, after a quotation between inverted commas, taken from one of my books, the author gives as being his own, changing only a few words, a passage copied directly out of my *Psychology of Crowds*, page 8 lines 4 *et seq.* (3rd edition). Otherwise I can say with pleasure that Signor Sighele's last work is not nearly so mediocre as his preceding one' (Le Bon, 1899, p. 100, n. 1, italics in the original). Sighele was, as noted in Chapter 1, not an unimportant figure in the nascent crowd theory tradition. He had been a student of another Italian criminologist, Enrico Ferri, who was one of the central figures in the Italian School of Positivist Criminology. The founding father of the positivist school was the criminologist Cesare Lombroso. Whereas Lombroso was predominately preoccupied with the individual criminal and the possibility of identifying him or her on the basis of particular characteristics, Sighele was more interested in the crimes committed by collectives (Borch, 2012, pp. 37–38, 2015, pp. 23–29). Sighele's work had, according to Lombroso, shown that '[t]hough the majority of the crowd may be good, the crowd itself may be converted into a cruel beast' (Lombroso, 1895, p. 43). Some argued that the members of the Italian School played an important role in developing several of the ideas that later came to define French crowd theory (Chamberlain, 1900, p. 275; Lea, 1894, p. 671).

allegations aside, *The Crowd* contributed to the manifestation of the psychology of crowds as a legitimate and important field of scientific inquiry. Besides being immensely popular and heatedly debated in the academic milieu, the book also gained significant popularity with the literate public. It established the crowd as a crisis phenomenon and as an omen of an impending breakdown of order, and crowd psychology as a field of research that demystified crowds and made them less intangible (McClelland, 2010, p. 196, 199). The book brought about a different and very timely perspective on the relation between the individual and the social that emphasised the fragility of the former's autonomy in certain excited and unruly social formations. Le Bon's crowd theory furthermore brought to the surface the malevolence of modernity. Instead of lauding the proliferation of technologies for mass communication and transportation as well as developments towards democratisation and urbanisation, Le Bon emphasised the tenuousness of these developments.

What intrigued Le Bon was not any type of gathering of people that could, in lay terms, be designated as a crowd. He instead took interest in the mental specificities of the 'collective mind' of the so-called 'psychological crowd'. A psychological crowd, according to Le Bon, could be described in the following way:

> [a] provisional being formed of heterogeneous elements, which for a moment are combined, exactly as the cells which constitute a living body form by their reunion a new body which displays characteristics very different from those possessed by each of the cells singly. (Le Bon, 1896, p. 6)

A main characteristic of the psychological crowd was, as implied in the quote, that it was different from the elements that constituted it and furthermore that the individual elements changed when they were brought together in a crowd. To crowd theorists such as Le Bon, crowds constituted 'a particular mode of individuation' (Blackman, 2012, p. 27). When being part of a crowd, people were, according to Le Bon, unable to think for themselves, and they unwittingly lost their sense of personal responsibility. Le Bon also noted that people in a crowd were unable to exercise emotional restraint and, as a consequence, became entirely subjected to collective emotions and interests. The intellectual faculties of people in a crowd were paralysed, and individual discernibility was essentially suspended (Le Bon, 1896, pp. 9–11). It was, Le Bon thought, the suggestibility and credulity of the people gathered in a throng combined with the powerful force of contagion that caused this transformation of selves (Le Bon, 1896, pp. 22–24).[41]

In order for a crowd to form, some sort of idea, cause or opinion had to be instilled in the minds of people, and it was the crowd leader – an often passionate, charismatic and eloquent orator – who aligned the minds of the mass. Like the metropolitan financiers, whom Le Bon so fiercely criticised in *The Psychology of Socialism*, crowd leaders (e.g. revolutionary, religious, political and military leaders) manipulated the gullible masses without asking for their consent (Le Bon, 1896, book II, Ch. 3, §1). The crowd leader's as well as the manipulative financier's sole aim was to set in motion and give direction to the rambunctious physical and emotional force that crowds assumedly possessed. The leader-follower dynamic was at the very core of Le Bon's crowd theory; according to him, it was a configuration that explained crowd emergence and concretised where the apex of power was located in the crowd-marred Western societies (that was with the leader-figures who were able to seduce crowds). Furthermore, it was a dynamic that, following Le Bon, seemed prevalent in most social processes, including financial markets. The broad applicability of Le Bon's ideas was exactly one of the distinctive characteristics of his crowd theory and a possible reason for its popularity. Le Bon convincingly explained how the fundamental psychological traits of crowds could be identified in a wide array of societal, political, religious and economic phenomena. The seemingly omnipresence of crowd phenomena and omnipotent explanatory power of his crowd theoretical framework made Le Bon's ideas appear pertinent in a range of different contexts and easy to apply to these individual contexts or phenomena.

Although Le Bon's study of crowds was accessible, novel and, in parts, disturbingly insightful, it was also criticised for being incoherent and methodologically

[41] Le Bon furthermore perceived crowds to be impulsive, irritable, unable to reason, without judgement and critical spirit and responsible for an exaggeration of the sentiments (Le Bon, 1896, p. 17).

underdeveloped (Barnes, 1920, pp. 333–334). In the journal *Science*, the American sociologist Franklin H. Giddings argued in a review of *The Crowd* that it was a major shortcoming of the work that Le Bon had 'not acknowledged, as he should have, his very obvious indebtedness to the greatest living social psychologist, M. Tarde' (Giddings, 1897, p. 735).[42] Compared to Le Bon's eloquently formulated yet also extremely conservative and somewhat repetitious ideas about the psychology of crowds, Tarde's work on imitation and crowd emergence had a different academic weight and theoretical sophistication to it. I will not elaborate on the myriad of complex reflections on various forms of imitation that Tarde made in his undoubtedly most influential work, *The Laws of Imitation* (1890, Eng. tr. 1903), but I will instead discuss Tarde's view on crowds and his understanding of how they emerge in the social realm. This, however, does not mean that Tarde's theory of imitation is not of importance to his understanding of crowds or vice versa.[43]

[42] To be fair, it is not true that Le Bon completely refrained from acknowledging Tarde's work, as Giddings claimed. At one point in *The Crowd*, Le Bon stated that the 'research on the crimes of crowds' made by '[a] learned magistrate, M. Tarde' had verified the assumption that a person's 'intellectual standard is immediately and considerably lowered' when forming part of a crowd (Le Bon, 1896, p. 38). However, it would arguably be an overstatement to refer to this isolated example as Le Bon's recognition of his own indebtedness to Tarde. On the other hand, Giddings was arguably somewhat biased when it came to Tarde, whom he was very fond of. He was one of the scholars who introduced Tarde's ideas to an American audience and used them in his own work (he, among other contributions, wrote the introduction to the English translation of *The Laws of Imitation*). Apart from Giddings, several other American-based sociologists, psychologists, philosophers and anthropologists were influenced by Tarde's imitation theory, including James Mark Baldwin, Franz Boas, Charles Horton Cooley, Morton Prince, William McDougall, Robert E. Park, Elsie Clews Parsons (who translated *The Laws of Imitation*), Josiah Royce, Boris Sidis, William Isaac Thomas, William James and George Herbert Mead (Leys, 1994). Some but not all of these scholars will be discussed in this chapter or in the following chapters.

[43] In *The Laws of Imitation*, Tarde developed an ambitious theory of the social that was very different and in clear opposition to the dominant theory of the father of sociology Auguste Comte as well as the immensely influential and popular evolutionary sociology of Herbert Spencer (Park, 1921; Tosti, 1897). Tarde's ambition was to examine 'the psychological aspects of social phenomena in their simplest forms' and the simplest form – the 'elemental social fact' – was, according to Tarde, 'imitation' (Giddings, 1896, p. 349, 1903a, p. v). Even though Tarde did not exert a great amount of energy discussing the notion of the crowd in *The Laws of Imitation*, some scholars argue that crowds did constitute an integral part of Tarde's theory of imitation. Anthropologist William Mazzarella (2010) argues that Tarde's sociology of imitation is in fact essentially 'a theory of crowd emergence' (p. 723). In the same vein, Borch (2012) asserts that 'Tarde's general sociology of imitation is modelled, in essence, around the notion of suggestive crowds' (p. 55).

One aspect that Le Bon and Tarde had in common was an interest in and indebtedness to their compatriot, the critic and historian Hippolyte Taine (Borch, 2012, pp. 29–32; Leach, 1986, p. 101). In *The Origins of Contemporary France* (1873), Taine had, according to Le Bon, 'perfectly observed the facts' about the allegedly 'bloodthirsty, anarchic, and ferocious' crowds that had, during the Revolution, acted as 'horde[s] of epileptic savages abandoning themselves without restraint to their instincts' (Le Bon, 1896, p. 68). Tarde also praised Taine's work, which he believed had 'sufficiently brought before our eyes that river of crimes which the French Revolution let loose' (Tarde, 1968 [1890], p. 481). Hence, the violence, the crime and the virulence of crowds that Taine had so vividly described had made an indelible impression on Le Bon and Tarde, which is evident in their work. Tarde and Le Bon were, in the wording of the English social psychologist Graham Wallas, 'brought up on vivid descriptions of the Revolution' (Wallas, 1914, p. 137).[44]

In his seminal work in criminology and penology, *Penal Philosophy* (1890), Tarde emphasised the violent and destructive sides of crowds and described the crowd in phrases similar to those Le Bon would make use of in his (quoted earlier) definition of the 'psychological crowd' half a decade later in *The Crowd*. Tarde presented this description of a crowd:[45]

> [A crowd is] a gathering of heterogeneous elements, unknown to one another; but as soon as a spark of passion, having flashed out from one of these elements, electrifies

[44] Wallas' statement about Tarde's and Le Bon's influences was by no means value neutral. Though Wallas acknowledged that *The Laws of Imitation* had profoundly influenced 'sociological speculation' in Europe and was increasingly influencing it in America, he noted that he had difficulties understanding how it had ever acquired such great influence. He even added that it was 'one of the most baffling and unsatisfactory books' he had ever read (Wallas, 1914, pp. 119–120). He was equally critical towards Le Bon's crowd psychology, which he believed was nothing more than a popularised reiteration of Tarde's views (Wallas, 1914, p. 121, pp. 133–135).

[45] In the English translation of *Penal Philosophy*, the French word 'foule' is, in most cases, translated to 'mob' (there are instances where it is translated to 'crowd'). I choose to use the term 'crowd'. In Boris Sidis' theory of suggestion, which I will examine later in this chapter, a qualitative distinction is drawn between the crowd and the mob. In that case, it is obviously necessary to differentiate the two terms.

this confused mass, there takes place a sort of sudden organization, a spontaneous generation. (Tarde, 1968 [1890], p. 323)

If an individual wanted to oppose the force of the crowd, she or he would thus almost instantly be swallowed by the crowd and would align with its goals. Tarde exemplified this by stating that the 'man who had come running to oppose the murder of an innocent person is one of the first to be seized with the homicidal contagion', and he added that the most astonishing part of this sudden reversal of intentions was that it happened unconsciously (Tarde, 1968, p. 323). In the essay 'The public and the crowd', published almost a decade after *Penal Philosophy*, Tarde reflected on the negative stigmatisation of crowds to which he had himself contributed (Tarde, 2013, p. 233, 1969).[46] In the essay, Tarde emphasised that besides criminal and violent crowds 'incited by hatred', there existed crowds that were, as he expressed it, 'motivated by devotion' (Tarde, 2013, p. 232). According to Tarde, the devotion-motivated crowd, such as a 'festival crowd', played a 'critical and beneficial social role' and counteracted 'the wrongdoing of other collectives' (Tarde, 2013, p. 233). Ultimately, Tarde argued that crowds were 'much more beneficial than harmful in displaying sociability' (Tarde, 2013, p. 233). On the question of crowds and sociability, Tarde's views markedly differed from Le Bon's. The latter did not think that crowds could display sociability or in any other way be socially edifying. On the contrary, Le Bon was certain that crowds were morally and socially corruptive. Tarde, however, insisted that not all crowd configurations were exclusively capable of creating social havoc. According to Tarde's sociology, crowds were thus not a neutral but a less stigmatised socio-psychological formation than was the case in Le Bon's crowd theory. This meant that the notion could be evoked without automatically implying that some sort of problem had occurred or was about to occur.

Whether violent and criminal or devotional and joyous, crowds had, according to Tarde, some common characteristics. Physical proximity was one of them. Unlike Le

[46] 'Le public et la foule' was published as an essay in *La Revue de Paris* in 1898, and then later became a part of the book *L'opinion et la Foule* from 1901. The first half of the essay was translated into English by Terry N. Clark in 1969, while the second part was not published in English until 2013 with the title 'Conviction and the crowd' (trans. by Dana Milstein).

Bon, who did not think that physical contact was required in order for a crowd to take form, Tarde saw it as a necessity and as something that distinguished crowds from other social formations, such as the public.[47] Crowds were confined to the limited area in which they were formed. If a crowd tried to extend beyond the limited area it occupied, the leader would cease control of it simply because her or his voice would be impossible to hear beyond certain distances. As a result, the crowd would disperse (Tarde, 1969, p. 278, p. 281). Similar to Le Bon's notion of the crowd leader, Tarde believed that the leader of a crowd had the ability to entrance or mesmerise people. The leader was a 'magnetiser' who captivated the masses by the sheer imitation-inducing force of 'prestige' (Tarde, 1903, pp. 78–79).[48] Prestige was, as Le Bon eloquently stated, 'the mainspring of authority'; a 'mystical force […] of domination exercised on our mind by an individual, a work, or an idea' (Le Bon, 1896, p. 133). Tarde did, however, stress that

[47] Le Bon stressed that the psychological crowd did not require physical presence, but only mental unity. Contagion was, he underlined, not restricted to a specific spatial location: It could be 'felt at a distance' (Le Bon, 1896, p. 3, 128). In 'The public and the crowd', Tarde examined both the crowd and the public. Unlike the crowd, the public was, according to Tarde, not bound to a specific physical space but was a solely mental collective. Tarde furthermore described the public as 'the social group of the future' and thus opposed Le Bon by stating that the age that they were standing on the verge of would be an era of publics and not of crowds (Tarde, 1969, p. 278, p. 281). Tarde's emphasis on the public as the social group of the future has been interpreted as Tarde's attempt to distance his thinking from crowd theory and from Le Bon who had become the popular figurehead of crowd psychology. Professor of Communication Elihu Katz, for instance, argues that Tarde, in his later work, 'moved from trickle-down imitation to greater mutuality of influence, and from crowd to public' (Katz, 1999, p. 149, 152, 2006, p. 267). However, I will argue that Tarde's notion of the public should not be regarded as a superior and necessarily more desirable social formation than that of the crowd. On the contrary, Tarde emphasised in the latter part of 'The public and the crowd' ('Conviction and the crowd') that publics could be as violent and criminal as crowds (Tarde, 2013, p. 237).

[48] Originally, magnetism was a type of therapy developed by the German physician Franz Anton Mesmer. (It was also called 'mesmerism' after its inventor.) In the late eighteenth century, Mesmer claimed that he had discovered a very fine fluid that surrounded and floated through all (divine, human and animal) bodies. Any imbalance in the fluid levels would cause illness, so the therapy had as its objective to secure the constant flow of the fluid through the body. Mesmer had furthermore discovered that magnets were good conductors of the fluid. Therefore, an important element of the therapy was massaging the body's 'poles', one of them being the nose (Darnton, 1968, pp. 3–4; F. Kaplan, 1974, pp. 692–693). Mesmer performed his magnetism therapy in a quite extravagant manner. At times, he wore a cape and used a wand during the session. Using these theatrics unquestionably added to the aura of mystique and flamboyance that surrounded Mesmer, but it arguably also damaged his scientific integrity (Woodstock, 2005, pp. 161–162).

a leader-figure was not a prerequisite for crowd emergence. Crowds could just as well be swayed by some sort of object, performance or spectacle that could attract the attention, feed the imagination, and speak to the desire of the masses. In 'The public and the crowd', Tarde described how a crowd could suddenly emerge in the cityscape:

> Passers-by in the streets, each one going about his own business, peasants assembled at a fairground, people out walking, may form a dense mass, but they are merely a throng until they have a common faith or a common goal that moves them, and moves them as one group. As soon as a new spectacle demands their attention, an unforeseen danger or sudden indignation orients their hearts toward the same desire, that begin to aggregate docilely, and this first degree of the social aggregate is the crowd. (Tarde, 1969, p. 288)

The fixity of the attention on a single object entranced the crowd members and made them enter into what Tarde termed a 'collective trance' or 'hypnotic state' (Tarde, 2013, p. 236). At that point, the crowd would be gullible and completely susceptible to any suggestion imposed on it. This meant that even the smallest affectation could lead to extreme emotional fluctuations such as panic and depression as well as 'collective hallucinations' (Tarde, 2013, p. 236).

By describing crowds as a 'hypnotic state' or 'collective trance', Tarde alluded to a research tradition that had grown tremendously influential and popular in France in the latter half of the nineteenth century, namely research in hysteria and hypnotism. Both Tarde's and Le Bon's work was inspired by and even imbued with ideas from this research tradition.[49] Experimentation with hypnosis had, according to Tarde, shown that

[49] There existed two prominent camps in French hypnosis research in the late nineteenth century: the Paris and the Nancy Schools. The Paris School was located at the famous Salpêtrière hospital in Paris and had France's foremost neurologist Jean-Martin Charcot as its unifying figure. The Nancy School was based at the University of Nancy in the eastern part of the country and was headed by another renowned neurologist, Hippolyte Bernheim. The point of contention between the two opposing schools of hypnosis was the phenomenon of hypnotism in itself. The Paris School scientists were convinced that there was a close link between hysteria and hypnosis. Charcot and other members of the Paris School used hypnosis as an investigative tool, with which they tried to identify different phases of hysteria in patients. Members of the Nancy School, on the contrary, argued that it was not merely pathological subjects who could be subjected to hypnosis. They believed that every person, pathological or normal, were suggestible to hypnotism, and therefore

a mind (the hypnotiser's) could act upon another mind (the hypnotised subject's). Tarde saw it as the primary objective of his '*sociological psychology*' to explain this 'inter-cerebral action at a distance' (Tarde, 1903, p. 204, italics in the original). This connection between individual and collective hypnotism and suggestibility was very clearly stated in the work of the Harvard psychologist Boris Sidis. Sidis quite effortlessly moved between the individual and social mind in his theory of suggestion by basically extrapolating findings made in the psychological laboratory to the societal level. Mob violence, mental epidemics as well as financial panics and crazes – which were among the socio-psychological phenomena Sidis examined – were essentially, according to Sidis, social equivalents of states in the individual mind. Understanding the notions of suggestion and suggestibility was, in Sidis optics, the key to understanding most socio-psychological phenomena including financial markets and the forms of collective behaviour that they induce and are fundamentally influenced by.

As I will discuss in the following part of the chapter, the significance of Sidis' psychological and social psychological theories lies in his focus on the moments of individual and social transformation. As an experimental psychologist preoccupied with suggestion and hypnosis, Sidis was highly attentive to the moment of individual

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there was no direct connection between hypnosis and neurosis (Maehle, 2014, pp. 4–5). It should be noted that hysteria was, at the time, one of the most common nervous disorders and the most common among females, which arguably explains Charcot's interest in investigating the disorder and why his subjects were predominantly female (Foucault, 1998, pp. 111–113; Micale, 1993, p. 497). Contrary to Charcot, Bernheim used hypnotic suggestion not with an aim of identifying pathological states, but as a form of therapy (Lerner, 1998, pp. 81–82). Le Bon was one of the regular attendees at Charcot's lectures at the Salpêtrière during the last third of the nineteenth century. Charcot's work on hysteria and particularly the work of Charcot's Paris school disciple Théodule Ribot inspired Le Bon, who used ideas about unconscious and automatic action in his theory of the psychology of crowds (Nye, 1975, pp. 28–31). Taine, who described his own work as 'applied psychology', also had an affinity for Charcot. Allegedly, Taine should have encouraged a young Oxford historian to begin his training under Charcot at the Salpêtrière rather than under the philologist Paul Meyer at the École des Chartes (also in Paris), even though the latter would have been a more obvious choice for a historian (Fisher, 1908, p. 61). Finally, it should be noted that Tarde's understanding of the social as imitation and imitation as somnambulism or hypnotism was particularly influenced by the work of Bernheim (Leys, 1994, p. 211). As outlined, the work of the Paris and Nancy School scholars had a great influence on French social psychology and sociology in the late nineteenth century (but it also influenced scholars elsewhere in Europe as well as in America).

transformation, when the subject of experimentation passed from one mental state into another. The same was true on the social psychology plane where crowds were, according to Sidis, always seemingly on the verge of erupting into a vile mob state. It was the same kind of inherent disruptive germ that could suddenly cause fundamental destabilisation, which Sidis identified in the financial markets.

Social suggestibility and crazed markets

In December 1894, the *Atlantic Monthly* published an article titled 'The new criticism of genius', which dealt with human degeneration in modern society. In the article, 'the psychology of crowds' was described as a newfound interest of 'Italian and French psycho-physiologists' and as a field of research destined 'to throw a great deal of light on the far-reaching results of every personal state of mind' (Gorren, 1894, p. 800).[50] Three months later, in March 1895, the magazine published a piece titled 'A Study of the Mob', written by a then little-known doctoral student at Harvard: Boris Sidis. The piece is considered to be one of the first contributions to crowd psychology written in America (Frezza, 2007, p. 108; Leach, 1992, p. 11). Sidis had emigrated from the western part of the czar-ruled Russia (now Ukraine) in 1887. After arriving in New York, he went to Boston to study at Harvard, where he received his PhD in 1897 (Leach, 1992, p. 14). Sidis was known, in posterity, for being extremely ambitious, intellectually uncompromising and highly productive (Bruce, 1923, p. 274). In an article in *American Journal of Sociology*, George Edgar Vincent, a sociologist at the University of Chicago, listed Sidis alongside Edward A. Ross, Tarde, Sighele and Le Bon as one of the important contributors to the 'morbid psychology of the group, as displayed in mental epidemics and mob violence' (Vincent, 1904, p. 152). Sidis' contribution to crowd

[50] The article critically assessed the Austrian Zionist, physician and social critic Max Nordau's controversial book *Degeneracy* (also translated to *Degeneration* (1895) from the German title *Entartung* (1893)). In his book, Nordau blamed a long line of prominent nineteenth century thinkers, novelists, poets and composers such as Tolstoy, Zola, Ibsen, Nietzsche and Wagner for the degeneration of the public by adding 'to the hysteria of the mass by the potent spell of artistic suggestion' (Gorren, 1894, p. 796). Nordau characterised the 'superior degenerates' as 'brilliant and erratic workers with pen, word, and pencil' who rapidly gathered a following and inferred ideas into the minds of the masses, which affected them emotionally (Gorren, 1894, p. 796).

psychology is found in the aforementioned article 'A Study of the Mob', in a *Century Magazine* article titled 'A Study of Mental Epidemics' (1896) as well as in his dissertation *The Psychology of Suggestion: A Research into the Subconscious Nature of Man and Society* (1898). In the introduction to *The Psychology of Suggestion*, William James, who was Sidis' teacher and mentor at Harvard, wrote that Sidis had treated the very important yet, in the Anglo-American context, minimally researched topic of crowd psychology in a 'highly suggestive' manner (James, 1919 [November 1, 1897], p. vii).[51]

Whereas Le Bon and Tarde found inspiration in the psychological experiments conducted by members of the Paris and Nancy schools of hypnosis, Sidis' theory of suggestion was mainly based on experiments he had done himself in the psychological laboratories at Harvard. Sidis' notions of the social and psychological characteristics of collectives were hence extrapolated from findings he had made in the laboratory. *The Psychology of Suggestion* was thus a continuation of the experimental psychology and physiological psychology traditions to which the members of the Nancy and Paris (Salpêtrière) Schools as well as James adhered. What Sidis wanted to add and what he thought that the discipline of psychology lacked was a 'strict definition' of the notion as well as a 'rigorous study' of the phenomenon of 'suggestion' (Sidis, 1919 [1898], p. 5). Reducing suggestion and suggestibility to 'mere symptoms of hysterical neurosis', as the adherents of the Paris School had done, was, Sidis believed, too narrow a definition.

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[51] Though James rightly stated that not a lot had been written about crowd psychology in English before Sidis' rather comprehensive study was published, he himself had actually touched upon the topic in the second of his ground-breaking two-volume work *The Principles of Psychology* (1890). For example, James pointed out that the audiences at boxing matches were influenced by 'the contagion of a crowd' and 'the impulse to imitate and undo'. The excitement surrounding such events was, James thought, immensely contagious (James, 1890, pp. 413–414). In the same chapter, in a section on 'play', James argued that 'the excitement of concerted action' during some games was comparable to action in 'an organized crowd'. According to James, in games as in crowds, action was for the most part dependent 'on the initiative of individuals, fixed by imitation and habit' (James, 1890, p. 428). Although James did not pursue the topic of crowd psychology in a systematic and methodological manner, the notions of imitation, contagion and suggestion underpinning crowd theories of French origin clearly inspired him. In a letter to Graham Wallas, written in 1908, James made it clear that he had an affinity for Tarde's ideas. He wrote that 'I myself see things a la Tarde, perhaps too exclusively' (Wallas, 1914, p. 121). Whereas James admitted to being greatly influenced by Tarde's ideas, he was, as were many of his colleagues, critical towards Le Bon's crowd psychology (Leach, 1992, p. 26).

However, to define suggestion as the cause of a 'peculiar state of mind in which the phenomenon of suggestibility become especially prominent', as the Nancy School had done, was simply too vague (Sidis, 1919, p. 5). Although Sidis thought that both the Paris School's and the Nancy School's definitions of suggestion and suggestibility were either too narrow or too vague, he sided with the ideas of the latter school.

Aligned with the ideas of the Nancy School, Sidis wanted to prove that it was not exclusively pathological subjects who could be subjected to suggestion. On the contrary, he insisted that 'healthy and normal subjects' who had never been hypnotised and who had never dealt in 'crystal-gazing, shell-hearing, [and] automatic writing' were also suggestible (Sidis, 1919, p. 158). That was what he tried to prove in the three thousand laboratory experiments he performed, out of which eight hundred were performed on himself and two thousand two hundred on fifty subjects (Sidis, 1919, p. 158). From his experiments, Sidis learned that suggestion and suggestibility were fundamental traits of not only the subject but also the social. Man was a suggestible animal per excellence, he claimed (Sidis, 1919, p. 44). Not unlike Tarde's claim about imitation being the elemental sociological fact, Sidis proposed that suggestibility was the main characteristic of the social as such. He defined 'suggestion' as 'the intrusion into the mind of an idea; met with more or less opposition by the person; accepted uncritically at last; and realized unreflectively, almost automatically' (Sidis, 1919, p. 15).[52] This intrusion of an idea into the mind was, Sidis claimed, caused by an imbalance between the conscious and the subconscious selves of which the human mind was constituted.

From psychologists Alfred Binet, Pierre Janet and James, Sidis borrowed the idea of 'dual consciousness', which meant that the mind consisted of two co-existing selves: a primary or waking self and a secondary sub-waking or subconscious self. The sub-waking self should not be mistaken for an unconscious self, because the former was not a '*physiological automatism*'. Rather, it was a '*secondary consciousness, a secondary self*' that possessed 'memory, and even rudimentary intelligence' (Sidis, 1919, p. 91, 106, 128,

[52] In 'A Study of Mental Epidemics', Sidis defined 'suggestion' in a slightly more straightforward manner, as 'the impressing on the mind of an idea, image, movement, which the person reproduces voluntarily or involuntarily' (Sidis, 1896, p. 849).

italics in the original). The two selves were connected and had the ability to communicate, but they occasionally became disaggregated. When a disaggregation of the two selves occurred, the individual mind became, Sidis asserted, a 'highway to suggestion' (Sidis, 1919, p. 179).

According to Sidis, one of the conditions that most effectively triggered the disaggregation of the two selves was a limitation of voluntary movements (Sidis, 1919, p. 49). James had argued in *The Principles of Psychology* (1890) that the feeling of individuality derived from the ability to move freely and that any limitation of voluntary movements would decrease the feeling of individuality (Ch. 26). Neither Sidis nor James saw the limitation of the freedom to move as a mere abstract condition to which subjects of psychological experimentation were subjected. On the contrary, Sidis believed that the limitation of voluntary movements was a regularly occurring social problem that was particularly pronounced in modern Western societies:

> The individual's relations in life are fixed for him; he is told how he must put on his tie, and the way he must wear his coat; such should be the fashion of his dress on this particular occasion, and such should be the form of his hat; here must he nod his head, put on a solemn air, and there take off his hat, make a profound bow, and display a smile full of delight. Personality is suppressed in the individual by the rigidity of social organization; the individual becomes an automaton, a mere puppet. Under the enormous weight of the sociostatic press, under the crushing weight of economical, political, religious, and social regulations, there is no possibility for the individual to determine his own relations in life, to move freely; voluntary movements are suppressed, and a limitation of voluntary movements produces that peculiar hypnotic state of fascination which is so highly favorable to the formation of mobs. (Sidis, 1895, pp. 194–195)

Whenever the controlling primary self was absent, the subject's self became identical to the hypnotic self (Sidis, 1919, p. 180). Hence, being in the state of suggestibility was similar to being in a state of hypnosis, as both Le Bon and Tarde had also stressed. As already mentioned, this was not merely an individual state. Just like the subject of psychological experimentation was brought into entrancement through hypnosis, groups of people could be brought into a similar state of suggestibility through the force of fascination (fascination being Sidis' equivalent of what Le Bon and Tarde called 'prestige'). Fascination was, Sidis noted, a tactical means used by crowd leaders ('heroes' or 'ringleaders') in order to plant 'the seed of a possible mob' in a crowd of people (Sidis, 1895, p. 190).

In 'A Study of the Mob', Sidis explained how the bodily squeeze of the physical crowd (qua the limitation of the ability to move freely) led to a squeezing of the individual mind. The sensible self of the individual seemed, he noted, 'to get submerged in the fermenting spirit of the possible mob', a spirit that becomes 'stronger the more it consumes of the individual self' (Sidis, 1895, p. 190). The transformation of the crowd into a mob was characterised by this transition from rationality to irrationality, from consciousness to sub-consciousness. In essence, Sidis proclaimed, 'a mob is a hypnotized crowd' (Sidis, 1895, 191). In order to capture the transition from crowd to mob, Sidis resorted to the literary work of his compatriot Leo Tolstoy, who, in his masterful novel *War and Peace* (1869), described what Sidis believed was the critical moment when the somewhat ordered crowd was about to turn into an unreasoned mob:[53]

> The crowd remained silent, and only pressed on one another closer and closer. To bear the pressure of one another, to breathe in this stifling, contagious atmosphere, not to have the power to stir, and to expect something unknown, incomprehensible and terrible, became intolerable. (Tolstoy in Sidis, 1895, p. 191, 1919, p. 301)

Tolstoy's eloquent description of the moment when mob energy was accumulating in a crowd to the point that it was on the verge of boiling over in rampant behaviour is a fitting image of the crowd problem on the trading floor of the exchanges. Jennings' pit (to return to the example used in the opening of the present chapter) was designed to prevent scenes such as the one described by Tolstoy, where the bodily pressure from the

[53] Sidis' way of drawing on Tolstoy's descriptions of crowd behaviour from *War and Peace* was similar to the ways in which Tarde and Le Bon were influenced by Taine's vivid portraits of the rampaging crowds roaming the Parisian streets during the Revolution.

crowd had restricted the individual's visibility and ability to move voluntarily. (I will return to this the bodily dimension of crowd phenomena in the exchange in a moment.)

The relation between crowds (and their pathological incarnation, the mob) and markets was, as already mentioned, explicated by Sidis, who argued that one of the places where collective suggestibility was expressed in its most extreme form was in financial markets during panics and crazes (Stäheli, 2013, pp. 122–127; Zimmerman, 2006, pp. 134–135). Stock speculation was, Sidis stressed, an illness ingrained in society, particularly in American society, which he perceived as being in a permanent state of 'circular insanity' oscillating back and forth between 'acute financial mania and attacks of religious insanity' (Sidis, 1919, p. 362). According to Sidis, speculative manias and panics that were haunting the U.S. financial markets were amplified by the high suggestibility of the American people and the structure of the American society (Leach, 1986, p. 102; Sidis, 1896, p. 853).[54]

In the chapter 'Financial Crazes', in *The Psychology of Suggestion*, Sidis examined different historical speculative manias and epidemics, all of which were taken from Charles MacKay's *Memoirs of Extraordinary Popular Delusions and the Madness of the Crowd* (MacKay, 1852a, 1852b [1841]). Out of the three financial crazes examined (the Dutch Tulip mania, the South Sea Bubble and John Law's Mississippi Company Scheme), the Tulip mania is arguably the most famous.[55] Since he dealt with the cases chronologically,

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[54] In an article in *The Forum* with the title 'Sociological Questions', Giddings advanced a somewhat similar argument stating that certain sociological questions were of a 'greater theoretical and practical interest for the United States than for any other nation' and that the 'American society offers the greatest variety of material for an inductive investigation of them'. One of the specific questions that Giddings considered to be pertinent to American society was the following: 'Is dense aggregation favorable or unfavorable to contagious emotion and impulsive social action?' Giddings believed that in order to answer this question, the sociologist needed to take psychological factors into account – in particular, observations of mob and crowd action (Giddings, 1903b, p. 250).

[55] MacKay's account of the Tulip mania is widely acknowledged as the standard and original description of the event, but MacKay actually borrowed it from Johann Beckmann's *A History of Inventions, Discoveries, and Origins* (Beckmann, 1846 [1797], pp. 22–31). The economist Peter M. Garber has critically assessed the tulip mania, claiming that it was neither a mania nor a case of a bursting bubble. Part of Garber's criticism is directed at well-established economists such as Paul Samuelson and Joseph Stiglitz who have, in his opinion, uncritically adopted MacKay's account as a factual depiction of the event (see Garber, 1990, 2000). The criticism that Garber directs at contemporary economists' bubble-studies could also be directed at Sidis' analysis of excessive

the Tulip mania was also where Sidis began his analysis of financial crazes. According to MacKay, the Tulip mania began around 1634, when tulip bulbs had become a praised and very valuable object of exchange. As a result of the exceptionally high demand for tulip bulbs, prices rose drastically between 1634 and 1637. In early 1637, the market for tulip bulbs suddenly collapsed, and prices fell to one-tenth of the peak prices (MacKay, 1852a, pp. 85–92; Sidis, 1919, pp. 343–344). The panic that superseded the mania was allegedly amplified by the way in which many of the tulip-deals were constructed.[56] What made the tulip mania a widespread panic was, according to Sidis, that 'social suggestion began to work in the opposite direction', which meant that the speculative craze turned into a panic that took over the minds of the tulip bulb speculators (Sidis, 1919, pp. 343–344). Just as crowds were constantly at risk of erupting into the pathological mob-state, the speculative markets seemed to always be on the verge of a mental epidemic, at least when viewed through MacKay's lens, as Sidis did. Sidis noted that one moment the market seemed to be in 'a state of maniacal exaltation', and in the next 'a state of still more acute melancholic depression' (Sidis, 1919, pp. 348–349, italics in the original).[57] The markets were, following Sidis, always in a transitory state. Like the subject being

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speculation in financial markets. By using MacKay's popular accounts or "folklore finance" as empirical evidence, Sidis based his rather bold claims about the functioning of markets on rather questionable grounds.

[56] Many tulip bulbs were bought and sold in deals similar to the way within which options are being bought and sold (Malkiel, 2012, p. 39). In practice, the deals were constructed so that the buyer bought the right, but not the obligation, to buy a certain amount of bulbs at a specifically given time for a certain price. (The amount, expiration time and prices were agreed upon as part of the deal between the seller and the buyer.) The buyer paid the seller a fee (the premium), which was the price of the option. If the price of tulips had not collapsed but maintained its upward surge, buyers would have secured a significant profit. But the collapse occurred and the price fell well below the price agreed upon in the deals. As a result, buyers chose not to buy the tulips, which meant that sellers were defaulting one by one (MacKay, 1852a, p. 90). The option-like deal structure made it possible for more people to invest, because the option price was relatively low compared to the actual price of the bulbs. This made the market much larger and increased the potential profits but also the risk (Malkiel, 2012, p. 39).

[57] Sidis' interpretation of MacKay's account of the Dutch Tulip Mania was echoed, in a shortened version, in Ross' *Social Psychology: An Outline and a Source Book* (1908). Ross stressed that crowd psychology had been one of the primary causes of the Tulip Mania, as it had also been in other panics and crazes (Ross, 1908, pp. 71–72).

primed for hypnotism or other experiments with subconscious suggestion, the markets were extraordinarily susceptible to suggestion.

Sidis perceived financial markets as a socio-psychological phenomenon in a state of permanent (intruding) crisis. Although this was perhaps not surprising considering that his only source of empirical data was MacKay's *Memoirs of Extraordinary Popular Delusions and the Madness of the Crowd*, a consequence was that the state of normalcy, i.e. order and stability, did not exist in Sidis' conception of the financial markets. It was either one or the other extreme. Panics or crazes occurred in the financial markets because individual speculators were brought into a state of abnormal suggestibility, which then propagated through the capillaries of the social. The market actors went from being constituents of an unstable but somewhat ordered crowd to being part of an unthinking and ferocious mob. By making a diagnosis of the state of speculative markets on the basis of his experiments in individual psychology, Sidis accentuated that the problem of crowds was essentially a problem of individuation. He simultaneously problematised the modern conditions of economic life that he assumed were diminishing the individual's mental and physical movability, which increased the risk of outbursts of mob behaviour. There seemed to be but few places where the socio-static press from the crowd was stronger and the limitation of voluntary movements more pronounced than on the trading floor of a stock or commodity exchange on a busy day. The implications of bodies pressing against each other and the corresponding squeeze of minds are among the issues I will attend to in the following and final part of the chapter.

Crowd psychology on the floor of the exchange

> Ideas, sentiments, emotions, and beliefs possess in crowds a contagious power as intense as that of microbes. This phenomenon is very natural, since it is observed even in animals when they are together in number. […] A panic that has seized on a few sheep will soon extend to the whole flock. In the case of men collected in a crowd all emotions are very rapidly contagious, which explains the suddenness of panics. (Le Bon, 1896, p. 128)

In the article 'The sociological view of history' published in the first-ever issue of the *Sociological Review*, the English historian Herbert Fisher argued that some sociologists were becoming increasingly aware that besides paying attention to the psychology of individuals, they had to be equally attentive to 'the psychology of crowds, and to the psychological states produced by the aggregation of men in urban centres' (Fisher, 1908, p. 62). Tarde's *The Laws of Imitation* was, Fisher noted, one of the 'brilliant examples' of this kind of modern sociological research, which he, without being derogatory, described as 'common-sense psychology' applied to the field of social enquiry (Fisher, 1908, p. 62). While praising crowd psychology-informed sociological inquiries, Fisher inferred what could be read as a somewhat convoluted invitation to sociology to take up additional inquiries, when stating that 'the psychology of the stock exchange still awaits its Walter Bagehot' (Fisher, 1908, p. 62).[58] Fisher was most likely unaware that Tarde had already applied his sociological psychology to the stock exchange in a two-volume work entitled *Psychologie Économique* that was based on a series of lectures he held at the Collège de France during the years 1900 and 1901 (Hughes, 1961). Furthermore, applications of 'common-sense psychology' in the empirical field of the stock exchange had also been made outside the field of sociology. In this final part of the chapter, I start out by discussing an attempt to outline a psychology of the commercial crisis using ideas from crowd theory and social psychology. The understanding of the psychology of a commercial or financial crisis that I excavate in the following section is closely associated with the physical dimension of markets and the corporeal aspects of trading epitomised

[58] Bagehot was a British journalist and business man who wrote the influential book *Lombard Street* (1873) about the English money market as well as several other seminal books and articles on primarily politics and finance. What Fisher meant by stating that the psychology of the stock exchange awaited someone like Bagehot was that there seemed to be a demand for a psychological study of the stock exchange of the calibre of Bagehot's study of the English money market. Besides being an authority on the subject of finance, Bagehot was also one of the first to claim, as Tarde did later on, that imitation (conscious and unconscious) was an organising force in society. In *Physics and Politics* (1873), Bagehot argued that 'unconscious imitation' was 'the main force which moulds and fashions men in society as we now see it' (p. 97, pp. 32–33). In the same volume, Bagehot also elaborated on the gregariousness of people. Furthermore, his analysis of the imitative and herding propensities of especially 'primitive societies' have many overlaps with Le Bon's study of the psychology of peoples and of crowds (Bagehot, 1873, pp. 100–104; see Le Bon, 1898, 1899).

by open outcry trading on the floor of the exchange. After exploring these dimensions of floor trading, I then turn to Tarde's economic psychology in which he described and analysed stock exchanges as 'laboratories of collective psychology' (Tarde, 1902a, p. 225).

In *Economic Crises* (1900), assistant professor of Economics and Commercial Geography of the University of Michigan Edward David Jones drew on a range of ideas from crowd and imitation-suggestion theory in an attempt to carve out an outline of the 'chief psychological phenomena of crises' (p. 181). Following psychological and sociological studies of social epidemics and crowds, Jones argued that one of the main reasons why crises occurred in the stock market was that people were both physically and mentally closely associated, which meant that beliefs, opinions and emotions could easily spread through a crowd of people via contagion. Furthermore, Jones noted that individuals were most often guided by the opinions of others rather than by their own autonomous beliefs.[59] The imperfections and general erroneous ways of the 'individual mind' were, he noted, only amplified in the 'social mind' (Jones, 1900, pp. 199–200). In the stock exchange, the imperfect functioning of the social mind could lead to the 'mutual accumulations of error' that transpired via the inter-mental processes of 'sympathy' or 'contagion' (Jones, 1900, pp. 203–204, p. 205).[60] Since the 'sympathetic force' or 'mental

[59] A similar view of the psychology of financial crisis is found in the Republican politician and financial writer Theodore E. Burton's *Financial Crisis and Periods of Industrial and Commercial Depression* (1902), in which Burton argued that 'many of the phenomena of crisis remain capable of explanation only as the result of various characteristics of human nature, which cannot be classified according to any established rule, and seem to be more or less capricious, such as the tendency of men to move in a mass; the disposition to alternate moods of hope and discouragement, of trust and distrust; to excessive action and inaction by turns' (p. 130). Another diagnosis of the psychology of speculative crazes and panics was made by Professor of Psychology at the University of Iowa George Thomas White Patrick in the article 'The Psychology of Crazes' published in *Popular Science Monthly* (Patrick, 1900).

[60] Tarde noted that 'sympathy' was a type of mutual imitation 'produced only in our so-called waking life and among people who seem to exercise no magnetic influence over one another' (Tarde, 1903, p. 79). Drawing on Adam Smith, Tarde argued that sympathy was a form of '*mutual imitation*' (or 'fellow-feeling') and further argued that it was 'the primary source of sociability and the hidden source or overt soul of every kind of imitation' (Smith, 2009 [1759], p. 48; Tarde, 1903, p. 79, 79, n. 2, italics in the original). Despite terming sympathy 'the soul of imitation', Tarde stressed

contagion' that transmitted erroneous beliefs among people allegedly worked more effectively among people closely associated in crowds than among separated individuals, the exchange's densely packed trading floor presented an optimal setting for an outburst of what Jones termed – citing Sidis' *Atlantic Monthly* article 'A Study of the Mob' – unthinking and ferocious 'mob action' (Jones, 1900, p. 202, 204). Like Jennings, who had expressed his concern with crowding in his patent application for the improved trading pit, Jones saw crowding as challenging effective trading in the exchange and ultimately as a trigger of panic and subsequent crisis. The limitation of voluntary movements, the lack of visibility and the annulment of sensible communication on a crowded trading floor in a very active market could lead to an eruption of irrational crowd behaviour. The physical pressure on the body was, following Sidis, also a pressure on the mind that could force the individual into a state of suggestibility and the gathering of traders on the floor into a mob-state.

Just as crowd theorists discussed how modern communication technology and urbanisation had increased the risk of mental contagion Jones, drawing on Tarde's reflections on the intensification of imitation in urban environments from *The Laws of Imitation*, argued that 'the railway, telegraph, and telephone' had increased the 'power of mental contagion'.[61] Jones added that the practices by which business was conducted in

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that 'prestige' and not 'sympathy' was the 'foundation and origin of society', because the 'unilateral must have preceded the reciprocal' (Tarde, 1903, p. 79). It thus seemed that unilateral prestige was a more prevalent form of imitation in crowds than sympathy. However, Tarde did not rule out the possibility that a positive form of fellow-feeling, i.e. sympathy, occurred in certain types of crowds.

[61] Urbanisation was a fairly popular theme in social psychology and sociology in the late nineteenth century and particularly in the beginning of the twentieth century. In *The Laws of Imitation* Tarde, for example, wrote that '[i]n the prodigious growth, in the hypertrophy of great cities and, especially, of capitals, […] is to be found the kind of inequality which modern life creates and which it finds indispensable, in fact, in managing and promoting the great currents of its industrial production and consumption, *i.e.*, of imitation on an immense scale' (Tarde, 1903, p. 226, italics in the original). Crowd behaviour was, however, not considered solely a metropolitan phenomenon, even though it was often associated with and identified in the urban environment. In an article in *The Forum*, Giddings argued that although it was normal in political science to associate all the evils and dangers of 'the mob spirit' with a 'democratic organization of great cities', crowd behaviour was primarily a phenomenon associated with rural communities (Giddings, October-December 1903, p. 251). Even though there had been, Giddings admitted, wild riots and collective violence in the great cities of Europe and America, these events did not compare with the epidemics of emotion sweeping the rural communities. The reason for this was, according to Giddings, that rural communities were

the stock and produce exchanges only further enhanced mental contagion (Jones, 1900, p. 205).[62] The overarching problem of the physical proximity of traders on the exchanges' trading floors or the mental touch of the market facilitated via telephones, telegraphs and stock tickers or the financial pages was, according to Jones, that it allowed for an intoxication of the mind that paralysed thought (Jones, 1900, p. 206). Drawing on the work of German psychiatrist Albert Moll (as Sidis had also done in *The Psychology of Suggestion*), Jones pointed out that the sympathetic influence that people were moved by in the exchanges and other densely populated spaces was 'allied to hypnotic influence' (Jones, 1900, pp. 205–206, n. 27; Sidis, 1919, pp. 73–76). In the 1880s, Moll visited both Charcot at the Salpêtrière hospital in Paris and Bernheim at the University of Nancy, and it was particularly the latter's views on hypnotism and suggestion that shaped Moll's own work on the subject, which culminated with the publication of *Hypnotism* in 1890 (Maehle, 2014, pp. 4–6). By employing Moll's work, Jones thus also indirectly drew on the French hypnosis research tradition that had so greatly influenced Tarde, Le Bon and Sidis.[63] Jones' psychology of crisis was essentially a description of the delusions of individual traders and the ways in which these individual delusions had a tendency to transform into collective hallucinations in the exchanges when trading became intense and traders crowded the trading floor. One could say, following Fisher, that Jones applied a crowd psychological framework to the market itself. Crowd

homogeneous and the population of great cities heterogeneous. However, Giddings did emphasise that dealing with crowd behaviour, in all settings, was an important task for the sociologist (Giddings, October-December 1903, pp. 250–251).

[62] Since *Economic Crises* was published prior to the first English translation of *The Laws of Imitation*, Jones did not quote the book directly. Instead, he quoted a summary of the book published in 1893 in a Bureau of Education circular. The passage that Jones quoted was a composition of extracts from chapter 6, 'Extra-Logical Influences', in which Tarde explained how imitation in large cities was 'proportionate to the density of their population and to the multiform multiplicity of the relations of their inhabitants' (Tarde, 1903, p. 239).

[63] Besides mentioning and discussing the work of Tarde, Sidis and Moll, Jones also drew upon the work of Cesare Lombroso, MacKay's history of crowd folly, Walter Bagehot's *Physics and Politics* as well as the work of notable psychologists such as Alexander Bain and Hugo Münsterberg.

psychology was thus the prism through which he made the chief psychological phenomena of crisis stand out.[64]

A year after the publication of *Economic Crises*, the New York Stock Exchange experienced a financial panic during which many of the psychological phenomena that Jones had discussed seemed to appear. On May 9, 1901, panic broke out on the trading floor of the exchange – a panic that the acclaimed financial editor and journalist Alexander Dana Noyes some years later deemed an event 'rarely paralleled in the history of speculative manias' (Noyes, 1909, p. 300). The panic was sparked by a struggle to gain the control of the Northern Pacific Railroad Company with the combatants being Edward H. Harriman, the director of the Union Pacific and Southern Pacific Railroad, on one side, and James Hill, the director of the Great Northern and Northern Pacific Railroad, on the other. (John D. Rockefeller and Jay Gould backed Harriman, while J. P. Morgan and Cornelius Vanderbilt stood by Hill.) When the price of Northern Pacific started soaring, every trader and investor wanted to buy the stock and started selling their stockholdings in other companies in order to mobilise funds to buy Northern Pacific. As a result, most stock-prices, with the exception of Northern Pacific, started to decline, and as the 'contagion' began to spread, the market fell drastically (The New York Times, May 9, 1901a). Those who had thought that selling Northern Pacific stock short, in the hope that it would decline and not continue its upward surge, was a good decision ended up losing everything.

An article in *The New York Times* reported of 'pandemonium' on the floor and of panic spreading outside in the corridors and in the Stock Exchange's visitors' gallery, which, according to the article in *The Times*, had to be closed when the onlookers became too excited and too many in numbers (The New York Times, May 9, 1901a). The mental contagion that Jones had identified as one of the psychological phenomena of a crisis seemed to have worked indiscriminately during the panic of 1901. Traders active on the

[64] A lengthy excerpt from *Economic Crises*, in which Jones explained how mental contagion was enhanced by the practice of trading in the crowded stock and produce exchanges, was later featured in a chapter on 'The Crowd' in Ross' *Social Psychology* (1908, pp. 58–59). Curiously, Ross did not mention that Jones was actually drawing on Tarde's imitation theory in the passage he quoted.

floor as well as visitors in the exchange's visitors' gallery had felt the mental strain of the panic and the bodily expressions it provoked. A broker told *The Times* that panic had hit so suddenly that 'conservative men lost their heads' and that 'reputable church going members of society' had used language 'that would not bear repetition under ordinary circumstances in a barroom of even the second class' (The New York Times, 10 May 1901b). The 'mad struggle' had made otherwise 'rational and responsible' persons act as 'insane men' who literally fought with each other on the trading floor (The New York Times, 9 May 1901a). In accordance with Le Bon's characteristic of the crowd, the feeling of individual responsibility among brokers, clerks and traders on the floor had, according to the eyewitnesses' statements featured in *The Times*, disappeared or been numbed during the panic. Noyes concurred, stating that no one escaped the mania that day; even the 'experienced capitalists lost their heads' (Noyes, 1909b, pp. 300–301). The excitement on the floor of the New York Stock Exchange was, Noyes recollected, so strong that exchange officials found it necessary to intervene and stop the trading:

> Execution of the orders on the floor of the Stock Exchange, under the prevalent conditions of excitement, so manifestly threatened physical break-down of the brokers that the governing committee took the quite unprecedented step of declaring an extra Stock Exchange holiday to give the membership a rest. (Noyes, 1909, pp. 300–301)

That trading was stopped and an extra exchange holiday declared can be read as a token of how physically challenging floor trading could be during these extreme phases of trading. Thus, the activity on the floor took its toll, not only on the minds of the brokers and traders (and the audiences) but on their bodies as well. Although physical presence was not required for mental contagion to be able to spread from one mind to another (at least according to Le Bon), the physical presence and proximity of bodies nevertheless seemed to increase the intensity of the imitation-contagion dynamic, as Jones had noted with reference to Tarde's imitation theory. The accounts of the panic emphasised the psychological dimension of trading and implied that there seemed to be a parallel and perhaps a connection between the destabilisation of the market and the mental stability of market actors. Similar reflections about the emotional contagion and different obstacles to reasonable social interaction on the trading floor of an exchange were formulated by Tarde in *Psychologie Économique*, in which he drew his own sociological conclusions from what had happened at the New York Stock Exchange on 9 May 1901.

Sociological research in the laboratory of collective psychology

Minimal scholarly attention has been directed towards Tarde's reflections about the financial markets in his economic psychology (one possible reason being that *Psychologie Économique* has not been translated into English).[65] Apart from Karl-Erik Wäneryd's article 'The psychological underpinnings of economics: Economic psychology according to Gabriel Tarde' (2008), Bruno Latour and Vincent Antonin Lépinay's short book *The Science of Passionate Interests: An Introduction to Gabriel Tarde's Economic Anthropology* (2009) is arguably the most thorough examination of Tarde's economic psychology (or 'anthropology', as they choose to call it).[66] Latour and Lépinay's interest primarily lies in the intermingling of the technical and the social as well as the calculable and the psychological that Tarde saw as elemental to the way markets in general and stock markets in particular functioned (Latour and Lepinay, 2009, pp. 59–65). I am, in the context of this dissertation, exclusively interested in the places in *Psychologie Économique* where Tarde's theory of imitation, his notion of the collective and the crowd and his understanding of the financial markets converge. The panic on 9 May 1901 represents, I will argue, one of these points of convergence.

[65] Some scholars have, however, shown interest in *Psychologie Économique*, mostly in the similarities between Tarde's ideas about 'invention' and 'the entrepreneur' and Joseph Schumpeter's later work on 'innovation' as well as 'the entrepreneur' (Lepinay, 2007; Michaelides and Theologou, 2010; Taymans, 1950). Furthermore, in a 2007 special issue on Tarde in *Economy and Society*, several articles engaged with aspects of his economic psychology (Barry and Thrift, 2007; Blackman, 2007; Lepinay, 2007; Toscano, 2007). Also included in the special issue was a translation, by Alberto Toscano, of a part of *Psychologie Économique* (Tarde, 2007). It is also worth mentioning Everett C. Hughes' article 'Tarde's *Psychologie Économique*: An unknown classic by a forgotten sociologist' published in *The American Journal of Sociology* in 1961. Hughes argued that *Psychologie Économique*, which unfortunately had been 'completely ignored by social scientists', was a sociological classic that could serve as a rich source of ideas for sociologists (Hughes, 1961, p. 553).

[66] Maurizio Lazzarato also briefly mentions Tarde's ideas about the financial markets in a critique of contemporary financial capitalism (Lazzarato, 2004, pp. 195–197).

Tarde described the panic as an outcome of a 'dual of two trusts' and as a struggle between 'two great kings of finance' (Tarde, 1902b, p. 118).[67] He also noticed the bodily and spatial dimensions of the panic that Noyes later addressed. Tarde argued that the brokers on the New York Stock Exchange trading floor had been unable to process the large number of orders simply because the atmosphere had been so hectic that they had been unable to hear each other. The consequence of these physical and spatial obstacles to trading was, according to Tarde, that in the opposite corners of the trading floor the same security was sold, at the same time, at a completely different price (Tarde, 1902b, p. 41, n. 18). The panic of 1901 had shown, Tarde argued, that stock markets, as most other places where social action took place, were not free of imitative dynamics and mental contagion (Tarde, 1902b, p. 119). The stock exchanges were, he proclaimed, continuously active 'laboratories of collective psychology' (Tarde, 1902a, p. 225). Like Sidis, who had taken his findings from the psychological laboratory and extrapolated them to the societal level, including the financial markets, Tarde saw the stock exchange as a place where socio-psychological processes were constantly taking place.

In *Psychologie Économique*, Tarde extended his idea of the social, as underpinned by imitation, to the economy and the financial markets. On the opening page of volume one, Tarde described 'society' as a network of inter-mental actions, of mental states acting upon each other (Tarde, 1902a, p. 11, paraphrase). Like sociology and social life, economic science and economic life were, according to Tarde, constituted of a melange of inter-mental connections and relations (Blackman, 2007, p. 576; Tarde, 2007).[68] The stock exchange was an ideal venue for observing these inter-mental actions at a distance. Tarde referred to 'the stock exchange' as a place dominated by psychological influences and inter-mental actions that passed from one brain to another via imitation and

[67] Tarde wrote that the panic occurred on 10 May 1901, perhaps mistaking the publication date of the *Evening News* article he used as a reference for the actual date of the panic (Tarde, 1902b, p. 41, p. 118).

[68] I use the term 'inter-mental', which is a direct translation of the French term 'inter-mental' that Tarde used in *Psychologie Économique*. Besides the term 'inter-mental', Tarde throughout both volumes used the terms 'inter-spiritual' and 'inter-cerebral'. These three terms are closely related, almost to the point that Tarde used them interchangeably (Tarde, 1902a, p. 83).

contagion (Tarde, 1902b, p. 136, paraphrase). The market activity in the exchanges revealed and highlighted the subjective sides of economic and financial phenomena instead of neglecting or downright ignoring it, as Tarde believed economists often did (Tarde, 1969a [1898], p. 314, 2007 [1902], p. 631).[69] Market fluctuations were, Tarde thought, products of collective psychology. Prices did not move as the thermometer's mercury level, which naturally followed increases and decreases in the temperature. They were, on the contrary, informed and shaped by the sentiments of the traders and the general mood created by the imitative spread of affect in the market (Tarde, 1902b, p. 41).

In *Monadology and Sociology* (1893), Tarde used the same thermometer metaphor when describing the stock exchange: He described the exchanges as the modern markets' 'special thermometers' (pp. 42–43). The stock exchange was, he thought, an emblematic example of the social evolution of commerce from a primitive phase to a much more sophisticated one. Compared to the primitive phase with no fixed prices and unregulated haggling, the modern markets were, Tarde argued, uniform and regulated (Tarde, 2012 [1893], pp. 42–43). The 'regularity and almost physical inevitability of the overall economic facts' allegedly characterising the modern market, did not, Tarde emphasised, eradicate but supported the 'unbridled impulse to speculation and the spirit of enterprise' (Tarde, 2012, p. 43). The economic 'facts' directing the functioning of the modern markets thus encouraged, in Tarde's opinion, a form of market action (i.e.

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[69] Tarde's criticism of the prevailing theories of economics was snubbed by most economists of his time. Many regarded Tarde's economic psychology as no more than mere 'psychologism' (Michaelides and Theologou, 2010, n. 7, p. 369). 'Psychologism' was a label that Tarde's critics, including Durkheim, also tended to associate with his theory of imitation (Presskorn-Thygesen, 2017, p. 148, n. 402). One of the possible reasons why Tarde's economic psychology was not taken up or taken more seriously by economists was that Tarde engaged with contemporary theories of economics in a somewhat superficial manner. He referred to the thoughts and ideas of 'economists' as if they were a completely homogenous group, and when he did refer to specific economists, it was predominantly prominent figures of classical economy such as Adam Smith and David Ricardo. He did, to be fair, mention contemporaries from the field of economics such as Carl Menger, Adolph Wagner and Gustave Von Schmöller, but only once and only as an example of economists who had, in Tarde's opinion, to some extent dealt with economic psychology (Tarde, 1902a, p. 102). Based on Tarde's thoughts on desires and needs in the second volume of *Psychologie Économique*, Wärneryd suspects that Tarde had not even read Menger's work on marginal utility, since there were clear overlaps but no references (Wärneryd, 2008, p. 1697).

speculation) that made the 'psychological particularities of the players break forth lawlessly in sudden triumphs or catastrophes' (Tarde, 2012, p. 43). Therefore, even though the modern markets were highly regulated, ordered and uniform, speculation was nevertheless inferring an element of psychological bias into the instrumental setting of the modern stock markets. The bartering of speculators in the exchanges thus brought forth the speculators' 'psychological particularities' or subjective factors through which they were mutually affected via processes of imitation and contagion.

Belief was one of the subjective factors or psychological particularities that, according to Tarde, played a major role in the formation of prices in the stock exchange just as it did in the formation of crowds. Tarde claimed that beliefs of stock speculators were to a large extent determined by factors such as 'prestige' and fascination (Tarde, 1902b, p. 41). In crowds, prestige was, as I have mentioned earlier, a force emanating from a charismatic leader-figure, a specific object or a spectacle that made people succumb to the rule of the crowd's mind. The beliefs of exchange-speculators were, in a similar manner, swayed by prestigious securities (objects), panics (spectacles) or the trades made by successful traders (market/crowd leaders) whom they were fascinated by (Tarde, 1902a, p. 84, 137). Although the action of individual speculators may have appeared to be a product of informed judgements, Tarde asserted that investment decisions were always influenced by the beliefs of other market participants. Beliefs were often informed – with or without the individual being aware of it – by contagion from 'sensational news' and 'corridor conversations' (Tarde, 1902a, p. 139, 1902b, p. 41).[70] Like Le Bon had pointed out in *The Psychology of Socialism*, Tarde perceived the opinions and beliefs of speculators as being swayed by certain types of financial news, which,

[70] To Tarde, it was an illusion to think that real market actors were able to make decisions without being affected by imitation in one way or the other. To think that the economic man, homo æconomicus, was an adequate representation of the human being in economic life was, in Tarde's opinion, preposterous. The economic man was, he argued, (a) devoid of emotion and (b) completely detached from associations of any kind (such as a group, corporation, homeland etc.). Tarde saw this abstract persona as simply mutilating to the general understanding of economic science and economic life (Tarde, 2007 [1902], p. 631).

again, had direct influence on the movements of prices in the markets.[71] Markets were, Tarde pointed out, mainly driven by psychological causes – 'sensations, emotions, ideas or volitions' – rather than natural causes. Using yet another measuring device – the barometer – as a metaphor to describe market dynamics, Tarde argued that:

> the peaks and troughs of values in the stock market, unlike the oscillations of a barometer, could not even remotely be explained without considering their psychological causes: a fit of hope or discouragement in the public, the propagation of a good or bad sensational story in the minds of speculators. (Tarde, 2007 [1902], p. 630)

That psychological causes influenced the movements of stock prices were, according to Tarde, not a problem *per se* but rather a fact that had to be acknowledged. In *Penal Philosophy*, Tarde had already underlined that the 'so-called law' of supply and demand that allegedly ruled in the exchanges was also no more than a mere construction or 'pretended law' with which people let themselves be guided (Tarde, 1968 [1890], p. 405).

Thus, to Tarde, it was only obvious that people trading securities in the exchanges were moved by factors such as prestige, fascination, fashion and rampant emotion. Tarde believed that financial markets were highly organised institutions in which actors mostly adhered rigorously to self-imposed pretended economic laws. However, it was an undeniable fact, he thought, that the socio-psychological processes of imitation, contagion and unconscious' following of leads, leader-figures or leading stocks happened constantly in the exchange. Viewed through the lens of Tarde's imitation theory, markets

[71] Tarde was, however, not sceptical about all kinds of financial news. In *The Laws of Imitation*, Tarde bemoaned that the informative and useful graphical curves 'showing the fluctuations of the different securities of the stock-exchange' were relegated to the last pages of the daily newspapers. He fantasised that such statistical representations would, in the future, replace the polemical stories filling the pages of the newspapers. This would turn the papers into providers of 'exact and ungarnished fact' (Barry and Thrift, 2007, pp. 516–517; Tarde, 1903, pp. 135–136). 'Statistics of stock-exchange values' were, as Tarde later noted in *Social Laws: An Outline of Sociology* (1899), expressions of variations in 'public confidence' regarding the success or possible failure of some listed company (p. 36). Stock-price statistics was thus, according to Tarde, reflecting collective psychological factors. This praise of graphical representations of securities prices reflects Tarde's predilection for statistical representations rather than for financial markets.

were thus subjected to the same kinds of inter-mental action prevalent in every other social sphere. For example, in order to understand how the price of a particular security could rise or fall dramatically from one moment to the other, it was not enough to consult the so-called fundamentals of the market or look for unexpected external events that could have shrugged the markets. Instead, it was also necessary to examine and understand the psychological causes that occasionally turned the slightest of oscillations in prices into a massive decline or rise. This way of discussing transactions in markets as psychological processes and comparing market events to crowd phenomena would, as I will examine in the chapters that follow, profoundly influence discourses on and perceptions of financial markets and speculation in America in the following decades.

Conclusion

The problematisations and discussions of financial markets examined in this chapter – regardless of whether it was specific events such as Leiter's attempt to corner the wheat market, the panic at the New York Stock Exchange in 1901 or more general elaborations such as Jones' and Jennings' concerns about the concentration of traders on the trading floors of the U.S. exchanges – show that crowd theory provided a vocabulary and a set of notions well-suited to articulate and describe seemingly pertinent problems associated with financial markets and the speculation carried out in them. The crowd theoretical framework provided by the likes of Le Bon, Tarde and Sidis neatly described non-economic factors that they perceived as influencing the movement of prices and the minds of traders in the volatile U.S. financial markets in the late nineteenth and early twentieth centuries. The leader-follower dynamic could, for example, make it possible to explain excessive speculation as instigated by a suggestion from somewhere and/or someone. The same can be said about the idea that emotions were contagious and could derail the reasoning powers of the individual. This idea did, for example, substantiate the claim that excessive and unfounded speculation was more likely to happen in the exchange if the trading floor was densely packed with traders. Ultimately, the crowd theorists' explorations of markets rendered it probable that markets and speculation could and perhaps ought to be examined as socio-psychological phenomena and not exclusively as economic entities and practices. Presenting market phenomena as expressions of certain socio-psychological processes identifiable in other parts of the social made it possible to draw parallels between and make analogous readings of the problems unfolding in society and the practices of actors in the markets. As a consequence of this conflation of market and crowd phenomena, the boundary between what could be considered the interior of the markets and the exterior became blurred. As I will examine and discuss in the following chapters, this circumstance created an opportunity for various critical readings of the alleged sociality and psychology of markets as well as the mental proficiencies of the investors and speculators trading in them.

By asserting that market action was influenced by collective emotions and thus by the temperament of investors and speculators, the crowd theorists and those employing their ideas to market phenomena rendered it probable that aspects of the individual market actor's psychological constitution such as mental tenacity, suggestibility, credulity and excitability were relevant to the organisation of financial markets. In Chapter 3, I examine concerns about mental contagion and crowd behaviour that were raised in debates about the popularisation of and public participation in financial markets. The psychology of the public did, in many financial writers' and other observers' opinion, disqualify members of the public from the practices of investment and speculation. Critics of public participation in the established financial markets argued there were groups of people who were not qualified to invest, let alone speculate. Some people were, as I show in the following chapter, more susceptible to following the crowd or herd than others and therefore were incapable of enduring the immense mental strain of the market atmosphere.

Chapter 3: The speculative public and the popularisation of financial markets

Wall Street had a little lamb,
Its fleece was very thick;
At every turn the market took
The lamb was sure to stick.

Moses Smith, *Wall Street Lamb*, 1887, p. 22, first verse

[T]he firm had no consideration for the "outsiders," the "public" – the Lambs. The Lambs! Such a herd, timid, innocent, feeble, as much out of place in La Salle Street as a puppy in a cage of panthers.

Frank Norris, *The Pit*, 1903, p. 81

Really, the best of our business, the very foundation of it, will be found among the people of modest means, the crowd of nobodies who speculate.

Émile Zola, *L'Agent*, 1890, p. 88

During the late nineteenth century, an increasing number of Americans developed an interest in the business conducted in and around the stock and commodity exchanges. Along with the public's increasing interest in markets and speculation came, for some, burgeoning aspirations and desires to take an active part in 'the game'. As Mark Twain and Charles Dudley Warner wrote in their famous novel *The Gilded Age* (1901 [1873]), it was a time when all young men 'caught the fever of speculation' (p. 208).[72] As the fever of speculation, to stick to that metaphor, caught hold of a still greater part of the American public, concerns grew over the possible consequences of this popularisation of financial markets. While some observers argued that an inflow of outsiders would destabilise the markets on the nation's stock and commodity exchanges with significant

[72] The novel's title alluded to the thin linings of gold gilded upon otherwise inferior metals, yet it later came to be used as a label for the entire period from around 1870 to 1900.

national economic consequences to follow, others were more worried about the financial, social and mental well-being of the newcomers who were entering the exchanges or brokerage offices seemingly without any experience, plan or proper market knowledge.

Gradually, as public interest and participation increased, financial writers began to devote more of their attention to the activities and characteristics of non-professional market actors. This new class of investors and speculators were often referred to as the 'investing' or 'speculative public', but most often they were simply called 'the public' (Keyes, 1904, p. 24). The public was described as 'a body of several million well-to-do individuals, of varying occupations,… and all of whom, taken together, make up a formidable force in the investment market' (Noyes, 1903, p. 516). Contrary to the professionals to whom speculation was an occupation, the public were comprised of people who were basically amateurs (Marcosson, 1907, p. 104).[73] The members of the public were often characterised by the qualities they lacked rather than those they possessed. Compared to seasoned professionals, the constituents of the public were considered to be inexperienced, credulous and lacking fundamental knowledge about the functioning of the financial markets. Whereas professionals were generally perceived as being self-determent and adamant, members of the public were considered to be dependent: They were dependent on the banker for credit and on the broker for information and access (Rollins, 1907, p. 319). Furthermore, the public allegedly were dependent on other more knowledgeable and experienced investors and speculators, whose lead they tended to follow uncritically. Regardless of whether the issue of public participation in financial markets was addressed by economists, financial journalists,

[73] Besides being labelled as amateurs, the public were also identified with animals and animal behaviour (Knight, 2016, pp. 107–111, see also 2014). Most often, they were referred to as 'lambs', but they were also occasionally referred to as a 'swarm' (Keyes, 1904, p. 16, 45). In a historical account of speculation on the New York Stock Exchange during the period September 1904 to March 1907, the 'general speculative public' was described as an 'imaginary swarm assumed to have been hovering over the market' (Osborne, 1913, p. 96). Labels such as 'lamb' and 'swarm' accentuated connotations of anonymity, collective behaviour and, in the case of the swarm, ephemerality.

how-to book authors or fiction writers, it was almost always presented as a problem or a cause of problems that ought to be responded to in one way or the other.

This chapter discusses how 'the public' became this contested and problematic category in the U.S. financial markets during the late nineteenth century and the beginning of the twentieth century. With the public's entrance into the stock and commodity exchanges, problems that the exchanges had formerly been able to keep at arm's length – because they were considered problems of the 'outside' – began to intrude on them. Responding to problems concerning collective action by means of, for example, intervening in the trading hall architecture, such as Jennings suggested with his improved trading pit (see Chapter 2), did not present a viable response to the problems deriving from the public's participation in the markets, which were not necessarily confined to the spatiality of the market. The problematisation of the public and of public participation did, I will argue, mostly revolve around three related themes. First, public participation in financial markets was discussed as a question of *competence* and *qualification*. It was often debated if and how the public's assumed lack of experience and speculative competence would impact the movement of prices in the markets, the exchange as an organisation and the newcomers themselves. Second, the public was considered by many financial writers to have *misperceptions about the functioning of the market*. Unlike the professionals who gained their market knowledge from practice, the public's market knowledge often derived, critics of public participation claimed, from unreliable popular accounts of financial speculation. Third, the debate on public participation often evoked discussions of the alleged *susceptibility* and lack of *mental tenacity* of the public. As some critics argued, due to the public's lack of competence and misconceptions about the markets' functioning, they were more at risk of losing their composure and resorting to imitation and herding behaviour than professionals were.

This chapter consists of three parts. In the first part, I examine the problems associated with public participation in financial markets through the work of the economist Henry Crosby Emery and some of the early writings of Max Weber on stock and commodity exchanges. Both scholars addressed the issue of public participation and discussed the problems associated with it as well as how the exchanges should attempt to respond to them. In the second part of the chapter, I turn to the more frivolous and in some cases heavily psychologised popular literature on financial markets and speculation found in magazines, novels and short stories as well as in some how-to books. I examine a distinction drawn between the outsider (the spectator) and the insider (the broker-trader) and how the public were problematised as a group of spectators-turned-speculators. This then leads to a related discussion of whether the public should be rendered speculators or gamblers. In the third part of the chapter, I examine the speculation or, according to critics, the gambling taking place in so-called bucket shops. Bucket shops became tremendously popular and common in the cityscape in late nineteenth century, and they brought the 'feel' of financial speculation to the masses. I will argue that their business depended entirely on some of the dictums of crowd or public psychology, namely that the crowd is intellectually inferior to the individual.

The main argument I make in this chapter is that the different responses to the participation of the public in the financial markets and the corresponding characterisations of the speculative public created a market problem that was essentially a crowd problem and additionally established a precedent for discussions of the impact of crowd psychology in the financial markets.

The widening of the market and the evils of speculation

The question of public participation and its effects were thoroughly discussed by American economist Henry Crosby Emery, who wrote an influential dissertation at Columbia University titled *Speculation on the Stock and Produce Exchanges of the United States* (1896). Emery opened his dissertation stating that the American people were regarded as the greatest of all speculators and that the world's two greatest speculative markets (produce and stock) were located in Chicago and New York (the Chicago Board of Trade and the New York Stock Exchange). Nonetheless, as Emery decried, only minimal scholarly work had been carried out on the topic of speculation in America, which was something he intended to change (Emery, 1896, p. 7). One of the reasons why speculation in the U.S. stock and produce markets was a timely topic that ought to be the object of a thorough scientific inquiry was, according to Emery, that speculation in the stock and commodity exchanges was a highly pertinent topic among legislators. (Emery mentions that several bills pleading for a 'suppression of speculation' had been introduced in Congress.) Futures trading, in particular, had been subjected to ongoing debate among American politicians and numerous regulatory interventions since the early 1880s (Cowing, 1957, pp. 403–404). In order to mitigate the risk of regulation of the financial markets on an uninformed or inaccurate basis, Emery asserted that a study of the actual functioning of the speculative markets was appropriate (Emery, 1896, pp. 7–8).[74]

In the introduction and in the last chapter of his dissertation, Emery engaged with what he thought was a paradigmatic example of 'repressive legislation' on speculation: a bill set to reform speculative markets in Germany. The bill was put to vote in the German Reichstag in June 1896 and passed without amendments. On 1 January 1897, the new law went into force. The bill was an outcome of an investigation into the speculation carried out on the crises-ridden German stock and commodity exchanges undertaken by a commission appointed in 1892 by the Imperial Government. The Exchange Inquiry Commission's work amounted to a massive four-volume report stating that the speculation on the German exchanges had reached an intolerable level (Lestition, 2000, p. 290). Though his discussion of the content of the bill preceded the actual law and thus its effects, Emery found the German regulatory intervention interesting yet frightening because it proved, he thought, how disastrously 'stringent governmental control of exchanges' could harm the competitiveness of an entire national economy (Emery, 1896, p. 230).

Almost parallel to Emery's work on his dissertation, Max Weber was writing on the topic of speculation with specific emphasis on the Exchange Inquiry Commission's

[74] Another reason why Emery found it necessary to conduct an in-depth study of speculation was the alleged prevailing confusion as to what role the study of speculation should play in the theory of economics. Emery wanted to show how speculation was 'vitally connected with the theory of value' (Emery, 1896, pp. 8–9).

report. In two contiguous pamphlets, 'Stock and Commodity Exchanges' [*Die Börse*] (1894) and 'Commerce on the Stock and Commodity Exchanges' [*Der Börsenverkehr*] (1896), Weber did something similar to what Emery attempted to do in his dissertation, namely study the phenomenon of speculation in stock and commodity exchanges.[75] Like Emery, Weber wanted to shed light on the phenomenon in order to eradicate popular misunderstandings that could sway politicians and consequentially inflict unfounded regulatory intervention on the exchanges. Furthermore, both scholars believed that there was an intimate connection between what Emery termed 'the evils of speculation' (Emery, 1896, Ch. 5) and the increasing number of, in the eyes of both scholars, inexperienced and unqualified people commencing on speculative endeavours in the exchanges. In Weber's wording, the 'tremendous expansion of the market', i.e. the bringing in of the public, had 'numerous serious side-effects' (Weber, 2000a, p. 261, pp. 363–364).[76]

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[75] The pamphlets were published in The Göttingen Workers' Library, an article series supported by and aimed at a Christian Socialist movement (Lestition, 2000, p. 292). Work published in this series was hence not aimed at an expert audience, which explains why Weber's texts are not overly technical although they dealt with highly technical matter (Lestition, 2000, p. 295). The primary objective of the pamphlets was, as Weber emphasised in the beginning of the first, to provide an 'initial orientation for those who in their daily lives are relatively distant from the things described here' (Weber, 2000b, p. 305). The same year as the first pamphlet was published, Weber was appointed for a professorship in macroeconomics [*Nationalökonomie*] and finance at the University of Freiburg – a position he held for a two-year period (Lestition, 2000, p. 294). Hence, the texts ought to be read as work done by an expert in macroeconomics and finance and not by a sociologist, which, however, does not mean that they are irrelevant from a sociologist's point of view (Swedberg, 2000, p. 374).

[76] In the second pamphlet, Weber meticulously explained futures trading, which played a central role in the Exchange Inquiry Commission's report and the succeeding reform bill. Futures trading had, according to Weber, made it easier to participate in financial markets because the amount of capital required to trade futures was comparably lower than stock trading (Weber, 2000a, p. 347). This lowered entrance barrier in futures markets had led to the expansion of the market, which Weber also referred to as 'the widening of the market' (Weber, 2000a, p. 363). Whereas Weber's work on the organisational characteristics of the stock and commodity exchanges has been given some scholarly attention within the field of economic sociology (see Gane, 2012; Hansen, 2015; Preda, 2009; Stäheli, 2013; Swedberg, 2000), only little attention has been given to his detailed examination of futures trading and the consequences of its proliferation in the financial markets. An exception is Nicholas Gane (2012), who argues that due to the side effects of futures trading (manipulation and derived herding behaviour, excessive speculation, inclusion of incompetent speculators etc.), the pertinent question Weber's second pamphlet raised was the following: Are market movements 'the result of meaningful and for the most part instrumentally oriented social

Among the evils of speculation, Emery mentioned different types of market manipulation such as cornering, 'wash sales' and rumour spreading. Corners had, Emery noted, attracted much more popular attention than they, from the economic point of view, deserved. They were, he thought, few and far between, and only rarely successful (Emery, 1896, pp. 173–176). Weber had a similar view on cornering, describing them as 'quickly-passing "fever-symptoms," ending usually with the collapse of a couple of speculative careers and finally even the "corner" group itself' (Weber, 2000a, pp. 367–368). Wash sales, however, were, in Emery's opinion, somewhat more disturbing, since they were extremely elusive. As Emery explained, a 'wash sale' was an operation where a speculator employed:

> one broker to sell to another broker at prearranged prices' in order to create false prices on the floor of the exchange. Though fictitious, the price would stand as a quotation and thus influence the market. Emery described it as a 'convenient method of giving a false appearance of activity', which would 'induce speculation or investment by the public. (Emery, 1896, pp. 177–178)[77]

Like wash sales, rumour spreading was a method of manipulation that interested Emery, because it was an effective way of swaying the public into buying or selling. Since spreading false rumours was a fairly easy thing to do, it was, Emery stressed, tempting to certain cunning speculators (Emery, 1896, pp. 176–177). Hence, market actors had to be aware of and somehow account for the many rumours circulating in the markets.

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actions or of crowd behaviours that lie outside the limits of the social?' (p. 57). Although it is true that Weber thought that the public, *en masse*, could be manipulated and thus led to cause excesses, he definitely did not think that crowd behaviour was a primary cause of price fluctuations in markets (cf. Weber, 2000a, pp. 366–368). Viewed through Weber's lens, the futures market can be seen as a place where a highly sophisticated, rationalising trading system collided with a minimally sophisticated, largely irrational class of people who began to participate in futures trading towards the end of the nineteenth century.

[77] *The Oxford Dictionary of Finance and Banking* defines a 'wash sale' as '[a] US name for the sale and purchase by a single investor, or a group in collusion, of a block of securities either simultaneously or in a short space of time to establish a loss or a gain; it may also be used to create the impression that the security in question is trading actively' (Law, 2015, entry: 'wash sale'). Emery's understanding of a wash sale thus corresponds to the second part of the aforementioned definition.

However, the greatest of all evils of speculation, in Emery's opinion, was the 'reckless participation in the market by the outside public' (Emery, 1896, p. 187). The 'amateurs', as Emery termed the constituents of the public, were, he argued, purely relying on chance for the simple reason that they were either knowledgeable or experienced enough to trust their own discernment. Besides being dependent on something as ephemeral as chance, the public were, Emery added, reliant on the banks, since they were, as a rule, speculating on borrowed money (Emery, 1896, pp. 186–187).[78] Their alleged recklessness, gambling inclination and profound lack of experience made the public extra-susceptible to the aforementioned forms of manipulation (cornering, wash sales and rumour spreading). Thus, the ramifications of manipulation were regarded as amplified due to the public's mere presence in the markets. In the same vein, Weber argued that allowing and thus making it possible for the underqualified and unprepared to speculate would 'increase the public's mania for gambling and opportunities to satisfy that mania on the exchanges' (Weber, 2000a, p. 364). Weber further emphasised that the 'small speculator' or 'superfluous parasite', which were terms he used for the constituent of the market public, formed a threat to the very foundation of the exchange as a social organisation (Weber, 2000b, p. 333). Small speculators were, he thought, completely dependent on external guidance. 'The whole horde of small speculators, armed with practically nothing beyond good lungs, a little notebook, and a pencil' had, Weber noted, 'little other choice than blindly to follow the word given "from above"' (Weber, 2000a, p. 367). If small traders with little to no experience, limited funds and an inclination to

[78] In a PhD dissertation titled *Money, Credit Instruments and Prices in Their Relation to General Prices* (1907) – presented to the faculty at Cornell University in June 1903 – Edwin Walter Kemmerer argued that credit was, in essence, a psychological phenomenon. He described it as 'a state of mind, a belief', and, as it is with beliefs, 'it is subject to all those causes of fluctuation which influence the minds and control the beliefs of men' (Kemmerer, 1907, p. 83). Among the influences affecting the minds of people, Kemmerer named the 'sympathetic and epidemic excitement which so largely sways communities of men' and which made even the most intelligent persons 'compelled in their actions to follow the lead of the ignorant, who are seized with an unreasoning panic, and thus swell the current, which having opened a crevasse, deepens and widens it, until it has spread devastation far and near' (Kemmerer, 1907, p. 83). Thus, the phenomenon of credit did, according to Kemmerer, enhance the influence of collective psychology on economic transactions. In other words, speculating on credit ostensibly increased the risk of becoming subjected to the mind of the crowd.

gamble constituted the public in the exchange, Weber feared that the continual formation and training of capable and respectable exchange traders, which he saw as the very heart of the exchange organisation, would be rendered impossible. Overall, Weber believed that the prevalence of small speculators in the exchanges had the following consequences:

> [It hindered] the formation of a class of exchange traders who would be *more homogeneous* in their preparatory training, their practical education, and their position [on the exchanges] – a class that would be in a position to form a [self-instituted] "tribunal" that could have the energy to educate effectively [the traders] and have its judgments respected. The pronouncements of a tribunal that is composed out of the mishmash that now constitutes our "public" on the exchanges will never have its pronouncements respected; the precondition for that, a unified "concept of honor," is lacking. My own personal opinion, that I state with full reservations (because I think people can rightly question it), is therefore that *honorableness and honesty* is the strength of any social organization. On our, and all other, exchanges, the dominant force is *in fact* the greater quantity of money [to be gained], and it cannot be otherwise. Therefore, one may wish to give the playing field over to it, simply *in terms of formal organization*, and make entrance into the exchanges *more difficult* by requiring stronger monetary guarantees; one would not strengthen the position of the large capitalists thereby, but simply make possible for the first time a control over and the emergence of a unified view of what are or are not "honorable business practices" on the exchanges. (Weber, 2000b, pp. 333–334, italics in the original)

Hence, the public brought their vulnerabilities into the market and forced a mingling of social categories such as amateurs, professionals, large investors and small speculators, which Weber perceived as being a challenge to the organisational order of the exchange (Preda, 2009, pp. 43–44). Due to the inclusion of 'less *professionally-knowledgeable* persons', Weber felt that the exchange as a system and an organisation was weakened (Weber, 2000a, pp. 361–362, italics in the original). To sustain the social order and the honourableness of the exchanges, he maintained that the exchanges should remain 'the monopoly of the rich' (Weber, 2000b, p. 327, 334).[79]

Emery and Weber both framed the problem of public participation as one problem that had to do with lack of *competence* and with a high degree of *credulousness* on the part of the speculative public. Since the public allegedly did not have the experience, the training, the analytical skills or the capital required in order to speculate in a 'healthy' manner, they were compelled to follow the guidance and advice that others offered them. Their lack of competence therefore increased their credulousness. (They were bound to follow the lead 'from above', as Weber stressed.) What turned public participation into a concrete market problem was, Emery argued, the fact that there were specific instances where the public's lack of competence and credulousness in speculative matters had direct economic effects:

> The most apparent of these [economic effects caused by the speculation of the outside public] is the unsteadiness of the market in times of speculative excitement. The larger the number of irresponsible persons involved, the more does trading at such times partake of the unreasoning nature of all crowd action. (Emery, 1896, p. 188)

[79] When it came to the organisation of the exchange, Weber had an affinity for the English and American exchanges because of their alleged archaic, plutocratic structure. He compared the acquisition of a membership at the American and English exchanges to German churches, where one had to either inherit or pay a significant fee in order to become a member (Weber, 2000b, pp. 127–128). The foremost exchange in the Anglo-American world at the end of the nineteenth century was, as Emery had pointed out, the New York Stock Exchange. The New York Stock Exchange was governed by a Governing Committee composed of the president of the exchange, the treasurer and forty members, whose primary purpose was to make sure business was carried out in accordance with the exchange's constitution. In order to qualify for membership, the applicant had to be an American citizen and at least twenty-one years of age (Emery, 1896, pp. 17–18). Additionally, the person applying for a seat had to be able to put up the initiation fee, i.e. the price of a seat. The number of seats in the New York Stock Exchange was, around the end of the 1880s, 1,099 and the cost an average of thirteen thousand dollars. The real value of a seat at the stock exchange was, however, allegedly much higher – according to Wall Street vernacular, around twenty-five thousands (G. R. Gibson, 1889, p. 74). At the time, the New York Stock Exchange was unquestionably a monopoly of the rich, as Weber wanted it to be.

That public participation could potentially generate crowd action was, to Emery, a disturbing fact. He did, however, stress that crowd action and speculative excitement were not attributes of speculation as such. Instead, it was the participation of the public that disrupted the otherwise effective and necessary practice of speculation (Emery, 1896, p. 188).[80] Crowd problems in markets (as, e.g., speculative excitement that led to unreflective collective action that ultimately could result in a panic) were thus results of the speculative deals the public made and not a direct consequence of the practice of speculation in itself.

Although Emery perceived the participation of the outside public as the greatest of all the evils of speculation and as a pertinent issue for the markets in general, he also saw some possible advantages associated with the increased number of people conducting business in the stock and commodity exchanges. In the long run, Emery noted that 'the influence of the public in speculation is not that of inflation or panic': Therefore, even though the risks of crowd behaviour and speculative mania were real, they should not be considered the only possible consequence of the increased public participation in speculation (Emery, 1896, pp. 188–190). Though the participation of the public did not bring any 'great degree of intelligence or fitness for investigation to the market', as Emery claimed that some overly excited advocates of public participation suggested, it did increase numbers, and numbers were, as Emery pointed out, 'a steadying influence in

[80] Economists such as Emery and Weber as well as other financial writers who saw speculation in the exchanges as a practice beneficial to the national economy and thus society felt obliged to highlight the benevolence of speculation because the public opinion in the late nineteenth century was generally not in favour of the (to many outside observers) impalpable business practices exercised in the exchanges. Since speculation was not producing anything, critics believed that it could not be generating any value for society (see, e.g., Levy, 2012, pp. 242–252). More than a decade prior to the publication of Emery's dissertation, the historian Martha Joanna Reade Nash Lamb had stressed that the speculation carried out in the exchanges was definitely not unproductive although the broad public might think it was, but contrarily of vital necessity in an age and country of progress. The exchange was, Lamb argued, a 'great national mart and market place, where the capital and capital seeking investment are brought together, where the relative values of money and of securities representing national, municipal or corporate credit are established and expressed, where securities may be turned into money, and where money, in itself inert and incapable of self-increase, may find its way into the channels in which it will impart life and activity to business enterprise and material development, and become productive to its owner through interest, dividends or the fluctuations in values' (Lamb, 1883, p. 90).

the market' (Emery, 1896, p. 190). So even though Emery was not impressed with the public's ability to learn from experience, he saw the liquidity they provided as potentially beneficial (Emery, 1896, p. 190). However, Emery maintained for good measure that 'the price-making benefits of speculation come, not from the number of outsiders, but from the activity of those best qualified for speculation' (Emery, 1896, p. 191). Hence, the perks of a widened market could prove to be the seeds of impending crowd behaviour:

> While the participation of speculators in the market increases the chances of an intelligent forecast of coming events, it also affords the opportunity for panic influence. The ease with which business is done, and especially the facility of trading on insufficient capital, occasionally precipitate movements in price which are due solely to the unreasoning excitement of a crowd. (Emery, 1896, p. 122)

To Emery, public participation in financial market speculation was thus both a good and bad development. With the increased number of fortune-seeking amateurs in the markets, the risk of panic and speculative mania increased as well. However, the increase in the number of buyers and sellers in the market also increased market activity and hence made markets more liquid. (It ostensibly led to an increase in liquidity as well as in volatility.) Ultimately, Emery concluded that it was near impossible to determine 'at just what point the evil of public speculation becomes too high a price to pay for the advantages of the active market' (Emery, 1896, p. 191).

Neither Emery nor Weber thought that the problems of market instability were located in the structures of the markets themselves. Market problems arose from externalities obstructing the established market order. The speculative public were, *en masse*, one of the intruding externalities that posed a risk to the stability of the markets. Financial journalist and author Charles Conant shared this view. Conant argued that the public often seemed to forget that the quotations in Wall Street were only 'the mirror of their own estimates of the value of securities', by which he meant that it was not the exchange's but the public's own fault that they tended to buy the wrong securities at the wrong time (Conant, 1903, p. 343, 1904, p. 145, 152). Conant reminded the critics of the business conducted in the exchanges that the stock market was a 'barometer of values' that in the most sensitive and value-free way recorded 'the operation of the scientific laws of value' (Conant, 1901, p. 712, 1905, p. 359). If or when the 'truthfulness of the barometer of values' was impaired, it was, he insisted, due to some sort of illegitimate practice or excessive gambling by uninitiated persons (Conant, 1901, p. 712).[81] As a solution to the problem of public participation, Conant suggested that the 'outsider', whom he also referred to as the 'uninitiated' person, should either completely keep out of the market or at least not enter it 'in the gambling spirit' (Conant, 1901, p. 712, 1904, p. 145). Determining exactly when a person was sufficiently equipped or unfit to partake in the financial markets was not as easy as writers such as Conant made it appear. It was furthermore difficult to define what 'the gambling spirit' was and to detect those who were 'possessed' by it. Conant's emphasis on the importance of the 'spirit' in which the public entered the financial markets can be read as an expression of a central problem associated with the public – namely, that the public's connection to and association with the financial markets was emotional rather than rational.

The participator and the spectator

Whereas advocates of the business conducted in the exchanges such as Emery, Weber and Conant saw public participation as a threat to the stability of the markets, critics of so-called 'organised speculation' did not think that the inflow of small speculators threatened to corrupt an otherwise well-functioning and ordered market. Popular accounts of financial market speculation imprinted an entirely different image of financial markets into the public mind than the one pro-market advocates tried to instil (Cowing, 1957). Writers in these genres of financial writing often portrayed speculators

[81] As I discussed in Chapter 2, Tarde also used the barometer as a metaphor when describing fluctuations in the stock markets. However, Tarde emphasised that the quotations of stock prices were *not* an equivalent of the exact measurement of a barometer. On the contrary, and contrary to Conant, Tarde insisted that markets could not be properly understood without taking seriously the 'psychological causes' affecting the minds and thus the behaviour of market actors (Tarde, 2007 [1902], p. 630).

as undignified in their behaviour and markets as irrational rather than rational. They furthermore seldom differentiated between speculation and gambling. Proponents of the business conducted in the exchanges tried to delegitimise popular financial writing by rendering their accounts of markets misconceived and accusing them of misguiding the public. Conant captured the essence of the public's ostensibly delusional views of the financial markets when he stated that one of the most 'persistent of the hallucinations which prevail among people otherwise apparently lucid and well informed is the conception that operations on stock and produce exchanges are pure gambling' (Conant, 1903, p. 433). In the following part of the chapter, I examine the contrasting market views of insiders (practitioners and experts) and outsiders (the public and the market spectators) as well as the challenges associated with letting the outside public into the market.

One of the writers who allegedly evoked hallucinations in the public mind was the prolific financial journalist-cum-fiction writer Edwin Lefèvre.[82] In a *Munsey's Magazine* article titled 'Boom Days in Wall Street', Lefèvre depicted the stock market as a 'pendulum' swinging back and forth between extremes. One moment, a fall in prices would cause 'an epidemic of commercial cowardice'; the next moment, a rise would evoke a 'carnival of financial fearlessness, intoxicated by success' (Lefèvre, 1901, p. 31). Unlike Conant's delicate and highly sensitive barometer of values, Lefèvre's pendulum was an indicator of extreme fluctuations in emotional states.[83] The swings of the pendulum were assumedly, if not induced, then greatly influenced by the psychological quirks of the public. As Lefèvre noted, those who came into Wall Street on 'a wave of a general boom' failed to 'display the ordinary ability' to speculate and were generally

[82] Lefèvre is perhaps best known for the partly biographical and partly fictionalised book *Reminiscences of a Stock Operator* (1923) that told the story of the legendary speculator Jesse Livermore.

[83] Rather than recording the 'facts' of economic law, as Conant argued that the stock market's barometer of values did, Lefèvre's pendulum was measuring what Sidis had referred to as the 'social *folie à double form*' of speculation (Sidis, 1919 [1898], p. 349, italics in the original). As mentioned in Chapter 2, Sidis argued that financial speculation made the collective mind oscillate between 'a state of acute maniacal exaltation to a state of still more acute melancholic depression' (Sidis, 1919 [1898], pp. 348–349).

'ignorant of the basic principles of stock speculation' (Lefèvre, 1901, p. 40). However, when taken together, Lefèvre thought that the public constituted a 'powerful engine', but it was an engine without an engineer to direct it (Lefèvre, 1901, p. 40). Just like a crowd needed a leader-figure to guide it (see Chapter 2), the public required direction from someone or something.[84]

However, according to Lefèvre, it was not only the public who were acting in incontrollable ways. In times of panic or overexcitement, everyone in the market was all of a sudden 'afflicted with the gambling fever' and started reacting to irrational impulses rather than resorting to their independent judgement (Lefèvre, 1901, p. 36). It was thus rather the market itself than the participation of the public that was creating the contagious excitement that provoked irrational behaviour among market participants. The feverish behaviour of market actors could, Lefèvre thought, be observed from the visitors' gallery at the New York Stock Exchange. From the gallery, spectators could experience the action on the floor, which Lefèvre described as utter 'pandemonium' and as a display of 'maniacal humanity' (Lefèvre, 1901, p. 34).[85] The stock exchange was thus, according to Lefèvre's dramatised depiction, not simply a building housing people who occasionally acted irrationally. It was, in Lefèvre's wording, a 'well-dressed Bedlam' (Lefèvre, 1901, p. 32).

[84] In another *Munsey's* article titled 'The New Wall Street', the article's author, one H. Allaway, underlined that the public was forceful yet simultaneously vulnerable to the slightest of influences. Allaway noted that '[o]nly a suggestion was needed to incite the gathering throng of outsiders into enthusiastic activity' (Allaway, 1899, p. 17). Just like the crowd mind was, according to Le Bon, controlled by the 'despotic authority' of the crowd leader, the public mind was, according to Allaway, suggestible and in need of direction or guidance (Allaway, 1899, p. 17; Le Bon, 1896, p. 121). Although Allaway described the public as highly suggestible, that was not, he thought, the same as saying that they were inveterate gamblers ill-suited for investing and speculation. On the contrary, he stressed that '[t]he newcomers in Wall Street were not a crowd of heedless gamblers depending upon thin margins, making reckless guesses, taking desperate chances; they represented solvent men putting accumulated funds into investments wherein there was reasonable sureness of safety' (Allaway, 1899, p. 17). That the public was excitable was, in Allaway's eyes, not a problem *per se*: It was also a sign of its forcefulness.

[85] The visitors' gallery in the exchanges constituted an often-used vantage point for market observation as well as a 'crucial trope' in many accounts of the business conducted in the stock and commodity exchanges (Knight, 2016, pp. 116–118).

There are certain parallels to be drawn between Lefèvre's picturesque portrait of the virulent behaviour of traders on the floor of the New York Stock Exchange and Frank Norris' portrait of pit trading on the Chicago Board of Trade in his novel *The Pit* (1903). Whereas Lefèvre's market pendulum swung between extremes, Norris drew a distinction between order and chaos that was based on the person perceiving the action unfolding – in Norris' case, in the wheat pit at the Board of Trade. In *The Pit*, there is a striking difference between how the outsiders and the insiders experienced market action (Borch, Hansen and Lange, 2015, pp. 1087–1088). To the outsider Page Dearborn (to-be sister-in-law of the novel's protagonist Curtis Jadwin), sitting in the gallery watching the trading unfold beneath in the pits of the Board of Trade, the market was nothing but a strange polyphony of meaningless noises. Norris describes how Page felt the noises of the market surround her and 'form a prolonged muffled roar, that from moment to moment increased in volume' (Norris, 1920 [1903], p. 380). The broker's clerk Landry Court (an insider) was, contrary to Page, familiar with the markets 'noises', which were in his ears just sounds made by the people going about their everyday routines and by the devices – telephones and tickers – used to facilitate the buying and selling of wheat futures. When the market opened at nine-thirty in the morning, Court would change from being the 'rattle-brained', 'absent-minded', 'impractical' and 'easily excited' person as he was in his leisure time into being the most 'shrewd', 'alert' and level-headed man on the floor of the Board of Trade (Norris, 1920, p. 92). During trading, Court was able to 'feel the market – almost at his very finger tips – how… [it] moved, how it strengthened, how it weakened' (Norris, 1920, p. 100). Court immersed himself into the market without being carried away by it. Page, on the other hand, was too much of a stranger to the noises and practices of the market to be able to handle it well, as Court did. Instead, she was overwhelmed and almost entranced by the intense atmosphere in the exchange.

Advocates of the speculation undertaken in the exchanges drew a similar distinction between the outside and the 'immersed' view and interpreted it as a distinction between a *distorted* and a *real* perception of the markets. On account of this distinction, they dismissed popular representations such as Lefèvre's as mere misconstrued views of outsiders who did not have proper knowledge of the fundamental functioning of the market. The financial journalist Isaac F. Marcosson, for example, argued that those who observed the action on the trading floor from the visitors' gallery in the exchanges or experienced it second-hand through newspapers or magazine articles could not fully comprehend the intricate machinery of the market (Marcosson, 1907, pp. 101–102). In the book *The New York Stock Exchange* (1905), Edmund Clarence Stedman, a staunch defender of the institution of the exchange, described how the floor brokers' ability to remain impervious to the affectation from what seemed to be a tumultuous market baffled people unfamiliar with the daily business conducted in the exchange. In an almost superhuman fashion, the floor broker was, according to Stedman, capable of embodying 'the desires, the hopes, and the fears of his customers, and wields a magnetic force many times greater than his own' (Stedman, 1905, p. 11). Spectators were, Stedman thought, utterly amazed that the brokers on the floor were able to 'endure the strain upon them without breaking down mentally and physically' (Stedman, 1905, p. 11).[86] In the same vein, financial writer and member of the Chicago Board of Trade and the Minneapolis Chamber of Commerce Rollin E. Smith argued that the brokers on the floors of the exchanges were in 'sympathetic touch with the market' to such a degree that they were able to detect the culmination of an advance or decline in prices (R. E.

[86] A couple of years prior to the publication of his book on the New York Stock Exchange, Stedman had written an article in *The Century Magazine* titled 'Life "on the Floor": The New York Stock Exchange from within' (1903). In the article Stedman provided matriculate descriptions and explanations of the practices of the floor broker, the behaviour of people in the gallery, the difference between participating and spectating, etc. Stedman opened the article by telling the story of one time when he took a 'gentle lady' to experience stock speculation from the gallery at the New York Stock Exchange. The woman, who was 'not in the least wonted to the rack of the brokers' world', was 'startled, silenced, fascinated' and eventually 'appalled' as she observed the spectacle unfolding on the floor beneath them. Stedman recalled that the woman suddenly exclaimed 'What a terrible scene! What dreadful faces! It cannot be that you have to do with such people, with that ferocious mob. They look insane – no, wicked – and they act like fiends. It is pandemonium itself!' To the woman's outcry, Stedman calmly replied: 'Let me show you the meaning of it all' (Stedman, 1903, p. 1). Stedman used the story to make the simple point that it was not easy for a mere spectator to comprehend what was actually happening on the floor of the exchange and as an offset to sketch out what 'life on the floor' was from an expert's perspective and not from 'the casual visitor's point of view' as was the norm (Stedman, 1903, p. 2).

Smith, 1904, p. 62).[87] According to Stedman and Smith, being a spectator did not provide an accurate understanding of the market. The market was hence only fully grasped through practice. The descriptions of the floor broker or trader as someone in 'sympathetic touch' with the market and who was able to wield a 'magnetic force many times greater than his own' resonates with Tarde's characterisation of magnetisers exerting their 'prestige' on subjects (Tarde, 1903, pp. 78–79). Like the floor brokers who were capable of embodying the desires of their customers, Tarde argued that magnetisers were able to 'open the necessary outlet' for the 'force of belief and desire' anchored subconsciously in every person's mind (Tarde, 1903, p. 78). While the insiders were perceived as having a clear understanding of the functioning of markets and managed these functions in rather masterful ways, the spectators in the visitors' gallery only experienced the commotion of the market and were unable to grasp the intricate institutionalised practices hidden behind it. The spectators were perceived as being connected to the markets on an affective or emotional level, while having no practical and therefore no 'real' knowledge about how the markets functioned.

The alleged misconceptions of the public were, however, not exclusively reflected in the views of spectators in the visitors' galleries of the exchanges. In *The Americans* (1904), Professor of Psychology at Harvard Hugo Münsterberg presented a social psychological

[87] An even more venerated characteristic of the floor trader was given by another sympathiser of legitimate stock speculation, William C. Van Antwerp, in the *The Stock Exchange from within* (1914). Antwerp praised the floor brokers, whom he referred to as 'gentlemen', for their incorruptibility; their imperviousness to every form of suggestion; their strong will and unbendable discernment (Van Antwerp, 1914, p. 285). In unbridled admiration, Antwerp went on to describe the floor trader as 'intent, resourceful, suspicious, vigilant, and ubiquitous. He asks no quarter, and gives none. Now he is sphinx-like, deaf, inscrutable and impenetrable; now exploding with the frenzy of battle. You may stand and chat with him, and he may seem to listen to you. In reality he does not hear you at all. His roving eye is elsewhere, his mind is intent on other things. In the middle of a sentence he may leave you abruptly and go tearing from crowd to crowd like a thing possessed, the incarnation of energy' (Van Antwerp, 1914, p. 285). What the audiences and readers of popularised accounts of the business conducted in the New York Stock Exchange failed to grasp was, Antwerp maintained, that the floor traders were exercising 'perfectly orderly' behaviour in a smoothly operating machinery and not vile crowd action (Van Antwerp, 1914, p. 286). Weber also noticed the way in which the audiences were strongly affected by their experiences of trading in the exchanges. He noted how the often intense open outcry trading was 'likely to arouse both astonishment and dismay in those who visit the observation galleries of an exchange hall for the first time' (Weber, 2000a, pp. 340–341).

and cultural diagnosis of the American people, and one of the distinctive psychological and cultural traits he noticed was Americans' fondness of gambling and speculation.[88] Münsterberg had, for instance, been surprised to realise that one could find Americans in the stock exchange who would smilingly confess that they were citizens in 'a gambling nation' (Münsterberg, 1904, p. 232). Americans' affinity for gambling in financial markets was, Münsterberg stressed, not perceived as a problem by the 'gamblers' themselves: The small investors saw their trades as sound and as made on the basis of informed judgements. However, brokers understood, according to Münsterberg, that the popularisation of trading was leading to reckless speculation by little-knowledgeable people. Münsterberg wrote the following about the broker's and the small investor's views of the market:

> [The broker] sees how all classes of people invest in speculative securities, and how the public interests itself in shares which are subject to the greatest fluctuations; how the cab-driver and the hotel waiter pore nervously over the quotations, and how new mining stocks and industrial shares as greedily bought by school teachers and commercial clerks. The broker sees in this the people's desire for gambling, because he is himself thoroughly aware of the great risks which are taken, and knows that the investors can see only a few of the factors which determine prices. But in the public mind all this buying and selling looks very different. The small man, investing a few dollars in such doubtful certificates, never thinks of himself as a gambler; he thinks that he understands the market; he is not trusting to luck, but follows the quotations day by day for a long time, and asks his friends for "tips," until he is convinced that his own discretion and cunning will give him an advantage. If he were to think of his gain as matter of chance, as the broker thinks it is, he would not only invest his money, but would be no longer attracted by the transactions. And whenever he loses, he still goes on, believing that he will be able the next time to figure out the turn of the market more accurately. (Münsterberg, 1904, pp. 232–233)

Münsterberg's characterisation of the speculative public echoed ideas prevalent in crowd theory. Similar to people gathered in a crowd, the public were collectively excited and

[88] There were other psychologists and sociologists, such as Sidis and Giddings, who claimed that the inclination to speculate and gamble seemed to be particularly strong with the American public (see Chapter 2).

their attention fixed on an object (the price of a particular security). They were furthermore inclined to follow without thinking; trading on 'tips' from friends, as Münsterberg noted, instead of relying on their individual discernment. To Münsterberg, the public's investment decisions were thus not made on the basis of matriculate analyses of the market, but rather on the basis of emotion, temperament and a tendency to follow others' lead.[89] Following the rationale in Münsterberg's critique, the public thus had to become able to make trading decisions on an informed basis in order for them to be considered as legitimate speculators rather than as petty gamblers.

Enlightening the gambling public

During the second part of the nineteenth century, advocates of financial markets (including exchange-affiliates, authors of practical market literature and some academics) went to great lengths to draw a clear distinction between speculation and gambling. The intention was, following Preda, to 'make plausible to the middle classes that financial investments were totally different from gambling, and hence ethically and socially acceptable' (Preda, 2004, p. 335). They wanted to erase misconceptions about the markets such as, for example, those expressed by financial writer and fierce critic of exchange speculation Moses Smith. In *Plain Truths about Speculation: How to Avoid Losses in Wall Street* (1887), Smith asserted that '[m]orally there is no difference whether one makes his commissions on a stock gamble, or on pool selling at a horse-race' (Smith, 1887, p. 24).[90] Discussions of how to deal with the increasing popularity of financial

[89] In an address titled 'The Relation between Speculation and Gambling', delivered before The Congregational Club of New York City and Vicinity in 1903, the financial journalist Collin Armstrong pointed to some of the same problems of public participation as Müsterberg did. Armstrong stated that the public mainly bought securities 'because of their temperament' and because of their 'susceptibility to the influence of the crowd' (Armstrong, 1903, p. 10).

[90] A similar argument was put forward in an article in *The Forum* in which it was stated that if gambling was eliminated from the stock exchange 'grass would soon grow in Wall Street' (Curtis, 1891, p. 283). Some years later the broker-turned-financial writer John Ferguson Hume stressed, in the how-to book *The Art of Wise Investment* (1904), that although the exchange was perhaps not a 'madhouse' giving shelter to a 'howling mob of incurable lunatics', as it had been depicted in popular accounts such as Lefèvre's, it certainly was a place largely occupied by simple gamblers 'wagering on stocks' as if it was a card game (pp. 53–55).

markets overlapped with and were shaped by the efforts made to distinguish speculation from gambling. Since the market newcomers were often presented as a bunch of inveterate gamblers, their mere presence in the markets was perceived as blurring the distinction between morally corrupting gambling and valuable and legitimate speculation.

One attempt to disentangle speculation from gambling was made in a report drafted by the Hughes' Committee, which was appointed by the attorney and governor of New York, Charles E. Hughes on 14 December 1908. The committee was asked to find out 'what changes, if any, are advisable in the laws of the State bearing upon speculation in securities and commodities, or relating to the protection of investors, or with regard to the instrumentalities and organizations used in dealings in securities and commodities which are the subject of speculation' (White et al., 1909, p. 3). In the committee's report, it was suggested that speculation 'carried on by persons of means and experience, and based on an intelligent forecast' was legitimate, while the speculation carried out by persons 'without these qualifications' should rather be termed 'gambling' (White et al., 1909, p. 4). Whereas the former kind of speculation was considered good for the economy and thus society, the latter was considered to do 'but a small amount of good and an almost incalculable amount of evil' (White et al., 1909, pp. 3–4). The committee basically concluded that competent people speculated, while the incompetent gambled.

Basing a distinction between speculation and gambling on the qualifications and competencies of the individuals carrying them out, as suggested in the Hughes' Committee's report, was, according to Professor of Economics at Columbia University Carl Parker, not only problematic but bordering on the absurd. For speculation to be legitimate, Parker believed that an actual transaction had to take place. When someone speculated in the stock and commodities markets, they made a contractual agreement to buy or sell property and eventually receive or deliver the property in question with a profit or a loss (Parker, 1911, pp. 151–152). If a deal involved what Parker referred to as 'unnecessary risk-taking' (by 'unnecessary', Parker meant risk that was unnecessary to the 'welfare of the community'), he would characterise the deal as gambling (Parker, 1911, p. 151). This was, Parker thought, the only viable way to understand gambling as a practice distinguishable from legitimate speculation. The only thing the Hughes' Committee achieved with their distinction was more or less to say that those buying and selling with the intent of profiting from the fluctuations in prices were speculators insofar as they succeeded and gamblers if they failed, which was, in Parker's opinion, neither a fair nor useful distinction (Parker, 1911, p. 151). He insisted that speculation should be understood as a practice independent of the speculators qualifications, competencies let alone success.

Although Parker did not find the Hughes' Committee's distinction between speculation and gambling particularly convincing, he did agree with the committee members' proposed solution to the problem of gambling, which was to 'lessen speculation by persons not qualified to engage in it' (White et al., 1909, p. 4). Like Emery, Parker pointed out that in order to 'meet the evil of speculation' it was necessary to eliminate 'from the field of speculation those who are unfitted by nature, financial circumstances, or training to engage in it' (Parker, 1911, p. 152). Hence, being unfit for speculation in the financial markets was not only a matter of competence, wealth and experience: It was, to Parker at least, also a matter of whether the individual was naturally fit to cope with the intense competition in financial markets and to process the seemingly insurmountable amount of financial communication that existed in and around the markets. Instead of regulatory intervention, Parker believed that the evils of speculation should be mitigated through a process of public enlightenment. In order for such a process to even commence, it was crucial that brokers in particular recognised their fiduciary relationship to the public (Cowing, 1957, p. 19). Parker suggested that the bankers and brokers recognised their responsibility to their clients and started to be more selective in terms of whose business they would facilitate.[91]

Authors of how-to books provided another form of public enlightenment, which, contrary to the abovementioned, did not entail that the public kept out of the financial markets. The how-to literature was beneficial to the less experienced speculators who,

[91] One way the bankers and brokers could act responsibly towards the public was, Parker argued, by raising the margin payment (the collateral required in order to be allowed to trade). This would, he noted, keep many small speculators – who would be better off not speculating – out of the markets (Parker, 1911, p. 152).

despite the warnings and seemingly unfavourable odds, wanted to try their luck in the financial markets. The most basic rule articulated in many late nineteenth and early twentieth century how-to books was to steer clear of the public, since they had a notoriously bad track record in the financial markets. The public's lack of experience and competence combined with their credulousness and susceptibility to the influence of the crowd were considered the main reasons why *not* following the trading strategies of one's peers (insofar as they had one) would be the best possible way for the small speculator to approach a speculative venture. Not getting carried away by others was, however, an extremely difficult thing to do, since emotions in the markets allegedly were, as how-to book author, financial journalist and editor William Walter Wall noted, 'undoubtedly contagious' (Wall, 1901, p. 136).[92]

One of the financial writers who aimed to enlighten the public about the intricacies and pitfalls of speculation was William E. Forrest Hoyle. In the how-to book *The Game in Wall Street, and How to Play It Successfully* (1898) Hoyle subscribed to the stereotypical conception of the public as inexperienced, incompetent, ignorant and generally unsuccessful in market endeavours. Professional speculators were, Hoyle argued, well aware of the public's deficiencies and were scrupulous when they took advantage of them. Market insiders or 'pool generals', as he called them, used their knowledge of the public's weaknesses to 'play upon' their hopes and fears (Hoyle, 1898, p. 30, 32). The

[92] In the how-to book *How to Speculate in Mines: Being an Exposition of the Principles of Investment and Speculation, with Descriptions of Mine-Developments and Principle Gold Fields* (1901), Wall asserted that the 'temperament' of individuals, but especially of collectives, was one of the most important and 'potent' influences in the markets (Wall, 1901, pp. 135–136). The problem with the public was, Wall argued, that they generally were unable to restrain themselves and control their temperament. He described the speculative public in the following unflattering way: 'That the public are unreasoning and foolish is indisputable. They have no individual initiative. They all wait patiently for someone to take the lead, and they all with one accord follow, whether they are led to their destruction or not. It all comes of the public's ignorance, their disinclination to think and reflect. […] the public will not reflect. They will not see that this is the time to buy and to hold, either for investment or speculation. And, therefore, they are content to watch and wait, letting the golden opportunities slip by, until the boom is started, and then, as usual, they will be eager to buy at inflated prices, buy the valuable as well as the rubbish, and some people will be ruined. But the hope that it not be they, but only the other people, to whom they will sell at a profit' (Wall, 1901, pp. 148–149). Wall description of the market public as a mass of docile, unreasoning, deindividualised persons was reminiscent of characterisations of crowds and of crowd behaviour found in the theories of the likes of Le Bon, Sidis and Ross.

pool generals profited from panic, which Hoyle regarded as a distinctively American 'disease of the public mind' (Hoyle, 1898, p. 39). Since the market professionals were already taking strategic advantage of the susceptibility of the public, Hoyle's advice to amateurs was to try to do the exact same thing. Though the small speculator was unable to manipulate or enter into conspiratorial allegiances with the newspapers, as Hoyle accused the professional speculators of doing, they could learn to be smarter than the public. Hence, Hoyle advised small speculators to do the exact opposite of what the public was doing: '*sell when the public want to buy*' (Hoyle, 1898, p. 36, italics in the original).[93]

Due to the risk of manipulation, misinformation from the newspapers and the notoriously bad judgement of the speculative public, counteracting it was, in Hoyle's opinion, not only the best but also the safest way to speculate. To counteract the public was, however, more a mantra than it was a concrete trading strategy. In terms of strategy, Hoyle suggested that the amateur adopted and strictly adhered to a certain trading system. Having a system to abide by could prove decisive for the amateur, whom Hoyle believed had a tendency to approach speculation in an *ad hoc* rather than a systematic manner (Hoyle, 1898, p. 44). The system that Hoyle recommended as the most appropriate for the amateur was the so-called 'simple scale system', which presented a rather easily adoptable alternative to the generally unsuccessful approaches of the speculative public (Hoyle, 1898, p. 52). Basically, using the scale system meant 'buying or selling a certain number of stocks at every point or half-point up or down as the prices advance or recede, and then taking profits on every individual transaction when the profit shows' (Hoyle, 1898, p. 45). The simple scale system was low risk, low reward. Hoyle's system could not provide profits that paralleled the amounts that professional speculators were making. In terms of the capital involved and therefore the

[93] In Hoyle's slipstream, several financial writers of how-to books advanced similar descriptions of the haphazard speculation, susceptible minds and limited capabilities of the public. Like Hoyle, these other writers offered advice on how the small speculator could counteract the public when the market was at a tipping point. Such arguments and advice can be found in, inter alia, C. H. Thorpe's *How to Invest and How to Speculate* (1901) and William Young Stafford's *Safe Methods of Stock Speculation* (1902).

size of the trades, the amateur speculators traded on a whole other (lower) "level" than the professionals. Pertaining to the differentiation in "levels" on which speculation was conducted, Hoyle emphasised that the scale system should not be applied in the New York Stock Exchange for the simple reason that entrance fees were too high and lot sizes were too large. Instead, he advised amateurs to take their capital to New York's Consolidated Exchange where it was possible to deal in ten-share lots – a tenth of the lot size in the New York Stock Exchange (Hoyle, 1898, pp. 52–53). What Hoyle did in his how-to book was to address the difficulties that his readership, the amateurs, were faced with when entering into speculative markets, and suggest the scale system as a practical response to these difficulties.

One of the proficiencies of the simple scale system was, Hoyle stressed, that it was 'absolutely automatic and machine-like' (Hoyle, 1898, p. 44). In order to capitalise from the mechanistic character of the scale system, the person operating it had to strive to refrain from having 'an opinion about the market' that could cause her or him to deviate from the system (Hoyle, 1898, p. 44). That being said, Hoyle emphasised that it was the operator's obligation to give direction to the system. While personal opinions should not influence the operation of a speculative system, Hoyle insisted that sound judgement should. Therefore, the successful operation of a system required brains, not opinions (Hoyle, 1898, p. 45). Sound judgement, or 'brains', was a crucial accompaniment to the scale system since the operator needed to identify the general trend in the market in order to initiate the buying or selling at the right time and on the right side of the market (Hoyle, 1898, p. 47). The systems' function was in this sense two-fold: First, it helped amateurs to compensate for their relative lack of experience and speculative competence as compared to the professional speculators. Second and equally important, it functioned as a safety-barrier between the susceptible selves of the public and the lures of the markets.

In addition to the simple scale system, the amateur could consult a list of twenty-five 'hints' outlined in *The Game of Wall Street, and how to Play it Successfully*. Like the scale system, the hints were very straightforward and thus easy to follow. For example, hint no. five stated, '*As a rule do not sell stocks on the third day of a decline* (unless you are working on the "scale system") and *do not buy on the third day of a rise*' (Hoyle, 1898, p. 57, italics in the original). Somewhat curiously, Hoyle admitted that he could not explain why markets tended to react after moving in one direction for three days. It simply seemed to be the rule, which was, to Hoyle, a good enough reason why this particular hint should be followed. Even though Hoyle continuously stressed the importance of independent judgement and depreciated unfounded market advice, he nevertheless underlined that there were certain rules of the market that the amateur simply ought to follow without much critical reflection.

Whereas most of the hints, including the above mentioned, were action-oriented and action-directing, Hoyle also hinted to the mental dispositions and individual qualities required when embarking on a speculative endeavour in financial markets. While the former kind of hints encouraged strict rule-following, the latter involved seemingly more intricate and, by Hoyle, less well-defined practices of the self. In hints no. fifteen and seventeen, he emphasised that the formation of independent judgement as well as possessing or acquiring qualities such as courage, patience and nerve were necessary in speculation (Hoyle, 1898, p. 61, 63). These hints were a lot less palpable, but arguably showed the amateur speculator that successful speculation required more than following some basic rules – it allegedly required a strong-willed person who was able to withstand and repress inner urges to follow the whims of the markets. The public ought to strive to become more like the seemingly unattainable ideal trader or broker (mentioned and discussed earlier in the chapter).[94] That character mattered in speculation resonated well

[94] Such qualities or competencies were considered attributes of the exemplary market actor. In *The ABC of Stock Speculation* (1902), Samuel Armstrong Nelson stressed the importance of – in a more thorough and stringent manner than Hoyle – the qualities and the mental disposition (temperament) needed in order to become this exemplary market actor (pp. 103–110, 148–167). Along similar lines, the Wall Street professional and prolific financial writer Richard Demille Wyckoff, who occasionally used the pseudonym 'Rollo Tape', argued in his how-to book *Studies in Tape Reading* (1910) that the good trader possessed 'nerve to stand a series of losses; persistence to keep him at the work during adverse periods; self-control to avoid overtrading; a phlegmatic disposition to ballast and balance him at all times' (p. 17). As Wyckoff stated, being a good trader required a strong sense of and ability to exercise self-control. It should be noted that Wyckoff was dealing specifically with the 'tape reader', whom he perceived as the ideal trader insofar as she or he possessed or acquired the aforementioned qualities. (As 'Rollo Tape', Wyckoff wrote columns in *The Ticker* titled 'Tips to Tickerites' in which he gave expert tips to fellow ticker readers.) The

with the assumption that suggestibility was one of the main threats to successful speculation. A strong character was the best possible guard against innate impulses and the different sources of mental contagion coming from the outside.

The evils of speculation and the problems associated with inexperienced, impressionable and unqualified speculators were not exclusively problems within the exchanges. Outside the exchanges, in the streets of the financial districts, the bucket shop had become a symbol of the increasing gambling fever of the American public that amplified the alleged problems of public participation in speculation. These shady establishments appealed to people on the fringes of the market, i.e. to people who were drawn towards and had aspirations about making money in the financial markets but who did not have the means to do it. The bucket shop provided an opportunity to speculate in proximity of the exchanges, somewhat similar to the trading opportunities offered in the so-called 'curb market' in New York.[95] The bucket shop (and the curb market) made speculation

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experienced tape reader would use the stock ticker the way Hoyle had suggested that the amateur used the simple scale system. It functioned as an impervious and incorruptible extension of the tape reader's rational judgement, and turned her or him into an unswayable 'automaton'. 'The tape reader', Wyckoff noted, 'evolves himself into an automaton which takes note of a situation, weighs it, decides upon a course and gives an order.' The tape reader experienced 'no quickening of the pulse, no nerves, no hopes, no fears' (Wyckoff, 1910, p. 16). That being said, Hoyle advised his reader to shy away from the tickers and from the brokers' offices in which they were located. Ticker watching was, in his opinion, incompatible with the simple scale system: 'The 'scale system' buys and sells', Hoyle stressed, 'exactly contrary to the whisperings of the 'ticker'' (Hoyle, 1898, p. 61). Ticker watching suppressed, Hoyle asserted, the formation of independent judgement and made traders act on fear rather than courage (Hoyle, 1898, p. 61). On a side note, the notion of 'the automaton' was also used in crowd theory, though it had more negative connotation in that context. An 'automaton' was considered the emblem of the docile person caught up in a crowd, stripped of her or his will and reason (Le Bon, 1896, pp. 12–13; Sidis, 1919 [1898], p. 312). Interestingly, while crowd theorists perceived the 'automaton' as an emblematic example of a person completely subjugated the will of the crowd, Wyckoff used the term to characterise the person who had learned to be impervious to the negative mental influences emanating from the market and from other market participants.

[95] In his book *The Stock Exchanges of London, Paris, and New York* (1889), George Routledge Gibson noted that the curb market came into existence when financial excitement made business overflow into the streets and hotel lobbies after the New York Stock Exchange had closed (p. 104, paraphrase). According to financial journalist Alexander Dana Noyes, the curb market satisfied the public's unabated 'appetite for gambling in values' (Noyes, 1907, p. 326). The New York curb market was located on Broad Street, close to the stock exchange on Wall Street. The curb market and the bucket shop symbolised an expansion or widening of the market different from the one

an integrated part of the everyday life or at least a pastime of people from the middle-classes in the major cities. The bucket shop was, from the critics' standpoint, a place where the problems of the public coincided with the problems of the masses in the cities. Qua the proliferation of bucket shops, concerns about the mental strength, self-restraint and the general level of intelligence of the masses indirectly came to be concerns of the established markets, i.e. the exchanges. The clash between the finance-wise ignorant public, bucket shop proprietors with ominous intentions and the strong attraction that speculation was perceived as having on the public made the bucket shop a hotbed of political and legal contestation.

The bucket shop: Taking advantage of public psychology[96]

> The majority of small investors keep away, or are kept away, from standard stocks. They inhabit bucket-shops, and surround the offices of low-class brokers, who sell less-than-nothing, nothing, or almost nothing, for something. The very atmosphere of the bucket-shop, like that of the gambling-den, attracts them and holds them. They are intoxicated with greed. They care nothing for honor, or for anything else in their mad rush to get rich mighty quick. They are gamblers, neither more nor less. (Fowler Jr., 1913, p. 140)

Weber described in his pamphlets. It was not an expansion of the market within the regulated realm of the exchange, but an expansion of the market into the city and thus into the public sphere. This widening of the market across city spaces – the exchange, the curb and the bucket shop – widened the array of types of investing and speculating and contributed to a blurring of the lines between what was considered legitimate and what was considered illegitimate speculation (on the legitimacy and illegitimacy of curb trading, see Noyes, 1907, p. 326).

[96] In an exposé of bucket shop speculation, John Hill, a member of the Chicago Board of Trade and the chairman of a committee set up by the exchange with the aim of putting the bucket shops out of business, pointed out that the term 'bucket shop' originally, had no reference to gambling and speculation whatsoever. The term was allegedly coined in London around the middle of the nineteenth century, and the term was used to refer to a den where beer-drinkers from London's East Side carried out a rather peculiar money-saving ritual. According to Hill, the bucket shop was the place where 'beer swillers' went after they had 'drain[ed] every keg they came across' into a bucket. When arriving at the den, the bucket of leftover beer was passed around, and those who wanted to took turns drinking from it (Hill, 1904, p. 39).

With these words, deriving from the how-to book *How to Save Money* (1913), Nathanial C. Fowler Jr. expressed a view of the bucket shop and of the amateur speculators who frequented these establishments that was shared by many financial writers in the beginning of the twentieth century. Though the bucket shop might have felt and looked like a brokerage office, it was, Marcosson noted, indeed no brokerage office (Marcosson, 1907, p. 98). The main difference between the brokerage firm and the bucket shop was that the former was a facilitator of the buying and selling of securities listed on the exchanges, whereas the latter had no formal affiliation with the exchanges. Instead, bucket shops simply provided the opportunity for people (including those of modest means) to bet on whether the price of a certain security was rising and falling going up or down. However, contrary to investments made and speculation carried out on the exchanges' trading floors and in the brokers' offices, bucket shopping did not involve the exchange of actual commodities or stocks (Conant, 1901, pp. 709–710; Thomas, 1900, p. 68).[97] To get the right atmosphere and appearance, many bucket shops mimicked the décor of the brokerage offices, which meant having large blackboards on the walls where clerks could write down security prices, proper financial newspapers and stock indices for customers to read and telephones for customers, proprietors and clerks to use. Being located in the same financial districts – for example, near the Board of Trade building on LaSalle Street in Chicago and the New York Stock Exchange on Wall Street – as the regular brokerage firms only made the bucket shop seem more authentic (Hawley, 1900, p. 760). However, it was, more than any other thing, the stock ticker that authenticated the bucket shop and propelled its popularisation (Hochfelder, 2006, p. 336).[98]

[97] The present discussion of the bucket shop draws on existing studies of the bucket shop business and the legal and political controversies it ignited (see Fabian, 1999; Cowing, 1965; De Goede, 2005; Levy, 2012; Knight, 2016; Hochfelder, 2006).

[98] The stock ticker was a telegraph that recorded price quotations of securities listed on the exchanges onto a strip of paper called 'the tape'. Edward Calahan of the American Telegraph Company invented the ticker in 1867. (In the 1870s, Thomas Edison invented an improved version, the 'quadruplex', which had a higher capacity than Calahan's ticker.) The quotations were transmitted from the exchanges to the brokerage offices or bucket shops via telegraph wires connecting the different facilities. The stock ticker has been the subject of several studies within the

The ticker was described as the 'pulse of the market' (Lefèvre, 1901b, p. 542).[99] It made it possible to have access to the market without being near an exchange. This, however, also meant that it allegedly was more difficult to escape the 'contagious' market feeling (Marcosson, 1907, p. 103). The ticker made the market flow through the telegraph wires connecting various establishments across and between America's big cities. Although this new form of communication helped to connect various markets across the nation, it also contributed to a concentration of information and sources of information pertaining to the most important markets such as those in Chicago and New York (Cronon, 1991, pp. 120–122). Having wires and tickers providing a constant stream of quotations from the exchanges meant that the bucket shops had direct access to the market (see Hochfelder, 2006; Knight, 2013; Preda, 2006).[100]

In practice, the result of bucket shop deals was always one of loss for the client and of profit for the proprietor or *vice versa*. (The former scenario happened more often than the latter.) The interest of the bucket shop proprietor was thus always 'diametrically opposed to that of the customer' (Eames, 1894, p. 70). To turn out a profit, the bucket shops were hence completely reliant on their clients being on the wrong side of the wager. As Patton Thomas put it in his *Munsey's Magazine* article 'Bucket shops in Speculation', the bucket shop's livelihood rested on the Wall Street axiom 'the public is always wrong' being true (Thomas, October 1900, p. 68). Relatedly, it was widely agreed upon that the public only understood one form of speculation, and that was speculation in rising prices. The public were active in the market when there was a general

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fields of economic sociology, social studies of finance and the cultural history of finance (see Cetina and Preda, 2007; Knight, 2013, 2016; Preda, 2006, 2008; Stäheli, 2003, 2013).

[99] Lefèvre furthermore imagined that the ticker had a voice and even a mind and temper of its own (Lefèvre, 1901a). Lefèvre was not alone in ascribing human traits to the stock ticker. Hoyle, for instance, described how the ticker 'whispers' to the traders and brokers monitoring it (1898, p. 61). The ticker was said to have an influence on its users (observers) mental constitution, and this influence could occasionally, according to some writers, turn pathological. Traders could become 'mentally intoxicated' with 'ticker fever' (Lefèvre, 1901c, p. 72) or 'tickeritis' (Harper, 1926, p. 10).

[100] In some bucket shops, the ticker served as nothing but a symbol, i.e. as a part of the paraphernalia of the properly equipped shop (Fabian, 1999, pp. 191–192). Since bucket shops were mostly small businesses, many either could or would not buy access, even if the exchanges had granted them permission. Some allegedly stole access by tapping into the telegraph wires of the exchanges (Hill, 1904, p. 21).

excitement about securities, and they kept out or got out when markets were "depressed". Most observers believed that the public would never speculate in falling prices, i.e. sell short (Thorpe, 1901, pp. 62–63). Therefore, the proprietors took the short, 'bearish' side of the wager anticipating that the customer would stay on the bull side until the price went past its peak and started falling. The very foundation of the bucket shop business thus relied on the simple assumption that the customer would follow the crowd on the buy side almost regardless of what happened. In short, the proprietors assumed that the public were gullible, ignorant and susceptible to the influence of crowd psychology. What the proprietors needed was basically to lure customers into their shops and then sooner or later the small speculators would end up overstaying their position and come out on the losing end.

Providing small margins and fractional lots (the lot being the number of shares that constitute one transaction, whereas an odd lot is a number of shares below the one lot minimum) the bucket shops allowed people of modest means to become acquainted with the thrills and disillusions of speculation.[101] Not being exclusively for the affluent and professional investors, the bucket shop attracted quite a diversified clientele. In the

[101] A bucket shop deal was usually made via a margin payment or an opening of a margin account. The margin constituted the collateral that the bucket shops demanded from its customers in order to let them speculate on the movement of securities' prices. Trading on margin was, as already mentioned, not an uncommon practice in the exchanges, but the difference was that the margin payment in bucket shops was comparatively lower than the one set by the exchanges (Cowing, 1957, p. 406). Typically, the margin payment in bucket shops was around three per cent of the price of the financial product purchased (it could even be as low as one per cent), whereas e.g. the New York Stock Exchange required a 10 per cent margin as a minimum. The New York Stock Exchange furthermore required a minimum of hundred shares per trade, which amounted to transactions involving hundreds or even thousands of dollars (Hochfelder, 2006, p. 343). In *The ABC of Wall Street*, S. A. Nelson noted that 'bets' in bucket shops 'are usually based on $5 as a minimum or 5 shares of stock on a margin of 1 percent' (Nelson, 1900, p. 131). Conant, who greatly disapproved of bucket shops and everything that they stood for, claimed that the margin in bucket shops was, in fact, 'only a wager and not a margin' (Conant, 1901, p. 710). A real margin, such as the one paid to a broker, was, Conant argued, the cash amount that a buyer of a financial product needed to pay the broker in order to buy a certain amount of stocks or commodities. The margin constituted a certain percentage of the actual price of the product and the difference between the cash put up as a margin and the product's price the buyer borrowed from the broker (Conant, 1901, p. 710). Since there were not any actual transactions being made in the bucket shops, Conant maintained that their margins were nothing but yet another fictitious emulation of an otherwise legitimate market practice (Conant, 1901, p. 710).

beginning, it was predominantly young bank or investment house clerks – with an affinity for speculation but without the means to partake on the same terms as the people they were servicing on a daily basis – who were lured into the bucket shops by the prospect of speculative gains. Gradually, other groups, besides those affiliated with the market by proxy (as the clerks were), began to frequent the bucket shops with hopes of making what seemed, from the outside, to be easy and fast money. Contrary to the exchanges, the bucket shop proprietors did not discriminate based on class, status or gender as long as those coming through the doors were willing to part with money (Hochfelder, 2006, pp. 341–343; Levy, 2012, pp. 252–253).

Generally, the exchanges considered bucket shop speculation detrimental to the 'interest and welfare' of the exchanges (Rollins and Brown, 1920 [1911], p. 23). The bucket shops tarnished the exchanges' image as facilitators of legitimate organised speculation, a reputation the exchanges had fought long and hard to establish. In order to legitimise their own business, the exchanges needed to maintain that the business conducted in bucket shops was an immoral form of gambling completely detached from the speculation they facilitated (De Goede, 2005, pp. 75–81; Fabian, 1999, pp. 188–189).[102] The exchanges had to clear the 'confusion in the public mind' that the bucket shops, according to Conant, had played a central role in creating (Conant, 1901, p. 701). One way clarity could be brought to the public mind was by emphasising that bucket shops had nothing to do with and, even more importantly, had no effect on the regular market. Since their activities had no effect on demand and supply, their economic and social value was, Conant believed, non-existent or, in fact, negative (Conant, 1901, pp. 709–711, 1903, p. 433). Contrary to Conant, who went to great lengths to clarify the distinction between financial market speculation and bucket shop gambling, other

[102] Besides being referred to as 'immoral', various unflattering terms and phrases were used to describe buckets shops. The bucket shop was called 'a parasite' on the exchanges (G. R. Gibson, 1889, p. 120), a 'nefarious trade' (Wallace in King, 1898, p. 6), a trade 'destructive to the morals and pockets of young men' (Conant, 1903, p. 433), the 'principal menace to the public' (Guenther, 1911, p. 247), the 'pest of Wall Street and the country' (Nelson, 1900, p. 131) and simply 'immoral' (Howe, 1916, p. 63).

writers persistently claimed that there was no considerable difference between the two. Some even preferred bucket shops to the exchange affiliated brokerages.

In *Wall Street Speculation: Its Tricks and Tragedies* (1904), Franklin Keyes argued that people venturing into bucket shop speculation were for the most part sceptical about the proprietor's intensions and advice, which made them cautious. This was seldom the case in the exchange-affiliated brokerages, where people believed they would be treated fairly (i.e. that their interests were being looked after). To Keyes, it was thus a mitigating circumstance that people speculating in bucket shops at least knew that entering such an establishment meant that they were about to engage in gambling activities and thus should, as he phrased it, 'work out their own destruction' (Keyes, 1904, pp. 30–32). Conant rebutted such a view by pointing out that the gambling carried out in the bucket shops was by no means comparable to the legitimate speculation undertaken in the exchanges (Conant, 1903, p. 433). Another reason why the exchanges tried to eradicate bucket shops was that the latter were making substantial inroads in the exchanges' revenue stream by reeling in customers who would perhaps otherwise have gone to do business in the exchanges.[103]

Around 1915, the exchanges' persistent campaign to make an end to bucket shop speculation had succeeded (see De Goede, 2005, pp. 68–75; Fabian, 1999, pp. 188–200; Hochfelder, 2006, pp. 350–354). While they were still in business, the bucket shops were, at least in the eyes of the exchanges and their affiliates, symbols of the vices of public participation. The success of the bucket shop was necessarily always at the expense of the public. The immense success of the bucket shops accentuated that the

[103] The author of the exposé *The Dragon and the Juggernaut of Speculation* (1916) James Hamilton Howe, who was highly critical of speculation in all its forms irrespective of whether it took place in the exchange building or in the nearby bucket shop, argued that the exchanges' campaign against bucket shops had nothing to do with protecting honourable business. Bucket shops were, Howe argued, the 'illegitimate children of the Board of Trade' in Chicago (Howe, 1916, p. 18). They were tokens of the morally corrupting financial gambling fever spreading from the so-called legitimate markets into the public sphere, creating outgrowths like the bucket shops. The exchanges were not, Howe thought, on a moral crusade against a societal menace called the bucket shop. On the contrary, their aim was simply to crush the competition (Howe, 1916, p. 63).

public were gullible and suggestible to manipulation and therefore should be provided some form of protecting against scams. The best remedy against bucket shops was, according to the exchanges and those in favour of the business they conducted, to have them illegalised, thus emphasising that the only place speculation could be carried out in an orderly and socio-economically beneficial way was in the exchange.[104]

In basing their business model on the axiom that the public was always wrong, the bucket shop came to incarnate the problem concerning the speculative public as expressed by advocates of organised exchange speculation. The bucket shops were perceived as a fraudulent business that prayed on the gullibility and speculative fever of the public, and their tremendous success only accentuated that the public actually did lack the required knowledge, experience and mental strength when it came to investment and speculation. The bucket shops emerged as a response to the popular demand for opportunities to speculate in stocks and commodities. Unlike the exchanges that deployed exclusionary mechanisms to deal with public participation, the bucket shops opened their doors and let the public satisfy their speculative urges with them. They thus embraced the public's alleged susceptibility to follow the crowd, and their success was a testament to the assumption that it was logical in the market sense to counteract the

[104] The number of people with a broker's account in an exchange-affiliated brokerage firm increased dramatically after the eradication of the bucket shops. The popularity of bucket shop speculation had, according to Hochfelder, made the bucket shop speculators somewhat acquainted with investment and speculation. When the bucket shops were forced out of business, their clientele of small speculators went to the exchanges to invest and speculate (Hochfelder, 2006, pp. 357–358). The more than three hundred per cent increase in the number of Americans owning stocks between 1900 and 1922 (from 4.4 million to 14.4 million) was, however, not exclusively propelled by the proliferation and later eradication of the bucket shops (Hochfelder, 2006, p. 336). The introduction and propagation of employee stock ownership plans and in particularly the Liberty or War bond campaigns contributed greatly to the increased public participation during and after World War I (Hochfelder, 2006, pp. 337–338). A massive increase in the number of American investors took place during World War I when the US government started mass-issuing so-called Liberty or War Bonds to the American public. The aim of the war bond campaigns was simply to support the allied cause (Ott, 2011). The campaigns turned out to be tremendous successes. According to historian Julia Ott, '20 million subscribers (82 percent of U.S. households or roughly 20 percent of the population) pledged to buy a federal war bond' during the four War bond drives that took place between June 1917 and May 1919. Altogether, the four drives raised $21.4 billion (Ott, 2011, p. 56). Besides helping to sustain the financial side of the war machinery, the war bond drives markedly increased the number of Americans with a stake in the financial markets.

public, since the public was always wrong. This piece of market logic was later popularised in the how-to literature, as I will return to in Chapter 5.

Conclusion

A significant dimension of the debates associated with the topic of public participation that I have left out of this chapter is that of women's role in the financial markets. Although there were female speculators in the exchanges, the idea of the female investor or speculator was met with scepticism from financial writers. As I have shown in this chapter, many financial writers and economists were concerned with the increasing number of small or amateur speculators and investors who ventured into the financial markets without the required skillset, knowledge or experience. The concerns raised about the speculative public were echoed in discussions of women's role in the markets. The debates about women in finance in the late nineteenth and early twentieth centuries can, I will argue, be seen as a prism through which all the problems associated with the public were reflected in an amplified form with stronger moralistic connotations.[105] Although I have chosen not to focus specifically on the debates about women in finance in this chapter, I will give one brief example that illustrates how the problematisations of women in finance and public participation converged in the three areas examined in the chapter, namely (a) *competencies* and *qualifications*; (b) *misperceptions of the market*; and (c) *suggestibility* and *credulousness*. The problematisation of women's role in finance illustrates how the theme of public participation was one that began to permeate many discussions of financial markets in the late nineteenth century and especially in the beginning of the twentieth century. Many financial writers assumed at the time that the optimal functioning of the organised markets was dependent upon the exclusion of disturbing elements such as the hapless public, including allegedly excitable females.

In the Q&A section of his *Munsey's Magazine* segment 'Financial Department', the respected financial journalist John Grant Dater was once asked for investment advice by

[105] Women's role or the role of the female sex in the history of financial markets has been touched upon from different perspectives in different studies (see De Goede, 2005, Ch. 2; Fraser, 2005, pp. 76–78; Ott, 2011, pp. 75–92; Stäheli, 2013, Ch. 6).

a woman from Springfield, Massachusetts who openly admitted to know 'nothing about bonds and very little about stocks' (Dater, May 1911, pp. 237–238).[106] Among other things, the woman, who signed as Miss J. B., asked Dater whether he would advise her to buy stocks or real estate and if buying stocks in railroad companies at the present prices would be a good investment. Pedagogically and methodically, Dater answered Miss J. B.'s questions one by one, without concealing that a different set of rules of precaution applied when it was women and not men who were speculating and investing. He pointed out that '[i]t is well for a woman to confine her investment operations as closely as possible to the highest investment standards', by which Dater meant high-class bonds (Dater, 1911, p. 237). With regard to the question of whether it would be wise to buy railroad stock, Dater was reluctant to give any specific recommendations. Although arguing that there were 'many good stocks', he did not think that buying stocks was a good investment for 'a woman or a dependent person' (Dater, 1911, p. 238). Buying and owning stocks required, in Dater's opinion, the ability to cope with price fluctuations, and though he acknowledged that seeing prices decline could act as a disturbing influence on everyone, it was, as a rule, more disturbing to women. Dater used the term 'woman's investments' about investments, which he believed were suitable for women. These, Dater thought, were investments that fitted women's allegedly limited market knowledge and temperamental nature (Dater, 1910, p.

[106] Apart from his segment in *Munsey's Magazine*, Dater wrote prolifically on market-related topics, and he was the financial editor of both *Munsey's* and the daily newspaper *The New York Herald* (Lefèvre, 1904a, p. 147). In 'Financial Department', Dater offered overviews of the market situation, ideas as to what would be a good investment and, in particular, warnings about bad investments and 'get-rich-quick' schemes. Foremost, the segment was focussed on informing readers about the legitimate business being made in financial markets as well as the misdeeds of certain phony scammers. The last part of every 'Financial Department' segment was devoted to questions from the magazine's readers and Dater's answers hereto. The Q&A section mostly contained investment advice and investment warnings, but contrary to the advice clients would, for instance, receive in bucket shops, Dater's errand was, generally, to convince his readers to minimise risk insofar as they had decided to invest in securities in the first place. In Dater's opinion, the American public was notoriously ignorant about the workings of financial markets, and this was particularly problematic considering how eagerly the public invested in stocks and bonds. The American public's level of financial illiteracy was, Dater briskly stressed, downright appalling (Dater, 1912, pp. 141–42). Dater's view of women's role in the financial markets was an aspect of a broader concern he had with public participation in the U.S. markets.

148). Slightly derogatory, Dater reminded his female readers that a savings account in a bank also could be considered a kind of investment (it paid interest), so settling for that was, in his opinion, the most proper and safest investment for a woman (Dater, 1910, p. 148). The combination of women's growing interest in investing and speculation and the alleged mental vulnerability of women made Dater label 'woman's investments' a 'timely topic' (Dater, 1913, p. 823).[107]

What Miss J. B.'s query and Dater's answer reflect are the prejudices that financial writers had about women and the assumption that women ought to follow different rules than their male counterparts insofar as they wanted to invest in securities. What this short example also shows it that the problems Dater ascribed to women's participation in financial markets were, as mentioned, in many respects similar to the problems associated with the participation of the public. Women were unknowledgeable about financial products and the general functioning of the market, which made them dependent on advice, tips and other guidance sources of which they were unable to judge the reliability. Furthermore, they were, in most cases, financially dependent on their husbands' income (other constituents of the speculative public were dependent on an equivalent, the credit system). Besides being inexperienced, incompetent and dependent, women did not have the poise or mental strength to withstand the lure of the market, which was why Dater advised Miss J.B. and all other women for that matter to stick to bonds or a simple savings account if they were to invest in the first place. Finally, Dater and several other financial writers perceived women as naturally inclined to act impulsively and as having a hard time exercising emotional restraint, which were problems that the public, *en masse*, were also perceived as having. Le Bon argued in *The Crowd* (1896) that crowds had predominantly 'feminine characteristics' (p. 21), and it seems clear from the articulations of the problem of the public in the markets and of females in the markets that there is a kinship between the mental states of the public and that of women.

[107] It should be noted that in the early twentieth century, women were investing and speculating to an increasing and unprecedented degree, which arguably made 'women's investments' a timely topic (Gregory, 1912, p. 722).

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The popularisation of financial markets and the way in which the public was stigmatised as a pariah with little hope of making it in the fiercely competitive markets influenced the way markets were perceived and analysed. Additionally, a range of opportunities for action upon the action of the public was rendered possible, which concerned individual market actors as well as the regulators of markets. There were two primary consequences of the popularisation of financial market speculation and the derived problematisation of the public. First, these aspects created an immediate demand for accessible market advice that could help bridge what seemed to be an abysmal knowledge-gap between the amateur and the successful market professional. With the widening of the market thus emerged a significant group of potential readers of how-to literature. Public participation and the increased popularity of how-to books went hand-in-hand. In other words, the inclusion of the public in the financial markets created a demand for simple market knowledge, accessible to the inexperienced public. In Chapter 5, I explore how financial writers with a so-called 'contrarian' impetus tried to accommodate the public's demand for advice on how to invest and speculate successfully in the financial markets, while simultaneously subscribing to the stereotypical notion of the public presented in this chapter. By conflating the notion of the market public with the notion of the crowd found in crowd theory, the contrarians drafted a market approach or philosophy that took into account the alleged incompetence and lack of mental tenacity of the speculative public.

Second, the emphasis on the public's assumed lack of competence, credulousness and suggestibility made the psychology of the market and of market actors stand out as not only a pertinent topic but also, in some cases, as a factor that directly influenced the formation of prices in the markets. The following chapter (Chapter 4) examines the influence that applications of psychology in various genres of financial writing, such as practitioners-oriented how-to literature, academic writing and reports by federal regulatory agencies, had on the way financial markets were perceived and how market practices and phenomena were explained. Furthermore, the chapter explores how this *psychologisation* of the markets, which was particularly prevalent during the second and third decades of the twentieth century, highlighted different challenges, opportunities and problems that speculators and regulators alike ought to be concerned about and act upon. In the psychologised market, the so-called 'psychological moment' became, as I argue in the chapter, an organising principle and focal point for individual market action as well as a possible regulatory intervention.

Chapter 4: The psychological moment

> In the stock market, as elsewhere, men love to follow a leader. They will take desperate chances on the opinions of others; on the merest hearsay, the most absurd rumor. They are as easily frightened as a flock of sheep and credulous to the point of stupidity. Men who are contemptibly mean in the matter of expenditures upon themselves and their families will lose thousands of dollars in betting on a tip, and others who in their ordinary walks of business are sane and reasonable lose all their powers of reason on coming in contact with the "chance" to make "something for nothing."
>
> Samuel Armstrong Nelson, *The ABC of Stock Speculation*, 1902, pp. 158–159

The fear of losing control and the power of reason in the midst of trading were major concerns of financial writers in the late nineteenth and early twentieth centuries. The rather extensive media coverage of ominous market events such as the panics in 1901 and in 1907 revealed to the public how quickly things could escalate in the markets (see Noyes, 1909; Sprague, 1908). As examined in Chapter 2, the panic unfolding on the floor of the New York Stock Exchange in May 1901 proved, according to some observers, how rapidly tempers could flare and emotions of fear or excitement could spread through a market. A trait that many financial writers found to be distinctive of a panic was that those who experienced it appeared to be suffering from a temporary change in personality. The *New York Times* reported after the panic in 1901 that persons who were normally considered to be 'rational and responsible' had been acting as if they were 'insane' (The New York Times, 10 May 1901). Since an impairment of reasoning powers could allegedly have devastating consequences for the individual market actor, many financial writers were deeply interested in figuring out what caused the impairment and the loss of control. Often, they would explain the loss of reasoning powers with reference to people's assumed inclination to imitate other people's actions. The continuous exposure to a myriad of influences and suggestions in the markets arguably made it immensely difficult for investors and speculators, especially for those perceived as the constituents of the speculative public, to withstand the urge to imitate others.

These concerns about whether or not market actors were able to remain rational in the fiercely competitive financial markets were propelled by two composite developments: First, the discussions about the possible problems associated with an increase in public participation in the financial markets painted a picture of an inexperienced, incompetent and notoriously susceptible market public (see Chapter 3). It was a commonly acknowledged 'fact' that the general level of competence in the market was in inverse proportion to the number of newcomers being allowed to trade on the stock and commodity exchanges. As the number of amateurs increased, several observers – from gossip journalists and how-to book authors to reputable financial journalists, regulators and economists – assumed that the markets would become more unstable and volatile. Second, during the first three decades of the twentieth century financial writers as well as some academics began to resort to ideas, tropes and terms from psychology and crowd psychology to explain the irrational forces which were occasionally allegedly at play in the financial markets. This second development, which will be the main focus in this chapter, was heavily influenced by and in some cases a direct outcome of the first. Thus, the problems associated with public participation in financial markets were viewed as inextricably entangled with what I term the *psychologisation* of the markets.

The present chapter explores deployments of psychological explanations, ideas, tropes and terms in practice-oriented market literature and scholarly work by economists and sociologists, as well as in reports by federal agencies from the second and third decades of the twentieth century. I argue that ascribing significance to the psychology of markets and resorting to the discipline of psychology for answers to concrete market problems were not merely or exclusively preoccupations of rather unorthodox writers of guidebooks on how to invest and speculate in securities. On the contrary, the use of psychology and crowd psychology in the advice literature was, I will argue, only one element in a more general incipient psychologisation spreading across and circulating between different genres of market writing and forms of market knowledge. Psychology offered a vocabulary that seemed well suited for describing certain phenomena occurring in the market, especially the actions of the public. It furthermore offered ways of thinking about the transmission of ideas, opinions and emotions in collectives as well as the individual experience of being in a crowd regardless of the shape or form it might have. These ways of thinking about the psychology of crowds were directly applied in accounts of the functioning of markets and the behaviour of speculators.[108]

The chapter consists of two parts. In the first part, I examine the influence that the psychologisation of the market discourse had on the practical dimension of speculation, and I do so through an analysis of the notion of 'the psychological moment' in financial markets. I argue that 'the psychological moment' came to constitute the most decisive moment in trading according to many psychologised accounts of the markets. Psychology was not, as I have already mentioned, only informing the practical discourse on investing and speculation. Social psychological and sociological ideas about crowd formation, the transmission of emotion via suggestion, imitation and contagion as well as the transformation of the self (and the conduct of the self) in highly affective environments such as the financial markets also permeated economic and sociological discussions of markets and market action. In the second part of the chapter, I begin with a discussion of (a) how social psychological ideas about suggestibility and imitative

[108] Although increasing importance was ascribed to psychological factors during the second decade of the twentieth century, psychology-informed interpretations of financial markets were not completely colonising the discourses on financial markets. Market psychology was still a marginalised perspective that went against the grain of more orthodox conceptions of financial markets as being ordered and determined by the rational action of market participants. In connection to this, it is worth noticing that the distinction drawn between the small or amateur speculators, i.e. the public, and the professionals created two levels on which market action and the psychology of market actors were generally discussed. On the level of the amateur, factors such as temperament, inclination to herd and mental contamination were considered paramount. To professionals, however, such factors were most often considered at least less important than, e.g., market fundamentals. This distinction between levels of market participation was concisely described by the investor, economist and prolific financial and business writer Roger Babson, who argued that those 'not fortified by a personal knowledge of the exact fundamental conditions' of the market had 'the psychological laws' working against them. The market actors who were particularly at risk of being swayed by irrational forces in the market were, Babson noted, the 'untrained' and 'uninformed', i.e. the public. He further emphasised that professional speculators were less inclined to get carried away by this or that psychological factor, since they generally stuck to the analysis of fundamentals (Babson, 1914, pp. 47–48).

inclination informed some economists' views on social action in markets. Social psychology provided the economists with what they saw as more empirically realistic ideas about individual and collective action in the markets than what the prevailing theories of economics could ostensibly deliver. I further (b) explore the assumed adverse effects of irrational crowd behaviour in the speculative markets as investigated in two reports on commodities futures trading drafted by the Federal Trade Commission (FTC) and the Grain Futures Association (GFA). Being introduced in the regulatory discourse – as a means to explain the collective behaviour allegedly contributing to unfounded movements in prices in the futures markets – meant, I will argue, that crowd psychology was assigned prescriptive relevance: It was recognised as a factor that regulators had to decide whether to account or not account for when drafting market legislation.

The psychological moment in financial markets

During the second decade of the twentieth century, several writers, among them economists and sociologists, began to show increasing interest in the psychological factors supposedly influencing financial markets. A market phenomenon that was assigned significant importance in psychologised accounts of financial markets was the so-called 'psychological moment'. *The Oxford English Dictionary* defines the compound noun 'psychological moment' as 'the moment at which something will or would have the greatest psychological effect'. The notion was used in an almost identical way by financial writers, to whom it constituted the decisive moment when prices seemed to have reached top or bottom and were about to move in the opposite direction, i.e. the crucial moment when the active trader either made a profit or incurred a loss (see, e.g., Brand, 1915; Browne, 1918; Gibson, 1915; Selden, 1912). The expression the 'psychological moment' was already part of the Wall Street vernacular in the first decade of the twentieth century. It was, for example, used rather extensively in the investors' and speculators' magazine *The Ticker*. The uses of the expression in *The Ticker* were, however, not accompanied by reflections on the psychology of markets, as was later the case. It was first during the second decade of the twentieth century that the expression became an object of theorisation and given a central place in the psychology of the markets.[109]

Selden's market psychology

One attempt to determine and study the psychology of the stock market was made by George Charles Selden (a former fellow at Columbia University, statistician and prolific financial writer). Selden's short volume *The Psychology of the Stock Market* (1912) stands as one of the first books entirely devoted to the task of unfolding a psychology of the market.[110] In the book's preface, Selden made it clear that his study of the stock market was based on the assumption that 'the movements of prices on the exchanges are dependent to a very large degree on the mental attitude of the investing and trading public' (Selden, 1912, preface). When Selden spoke about the 'mental attitude' of the public and of 'the public mind', he specifically meant 'the mental attitudes of those persons who are interested in the market at the time' (Selden, 1912, p. 9). He refrained, however, from explicating what he meant by 'interest' and hence how it would be

[109] In the article 'The Psychological Moment' published in *The Scientific Monthly*, Professor of Psychology at the University of Indiana Harry Dexter Kitson used a Shakespeare quote to illustrate what he meant by the term 'psychological moment': It was 'a tide in the affairs of men, Which taken at the flood, leads on to fortune' (Kitson, 1919, p. 247). Though the term 'psychological moment' was, according to Kitson, a popular expression applied to 'the most widely varying circumstances', he argued that it was particularly important in relation to what he referred to as 'the psychology of the sale'. The psychological moment in connection to a sale or a purchase was, Kitson emphasised, a moment of 'extreme delicacy' that could either result in a desired transaction being carried out or destroy the preparatory work of the salesman. Failing to recognise and thus seize the psychological moment either by being too eager and thereby rushing the transaction or by delaying the process until it was too late were, Kitson pointed out, the constant risks associated with the psychology of the sale (Kitson, 1919, p. 246, pp. 250–251). A revised and extended version of the article became a chapter in Kitson's book *The Mind of the Buyer: A Psychology of Selling* (Kitson, 1921, pp. 169–181).

[110] Selden was, however, not the first to attend to the idea or the topic of the psychology of the stock market or stock exchange (see H. a. L. Fisher, 1908, p. 62). For example, in the article 'The Theory of Marginal Utility and the Fundamental Law of Psychophysics' (1908), Max Weber discussed the idea of a psychology of the stock exchange. In the article, Weber criticised attempts made by certain scholars to infer psychology as a complementary science to economics. Weber noted that 'taking into account the specific "psychology of the stock exchange" as a *complement to* the purely abstract theory of price [formation]' was, from the economist's point of view, utter nonsense (Weber, 2012 [1908], p. 249, italics in the original). However, he did not say anything about whether accounting for the psychology of the stock exchange could be beneficial to practitioners such as, e.g., the speculator trying to make a profit trading securities.

possible to identify the people interested in the market at a particular time. Furthermore, how 'mental attitudes' should be scientifically accessed and assessed was another methodological question to which Selden did not provide clear answers. Although Selden aspired to cultivate a new field of research, namely market psychology, the real value of the book was, according to a review in *Journal of Political Economy*, its suggestions to aspiring investors and speculators. The reviewer noted that Selden had made 'no attempt at working out a causal organic theory', and that the scientific contribution of the book could accordingly only be seen as 'a suggestion of what might be accomplished in this direction' (1913, p. 95). 'The primary object of the book' was, the reviewer concluded, 'to offer practical guidance toward successful speculation' (1913, p. 95). Though Selden resorted to psychology for explanatory purposes, it primarily came to serve him as a means to describe market movements and to prescribe ways of acting in the stock market with a successful outcome.

Selden's orientation towards the practical side of stock market trading reflected his conviction that the market fundamentally was a 'purely practical proposition' (Selden, 1912, p. 34). Various scientific methods might be applied to it, but that did not mean, Selden insisted, that it was possible to 'reduce the fluctuations of the stock market to a basis of mathematical certainty' (Selden, 1912, p. 34). This aversion towards mathematics, which was arguably only an expression of scepticism from someone who had actually experienced the empirical reality of social action on the stock exchange at close quarters, paved the way for ideas from collective psychology to emerge in Selden's account of the stock market. Selden distinguished between two levels of psychological influence on markets: (a) the aggregate market level and (b) the level of the individual market actor. On the market level, Selden was interested in providing answers to the following questions: 'What effect do varying mental attitudes of the public have upon the course of prices?' And, '[h]ow is the character of the market influenced by psychological conditions?' (Selden, 1912, p. 12). On the individual level, Selden queried, 'How does the mental attitude of the individual trader affect his chances of success?' And, '[t]o what extent, and how, can he overcome the obstacles placed in his pathway by his own hopes and fears, his timidities and his obstinacies?' (Selden, 1912, p. 12). The two levels were necessarily inextricable, for while individual sentiment affected the aggregate level, the mental attitude of the individual was susceptible to the 'public mind'.

The 'public mind' or the public were, according to Selden's understanding, not *per se* synonyms for an 'inferior mind' or for an always inferior class of market actors. The 'wrongheadedness' of the public 'no longer exists to the same extent as formerly', Selden proclaimed (Selden, 1912, p. 85). The public was, he insisted, not completely incapable of making informed trading decisions, as had been a widely shared belief among several financial writers before him (see Chapter 3).[111] Unlike, for instance, proprietors of bucket shops, Selden did not think that the trader could rely completely on the axiom 'the public is always wrong' to hold true (Thomas, October 1900, p. 68). Along similar lines, Thomas Gibson – an author of several market handbooks and of *Thomas Gibson's Weekly Market Letter* published during the first three decades of the twentieth century – argued that the public had become better at speculating than they had previously been. In an issue of his market letter dated 7 November 1908, Gibson stated that although he did not mean to 'offer the opinion that the public element has suddenly grown extremely wise', he did detect a 'great improvement in methods' (Gibson, 1909, p 216). 'A few years ago', Gibson continued, 'the outside trader wanted his broker or adviser to tell him what to buy – nothing more. To-day the same contingent make the broker who doesn't know his business very unhappy' (Gibson, 1909, p 216). Successful stock trading ostensibly required more than a strategy of counteracting the public. Although a great number of small traders had proven that they were able to trade intelligently, Gibson and Selden both nevertheless stressed that there were pivotal moments, when the public

[111] Already in the academic article 'Trade cycles and the effort to anticipate' published in the *Journal of Quarterly Economics* in 1902, Selden intimated that there was a connection between public intelligence and speculation. He argued that as the public grew smarter, their interest in speculation – in anticipating and foreseeing the effect of future events on prices – increased concomitantly (Selden, 1902, p. 309). One of the consequences of this development was, according to Selden, that fluctuations in the prices of securities were caused by subjective 'speculative forces' rather than by the laws of supply and demand. The speculative forces causing minor but still significant price-fluctuations were brought about by what Selden termed the 'instinct of anticipation' which he described as an inclination to speculate and gamble that every person possessed. This 'speculative sentiment' had become much more influential in the markets due to public participation (Selden, 1902, pp. 296–297, p. 309).

tended to be on the wrong side of the market. These were 'psychological moments' or simply 'the moment', as Selden termed it, when prices seemed to have reached top or bottom and were about to take a turn.[112] At these crucial turning points, it was, Selden claimed, necessary to oppose the public (Selden, 1912, pp. 85–86). In these pinnacle 'psychological moments', the public generally were, as noted in a short article in *The Ticker and Investment Digest*, 'apt to be carried away by the first strong bit of information which comes to hand' simply because they had not sufficiently analysed the market before venturing into a trade (September, 1910, p. 214). The psychological moment thus marked the moment when irrational psychology was affecting the sentiment of the public and hence making its mark on the fluctuations of prices.

According to Selden, one way of discounting these turning points in the price of a stock was to detect market sentiment in the news (Selden, 1912, p. 58). The press reflected, he assumed, 'the thoughts of the multitude', and it thus constituted a means to identify when a break in a stock price was imminent (Selden, 1912, pp. 28–29). However, other observers considered the detection of public sentiment through the news to be a rather risky approach. As Gibson emphasised in *The Element of Speculation* (1913), speculators and investors had a tendency to exaggerate the importance of news, and it was furthermore generally difficult to distinguish proper news from plain gossip (pp.

[112] There were, as mentioned in the chapter's introduction, other financial writers besides Selden who ascribed immense market-strategic importance to (the detection of) 'the psychological moment'. To take into account the psychological influences in the markets constituted, according to the financial writer and former trader John T. Brand, a second aspect to the study of markets (the first being the observation of price changes). Brand asserted that having the ability to detect 'the temper of the market' enabled traders to identify the decisive moment – 'the psychological moment' – when prices changed direction (Brand, 1915, p. 22). Gibson also noticed and ascribed importance to 'the psychological moment' in his market letter (Gibson, 19 March 1915). The term 'the psychological moment' was also discussed in Scribner Browne's *Practical Points of Stock Trading* (1918, p. 231) and later in William D. Gann's *Truth of the Stock Tape: A Study of the Stock and Commodity Markets with Charts and Rules for Successful Trading and Investing* (Gann, 1923, p. 2). Furthermore, the significance of the 'psychological moment' was emphasised by the financial journalist and market professional Thomas Temple Hoyne in the how-to book *Speculation: Its Sound Principles and Rules for Its Practice* (1922). Hoyne argued that the 'hackneyed phrase' the 'psychological moment' had a deep significance in speculation. He also stated that '[b]ecause of all those changes in price often brought about by nothing beyond crowd action resulting from a unified discharge of speculative force, the real meaning of that phrase becomes clear and luminous' (Hoyne, 1922, p. 219). I return to Hoyne and his crowd psychology-informed account of speculation in Chapter 5.

116–117). Many providers of market news were, Gibson thought, dishonest and manipulating. They prayed on the susceptibility of the public by exercising what he referred to as 'the power of suggestion by means of exaggeration' (Gibson, 1911, p. 587).[113] Gibson suggested that 'gossip masquerading as news' should be disregarded, while speculators and investors should only attend to 'genuinely informative' and authoritative sources of market information (Gibson, 1913, pp. 116–117). How information should then be distilled from noise was not a question to which Gibson provided an answer. Nevertheless, the point seemed to be that reading the news allegedly made it possible for the watchful investor or speculator to capture a snapshot of the mood of the market (following Selden), and yet it could also serve as proof of deceptive and distorted judgement (following Gibson). These opposing views reflected an infrequently discussed yet thinly veiled paradox penetrating the work of autodidact market psychologists like Selden, namely that the disease also appeared to be the remedy. To specify, studying the psychology of the public could give an indication of where markets were moving, but it could allegedly also distort the individual trader's ability to make unbiased, independent decisions.

A pertinent question that Selden did not pose directly in *The Psychology of the Stock Market* but one he nevertheless seemed to grapple with throughout the book was this: What happens to the individual when trading in the stock market? One thing Selden was certain about was that the discernment of market actors was often affected in the stock

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[113] Gibson's scepticism towards news was informed by the essentially crowd-psychological idea that the newspapers deceived the masses and turned them into docile crowds (see Chapters 2 and 5). Generally, Gibson was convinced that crowd psychology played a significant yet frequently unrecognised role in financial markets. In his market letter of 16 September 1911, Gibson argued that there were 'tangible' and 'intangible' causes of price movements in the financial markets. While the tangible causes could be identified deductively in the fundamentals, the intangible causes were impalpable and impossible to detect via deduction. They were simply of another nature, and Gibson described these intangible causes of price movements as 'what Le Bon called "the psychology of the crowd"' (Gibson, 16 September 1911b). Early in the second decade of the twentieth century, Gibson began to discuss 'the temperament of the speculative public' and 'the psychology of the crowd' and how studying crowd psychology would provide the individual trader with an invaluable competitive edge in the market (Gibson, 1910b, p. 237, 1911a, p. 587). The psychology of the public and that of the crowd were, for Gibson, two sides of the same coin. The temperament of the speculative public was comparable, he reckoned, to the whimsical 'temper of a mob', which, he argued, tended to change 'instantly and simultaneously' (Gibson, 1910a, p. 147).

market. When commencing on a market venture, Selden believed that the individual trader 'unconsciously' permitted 'his judgment to be swayed by his hopes' (Selden, 1912, p. 71). This idea that the mind of the individual was unconsciously influenced in the market is strikingly similar to the idea that people lose a sense of their individuality in crowds. This latter idea was a cornerstone in crowd psychology. Le Bon, for example, assumed that people gathering in a crowd unwittingly lost their ability to decide for themselves and became subjected to '*the law of the mental unity of crowds*' (Le Bon, 1896, p. 2, italics in the original). This law seemingly also applied in the stock market, at least according to Selden.[114] Hence, the trick was not to become subjected to the collective mind of the market crowd. Though it seems counterintuitive that market actors should be able to actively or consciously prevent an unconscious loss of autonomy, Selden nonetheless believed that they could. According to Selden, in order *not* to experience a loss of discernment the trader had to 'hold himself in a detached, unprejudiced frame of mind and needed to study the psychology of the crowd, especially as it manifests itself in the movement of prices' (Selden, 1912, p. 86). If an investor or speculator understood and hence was able to detect crowd psychology in the market, she or he would have insight into what Selden perceived as one of the main causes of the movements of stock prices, namely public sentiment. The market actor should, Selden stressed, try to remain unaffected by any emotion, because emotions had a tendency to 'cloud the intellect'

[114] The loss of individuality due to the unconscious influence of crowd psychology in the financial markets and in business and economic life more broadly was not exclusively a concern of financial writers of handbooks and how-to literature such as Selden. In his book *Wealth and Welfare* (1912), Professor of Political Economy at University of Cambridge Arthur Cecil Pigou argued that crowd psychology played an important role in business; more precisely, it incurred errors on business forecasts. Pigou argued that people doing business, in the financial markets and elsewhere, were bound together by 'psychological interdependence', which he described as a 'quasi-hypnotic system of mutual suggestion' (Pigou, 1912, p. 460). Drawing on Edward David Jones' thoughts on the crises and panics in the stock and produce exchanges in *Economic Crises* (which were greatly influenced by Tarde's theory of imitation (see Chapter 2)), Pigou stressed that the problem of mutual suggestion, i.e. psychological interdependence, was amplified when people were 'congregated in close physical proximity to one another in the business sections of large cities'. In large cities, people were, he added, 'bound together by an atmosphere of sympathy' (Pigou, 1912, p. 461). Besides being bound by sympathy, businesspeople were, according to Pigou, also bound together by debtor-creditor relations. He believed that these interdependence-relations – regardless of whether they were psychological or economic – tended to 'promote action in droves', i.e. 'the psychology of crowds' (Pigou, 1912, pp. 461–462).

(Selden, 1912, p. 113).[115] Selden thus assumed that there was a privileged position from which the trader could observe the actions of the market crowd and act upon them without being affected in return.

Acting in the stock market was thus believed to require a constant awareness of collective sentiment. The trader needed to know when to ride a wave of public sentiment and when to break with it, while, at the same time, always keeping a safe distance from any mind-distorting influences. Selden's suggestions for proper market conduct were aimed at those who dared to embark on this intricate balancing act. Whereas most texts in the practitioners-oriented genre devoted a chapter or a couple of chapters to market psychology, *The Psychology of the Stock Market* stands out as a more in-depth engagement with the topic.[116] In dedicating an entire volume to the topic, Selden

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[115] Towards the end of his book, Selden summed up his advice to traders in five suggestions, all of which aimed to prevent a clouding of the intellect: '(1) Your main purpose must be to keep the mind clear and well balanced. Hence, do not act hastily on apparently sensational information; do not trade so heavily as to become anxious; and do not permit yourself to be influenced by your position in the market. (2) Act on your own judgment, or else act absolutely and entirely on the judgment of another, regardless of your own opinion. "Too many cooks spoil the broth." (3) When in doubt, keep out of the market. Delays cost less than losses. (4) Endeavor to catch the trend of sentiment. Even if this should be temporarily against fundamental conditions, it is nevertheless unprofitable to oppose it. (5) The greatest fault of ninety-nine out of one hundred active traders is being bullish at high prices and bearish at low prices. Therefore, refuse to follow the market beyond what you consider a reasonable climax, no matter how large the possible profits that you may appear to be losing by inaction' (Selden, 1912, pp. 119–120). Such rules of what could be called proper trader conduct were, perhaps not surprisingly, common in the how-to genre, which I return to and elaborate on in Chapter 5.

[116] There were nevertheless quite a few market handbooks preoccupied with the topic of collective or crowd psychology in connection to speculation in financial markets. In the final chapter of *Stock Prices: Factors in Their Rise and Fall* (1911), Frederic Drew Bond discussed the psychology of speculation and emphasised the role of experience in limiting individual susceptibility (pp. 117–124). In *The Value of Organized Speculation* (1913), Harrison H. Brace stressed the importance of 'the mysterious psychology of the crowd', which, he argued, was a constant influence on the exchanges (p. vii). Additionally, in a previous volume, *Gold Production and Future Prices* (1910), Brace studied how psychology in the markets affected market actors *en masse*. In relation to Selden's work, it is worth noticing that he did not ascribe as much importance to market psychology in his later work as he had done in *The Psychology of the Stock Market*. In *A Century of Prices* (1919), co-written with former senator of Ohio and chairman of the Board of Directors in Merchants National Bank Theodore E. Burton, 'the psychology of prices' was, for example, only touched upon once. Moreover, it was perceived as an influence of only 'some importance', causing 'temporary and minor movements of commodity prices' (p. 26). Selden's co-writer Theodore Burton was no stranger to the implication that mass psychology, according to some observers, had in the financial markets. He discussed the

underlined that market psychology was in his opinion not a speculative appendix to studies of financial markets but an integral cog in the market machinery. While economics and psychology were conceived as distinct sciences, using psychology as a means of explaining economic as well as financial phenomena was a rather common approach at the time. Almost parallel to the increasing popularity of market psychology in the practitioners-oriented how-to literature, economists began to take an interest in psychological theories as potential modes of explaining and correcting the fundamental assumptions of the theories of economics. The *psychologisation* that Selden referred to in his work was also incipient in parts of the economics milieu at the time. However, whereas Selden described market movements and prescribed ways to profit from them through his application of psychological ideas on market phenomena, economists saw an opportunity to rethink and more aptly explain the factors guiding economic action in theories of social psychology.

Psychologisation in economics and a permanent crisis in the markets

One of the American economists who advocated for a use of psychology as a means of explaining, complementing and ultimately improving theories of economics was Wesley Clair Mitchell. Armed with insights from crowd, instinct and nascent behaviourist psychology, Mitchell proposed some radical changes to the way in which economics should be conceptualised.[117] Inspired by the then immensely popular social psychology of William McDougall, formulated in, inter alia, *An Introduction to Social Psychology* (1908), Mitchell wanted to prove that psychology was the unrecognised foundation of economics and, furthermore, that the psychological assumptions already inscribed in economic theory were essentially flawed. To specify, McDougall had proposed that

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connection between mass psychology and financial crises in the book *Financial Crisis and Periods of Industrial and Commercial Depression* (Burton, 1902, see Chapter 2).

[117] Mitchell was well-versed in the crowd psychological tradition. Crowd psychology was, in Mitchell's reading, based on the notions of imitation, suggestion and sympathy, a trinity of notions whose theoretical development he ascribed to Le Bon, Tarde, Ross and Walter Bagehot (Mitchell, 1914, p. 16). He argued that when it came to understanding particular economic phenomena these notions – imitation, suggestion and sympathy – were as important as those of equilibrium, self-interest and rationality (Mitchell, 1914, p. 7, p. 16).

psychology was the foundation of all the social sciences. In McDougall's opinion, psychology was not taken seriously enough in the social sciences, including in classical theories of economics, and the attempts made to say something about the 'mind' within the social sciences thus often came out as flawed and downright bad psychology (McDougall, 1916 [1908], pp. 1–2). Paraphrasing McDougall's criticism of the simplistic psychology underpinning prevailing theories of economics, Mitchell pointed out that classical economists had committed an intellectualist fallacy by assuming that individuals were always guided by their 'enlightened self-interest' as well as a hedonistic psychology equating 'the good' with 'the pleasurable'. The classical economists (and John Stanley Jevons, who was later labelled a 'neo-classical' economist) thus neglected all the aspects of human psychology that did not fit into their narrow definition and simplistic idea of human psychology (McDougall, 1916, p. 11; Mitchell, 1910a, p. 197).[118]

Driven by the desire to reformulate the underlying premises of economic theory, Mitchell encouraged economists to open up to broader conceptions of what constituted human activity, which required, he argued, an acknowledgement of the importance of

[118] In the double-article in *Journal of Political Economy* titled 'The Rationality of Economic Activity I and II', in which Mitchell laid out his assessment of the assumptions underpinning classical theories of economics, he presented a lengthy critique of the allegedly hedonistic psychology found in most classical theories of economics. From loosely elaborating on the premises of Smith, Malthus and Ricardo's economic theories, Mitchell thoroughly examined the entanglement of utilitarian ethics and hedonistic calculus found in the work of, among others, James Mill and Bentham, yet fully and explicitly integrated in Jevons' economic theory (Mitchell, 1910a, pp. 205ff., 1910b, pp. 104ff.). The combined assumptions of enlightened self-interest and hedonism turned the human into a reflective pleasure-calculating animal that was, according to Mitchell, inconsistent with the way that humans actually acted and the way that their minds really functioned. Mitchell's argument simply was that the underlying psychological assumptions of theories of economics should be replaced by more accurate assumptions such as those found in the work of, e.g., McDougall (Mitchell, 1910a, p. 197). The application of psychology to economic and financial market phenomena was, however, also met with criticism. Although he noted that the connection between psychology and economics was 'real and intimate', Professor of Political Economy at Columbia University Edwin R. A. Seligman was highly sceptical of the idea that the discipline of psychology should directly inform theories of economics. He dismissed attempts to bridge the two disciplines as nothing more than an unproductive fad just as it had previously been 'the fashion to apply biological concepts to economic life' (Seligman, 1910, p. 29). In *Principles of Economics* (1910), Seligman explained that an increasing number of economists were becoming aware that the biological and psychological explanations of economic phenomena were 'vague analogies rather than identities; that the laws of life in the economic world are not the same as those in the physical world; and that the only real aid which biology can give to economics is to enforce the conviction that in social as in animal life there is continual growth and perpetual change' (p. 29).

people's habits, their 'amenability to suggestion', 'tendency towards imitation' and their 'instinct of construction' (Mitchell, 1910a, p. 200). Unless they were willing to do so, economists would, Mitchell believed, 'fall unconsciously into an artificial way of representing the mental processes of economic life' (Mitchell, 1910a, p. 205). Mitchell's criticism of what he believed was economists' artificial representations of economic life coincided with Selden's earlier mentioned insistence on the impossibility of reducing stock market fluctuations to predictable mathematical certainties. In his arguably most influential work *Business Cycles* (1913) Mitchell stated his psychology-informed criticism of the mathematics-centred theories of economics in a financial market context:

> A mathematician's mood exercises no influence upon his solution of an algebraic equation; but it does affect his opinion about the advisability of buying the bonds which are offered him. (Mitchell, 1913, p. 445)

The emotional states allegedly affecting the opinion of people about to, in this case, buy bonds were, Mitchell argued, both 'the product of strictly individual condition' and 'of suggestions received from the demeanor, the talk, and the actions of associates' (Mitchell, 1913, p. 445). Like Selden, Mitchell was certain that individual inclinations or instincts as well as external affectations of various kinds could easily make individuals diverge from independent judgement. An individual person's conduct was, as he pointed out, highly sensitive to the emotions swirling around in the company of which the individual was part. Additionally, Mitchell assumed that as emotions spread in markets, the actions they prompted were simultaneously intensified and affirmed by the market actors (Mitchell, 1913, p. 445). Echoing the belief of many market observers, including Selden, Mitchell noted that the consequences of the contagious spread of emotion in the financial markets were direr for the 'great mass of small investors' (Mitchell, 1913, p. 35). The small investors generally lacked experience and ability, which made them follow the advice or action of others instead of relying on their own judgement. '[T]hey are', Mitchell argued, 'peculiarly subject to the influence of feeling in matters where feeling is a dangerous guide' (Mitchell, 1913, p. 35). Even though the psychology of the market had a stronger impact on the minds of those who had only minimal if any understanding of the fundamentals of the market, Mitchell was, exactly like Selden, convinced that no one was 'wholly immune from the contagion of emotional aberration' (Mitchell, 1913, p. 35). Hence, psychology was perceived as a fundamentally important factor that ought to be taken into account when dealing with and in financial markets.[119] They did, however, agree that some were more suggestible than others depending on their experience, familiarity with the logic of emotional spread and their level of speculative competence. Selden and Mitchell were thus both interested in understanding the role that psychology played in the stock market and in providing a supposedly more realistic account of the way it functioned as compared to prevailing accounts heavily informed by mathematics and their opinion of a simplistic understanding of human psychology.

Whereas Selden and Mitchell wanted to provide what they perceived as being a more 'realistic' account of the relationship between human behaviour and the formation of prices in financial markets, the American sociologist and journalist Robert Ezra Park was interested in understanding and determining what actually characterised the sociality of the stock market. Park's assumption was that the sociality of the market was unique and a reflection of a profoundly modern and unmistakably urban form of sociality. In the article 'The City: Suggestions for the Investigation of Human Behavior in the City Environment', published in the *American Journal of Sociology*, Park attended to the question of crowd behaviour associated with the stock exchange in a short but dense subsection

[119] Mitchell was not the only American economist who ascribed importance to 'the psychological factor' in financial markets. Professor of Economics at Harvard University Frank William Taussig advanced almost identical arguments about the psychology of the market in his *Principles of Economics* (1911). Taussig noted that oscillations of prices in a market had 'partly economic, partly psychological' causes (Taussig, 1911, p. 403). Elaborating on the collective psychology in markets, Taussig drew a parallel between the psychological conditions in a market and in a crowd. Though a few 'very sagacious and sober persons' were perhaps able to remain unaffected by the psychological influences of the markets, Taussig maintained that they were as few and far between as persons able to 'remain rational in a mob or quiet in a cheering crowd' (Taussig, 1911, pp. 404–405). The group of market actors on whom 'the psychological factor', according to Taussig, had the greatest influence was the public. About the public, Taussig wrote the following: 'Many of the smaller fry and the "outside" speculators exercise no independent judgment at all, but simply buy or sell with the crowd, swallow all sorts of exaggerated statements or rumors, think only of the prices of securities from day to day, and, in the contagion of the moment, are singularly inattentive to the fundamental forces on which their doings are based. The psychological factor plays a large part' (Taussig, 1911, p. 409).

titled 'The stock exchanges and the mob' (Park, 1915, pp. 591–593). The purpose of the article was, as the title indicates, to provide suggestions for investigations of certain forms of human behaviour in certain organisations and institutions in the modern city. The stock exchange was one of the institutions of the city that Park found particularly interesting. As a lecturer at the University of Chicago, Park also took an interest in the city's iconic exchange, the Chicago Board of Trade. However, in his article, Park dealt with the exchange as a somewhat generic spatial construct. What enticed Park about the exchange – both 'the stock exchange, and the board of trade' – was the intenseness of the competition on the floor and the rapidity with which changes took place (Park, 1915, pp. 590–591). Park was thus interested in the stock market as a space in the modern city where human behaviour was unique in terms of the speed and intenseness of interactions and where eruptions of crowd behaviour were rather frequent.[120]

The 'constellation of forces' found in the exchange was, Park argued, comparable to the social organisation of crowds or mobs (Park, 1915, p. 591).[121] However, as he noted,

[120] Markets, cities and crowds had been studied in conjunction before Park outlined his programme for such a study. In *Economic Crises* (1900), Edward David Jones did, as examined in Chapter 2, compare the intensity of imitation in the modern city with the intensity of imitation and the contagious spread of emotion in the stock exchange. Jones drew on Tarde's elaborations on imitation in cities (from *The Laws of Imitation*) in order to substantiate his comparison (Jones, 1900, pp. 204–205). Ellis Thomas Powell, the financial editor of the British daily financial newspaper *Financial News*, also argued that there was an affinity between and a mutual dependence of the modern market and the modern city. In *The Mechanism of the City: An Analytical Survey of the Business Activities of the City of London* (1910), Powell explained that the city and the market were characterised by the same social and psychological processes of imitation, sympathy, mass-suggestibility and fashion. With his analysis of the market as a constantly evolving mechanism in the modern city, Powell aimed to do what, among others, Selden and Mitchell were also aiming to do – namely, to infer what they perceived as 'reality' into the abstract theories of economics underpinning the reigning laws of markets. Powell elegantly stated that he was attempting to 'clothe the dry bones of economic theory with the flesh of living reality, so that theory and practice come together' (Powell, 1910, p. 3). Although Powell was British and although London was the setting of his analysis of modern business, he made numerous comparisons to and comments on, e.g., the relation between the city of New York and the New York Stock Exchange. In a later volume, *The Evolution of the Money Market* (1916), Powell engaged more thoroughly with U.S. markets and exchanges. He furthermore drew on the work of sociologists William Graham Sumner and Edward Alsworth Ross and discussed how the 'mob psychology' that erupted during market panics called for some form of social control (Powell, 1916, p. 256, pp. 324–325, note 2).

[121] It is not surprising that Park took interest in the similarities between interactions and behaviour in the stock exchange and in crowds since he had had a strong intellectual interest in the latter. He had dealt exhaustively with the topic of crowds and crowd psychology in his PhD dissertation *Masse*

whereas crowds normally were characterised by being very mobile, they exhibited, in the exchanges, a 'relative stability' (Park, 1915, p. 591). In the same vein as Selden, Park asserted that the primary similarity between markets and crowds was that they were susceptible to psychological factors:

> It is commonplace that decisive factors in the movements of crowds as in the fluctuations of markets are psychologic. This means that among the individuals who make up the crowd or who compose the public which participates in the movements reflected in the market, a condition of instability exists which corresponds to what has been defined elsewhere as crisis. It is true of the exchanges, as it is of crowds, that the situation they represent is always critical, that is to say, the tensions are such that a slight cause may precipitate an enormous effect. The current euphemism "the psychological moment" defines such a critical condition. (Park, 1915, p. 591)

Hence, Park perceived 'the psychological moment' as a fundamental condition in the exchange. It was not simply the moment when prices reached a high or a low, as was the general understanding among financial writers such as Selden and Gibson. The psychological moment was always imminent, which, according to Park, meant that the market, just like the crowd, was in a permanent state of instability or crisis. By crisis, Park did not mean financial crisis, although he thought the latter was an 'extension of

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und Publikum: Eine Methodologische und Sociologische Untersuchung (1904), written at the University of Heidelberg. In a footnote, Park touched upon the topic of (financial) panic in relation to collective psychology [*Kollektivpsychologie*] and hence alluded to the possible connection between crowds and markets (Park, 1904, p. 60, n. 1). The notion of panic [*Panik*] had, Park noted, not been thoroughly dealt with within the scholarly field of collective or crowd psychology (Park, 1904, p. 60, n. 1). However, Park added that there were a couple of exceptions. One was Boris Sidis' work on 'financial crazes' in *The Psychology of Suggestions* (1898), which I discussed in Chapter 2, and the other was the Swiss linguist and ethnologist Otto Stoll's *Suggestion und Hypnotismus in der Völkerpsychologie* (1894). Park mentioned the two works without discussing how they respectively dealt with the notion of panic. Stoll, in fact, had rather elaborate ideas about how mass suggestion [*Massen-suggestion*] was a psychological factor affecting the formation of prices in the exchange [*Börse*]. One phenomenon that Stoll argued was caused by mass-suggestion in the exchanges was *bank runs* (Stoll, 1904 [1894], pp. 656–658). When a panic and subsequently a crisis set in, the markets were overwhelmed by what Stoll termed contagious suggestibility [*kontagiösen Suggestibilität*] or the infectious suggestibility of the crowd [*infektiösen Suggestibilität der Masse*], which he, like Sidis, exemplified by examining famous speculative panics and subsequent crises in financial history such as the tulip mania in Holland and John Law's Mississippi Company scheme (Stoll, 1904 [1894], pp. 658–664).

this critical condition to the larger business community' (Park, 1915, p. 592). Just as the critical condition in the exchange could easily be extended to the macro-level business community, it also reflected a critical condition on the micro, i.e. the individual level. The imminent risk of an eruption of a panic on the trading floor was mirrored in the individual trader, who was allegedly constantly at risk of being carried away by expressions of collective emotion. Thus, the permanent instability of the markets was reflected in the fundamental instability of the market actor, just as the critical situation inherent in crowds was, according to Park and crowd theory in general, reflected in a crisis of individuality (see Chapter 2).

Park's article did, as mentioned, consist of pre-studies, i.e. suggestions for how to study human behaviour in different urban settings. In order to study the critical condition in the markets, i.e. the psychological moment, Park suggested that one could examine the ways in which exchange speculators sought to take control of and manipulate crowds in the stock exchange. Park found it highly interesting that a crisis in the stock market could be instigated via manipulation, just as crowds had historically been subjected to the wishes of a leader figure (Park, 1915, p. 592).[122] Apart from or in addition to the study of control and manipulation of crowds and markets, Park also proposed an examination of the emotional states of individuals who had taken part in an instance of crowd behaviour in the markets. Park was interested in whether or not the

[122] The connection between the leader and the led was, as I have explored in Chapter 2, one of the central aspects of crowd psychology. Whether it was the subjugation of the subject to the hypnotiser (Sidis, 1919 [1898], pp. 78ff.), the magnetised subject to the magnetiser (Tarde, 1903, pp. 78–79) or the crowd to the crowd leader (Le Bon, 1896, pp. 117–125), it stood out as perhaps *the* germ of crowd emergence. The leader-led structure appeared inherent in the markets as a latent condition that those with little experience, sparse qualifications and modest means had to take into account when embarking on a financial market venture. In a later socio-psychological study of stock market values and economic crises, which appeared in an issue of The Annals of American Academy of Political and Social Science titled *Stocks and the Stock Market* (1910), the law scholar Arthur Selwyn-Brown suggested that market actors could be categorised as either 'crowd leaders' or followers. According to Selwyn-Brown, most people were, as a rule, 'prone to suggestion and imitation' (Selwyn-Brown, 1910, p. 155). These people were, he added, 'moved more by sentiment than by judgment, by imitation rather than by thinking' (Selwyn-Brown, 1910, pp. 155–156). A smaller group of people of the 'optimistic and indomitable' type had, Selwyn-Brown argued, a strong influence on the suggestible majority. Individuals adhering to the latter group were perceived as 'constructors' or 'crowd leaders' who gathered followers 'through suggestion, sympathy, and imitation' (Selwyn-Brown, 1910, p. 156).

individuals who had experienced a panic had felt a 'sense of loss of control' and/or 'loss of personal responsibility' (Park, 1915, p. 592). He further emphasised that it could be relevant to inquire into the 'devices' used to prevent panics and to disperse mobs (Park, 1915, pp. 592–593). Park assumed that people's market experiences would mirror the experiences people allegedly had in crowds. All of Park's proposed angles on the study of human behaviour in the stock market were furthermore already, in some shape or form, circulating in the practical literature on speculation and investing in financial markets. The noticeable difference was that Park wanted to know whether the loss of control, the herd behaviour, the manipulation and other factors were actually happening and how market actors experienced them, while authors like Selden considered them as matters of fact and tried to come up with practical guidance on how to deal with them.

While the interest of the social scientist (Park), not surprisingly, differed from that of the provider of practical guidance (Selden), they nevertheless shared the assumption that psychology was a key factor in the movements of prices in the stock market. Psychology was thus conceived as something else and as more than a mere means of explaining exceptional market phenomena and events: It was considered a factor more or less on par with fundamental factors such as interest rates, cash flows, earnings etc. The role that collective psychology played in the financial markets was epitomised by the psychological moment. Whereas authors of how-to literature such as Selden and Gibson saw the psychological moment as the defining moment when the market was just about to break, Park perceived it as a permanent critical condition. In both cases, the psychological moment was understood as a critical condition or an event around which action, trading strategies and market protection measures were shaped.

Disruptions of the market order

Expressions such as the 'psychology of the market' or of 'the public' as well as psychological 'effects', 'conditions', 'moments', 'factors', 'laws' and 'tendencies' in the markets were becoming part of the financial market vernacular during the second decade of the twentieth century. These phrases as well as the ideas behind them were shaping views of the functioning of financial markets. To think that psychology had a profound influence on the movements in financial markets was thus far from uncommon during the second and third decades of the twentieth century. As quoted earlier, Park, for example, argued that it was 'commonplace' that 'decisive factors […] in the fluctuations of markets are psychologic' (Park, 1915, p. 591). On the backdrop of this psychologisation of the discourse, some writers thought that the use of psychological expressions and explanations had become too excessive and uncritical. In the book *Investment* (1918), Professor of Commerce and Industry at the University of Michigan Edward David Jones implied that crowd psychology had become too much of a default explanation of market movements.[123] In discussing causes of price fluctuations in the stock markets, Jones pointed out that '[m]inor fluctuations result largely from the varying contests of bulls and bears' (Jones, 1918, p. 238). In the same breath, he added that the over-buying and over-selling of the bulls and bears were *not* only the result of 'the contagion of the crowd' but also predominantly due to the fact that those who traded from afar gave their 'orders on the basis of quotations a day or two old' (Jones, 1918, p. 238). Jones stressed that there were obviously other factors affecting the movement of prices in the markets besides crowd contagion. Another critical comment about the allegedly excessive and frivolous employment of the word 'psychology' in financial writing came from the editor of *The Wall Street Journal* William Peter Hamilton. In his seminal work on the 'Dow Theory', *The Stock Market Barometer* (1922), Hamilton underlined the following with thinly veiled impatience:

[123] In Jones' earlier work on economic crises, he adopted ideas from crowd psychology – more specifically, the work of Tarde and Sidis, among others (see Chapter 2). In this much later publication Jones, who had in the meantime advanced from associate to full professor, did not engage with crowd psychology to the same extent as he had done in *Economic Crises* (1900). However, it seemed as though he had internalised the idea that crowd psychology was an influential factor in financial markets. This is, for instance, apparent in his characterisation of low and high quality stocks: 'The better the quality of a stock is, the more it acts like a bond. The worse a stock is, the more it depends upon earnings, the "psychology of the crowd," the operations of pools, etc.' (Jones, 1918, p. 284).

> If there is one word which has grown wearisome, from constant use and misuse in the era of quackery from which we are only slowly emerging, that word is "psychology." But here is a true psychological condition. We have lost trust in ourselves. We have meddled so disastrously with the law of supply and demand that we cannot bring ourselves to the radical step of letting it alone. (p. 247)

Hamilton's criticism was not exclusively directed at other financial writers' misuse of the word 'psychology' in their accounts of markets. It was also, as implied in the quote, a free market and thus deregulation apology. The psychologisation of the discourse presented a threat to the idea of the free market since those using psychology to explain how markets worked assumed that irrational, extra-economic forces were actively influencing the fluctuations of prices. Regulation presented one way of preventing irrational forces from affecting the order of the market.

Although there were critical outbursts, such as those from Jones and Hamilton, against the adoption of psychological terminology and against using psychology to explain certain market phenomena, the psychology of markets remained a regularly discussed topic in the how-to literature (see Chapter 5) as well as among some economists. In the same vein as Mitchell, some economists resorted to social psychology in order to find what they perceived as more realistic and scientifically adequate assumptions about human action. As proponents of this 'social psychology criticism' of the prevailing theories of economics argued, people did not carry their preferences and wants in 'a suggestion-proof container': Wants were products of a social process conducted by the 'whole interacting social mind' (Dickinson, 1919, pp. 407–408). Additionally, in the 1920s, regulatory agencies began to take notice of the psychological factors that were allegedly influencing the fluctuations of prices in the markets. As noted in a report on the grain trade drafted by the Federal Trade Commission (FTC) 'the psychological effect of the character of the market' should not be disregarded when looking for the causes of price discrepancies in the futures markets, and neither should the 'psychology of the exchange members' (Federal Trade Commission, 1922, pp. 244–245). It was believed that crowd psychology could and did amplify movements in the prices in futures markets and it was furthermore believed that some speculators deliberately traded on the crowd psychology-induced price fluctuations. The regulatory agencies used crowd psychology to describe these unfounded oscillations in prices and on this basis outlined the possibilities for regulatory intervention. There were different reasons why some economists and regulatory agencies such as the FTC and the Grain Futures Association (GFA) thought that psychology ought to be recognised as an important factor in financial markets. In the following, I focus on the two primary and most clearly articulated reasons.

The first reason why market psychology had to be taken seriously by regulators of futures markets was because of the alleged suggestibility of certain investors and speculators, which made them more prone to getting swept up in irrational crowd behaviour. The discussion of suggestibility was related to the aforementioned social psychology-informed critique of economics that overlapped with a decades-long debate about 'speculative competence' (see Chapter 3). Apart from being understood as the ability to understand and analyse the technical and fundamental conditions of the markets, speculative competence had developed into an umbrella term under which immeasurable and delicate factors such as temperament, experience and tendencies (to imitate, herd etc.) were subsumed (Cowing, 1958, pp. 20–21). Suggestibility was often seen as a direct outcome of speculative incompetence, which, again, was intimately associated with the public. The second reason why psychology in the markets should not be overlooked was that certain 'destructive' speculators were allegedly exploiting and trading on crowd psychology in the markets. The speculative practices of these market actors were believed to elicit unwanted irrational behaviour in other actors, setting in motion veritable cascades of buying or selling. Regardless of the way in which psychology was introduced in the financial market discourse, it always brought about discussions of and reflections on public participation and the problems that corresponded with it.

Suggestibility, competence and amateurism

One of the central questions that made discussions of competence in conjunction with collective psychology pertinent was the question of suggestibility. Did people have set preferences, or were they partly or completely shaped "for them" by the environment? A related and equally important question in connection to this concerned whether different groups possessed different degrees of suggestibility, i.e. if the social or economic class that the individual adhered to was determining the degree of suggestibility. Economist John Maurice Clark, the son of one of the first American neoclassical economists John Bates Clark, advanced the argument that people's wants and desires and consequentially their decisions were informed by stimuli from the 'system' that the individual 'happens to be born into' (Clark, 1918a, p. 11).[124] Thus, what studies in social psychology had made Clark realise was that every economic actor was embedded in a context that moulded her or him through social and inter-psychological processes of imitation and suggestion.

Since suggestion was, Clark argued, such a strong force in economic life, he thought that economics was in need of a 'theory of economic guidance' that could provide a more accurate picture of how wants were directed. In the second of a double-article in *Journal of Political Economy* titled 'Economics and Modern Psychology II. Constructive statement: Outline of the Theory of Economic Guidance' (1918b), Clark took it upon himself to draw out the contours of such a theory of economic guidance.[125] Although all

[124] In the same vein as his predecessor Mitchell, Clark believed that the assumptions about human agency inscribed in the then prevailing theories of economics were far too detached from the realities of economic life. Rather than manufacture their own abstract assumptions, economists should, he proposed, borrow them from competent colleagues in other fields such as psychology and sociology (Clark, 1919, p. 290). Clark argued, almost as an echo of Mitchell, that '[i]f the economist borrows his conception of man from the psychologist, his constructive work may have some chance of remaining purely economic in character', and she or he would not end up resorting to self-made 'bad psychology' (Clark, 1918a, p. 4). In order not to fall into the trap of producing bad psychology, Clark resorted, as Mitchell had done before him, to authorities within the fields of sociology, psychology and social psychology such as William James, McDougall and Charles Horton Cooley, all of whom were to some extent influenced by Tarde's imitation-suggestion theory (see Leys, 1994).

[125] The outline included a general outline of generic factors that, one way or another, had an effect on economic choice-making as well as an outline of a detailed analysis of specific groups (Clark, 1918b, pp. 159–160). The general processes that played a guiding role when individuals were to make economic choices were (1) '[d]eliberative action in deciding whether or not to act on a stimulus presented from outside'; (2) '[h]abit, custom, imitation'; (3) '[i]deo-motor action and suggestibility'. Each of the three parameters for choice-making had a string of sub-categories explicating each parameter under certain circumstances. Deliberate action was, for instance, conditioned by the information available as well as the ability to be calculative on the basis of the

individuals were habituated by the social and cultural 'system' in which they adhered, some people were, Clark assumed, better at controlling their 'vulnerability to suggestion' (Clark, 1918a, p. 25). Clark believed that the less intelligent people were, the more suggestible they tended to be. This was the case with people about whom Clark attached the unflattering label 'sub-normals', which he used to refer to persons who were intellectually inferior to the 'average or typical citizen' (Clark, 1918a, pp. 28–29).[126] As Clark's outline of the factors guiding 'free' economic choices implied, it was not exclusively the intellectually inferior persons who were vulnerable to suggestion.

One of the specific groups under scrutiny in Clark's outline was investors. The most challenged subgroup in this category was the small investors. Small investors had, in

information that existed. Calculability and individual ability were thus intimately connected conditions that had to be in place in order for the individual to make sound economic judgements. Moreover decision-making was, according to Clark, also often a case of (self-)imitation (conscious mimicking of former, successful, choices) or a result of the individual's habituation and the prevailing customs of the specific context. However, the ideo-motor action did not derive from reasoning but from an unconscious suggestion that provoked some sort of reflex (Clark, 1918b, p. 151).

[126] Similar to Clark, yet in a broader socio-economic perspective, the economist John Atkinson Hobson stressed that people were suggestible and inclined to imitate. He also commented that those inclinations were more pronounced in specific classes in society. Hobson explicitly drew on Tarde's 'psychology of imitation' in order to explain how inventions and innovations proliferated in society. In *Work and Wealth: A Human Valuation* (1914), Hobson analysed and utilised Tarde's notions of invention and imitation, as well as the dynamic relationship between the two notions that Tarde had formulated in *The Laws of Imitation* and elaborated upon, in the context of economic life, in *Psychologie Économique* (Lepinay, 2007; Tarde, 1902a, 1902b, 1903). Hobson thought that imitation was an inborn faculty of man. He believed that 'suggestion', 'infection', 'contagion' and 'conscious imitation' or any combination of those 'forces or habits' constituted 'the social nature of man' (Hobson, 1914, pp. 40–41). Furthermore, Hobson argued that some groups of people or classes imitated more than others. The imitators were, in Hobson's opinion, the lower classes, and those who were imitated were the leisure class. Since imitation, according to Hobson, intensified as it spread throughout the social strata, those who were imitated had a tremendous influence on the social as such. The vices of the leisure classes would, Hobson thought, become even more socially and morally corruptive vices of the lower classes due to the gradual intensification of imitation. Using gambling as an example of a vice of the leisure class, Hobson asserted that 'the defects in the standard of the upper few will, by imitation, be magnified as well as multiplied in the lower standards of the many'; he also noted that 'imitation becomes progressively worse as it descends, poisoning the life and consuming a larger proportion of the diminishing margin of the income of each class' (Hobson, 1914, p. 141). The idea that vices allegedly became more intense as they trickled down from the upper classes of society to the lower was also something Tarde stressed in *The Laws of Imitation*. 'Drunkenness' was, according to Tarde, a type of 'mania', which began as a privilege of the upper classes but infected the lower classes over time. As it did, Tarde noted, it tended to 'raise the folly of the masses to the highest pitch' (Tarde, 1903, pp. 231–232, n. 1).

Clark's opinion, difficulties with analysing financial reports and calculating prospects. These difficulties were partly due to the lack of skill and experience, but they were also due to the fact that the financial information that the small investors could obtain was limited. The financial information communicated in the reports was sparse because the small investors did not have the authority to demand accurate information and because there were market actors who profited from concealing commercial facts from competitors (Clark, 1918b, pp. 159–160). Since the small investors were allegedly unable to understand and thus analyse financial reports, they were ostensibly more likely to follow the lead of others, i.e. to imitate, which necessarily made them malleable. Although Clark did not elaborate on the more general market consequences of small investors' lack of self-guidance, he did note that it reduced the individual small investor's ability to judge the safety of investments (Clark, 1918b, p. 159). Hence, trading in financial securities was perceived as a particularly risky practice when undertaken by small investors.

The risks associated with unsafe investing or speculation, especially among certain groups, was a topic that also interested the renowned Yale Professor of Economics Irving Fisher. Fisher is perhaps best known in the wider public for stating, in the early autumn of 1929, that '[s]tock prices have reached what looks like a permanently high plateau' (Fisher in Galbraith, 1975, p. 95). Yet, some years before his erroneous prediction, Fisher had noted that there seemed to be a relation between bad speculation practices, herding behaviour and financial market panics and crisis. In the text 'Useful and Harmful Speculation' from 1924, Fisher argued that '[a] chief cause of crisis, panic, runs on banks, etc., is that risks are not independently reckoned, but are a mere matter of imitation' (Fisher cited in Brenner and Brenner, 1990, p. 98). He furthermore asserted that speculators tended to act like sheep and follow a single leader.[127] These claims about

[127] At first, it might seem odd that Fisher, whose economic ideas were shaped in the image of neoclassical economic theory, spoke of widespread imitation and herd behaviour among speculators. However, besides being a lauded economist Fisher was a eugenicist. (He was the first president of the Eugenics Research Association.) Having been a student of the prominent social Darwinist and the first Professor of Sociology in America William Graham Sumner, as an undergraduate at Yale, Fisher had been inoculated with social evolution theory, eugenics and degeneracy theory from early on in his career (Aldrich, 1975, p. 35). Fisher believed that the world

the possible consequences of what Fisher termed 'harmful speculation' echoed arguments about the adverse consequences of public participation in markets that had been advanced, particularly in popular and practitioners-oriented financial writing, for at least a couple of decades. What had changed, it seemed, was that it was no longer exclusively providers of financial advice, with all the strategic and self-interested reasons they might have had, who turned to (collective) psychology for means to describe and explain certain market phenomena. By turning to psychology while adhering to the idea of a class-structured financial market, economists such as Clark and Fisher (and Mitchell and Taussig in the previous decade) reproduced the, in the popular and practical discourses, already well-established idea that the inexperienced were psychologically unfit to invest properly and that they constituted an inferior class in the market, i.e. the market public or crowd.[128]

The how-to literature discussions of suggestibility and the competence-level of different classes of market actors often coincided with reflections on the real increase in the number of investors and speculators caused by the immensely successful Liberty Bond campaigns of WWI (as mentioned in Chapter 3). When looking back on the excessive speculation during and shortly after WWI, several financial writers argued that

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was divided into two classes: the educated and the ignorant (Leonard, 2008, p. 218). This divisive view of society also shaped Fisher's thought on the economy: An example was his tripartite explanation of income distribution in which 'time preference' constituted one factor, 'ability' another and 'the innate inferiority of the lower classes and coloured races' a third (Aldrich, 1975, p. 36). Fisher believed that the classification of people on the basis of innate mental and racial abilities also necessarily applied to the financial markets. Thus, imitation was more prevalent among the less qualified or less mentally evolved market actors. Fisher's thoughts on eugenics were informed by the work of notable scholars in American social psychology who also had an affinity for race theory. In his presidential address to the Eugenics Research Association in 1921, he drew on the ideas of William McDougall and Edward Ross (I. Fisher, 1921, p. 224, 227). The question of race, eugenics and social control in relation to the economy was also of interest to Clark (Clark, 1918a).

[128] Financial writer and lecturer at Columbia University Albert W. Atwood was one of the exponents of the idea that certain groups in society were ill-fitted for speculation. In the how-to book *Putnam's Investment Handbook: A Stimulus and a Guide to Financial Independence* (1919) Atwood argued that the problem of speculation was the 'unskilled amateurs […] whose minds are easily influenced, whose judgment is feeble, and who allow anxieties to prey upon them' (pp. 291–292). These unskilled people were, Atwood emphasised, more easily influenced by 'mob psychology' than the experienced and professional speculators, who were, he insisted, however not immune to such influences but at least more resilient (Atwood, 1919, p. 303).

the mass investment in war bonds contributed to the increased prevalence of speculation that came to define the 1920s. Although war bonds were seldom purchased with an eye to speculation, some thought that they ignited desires to speculate on a part of the public that was more or less completely unfamiliar with the workings of financial markets. In the how-to book *The Stock Market Investor* (1923), insurance underwriter Harold J. Aldrich stated that the speculative public were bound to commit a 'hopeless combination of errors' of which blindly following the crowd was the most disastrous (pp. 81–82). '[W]ith the nationwide distribution of Liberty Bonds that took place from 1917 until the end of the War,' Aldrich noted, 'millions of people for the first time were imbued with the thought that bonds and stocks offered opportunities to those of limited, as well as to those of unlimited, means' (Aldrich, 1923, p. 6). As Aldrich argued, the public tended to slip from government bonds into 'the field of miscellaneous securities' and from there into despair (Aldrich, 1923, p. 6). In some accounts, the successful Liberty Bond campaigns were even singled out as one of the main reasons why markets were becoming ochlocracies where amateurism rather than professionalism reigned.[129]

[129] Aldrich was not alone in discussing the consequences of the increased public participation directly or indirectly caused by the Liberty Bond campaigns. A how-to book author who wrote under the pseudonym 'Don Guyon' argued, before the war had even ended, that speculation had become increasingly popular during the war years. In *One-Way Pockets: The Book of Books on Wall Street Speculation* (1917), Guyon encouraged his readers to trade contrary to a market public that had seemingly grown increasingly ignorant during the first years of the war (p. 63). In one of his market letters Gibson recalled that the war years had produced a large number of 'amateurs' who were 'woefully lacking in knowledge of either the economic situation, the psychology of the crowd, or the machinery of the market' (Gibson, 27 January 1922a). In one of his lesser known publications, *Faith, Fear and Fortune: Why We Have Booms and Depressions. Must We Endure Them Again?* (1934), psychologist and marketing researcher Daniel Starch pointed out, more than a decade later, that the 'speculative fever' that had 'cracked the thermometer in 1929' (Starch referred to the stock markets as 'thermometers' as well as 'psychometers' that measured what he called 'America's psychological temperature') was caused by crowd psychology. However, the 'gems of the malady', he stressed, were planted with the successful war bond drives (pp. 68–69). 'Liberty Loans and Victory Loans', Starch argued, 'introduced the idea of investments to millions of people who previously had been content to keep their surplus funds in savings banks, building and loan associations, or real estate' (Starch, 1934, pp. 68–69). He believed that introducing the broad public to investing in the financial markets made the 'proverbial snowball' of mass psychology roll and gain speed and size during the 1920s (Starch, 1934, pp. 67–68).

As I will discuss in the following and final section of the chapter, the real increase in seemingly minimally qualified small speculators was recognised by federal regulatory agencies (the FTC and the GFA). These agencies reiterated the diagnosis that public participation was a central factor that contributed to the creation of artificial price discrepancies in the commodity futures markets. Crowd psychology was, however, not only considered a problem because of the mere presence of a still larger group of suggestible market actors. It was also a problem because some speculators allegedly took strategic advantage of the psychology of the crowd when trading. Besides being a problem expressed in extreme and unfounded movements of prices, crowd behaviour was also something that certain speculators tried to incite in order to artificially cause imbalance in the markets.

The psychology of speculative practices in futures markets

> A fundamental reason for doubt as to the effect of a futures market in general in checking wide price variations is the large importance of group psychology or "mob mind" in the determination of prices in the futures market. The facility with which future trading can be entered upon by anyone means that a large number of traders are ill informed and neither commercially nor financially competent. If their hopes and fears do not themselves drive the market to extremes, their inability to protect their trades adequately may furnish material for increased reaction as soon as anything happens to disturb the equilibrium of the market. (Federal Trade Commission, 1926, vol. VII, p. 238)

With these words, the FTC described what they called the 'psychological factor' in the futures markets. Crowd psychological effects on price formation were, as stated, directly connected to the presence of ill-informed and incompetent traders. Once again, public participation and irrational crowd behaviour were depicted as entangled.[130] The 'large

[130] It should be noted that futures markets were easier to access for people of modest means than was, for example, the stock market. Entry costs were comparatively lower and so were the general capital requirements due to the structure of the futures contracts and the way the contracts were bought and sold. The participation by people assumed to be financially and commercially unfit for trading was, for these reasons, an often-discussed topic among financial writers, economists and regulators interested in futures markets (Parker, 1911, pp. 152–153; Weber, 2000, pp. 347ff.).

importance of' crowd psychological effects on the formation of prices in the futures market was identified by the FTC as the problem, while the presence of under- or unqualified traders was considered the cause. As noted in the report, the psychological factors generated doubt as to whether or not futures markets were effective, which could potentially delegitimise or at least blemish the reputation of the business carried out in the exchanges – in this case, futures trading in the commodity exchanges. Besides destabilising prices in the futures markets, the crowd of unqualified traders thus contributed to a questioning of the idea of the futures trading as an effective form of financial transaction. The actions of these underqualified market actors were, as stated in the report, likely to drive the markets to extremes.

By singling out the ill-informed and incompetent as disturbers of the market equilibrium, the FTC reiterated a decades-old critique of public and popular participation in financial markets (see Chapter 3). The critique of public participation was most often articulated in discussions of futures trading specifically due to the fact that futures trading had, as mentioned, eased the access to the markets. As I briefly touched upon in the previous chapter, Max Weber had raised similar concerns about the inclusion of the public in futures trading in the 1896 pamphlet 'Commerce on the Stock Exchange'. Although Weber described futures trading as a 'technically perfect' form of business, he simultaneously emphasised that it had some adverse effects (Weber, 2000, p. 347, 363, 366). The main and most severe side effect of futures trading was, according to Weber, that it raised 'the participation of poorly-prepared persons in the business of speculation' which increased 'the public's mania for gambling and opportunities to satisfy that mania on the exchanges' (Weber, 2000a, p. 364).[131] Just as Weber had done in the late

[131] Although Weber admitted that there were problems associated with futures trading, he insisted that the adverse effects of futures trading should not be overestimated. The side effects of futures trading were, Weber claimed, not as dire as, for instance, the negative consequences of regular 'cash-and-carry' trading when conducted by the speculating public (Weber, 2000a, p. 364). Speculation that required cash investment was, Weber stressed, 'far more dangerous to them [the public] than the speculations in futures trading'; he also stated that '[o]ne must guard against believing that by doing away with *futures trading* one is doing away with *speculation*' (Weber, 2000a, p. 364, italics in the original).

nineteenth century, the FTC reiterated that the public constituted a destabilising factor that created doubt as to whether or not futures markets were indeed effective.[132]

Thus, the psychological factor in the futures markets, as discussed in the FTC report, revealed a single problem that had market-internal and organisational dimensions. The problem was, as shown, the disruption of market order that questioned the alleged efficiency of futures markets. The *market-internal* aspect of the problem was that 'mob mind' and 'group psychology' disrupted the idea of market efficiency. The *organisational* aspects of the problem concerned the structure of the futures markets that allowed for the commercially and financially unfit to take part in the trading of futures. It is evident that these two aspects were, according to the FTC report, inextricable from one another. The imbalance caused by irrational crowd behaviour was reflected in and connected to an imbalance in the composition of market actors. There was, however, also a third way in which the problem of unfounded price disparities and extreme market conditions were addressed from the regulatory agencies' point of view. This third aspect of the disruption of futures markets concerned *speculative practices* rather than speculative competence.

In 1925, a commission under the GFA was instructed to conduct a special investigation into some extreme fluctuations in the price of wheat futures at the Chicago Board of Trade (CBOT), which took place during the early months of 1925 (Grain Futures Administration, 1926, pp. x–xi). The comprehensive report concluded that the fluctuations were 'largely artificial and were caused primarily, either directly or indirectly, by heavy trading of the part of a limited number of professional traders' (Grain Futures

[132] In another FTC report on the grain trade, published in 1920, the distinction between professionals and amateurs was made apparent in a characterisation of the scalper. The scalper, professional or amateur, was defined (in yet another FTC report) as 'a man that buys in the market to resell in the market' (Federal Trade Commission, 1922, p. 252). The 'outsider' who aspired to emulate the professional scalper and make quick profits was described as someone who was 'dabbling in the market' without actually knowing what she or he was doing. It was further stated that the outsider 'does not know the rules of the exchange'; 'studies nothing but the quotations'; 'does not contemplate the requirements of any sort of possible developments three months or six months ahead' (Federal Trade Commission, 1920, p. 306). What is interesting about the characteristics is that the outsider, i.e. the amateur, was more or less described as the antithesis of the professional scalper: The latter represented market order and stability, while the former represented extreme and unstable market conditions.

Administration, 1926, p. 1). In explaining how these artificial fluctuations had come about, the GFA divided the speculative practices conducted in the Board of Trade into two categories and pointed to one of the two as the cause of the calamities. The GFA furthermore identified the two types of speculative practice with two types of speculators: the *constructive* type and the *destructive* type. Speculators of the constructive type were '[t]hose who trade on the basis of rational appraisement of present and prospective conditions affecting supply and demand, without at the same time trading in a manner or with aids designed to augment or artificially hasten the market results expected' (Grain Futures Administration, 1926, p. 5). These were speculators who analysed and traded on fundamentals. Contrarily, the destructive speculators were '[t]hose who trade largely on the basis of mob psychology and faith in their ability through heavy trading to bring about temporary market conditions of which they may take advantage to make profits' (Grain Futures Administration, 1926, p. 5).

It was stated in the GFA report that the limited yet financially powerful group of destructive speculators created a 'technically weak market condition' by buying or selling great volumes during individual trading days. Although the tactics had not been profitable in every case, they caused major price changes and created imbalance in the entire market (Grain Futures Administration, 1926, p. 5). What amplified the consequences of these 'unfair tactics', as the then president of the CBOT termed them, and made the artificial fluctuations erratic was the alleged 'reckless participation by the general public' (Grain Futures Administration, 1926, pp. 6–7). Although the trading behaviour of the general public was identified as 'reckless', the authors of the report were undecided about whether the recklessness had been intentional. Whether 'consciously or unconsciously', as it was phrased in the report, the public assisted the manipulative endeavours of the destructive speculators (Grain Futures Administration, 1926, p. 6). The goal of the destructive speculators was to incite public buying or selling – i.e. to create a crowd psychological snowballing effect and attempt to profit from the disturbances that it created.

The destructive speculators who had, according to the GFA, disrupted the futures markets in 1925 by trading on the basis of mob psychology had allegedly been aware that their market interventions would incite a chain reaction on the part of the public. The GFA report's description of the asymmetrical and non-reciprocal connection between the destructive speculators and the reckless public is comparable to, e.g., Le Bon's description of the connection between the crowd leader and the crowd in *The Crowd* or his similar critique of the uneven relationship between cosmopolitan financiers and the masses in *The Psychology of Socialism* (see Chapter 2). Furthermore, it echoed descriptions of market manipulation found in the how-to literature, in which the gullible and hapless public was inevitably victimised. The idea that the majority of market actors could rather easily be moved by a minority of professional speculators proliferated across discourses on markets and speculation. The FTC and GFA thus adopted if not a caricatured then at least a stereotyped idea of the public, which carried reminiscences of the contempt for the masses given its implication that mental inferiority and susceptibility were higher in lower levels of society.

That economists and regulatory agencies began to resort to crowd psychology and crowd theory terminology in attempts to describe and explain the probable causes of certain forms of seemingly irrational market behaviour and occurrences of unfounded fluctuations in the market prices was a token of the extent to which ways of thinking about markets had been permeated by psychology (and, in particular, the precepts of crowd psychology). Regulatory agencies and economists alike utilised a vocabulary and theoretical terminology that were partly offered by the increasingly popular scholarly field of social psychology and partly by the market discourse, which was, as I have shown in the first part of the chapter, to a still greater extent informed by psychology. Much like the psychology of crowds had served crowd theorist such as Le Bon and Sidis (and later a sociologist such a Park) as a socio-psychological prism that reflected social unruliness, instability and crisis, the precepts of crowd psychology provided economists and regulatory agencies with a vocabulary and a set of ideas with which they were able to respond to irregular behaviour and problems of destabilisation in the markets.

Conclusion

What the exhaustive late nineteenth and early twentieth century debates about the role of the public in investment and speculation and the derived negative characteristics of small investors and speculators seemed to have fostered was the idea that an ignorant, inexperienced, incompetent and gullible majority were actively influencing the course of security prices in financial markets. In this chapter I have shown how these debates fed into and gave shape to different discourses on financial markets and speculation. The psychologisation of the market discourse, as I have called it, was not solely found in the practical how-to book but was also discoverable across genre boundaries. In economics, sociology and even in reports by regulatory agencies, crowd psychology was being taken seriously and considered an unavoidable factor that influenced the behaviour of traders and the formation of prices in the financial markets. Social and crowd psychology provided a reservoir of ideas and a vocabulary that helped how-to book authors, financial journalists, academics and regulators to identify and respond to pertinent questions about the functioning of markets, such as these: What causes prices to move in a market? What makes market actors occasionally part with reason? Who causes market instability and how do they do it?

As an increasing number of observers of finance became preoccupied with the psychology of markets – in particular, in the how-to literature – increasing emphasis was, as I have shown, placed on the allegedly incontrollable temper of the public and the irrationality that allegedly underpinned their actions. Consequently, psychology became at once *explanatorily*, *descriptively* and *prescriptively* relevant in the analysis of financial markets. More specifically, psychology and especially crowd psychology offered (a) a particular vocabulary for describing public investment decisions; (b) a default explanation of seemingly unfounded market movements; (c) a prescriptive basis on which most speculation and investment advice on how to exploit market movements was formulated. Instead of embarking on the Sisyphean task of filling the knowledge and experience gap between the amateur and the professional, authors of how-to books suggested that amateurs adhere to the realm of what was allegedly possible by focussing their energy on *not* falling victim to waves of public sentiment. Self-preservation and mental fortification thus became central focus areas in the how-to literature. As I will further explain in Chapter 5, it became increasingly relevant to be attentive to the ambiguous relationship between the self and the crowd. Identifying how and when prices were driven by crowd psychology while steering clear of the rationality-impairing emotional contagion in the markets was increasingly being considered the recipe for successful speculation. The strong emphasis on crowd theory and crowd psychology in the how-to genre in the 1920s and 1930s laid the foundation for the popularisation of the so-called 'contrarian approach', which constitutes the primary object of inquiry in the following chapter.

Chapter 5: The contrarian market philosophy

> To ease and allay the fears of the mob, it is often necessary to act in an abnormal manner – often to disobey economic imperatives.
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> Robert L. Smitley, *Popular Financial Delusions*, 1933, p. 278

On 20 December 1916, while World War I was raging in Europe, the illustrious American financier Bernard Baruch sold thousands of shares of United States Steel in a daring yet, as it turned out, successful speculative operation. On the following day, President Woodrow Wilson issued a 'peace note' in which he requested the belligerents to state their peace terms. The peace note had an immediate effect on the stock market, where traders started selling at a rapid pace. As the dust settled, Baruch had allegedly made a substantial profit from his short-selling operation (Baruch, 1960, p. 28). In the days that followed, stories appeared in national newspapers connecting Baruch to a suspected 'leak' from the White House to Wall Street. To the press and the public, it did not seem likely that an immensely well-connected speculator like Baruch coincidentally happened to make a big sale shortly before the President's call-to-peace sent stocks plummeting. The fact that Baruch was, in addition to being a speculator, an economic advisor to the Wilson administration only made it easier for journalists, politicians and the public to pass judgement (Baruch, 1960, pp. 26–33; Grant, 2012, pp. 145–155; Hill, 1917).[133]

The accusations led to a Congressional hearing in Washington, where Baruch delivered a testimony denying that he had traded on the basis of a leak from the White

[133] The President had appointed Baruch to the position of chairman of the Metals and Raw Materials Purchasing Committee of the Advisory Commission of the Council of National Defence in 1916 (Baruch, 1960, p. 25). Baruch's double role had not been a problem until the 'peace note' debacle started to unfold. The accusations of insider trading were made by the Boston business man turned muckraker journalist Thomas Lawson whose colourful exposés of alleged fraudulence in high finance, published in the segment 'Frenzied Finance' in *Everybody's* magazine (running for almost three years between 1904 and 1906), had made him famous among the American public and infamous among many finance professionals (Grant, 2012; Zimmerman, 2006, pp. 82–83).

House. Though Baruch was exonerated of all accusations of insider trading, it was only after he had been vilified in the people's court due to the stories in the newspapers. From the stand, Baruch explained that paying attention to rumours had never been part of his investment practice. What he did instead was to carefully read the newspapers in order to grasp 'the psychological effect of the news' on the public, which would give him an indication of where the markets were heading. Baruch testified that the news had hinted of the possibility of peace prior to the issuing of the peace note and sensed that a 'public uneasiness over stocks' was brewing – an uneasiness that he anticipated would cause the market to drop (Grant, 2012, p. 152; Hill, 1917, pp. 599–600). Hence, as part of his approach to stock trading, Baruch tried to anticipate price movements by reading the psychology of the public.

Some sixteen years later in the fall of 1932, while the repercussions of the 1929 crash still felt insurmountable, Baruch wrote a foreword to a reissuing of MacKay's *Memoirs of Extraordinary Popular Delusions and the Madness of the Crowd, vol. I-II*. In the opening sentence, Baruch boldly stated that '[all] economic movements, by their very nature, are motivated by crowd psychology' (Baruch, October, 1932, p. xiii).[134] The 'market-madness' that had led to the disastrous crash of the U.S. stock market in October 1929 was, in Baruch's view, a paradigmatic example of this intimate relationship between impulsive 'mass action' and price fluctuations in the stock market (Baruch, 1932, p. xiv).[135] The excessive speculation of the late 1920s thus confirmed Baruch's belief that

[134] The significance of Baruch's foreword to MacKay's *Memoirs of Extraordinary Popular Delusions* in relation to crowd psychology in financial markets is also recognised by Stäheli (2013, pp. 98–99) and Robert Menschel (2002, pp. 37–39).

[135] In the second part of his memoirs, titled *Baruch: The Public Year* (1960), Baruch explained how he had sensed that the maniacal speculation and continuous rise in prices, dominating the U.S. stock market in the late 1920s, could not be sustained but would eventually result in a collapse (pp. 221–224). In the preceding volume, *Baruch: My Own Story* (1957), Baruch described how he was introduced to MacKay's *Memoirs of Extraordinary Popular Delusions* in the early 1900s (by the financial journalist John Grant Dater) and implied that reading it had made him aware of the danger signals with regard to such events and thus enabled him to anticipate what was about to dawn on the U.S. stock market towards the closing of the 1920s (pp. 242–245). However, what Baruch failed to mention in his memoirs was that he actually made a conflicting prediction in the summer of 1929. In the June 1929 issue of *The American Magazine*, Baruch was quoted saying that he was predicting a great forward movement in the global economy. He later made a turnaround of his own June

'graphs', 'business ratios' and even 'theories of economics' could not stand alone if one wanted a cohesive understanding of economic movements: Crowd psychology simply had to be acknowledged as a vital component of every market analysis (Baruch, 1932, p. xiv).[136] The American economist William Howard Steiner went a step further than Baruch by arguing that due to the alleged fact that the majority of market actors based their decisions on impulses rather than reason, the professional speculator would be better off simply substituting 'reasoned analysis of values' for studies of 'mob psychology' (Steiner, 1933, p. 429). Introducing crowd psychology in market analysis was Steiner's and Baruch's response to a market that did not seem to abide by conventional economic laws. While Baruch believed that crowd psychology could positively supplement economics and compensate for some of the latter's shortcomings, Steiner seemed to have thrown in the towel on behalf of his own discipline by simply repudiating the relevance of reasoned analysis of the financial markets. Hence, the crash had cast doubt as to whether the prevailing theories of economics – the theoretical bedrock of financial markets – were sufficiently able to describe and explain the functioning of as well as anticipate developments in a market that had proven, at least during the 1920s, to be completely unpredictable and seemingly malfunctioning.

Similar responses to a seemingly malfunctioning financial market were found in abundance in the how-to genre. Advocates and the so-called 'contrarian approach' applied the dictums of crowd theory to market phenomena in order to describe the behaviour of speculators and essentially the movements of prices in the markets. Besides being adopted as a descriptive tool, crowd theory had a prescriptive role in the contrarians' investment strategies. Contrarian approaches to investment and speculation

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prediction and offloaded his shares before the bottom dropped out of the market (Galbraith, 1975, pp. 95–96; Grant, 2012, p. 231).

[136] To Baruch, crowd psychology served as an indicator of future market fluctuations and as a means to make sense, *post facto*, of particular seemingly nonsensical occurrences in the market. In addition, he used crowd psychology as a compass of market conduct: It enabled him to navigate in the market with crowd action constantly in mind, yet without unknowingly and unwittingly falling victim to crowd psychology. In a memo dated 1930, Baruch reminded himself neither to 'go against the mob' nor to 'go with it in it's excesses' but to always remain 'fearful of too much company' (Baruch in Grant, 2012, p. 245).

became prevalent in how-to books during the 1920s, but, as I have shown in Chapters 3 and 4, authors of how-to books had presented counteracting popular trends in the markets as viable strategies since the late nineteenth century. However, it was only after the crash that the contrarian approach was formalised as the 'theory of contrary opinion' by the autodidact 'socio-economic journalist' Humphrey Bancroft Neill (Schultz and Coslow, 1966, p. 325).[137] Neill had been active in Wall Street as an investor and investment consultant in the late 1920s before turning to financial writing in the beginning of the 1930s, which was also the time when he began to reflect upon the virtues of contrarianism. The wild speculation in the late 1920s and the subsequent crash had made an indelible imprint on his perception of the markets. Neill retrospectively claimed that the events had imbued him 'with the spirit and practicality of 'contrary opinion'' (Mintz, 1994, pp. 99–103). In today's financial markets, the term 'contrarian approach' covers a range of strategies which more or less share the same basic motivation: namely, to 'trade in the opposite direction of the trend in prices or market sentiment' (Poitras, 2011, p. 509).[138] To Neill and other likeminded financial writers, the contrarian approach was more than simply an investment strategy. It represented a way of thinking and carrying oneself as a person, which was not confined to the financial market realm. Hence, it emphasised that being or becoming successful in the financial markets required a certain mental disposition as well as a certain worldview. The contrarian approach was, I will argue, an investment philosophy informed by dogmatic

[137] According to the *Oxford English Dictionary*, Neill coined the noun 'contrarian' in *The Art of Contrary Thinking* (1954), a book he dedicated to 'Contrarians and Libertarians everywhere'. Though the term 'contrarian' was not used until 1954, the ideas that shaped the investment philosophy were as I show in this chapter. I choose to use the term as a label for the rather heterogeneous group of financial writers whose contrarian impetus was reflected in their how-to books, market letters, pamphlets, articles etc.

[138] In contemporary finance literature, 'contrarian strategies' are often defined as strategies that are 'contrarian' to 'naive' strategies that other investors follow. Contrarian investors and speculators assume that naïve or 'noise' traders overreact to either good or bad news, which leads to their overbuying or overselling. As a result of the excessive buying or selling, some securities become overpriced, i.e. overvalued, or underpriced, i.e. undervalued. By refraining from investing in overvalued securities while prioritising the 'out-of-favour', 'unloved' or undervalued securities, the contrarian strategies aim to outperform the market (Black, 1986; Chong and Tuckett, 2015, p. 15; De Bondt and Thaler, 1985; Lakonishok, Shleifer and Vishny, 1994, p. 1542).

perceptions of market actors ingrained in the Wall Street vernacular and, in particular, the precepts of crowd psychology.

The contrarian market philosophy has been used as an example or has been more thoroughly analysed in sociological studies of: high frequency trader subjectivity (Borch and Lange, 2016a); crowd dynamics in automated markets (Borch, 2017); mimesis and anti-mimesis in behavioural finance (Borch and Lange, 2016b); crowd irrationality contra crowd intelligence in financial markets (Hansen, 2015); market rhythms in open outcry and automated markets (Borch, Hansen and Lange, 2015); the relationship between individual agency and crowd behaviour among market actors (Arnoldi and Borch, 2007); the notion of semiconscious suggestion and processes in economic life (Borch, 2007); and the 'crowd syndrome' in financial markets (Smith, 1999). Of these inquiries, Urs Stäheli's historical study of the contrarian 'investment school' in *Spectacular Speculation: Thrills, the Economy and Popular Discourse* (2013) is arguably the most thorough and comprehensive (ch. 5, see also Stäheli, 2006). In his study, Stäheli primarily focusses on the self-techniques that the contrarians developed in order for them to stir clear of the mass suggestion and contagion of the 'market crowd' (Stäheli, 2013, p. 148). In describing the contrarians as an 'investment school', Stäheli (perhaps unintentionally) implies that it was a rather unified group of market participants and how-to book authors. However, the broad spectrum of texts I analyse in this chapter suggests that the how-to book authors, whom I subsume under the label 'contrarians', constituted a rather heterogeneous group, especially before the crash. Another implication of viewing the contrarians as a unified investment school can be that some of the differences between the individual approaches to speculation and investment become lumped and diluted.[139]

[139] For example, Stäheli argues that the contrarians thought that the market was a crowd, i.e. a 'market crowd' (Stäheli, 2006, 2013, p. 147, pp. 149–151). If we look at the work of Thomas Temple Hoyne (whose work is, to be fair, not discussed by Stäheli), it becomes clear that he did not think that the market was *a* crowd. Hoyne argued that even though crowds were always in the markets, it was only rarely the case that a single crowd dominated the market (Hoyne, 1922, p. 137). Although understanding crowd dynamics was, in Hoyne's opinion, crucial to the speculator, he simultaneously (as I will get back to later in the chapter) stressed the importance of accounting for the fundamental conditions of the market. The implication of perceiving the market as *a* crowd and not as influenced by numerous crowds is that everything but crowd psychology becomes obsolete to speculators and market analysts. When Stäheli points out that the contrarians were, *en bloc*, not

When studying the contrarians it is necessary to touch upon themes such as self-control, self-mastery and self-reliance, since the shaping of the self was an integral part of the contrarian approach. This means that there is an overlap in terms of focus between Stäheli's study and the analysis I present in this chapter. However, besides focussing on the techniques, strategies and practices formulated by the contrarians, my objective in this chapter is also to explore the emergence of the contrarian approach as a way of thinking about and analysing markets.

The chapter examines how the contrarians selectively adopted basic ideas from crowd theory in order to formalise a strategy that suited a financial market that they believed was greatly influenced by crowd psychology. The chapter is divided into two parts. In the first part, I analyse how-to books published in the 1920s and focus on how ideas from crowd psychology were adopted by how-to book authors in a response to a 'market situation' in which the speculative public were perceived as having a great impact on the fluctuations of prices while, simultaneously, being profoundly disadvantaged.[140] From the crowd psychology precepts, the how-to book authors formulated rules of conduct and offered advice on how small speculators (the constituents of the public) should approach speculation in the best possible way. The overarching purpose of the contrarian approaches that were developed in the 1920s was, I will argue, simply to find ways to 'beat the crowd' or 'beat the market'. The deployment of crowd theory terminology in how-to literature on financial speculation resonated, I further argue, with the popular, psychologised view of the financial markets and the dogmatic perception of the speculative public as inexperienced, incompetent and gullible (see Chapters 3 and 4). In the second part of the chapter, I examine how the contrarian approach became

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the least interested in elucidating the functioning of the financial markets, it only applies to some of the authors who disseminated contrarian ideas in the how-to book format during the 1920s and 1930s (Stäheli, 2013, p. 150).

[140] In this first part of the chapter, I make one exception and include one how-to book that was not published in the 1920s, namely Thomas Temple Hoyne's *Wall Street Remodelling the World* (1930). In the book, Hoyne reiterated and elaborated upon ideas that he had initially formulated in an earlier how-to book, *Speculation: Its Sound Principles and Rules for Its Practice* (1922). Thus, this deviation from the demarcation of the analysed literature has the purpose of providing a more comprehensive account of Hoyne's crowd theory-informed and contrarian-leaned approach to speculation.

increasingly systematised and was turned into a 'market philosophy' in Neill's early writings. I furthermore discuss the overlapping viewpoints of different financial writers who all shared a fundamentally contrarian approach to market analysis and trading. My ambition in this second part of the chapter is to show that the contrarian approach was both a critique of existing investment strategies and schools of market analysis as well as an attempt to turn market psychology into a supplement to existing approaches to market analysis. The post-crash contrarian market philosophy was, I will argue, a response to a collective psychology-void in market analysis that was highlighted by the collapse of the stock market.

The overall argument in this chapter is that the contrarian market philosophy was not developed as a response to a dysfunctional market *per se*. Rather, it was a response to a market in which collective psychology had come to be seen as an indispensable factor in the formation of prices. The stereotyping of the speculative public and the psychologisation of the market discourse, which I described in Chapters 3 and 4, shaped the basis of the contrarian approach and the contrarian views of the market.

Prophylactics against mob mind

As increasing attention was given to the psychological factors that arguably influenced the acts of market participants and consequentially the formation of prices in the markets during the second and third decades of the twentieth century, the number of handbooks offering advice on how to deal with this *psychologised* financial market increased as well (see Chapter 4). In a financial market where the psychology of the crowd (i.e. the public) was considered to be one of the main causes of price fluctuations, becoming acquainted with so-called market psychology was, as some authors of how-to books suggested, a simple way of gaining an edge on those market actors who tended to unreflectively follow market trends. The contrarian approaches to speculation, promoted in a range of how-to books in the 1920s, were in most cases completely based on the precepts of crowd psychology. They reduced speculation to binary relations of either being in or outside of the crowd, having an independent judgement or being a victim of mental contagion from the crowd and, ultimately, being successful or a dupe. The following part of the chapter explores the rules and practices that were supposed to keep the small speculator on the right side of the aforementioned binary distinctions. The examination of these simple contrarian approaches is then contrasted with a discussion of more complex crowd psychology-informed and contrarian-imbued approaches to speculation. A main point of contention between the simple and arguably more sophisticated contrarian approaches was whether or not the fundamental conditions at all mattered to the small-scale speculators and analysts.

On the final page of his how-to book *Beating the Stock Market* (1921), the financial editor of the *Boston Herald* and founder of the Boston-based McNeel's Financial Service R. W. McNeel concluded that successful speculation was 'a problem of self-mastery and self-discipline as much as one of finance' (p. 155).[141] McNeel's view of stock speculation was shared by another financial writer, William C. Moore, who argued that 'special mental equipment' was required in order to win consistently in the game of speculation (Moore, 1921, pp. 37–38).[142] Picturing speculation in financial markets as a *game* that could only be won insofar as the speculator acquired specific competencies and qualities had been quite common in the how-to literature since the late nineteenth century.[143] What both

[141] McNeel's Financial Service described itself as an 'Aristocracy of Successful Investors' and used McNeel's how-to book to advertise the firm. In an investment guide published by the firm, the headline read, 'He made $70,000 after reading *Beating the Stock Market*' (Galbraith, 1975, pp. 67–68).

[142] Moore discussed the prerequisites of successful speculation and how to play the game in his how-to book *Wall Street: Its Mysteries Revealed – Its Secrets Exposed* (1921). In the book's introduction, Moore claimed that he was performing a much needed 'public service' that would help 'fellow men to avoid losses and to make profits in their speculative and investment ventures' (Moore, 1921, p. 5).

[143] The popular history of finance is filled with these game metaphors. For example, Hoyle (whose 'small scale system' of speculation is examined in Chapter 3) compared speculation to the game 'Whist' (Hoyle, 1898, p. 5). A few years later in *Wall Street Speculation: Its Tricks and Tragedies* (1904), Franklin C. Keyes described speculation as a game 'in which the vast majority of the outside public, who tamper with it, go to financial and often to physical and moral ruin' (p. 5). In the small, cartoonish how-to handbook *Playing the Game* (1918), Zebediah Flint described speculation as the 'jolliest, the most fascinating and interesting game in the world' (p. 7). In his popular science book *Man, the Puppet: The Art of Controlling Minds* (1925), the psychologist Abram Lipsky compared speculation to the game of poker in which '[e]ach man had to guess not only the eagerness or

McNeel and Moore saw as the impending risk threatening to obstruct especially the little-experienced speculators' attempts at 'winning' in the financial markets was the mental influence of the crowd. Thus, what the ailing want-to-be speculators were prescribed in McNeel's and Moore's how-to books were what I term, following Edward A. Ross, 'prophylactics against mob mind'. In chapter five of *Social Psychology* (1908), Ross outlined thirteen prophylactics against mob mind. The eleventh prophylactic was labelled 'intellectual self-possession as an ideal' by which Ross meant that in order not to be infected with 'mob mind', people should strive towards 'intellectual individualism' as expressed in the works of writers such as Ralph Waldo Emerson, Henry David Thoreau and Walt Whitman. For persons who possessed 'self-control', '[s]elf-consistency, tranquillity, balance, [and] robust independence', there was, Ross claims, only a minimal likelihood of being subjected to an irrational mental collective such as the crowd (Ross, 1908, p. 90). It was, I will argue, an equivalent to this intellectual individualism that early contrarian voices such as McNeel and Moore somewhat incoherently sought to instil in their readers. Their advice was supposed to function as a guard against the mind-distorting influence of crowd psychology and to ultimately enable the readers to 'beat the market'.

McNeel and Moore were both convinced that the public were fundamentally wrong and encouraged investors and speculators *not* to follow the crowd and instead oppose it. The 'so-called crowd – i.e. *the public*' were, Moore noted, not an assembly of rational individuals but a mass directed by a 'crowd mind' that was an 'unthinking' and thus highly suggestible mind (Moore, 1921, pp. 112–113, italics in the original). 'The mind of the inexperienced in market affairs' was, Moore condescendingly added, comparable to

nervousness of his opposites, but also the probable action of his similar' (p. 108). There were, however, different opinions about whether the market was a game that could be beaten. In *The Psychology of Speculation: The Human Element in Stock Market Transactions* (1926), the financial and fiction writer Henry Howard Harper argued that recipes for 'Beating Wall Street' simply did not work (pp. 8–9). He found 'beating the market-recipes' to be fundamentally paradoxical: If the authors could provide a rather simple step-by-step guide to beating the market, Harper wondered, why they would share their knowledge instead of using it themselves? The 'real secret of the stock market', Harper emphasised, rested with a small group of people who were 'too busy to write, and too rich to feel the need of writing' (Harper, 1926, pp. 9–10).

'that of the nine-year-old child in worldly affairs', and the feeblemindedness of the public was, he assumed, caused by 'unconscious mental suggestion' brought about by brokers' letters, advertisements, newspapers, financial periodical, circulars and rumours (Moore, 1921, p. 47, 114). Hence, the overarching problem seemed to be, in Moore's opinion at least, that the majority of people trading in financial markets were by nature highly susceptible to suggestion due to their alleged inexperience, lack of knowledge and incompetence. McNeel concurred by asserting that it had been scientifically proven in a study conducted by so-called 'war authorities' that the majority of people were prone to follow the crowd. The study had allegedly shown that 'in an average company of men, 20 per cent possess a certain amount of initiative, 60 per cent will follow the crowd, and 20 per cent are cowards by heart' (McNeel, 1921, p. 25).[144] Hence, it was perceived and presented as a (scientific) fact that the majority of people in the markets would not follow their own independent discernment but instead would imitate other people's actions. These were by no means controversial viewpoints in this branch of market literature in which the idea that the public was incompetent, credulous and suggestible had been firmly embedded for a couple of decades at least (see Chapter 3).

Another aspect that McNeel and Moore both agreed upon was that speculation ought to be approached as a zero-sum-game in which someone had to lose in order for someone else to profit. Success in stock trading depended, as McNeel phrased it in simple terms, on 'the dupes [the public] being carried away by their emotions at critical periods of the speculative cycle' (McNeel, 1921, p. 26). Similar to Moore, McNeel assumed that specific personal qualities or special mental equipment were required in order for the individual speculator to be successful in the stock market. He listed five

[144] It was not uncommon to see authors of how-to books estimate the public's inclination to herd in percentages. Without any substantiation whatsoever, Moore advanced the somewhat curious claim that the 'crowd is always 75% wrong marketwise' (Moore, 1921, p. 113). In *The Cycles of Speculation* (1907), Thomas Gibson had claimed that by studying a 'large number of public accounts', he had figured out that '80% of the participators lost money' (pp. 7–8). Years later, the contrarian Garfield A. Drew asserted that '[e]very successful speculator and every student of psychology knows that the mass of people are less intelligent than the few. It has been said that only 5% of the population think for themselves, 10% copy the 5%, and 85% believe what they read and hear, and do what they are told' (Drew, 1948 [1941], p. 170).

personal qualities that the successful speculator possessed and that the speculator who was aspiring to become successful ought to acquire: 'self-restraint, self-control, courage, initiative, and power of independent thought' (McNeel, 1921, p. 26).[145] Speculators' acquiring and exercising of these qualities was mainly important because they shielded the speculators' sound and independent judgement against influences from the mental contagion emanating from the unthinking crowd.

The process by which speculators lost the sound judgement in the stock market was perceived as being identical to the process by which people reacted in different forms of crowds. According to McNeel, by nature people were drawn towards the comfort of the crowd – they preferred companionship over solitude and had an inborn tendency to be gregarious (McNeel, 1921, p. 149).[146] People were furthermore driven by 'instincts', 'inborn tendencies' or 'emotions' (McNeel used all three terms) such as 'unconscious imitation' and 'sympathy', which caused them to 'catch the feeling of others and act in accordance with it' (McNeel, 1921, p. 150). It was, McNeel stressed, the 'contagious enthusiasm' (or depression) of the speculative public that tended to derail them mentally when participating in the markets (McNeel, 1921, p. 153). He described this process in the following way:

[145] Similar lists of qualities of the successful speculator were featured in several late nineteenth and the early twentieth century how-to books such as Hoyle's *The Game in Wall Street, and How to Play It Successfully* (1898), C. H. Thorpe's *How to Invest and How to Speculate* (1901), Samuel Armstrong Nelson's *The ABC of Stock Speculation* (1902), Richard Wyckoff's *Studies in Tape Reading* (1910) as well as Don Guyon's *One-Way Pockets: The Book of Books on Wall Street Speculation* (1917).

[146] People's alleged tendency or instinctual inclination to be gregarious had been a vividly discussed topic in social psychology. Sidis, for example, noted in the third part of *The Psychology of Suggestion* (1919 [1898]) that '[*s*]*ociety and mental epidemics are intimately related; for the social gregarious self is the suggestible subconsciates self*' (p. 310, italics in the original). Later, the British surgeon Wilfred Trotter made an in-depth inquiry into the instinct of gregariousness in his seminal volume *The Instinct of the Herd in Peace and War* (1916) in which he drew on a variety of works by sociologists, psychologists and social psychologists. He mentioned Le Bon's work on crowds and referred to it as 'valuable', yet he engaged more thoroughly with the work of Sidis (Trotter, 1916, pp. 26–28, 42–44). Furthermore, in the same year that both McNeel's and Moore's books were published, Sigmund Freud published his *Mass Psychology and Analysis of the 'I'* (1921) in which he, inter alia, discussed Sidis' and Trotter's work on the herd instinct (Freud, 2004, pp. 71–76).

> As prices rise, as one, then another, and another is drawn into the market, as activity increases and the price movement becomes more violent, hope and optimism and excitement on the part of the many grow, just as fear increases with each additional drop in prices when they are falling. The instincts or emotions of sympathy and imitation, the inborn tendency to act in common with others, urge the purchase of more and more stocks instead of the sale of those already purchased. (McNeel, 1921, p. 152)

The markets were, as presented by McNeel, abiding to the 'laws' of crowd psychology rather than to fundamental economic factors. Only 'intelligent self-mastery' could prevent speculators from succumbing to their innate irrational impulses and becoming one with the hapless public (McNeel, 1921, p. 151).

The contrarian approaches of McNeel and Moore can be condensed to two mutually dependent practices of (a) *self-mastery* and (b) *market analysis*, both of which were fully based on and determined by crowd psychology. The self-mastery or self-shaping dimension of speculation was supposed to fend off mental contagion emanating from the crowd. The market analytical dimension was, in turn, only possible insofar as the individual speculator was able to exercise emotional control and restrain instinctual urges from colouring her or his judgement. McNeel's and Moore's approaches offered rules and advice on how to identify the crowd in the market, remain unaffected by its contagious emotionality and ultimately counteract it. Their contrarian approaches responded to a market they made appear as almost completely driven by the precepts of crowd psychology. Hence, speculation required a calibration of the body and mind to the swings in the emotional state of the speculative public.[147] Additionally, it required what the financial journalist H. J. Wolf referred to as the ability to 'read the action of the

[147] In a chapter devoted to 'The Psychology of speculation' in the how-to book *The Facts about Speculation* (1923), Gibson argued that emotions in the markets – out of which fear was perceived as the most contagious – had the greatest impact on those who had 'no clear ideas as to values and economic prospects' (p. 33). Knowing of and being able to detect the contagious emotions governing the public in the markets was, according to Gibson, the best possible way to identify the right time to buy, sell or keep out of the market.

market', which involved reading the 'psychology of the public' (Wolf, 1966 [1924], p. 29).[148]

I mention Wolf, because his work represents a strict rule-following approach to speculation that had certain overlaps with McNeel's and Moore's approaches. In his how-to books *Studies in Stock Speculation I–II*, Wolf offered a range of rules speculators ought to follow and market laws they had to acknowledge and/or abide by.[149] One of

[148] The basic rule that the trader, according to Wolf, should try to adhere to was *not* to get caught on the wrong side of the market together with the public. '[T]he correct way to trade' was, he argued, 'to study the methods of the public and do the reverse' (Wolf, 1966, p. 39). Wolf's contrarian approach was shared by William D. Gann, who stressed, in *Truth of the Stock Tape: A Study of the Stock and Commodity Markets with Charts and Rules for Successful Trading and Investing* (1923), that '[f]or a trader to succeed, he must study human nature and do the opposite of what he finds the general public does' (p. 11). The main problem of the public was, as financial writer Morrell W. Gaines argued in *The Art of Investment* (1924), that it intensified tendencies in the financial markets due to their over-confidence when prices were advancing and their unfounded pessimism when they were descending. This 'contagious mob spirit', as Gaines termed it, affected major parts of the business community (Gaines, 1924, p. 70). These alleged facts about the majority of the actors in the markets made the contrarian stance appear logical, even though it entailed disagreeing with the majority opinion.

[149] Like McNeel, Wolf made a list of qualities that the speculator had to possess or otherwise acquire. Wolf's list included qualities such as self-reliance, good judgement, courage, prudence and pliability (Wolf, 1966, pp. 69–71). Besides outlining the qualities essential to the equipment of the speculator, Wolf listed four 'laws absolute' and six 'conditional rules' of speculation (Wolf, 1966, pp. 71–76). In a second volume of *Studies in Stock Speculation*, Wolf summed up his rules and laws of speculation in ten fairly generic 'cardinal principles of trading' (Wolf, 1967 [1926], pp. 8–9). The first absolute law was 'never overtrade', while an example of a conditional rule was '[i]n forming an opinion of the market, the element of chance ought not to be omitted' (Wolf, 1966, p. 71, 75). The former, as the remaining three absolute laws, were, according to Wolf, imperatives and thus inviolable, whereas the conditional rules were 'subject to modification according to the circumstances, individuality and temperament of the operator' (Wolf, 1966, p. 72). The qualities that Wolf took as being essential to the equipment of the speculator were the exact same as the ones Nelson had listed and described in *The ABC of Stock Speculation* (1902, pp. 108–110). Wolf had not, however, borrowed the outline of qualities from Nelson. Both Nelson and Wolf had taken the description of the qualities of the successful speculator from Dickson G. Watts, or 'Old Dickson', who had formulated them in *Speculation as a Fine Art and Thoughts on Life* – a short handbook ostensibly reproduced in *The Magazine of Wall Street* in August 1923 and later published by Traders Press in 1965 and Fraser Publishing Company in 1979. (I have not been able to identify the exact year Watts' book was first published.) Watts was President of the New York Cotton Exchange between 1878 and 1880 and was himself a successful speculator, and Edwin Lefèvre mentioned Watts' book in *Reminiscences of a Stock Operator* (Lefèvre, 2010 [1923], p. 292). The absolute laws and conditional rules that Wolf laid out were, as the aforementioned qualities, actually directly taken from Watts' book (with due recognition, it has to be noted). Watt's conditional rules and absolute laws of speculation also appeared in the first issue of the financial magazine *The Ticker* (November,

laws of the market that speculators had to account for when trading was 'the law of suggestion', which was, according to Wolf, the law of psychological influence and concomitant mental contagion (Wolf, 1966, pp. 26–27). Unlike McNeel and Moore, who presented crowd psychology as *the* law of the financial markets, Wolf noted that even though it was tremendously important to adapt to and make investment decisions on the basis of the psychological laws of the market, it was equally important to account for the fundamental conditions. Wolf perceived it as a cardinal principle of trading to '[n]ever ignore fundamental conditions' (Wolf, 1967 [1926], p. 9). Although there was a contrarian impetus in his approach to speculation, Wolf stressed that success could not be reached in the markets insofar as the speculator was unable or unwilling to study the fundamental conditions as well as the technical element (i.e. the forecasting of the direction of prices on the basis of a study of past market data). Wolf's approach to market reading is an example of a contrarian approach that is not indifferent to the functioning of markets, as Stäheli argues that the contrarians, *en bloch*, were (Stäheli, 2013, p. 150). Whereas the 'beat the market' approaches of McNeel and Moore rightly presented the markets as irrational and the prophylactics offered in their how-to books served as a means to remain sane in the midst of the market madness, other contrarian approaches did not reduce the markets to a pure exhibition of crowd behaviour. Being a speculator in search of contrarian investment opportunities did not necessarily mean that the then prevailing types of market reading such as fundamental and technical analyses were rendered redundant because the markets were under the sway of irrational rather than rational forces.

Psychological crowds and speculative force

Thomas Temple Hoyne, the author of *Speculation: Its Sound Principles and Rules for Its Practice* (1922), clearly expressed his views about the psychology of the public, the market

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1907, pp. 9–10). The resuscitation of Old Dickson's laws and rules of successful speculation shows how deep-seated the myth of the ideal speculator was in the popular discourse on financial markets.

and the crowd and its influence on speculative markets.[150] *Speculation* was, as Hoyne made very explicit, not written for the successful speculator but rather with the purpose of being 'of practical benefit to […] the average man' (Hoyne, 1922, pp. 143–144). Like McNeel and Moore, Hoyne stressed that self-mastery was paramount in speculation, and he noted that self-control was, in fact, 'the first lesson the speculator must learn' (Hoyne, 1922, p. 122). Insofar as the speculator was not able to exercise, what Hoyne termed, 'an unrelaxing intellectual mastery of himself', he would not be able to withstand the pressure from the 'stream of emotional stimuli' to which he was persistently being exposed (Hoyne, 1922, p. 143). When it came to the cause of mental impairment and emotional contagion in the markets, Hoyne was much clearer and more thorough than his contemporaries: The cause was crowd psychology, which he described as 'the most important incident to speculative markets' (Hoyne, 1922, p. 140). Hoyne drew extensively on insights from Le Bon's *The Crowd* in order to structure not only the advice he provided to his readers but his entire account of speculative markets (Hoyne, 1922, p. 140). Though understanding crowd psychology was of more practical value to speculators than any other kind of market knowledge they could acquire, Hoyne

[150] On the cover page of *Is the Chicago Board of Trade a Gambling House? An Inquiry into Trading in Grain Futures* (1921), which is another book written by Hoyne, it is stated that 'the author is a recognized authority in speculation' and a writer of articles on the topic in the *Chicago Herald Examiner*. (In 1928, Hoyne became the financial editor of the newspaper.) In a review of *Speculation* in *The Bankers Magazine*, Hoyne was described as having had 'wide experience in business and as a market reporter and financial writer, which, according to the reviewer, had made him an able critic of 'academic knowledge of economics' (Anonymous, 1922, p. 527). Besides being active in the markets and a vivid financial writer, as he explained in the introduction to yet another of his books, *Wall Street Remodelling the World* (1930), Hoyne also disseminated his thoughts on finance in 'weekly radio talks on finance and the stock market' (p. 14). Letters from listeners of the radio programme and readers of his articles and books had taught Hoyne to 'look at the market from the public's point of view' and to 'epitomize the specific information the public wants' (Hoyne, 1930, p. 14). In the aftermath of the crash, Hoyne came out as a fiction writer with the science fiction novel *Intrigue on the Upper Level: Crime, Love, Adventure and Revolt in 2050 A. D.* (1934). In the novel, Hoyne painted a dystopian picture of Chicago in the year 2050. Everything that had happened to Chicago and the rest of world was somehow connected to the speculative boom leading up to the eventual cataclysmic bust on 24 October 1929 and the subsequent depression, in the midst of which Hoyne was writing his novel. Hoyne's affinity for crowd psychology was also evident in his novel. In the totalitarian regime ruling Chicago anno 2050, crowd control has become the key to social order. Interestingly, controlling the mood of the masses was most efficiently achieved, Hoyne envisioned, through the manipulation and artificial stabilisation of the global financial markets.

emphasised that it was not the only important force impacting the fluctuations of prices in speculative markets.

In order to explain the functioning of markets and the role crowd psychology played in it, Hoyne developed the concepts *speculative power* and *speculative force*, which he described in the following rather tortuous manner: 'Speculative power is not the same as speculative force; the latter is thought. Speculative power is the money representative of speculative force, but it is by no means commensurate with the strength or weakness of the latter' (Hoyne, 1922, p. 132). Thus, speculative power was the expression of the individual speculator's speculative force. The speculative force, to be clear, represented the individual speculator's willingness to speculate or, phrased differently, the 'thought' inscribed into a particular speculative move. In the markets, Hoyne noted, there were multiple degrees of speculative force concretely represented by varying degrees of speculative power, i.e. the actual amount invested (Hoyne, 1922, pp. 132–133). It was important for Hoyne to emphasise that crowd psychology was a major influence on speculative force (Hoyne, 1922, p. 135). The whole point in describing the markets in terms of dynamic relationships between speculative forces and speculative powers was to stress that both (a) a *rational-calculable* dimension to speculative markets (i.e. speculative power) and (b) a *subjective-psychological* dimension (i.e. speculative force) existed. To fully grasp the functioning of speculative markets, it was necessary to comprehend the dynamic between these two entangled forces.

Understanding how and under what circumstances the speculative force was influenced by crowd psychology constituted, in Hoyne's opinion, a central part of being a successful speculator. Hoyne's own knowledge of the psychology of crowds derived, as mentioned, from reading Le Bon's *The Crowd*. If some of his readers were not acquainted with the work of Le Bon, they had no reason to despair since Hoyne informatively quoted, sentence by sentence, the first few pages of the first chapter of *The Crowd* in which Le Bon provided a general characteristic of the 'psychological crowd' (Hoyne, 1922, pp. 135–136; Le Bon, 1896, pp. 1–3).[151] In drawing on Le Bon's notion of the psychological crowd, Hoyne argued and attempted to demonstrate that the transmission of information in the financial markets resembled the way ideas, information, beliefs etc. were transmitted in psychological crowds:

> [O]bserve in regard to a psychological crowd about to become organized – in so far as the point has bearing on a speculative market – that it is not necessary for the simultaneous presence on one spot of the individuals who form the crowd. What is necessary is that the same emotions are aroused simultaneously in the individuals. […] So excellently and so quickly are market news and price changes widely disseminated that the certain means for emotional contagion is always present; and under proper conditions individuals, isolated in thousands of different parts of the country, may be organized almost instantly into a psychological crowd. (Hoyne, 1922, p. 137)

As Le Bon stressed in *The Crowd*, physical presence was not a prerequisite in order for a psychological crowd to emerge: Emotional contagion could act at a distance (see Chapter 2). According to Hoyne, crowds in the markets were thus not confined to the floor of the exchange, where traders were physically present. The emotional contagion that caused psychological crowds to emerge proliferated through the telegraph wires affecting the tape readers in the brokers' offices, and it reached the public through stock-indices and price-graphs in the newspapers' financial pages.

Thus, psychological crowds were following Hoyne's outline of speculative markets. They were always present in the markets, and, for that particular reason, it was crucial for speculators to find ways to guard themselves against emotional contagion.[152] Unlike

[151] As stated in Chapter 2, Le Bon defined the 'psychological crowd' as 'a provisional being formed of heterogeneous elements, which for a moment are combined, exactly as the cells which constitute a living body form by their reunion a new body which displays characteristics very different from those possessed by each of the cells singly' (Le Bon, 1896, p. 6). This definition was not featured in Hoyne's book.

[152] In many cases when crowd psychology was mentioned in connection to markets, it was in an attempt to describe externalities that occasionally disrupted the market order. Hoyne, on the contrary, underlined that psychological crowds were present in the markets at all times rather than exclusively when an exceptional event, such as a panic, occurred. It only happened rarely, Hoyne

the successful professional, the average speculator was not, Hoyne stressed, a 'paragon' and thus not completely 'impervious to crowd contagion' (Hoyne, 1922, p. 216). The average speculator should try to emulate the successful professionals, who had the ability to do the following:

> keep themselves immune to the emotional contagion which leads the average individual to lose his own personality, temporarily, in a psychological crowd, and results in his action being directed by the lower collective intelligence of the crowd, instead of by his own intellect. […] They seldom lose themselves in crowd action, but rather take advantage of it, now acting with a crowd, now against one, with rare individual judgment that is founded upon a profound knowledge, conscious or unconscious, of the psychology of crowds, how those crowds act, why, when, and what brings about such action. (Hoyne, 1922, pp. 139–140)

Therefore, the average speculator should try to become 'immune' to crowd contagion by taking 'every reasonable precaution at the beginning of every speculative operation to minimize the first cause of such overpowering emotion' (Hoyne, 1922, p. 146).[153] Furthermore, it was important that the speculator learned, as noted in the quote above, how to take advantage of the collective actions of the psychological crowds in the markets just as the successful speculators did.

In order to figure out whether the individual speculator was able to exercise the needed amount of self-restraint and -control, Hoyne suggested that she or he took an abstinence-test. The test was supposed to reveal whether the speculator would be able to withstand the urge to plunge into a speculative endeavour if exposed to the contagious

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emphasised, that the great majority of market actors became caught up in a single crowd. However, when it did happen, a market panic was bound to unfold (Hoyne, 1922, p. 137).

[153] In *Stock Movements and Speculation* (1928), Frederick Drew Bond advanced an argument similar to Hoyne's saying that if the speculator was not able to 'conquer his latent suggestibility he simply cannot succeed in the stock market' (p. 177). However, Bond also emphasised that this was a tremendously difficult task to accomplish, especially for the individual member of the speculative public, who he described as a 'bewildered man' whose 'attitude towards the market can probably best be described as that of a man not yet fully awake', as 'he *acts in a condition of intense suggestibility*' (Bond, 1928, pp. 176–177, italics in the original). Bond's description of the public speculator as a person who is not fully awake is analogous to Tarde's description of social man as a 'somnambulist' (Tarde, 1903, pp. 74–88).

atmosphere of the market. Specifically, Hoyne proposed that the speculators abstained from trading for a definite period of 'thirty days' during which they should 'frequent brokers' offices, keep themselves constantly in the speculative atmosphere and within the influence of market fluctuations and all the news and gossip concerning them' (Hoyne, 1922, p. 217). Being exposed to the so-called 'speculative atmosphere' of the market, while refraining from speculating, was supposed to enable speculators to observe their own emotional reactions to the contagion emanating from the market. Taking such an abstinence-test would, Hoyne noted, reveal a potential lack of 'self-control' and self-restraint (Hoyne, 1922, pp. 217–218). If the speculator was able to abstain from trading during the thirty day period, it meant that she or he was sufficiently immune to contagion and thus not at imminent risk of being carried away on a wave of irrational crowd action.

Some years later, Hoyne reiterated parts of his programme formulated in *Speculation* in the slightly more polemic *Wall Street Remodelling the World* (1930). In the introduction, Hoyne explained that the primary incentive for writing the book had been an ambition of 'aiding the public engaged in speculation to learn to think for itself' (Hoyne, 1930, 14). What he wanted the public to know and what successful speculators and experts including himself already were aware of was that speculation was essentially a 'struggle between reason and emotion in the speculative mass mind (Hoyne, 1930, p. 108). When speculators had become sufficiently knowledgeable of crowd psychology and knew how *not* to fall victim to its lures, they would be able to take advantage of the movements of the psychological crowds in the markets. Based on his reading of Le Bon's *The Crowd*, Hoyne also learned that crowds were 'little adapted to reason, but quick to act', which he opportunistically saw as proof that even though it was not possible to outpace crowds, it was possible for the individual to avoid making the same mistakes that the impetuous crowds were making (Hoyne, 1922, p. 140, 1930, p. 114; Le Bon, 1896, p. xvii). This was the contrarian credo that Hoyne had at the very core of his crowd psychology-informed approach to speculation. In what appeared almost as an echo of his description of the successful professional speculator in *Speculation* (quoted above), Hoyne summarised how speculators (professionals or amateurs) ought to conduct themselves in the financial markets:

> The constant self-training of the individual speculator should be directed toward making himself immune to psychological crowd contagion. He should keep himself at all times in intimate touch with psychological crowds acting in various issues, but he should never become part of one of these in the sense that he loses his own independence of decision. He should be sensible enough to feel quickly the development of emotional greed or fear in the market as a whole, or in a particular stock, but strong minded enough successfully to combat these emotions with reason. If he acts he should know that he is obeying his own will; not the rule of overpowering impulse suddenly born in a psychological crowd mind. This intellectual freedom he can attain only by doggedly thinking for himself, regardless of the opinion of others and the pressure of mass emotion. Often he should act in unison with a psychological crowd, but when he does he should do so consciously. (Hoyne, 1930, p. 115)

Hoyne's approach to speculation was, in essence, contrarian, but it was a more dynamic contrarian approach than the more somewhat simplistic strategies that Moore and McNeel provided. Although the crowd could and occasionally should be counteracted in order for Hoyne's approach to work, acting contrary to the public should never become a default option or a simple reflex. In the 'beat the market' approaches of Moore and McNeel, successful speculation was a matter of detecting public euphoria or depression with regards to a specific security and then taking the opposite position. It was a rather simple (at least simplified) game of "me against them". Succeeding in speculation was, to Hoyne, much more difficult than that. In addition to the need for speculators to become immune to psychological crowd contagion, they furthermore had to be able to remain immune while being in 'intimate touch' with the crowds.

The 'beat the crowd' recipes found in the work of Moore and McNeel advised amateurs aspiring to become successful speculators on how to become mentally equipped for speculative endeavours. Their diagnosis of the market and suggested strategy was extremely basic: Since the majority of participants in the financial markets acted irrationally and were simply unable to make trading decisions on an informed basis, the most likely way to continuously make money was to do the opposite of what the public were doing. Fundamental economic factors were rendered less important and often almost completely disappeared in the beat the market approaches. Contrary to these strategies, whose main purposes were (a) to avoid the mind hampering contagion of the crowd and (b) to trade against the public, Hoyne showed that the functioning of speculative markets could only be fully grasped insofar as the analysis of fundamental factors was supplemented by an analysis of the psychology of the market. Not unlike Baruch, Hoyne emphasised that understanding and analysing the psychology of the market should not substitute for fundamental or technical analysis but should instead serve as a complementary analytical focus. Hoyne's approach to speculation was, I argue, a forerunner to the contrarian ideas nascent in the aftermath of the crash in 1929.

The art and practice of being intelligently contrary

> [G]entle reader, if you follow the crowd in 1931, you will lose.
>
> 'The Market Cynic', *If, As and When*, January 1931, pp. 2–3.

In the aftermath of the October 1929 collapse of the stock market, more and more writers of how-to books resorted to crowd psychology to find a vocabulary with which they were able to describe the market as they saw it and furthermore a theoretical basis on which they could substantiate their views. On the backdrop of the crash, understanding the human nature element in financial markets appeared more pertinent than ever.[154] The financial writer who became the figurehead of crowd psychology-

[154] Among the books dealing with collective psychology in the markets were Orline D. Foster's *Making Money in the Stock Market* (1930), Edgar T. Brainerd's *How to Invest for Income and Profit* (1930), J. George Frederick's *Common Stocks and the Average Man* (1930), George L. Hoxie's *Stock Speculation and Business* (1930), Frank J. Williams' *If You Must Speculate, Learn the Rules* (1930), Ernest McCullough's *How to Spend Your Money* (1931), Bernie Winkelman's *Ten Years of Wall Street* (1932) and Garet Garrett's *A Bubble that Broke the World* (1932). One of the more interesting post-crash reflections on the collective psychological influences on the financial markets is found in a supplementary chapter to Henry Howard Harper's *The Psychology of Speculation*. In the supplementary

informed contrarian thinking in post-crash era was, as mentioned in the introduction, Humphrey B. Neill. Neill was attracted to crowd psychology for the same reasons that economists such as Wesley Clair Mitchell and John Maurice Clark had introduced ideas from psychology into debates about the presumptions of the prevailing theories of economics during the previous two decades of the twentieth century. Both Mitchell and Clark wanted to provide a more 'realistic' and therefore better basis for understanding economic action by adopting ideas from social psychology (see Chapter 4). In a similar vein, Neill assumed that introducing psychology into market analysis would make it easier to provide sound answers to the 'why'-questions concerning financial markets such as the following: Why do people trade? Why do some people trade differently than others? Why do prices fluctuate? The following part of the chapter examines Neill's formalisation of his contrarian market philosophy as well as some of the practices of the self that the philosophy imposed on the individual speculator and the crowd psychology-informed market analysis programme it prescribed. In addition, I examine how likeminded financial writers formulated crowd psychology-informed contrarian ideas more or less concurrent to Neill's development of his theory of contrary thinking. Neill's market philosophy was, as I will demonstrate, not a response to a financial market that had completely succumbed to the psychology of crowds but rather an attempt at outlining an optimised configuration of market analysis to which the study of crowd psychology was inoculated.

Crowd psychology and the contrarian approach

In 1928, Neill became vice president and promotion manager for the investment consultancy Wetsel Market Bureau, Inc., which was a subsidiary of one of New York's leading stock market advisory firms, Brookmire Economic Service. After the crash, Neill convinced Wetsel to publish a monthly magazine that he entitled *If, As and When: Passing*

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chapter titled 'After the Stock Market Crash of October 1929', Harper argued that the whole community had been 'inoculated with the speculative germ' which had caused the unreasoned boom in speculation (Harper, 1930, pp. 3–4). He further argued, as Baruch and Steiner would echo later on, that 'economics had become subservient to the will of the speculative mob' (Harper, 1930, p. 19).

Thoughts and Reflections on Human Nature in Finance. Under the pseudonyms 'The Market Philosopher' and 'The Market Cynic', Neill wrote about the dire state of the post-crash financial markets and began to develop his contrarian stance (Mintz, 1994, pp. 102–103). In retrospect, Neill described *If, As and When* as a mouthpiece he used to vent his thoughts on 'human foibles as they appeared in finance' (Neill, 2010b [1954], p. 18). Many of the thoughts on markets and speculation that Neill had disseminated through *If, As and When* were shortly thereafter reiterated in a more systematised and less polemic way in the how-to book *Tape Reading and Market Tactics* (1931). One of Neill's basic claims in *If, As and When* as well as in *Tape Reading and Market Tactics* was that in order to succeed in the stock market, it was necessary to be familiar with the psychology of the market and of the public and to have a proven market philosophy (Neill, 1931, p. 131). Equipping his readers with knowledge about market psychology and insights to his market philosophy was Neill's primary objective.[155]

Neill's contrarian market philosophy consisted of the same dual focus on (a) *character-building/-shaping* and (b) *market reading* as found in the contrarian approaches of McNeel and Moore. However, Neill's contrarian approach did not offer a recipe for how to 'beat the market'; instead, it provided a market philosophy that could enable the speculator to look beneath or beyond majority opinion when it had solidified into a dogma (Pring, 1993, pp. 110–111). More than being a tool used for prediction, contrary thinking was, according to Neill, a means to avoid wrong predictions and on that basis locate possible profitable investments.[156] Like Wolfe and Hoyne proposed, Neill noted in an issue of *If,*

[155] Late in the 1930s, more precisely in 1939, Neill began to issue the bi-weekly market letter *Neill Letters of Contrary Opinion* in which he disseminated contrarian advice and market overviews to his subscribers. The market letter was published between 1939 and 1974. (I have only had access to issues from the period 1949–1974.) Over the years, Neill's market letter managed to attract the attention of prominent names from the world of finance such as Roger Babson, Edson Gould (a leading technical analyst of the 1960s and 70s, who was greatly influenced by Le Bon's *The Crowd*) and popular personal finance columnist Sylvia Porter (Mintz, 1994, p. 96, pp. 97–98). Another pair of devoted readers of *Neill Letters of Contrary Opinion* was the founder of the financial services firm Fidelity Investments Edward Johnson II and his son and successor Edward Johnson III. Neill's market philosophy led to the development of The Fidelity Contrafund, established in 1967 (Neill, 18 September 1963c).

[156] Years later, while reflecting on the proficiencies of his market philosophy in his *Neill Letters of Contrary Opinion*, Neill pointed out that the usefulness of contrary thinking resided in its 'objective

As and When that speculators should perceive market psychology and hence crowd psychology as factors that had to be analysed in conjunction with studies of the fundamental conditions and technical factors of the market (Neill, April 1930, pp. 9–15). Thus, successful speculators had to, as the successful long-term investor and former reporter for the financial magazine *Barron's* Philip Lord Carret stressed, 'study the psychology of the stock market as well as the elements of real value' (Carret, 2007 [1927]).

One of the people who had a great influence on Neill's work and who helped him realise the importance of crowd theory was the Yale graduate and broker-turned-financial writer Robert Lincoln Smitley.[157] Apart from being a former member of the New York Stock Exchange who had turned to financial writing, Smitley was an authority on business and finance literature, which he sold from his New York-based Dixie Business Book Shop that opened in 1918 (Mintz, 1994, pp. 106–108). As a way of advertising his bookshop, Smitley published bibliographical articles in *Forbes Magazine*, which he later compiled into a monumental bibliographical publication comprising 2700 business- and finance-relevant books (Smitley, 1922, 1923). The publication included an eclectic shortlist of fifty quintessential books for the modern businessperson (Smitley, 1922, pp. 2–6). Besides books on economics, finance and business management, the list also included the fictional work of Emerson and H. G. Wells as well as philosophical treatises such as Plato's *Republic* and Aristotle's *Ethics*. Hoyne's *Speculation*, MacKay's

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and realistic approach' (Neill, 28 December 1951). Hence, Neill believed he had proven that the realities of the financial markets called for contrarian thinking. However, he also noted that the contrarian approach was occasionally deployed for ideological purposes. Neill stressed that it was a great temptation for those utilising contrarian thinking 'to force opposite viewpoints in order to support personal opinions'. In such cases, the person was only using contrarian thinking to legitimise her or his presumptions, which was, Neill stressed, not the purpose of his market philosophy (Neill, 28 December 1951). Summing up his approach, Neill emphasised that '[c]ontrary opinions are not, and cannot be taken as, predictions'. The theory's value was rather, he added, 'to question all general predictions' (Neill, 17 October 1951).

[157] In an issue of *Neill Letters of Contrary Opinion*, Neill referred to Smitley as his 'friend and mentor' and implied that it had been Smitley who had introduced him to Le Bon's *The Psychology of Socialism* and *The Crowd* (Neill, 15 May 1963). In the pamphlet *It Pays to Be Contrary* (1951), Neill further expressed his indebtedness to Smitley, writing, 'I owe R.L.S. more than I can repay for his guidance and counsel through the years and for the reading and studies he advised' (p. 39).

Extraordinary Popular Delusions and Le Bon's *The Crowd* had also found their way into Smitley's top-fifty list. About *The Crowd*, Smitley wrote that '[t]oo little attention has been paid to the psychology of nations and crowds. Le Bon writes clearly and what he says should be of practical assistance to everyone who desires to understand 'why' certain things happen which are unreasonable' (Smitley, 1922, p. 5). Speculators would arguably benefit significantly from reading *The Crowd*, since speculation had, in Smitley's opinion, as much to do with 'emotional influences' and 'temperament' as it had with 'knowledge of fundamental economics' (Smitley, 1922, p. 105).

Le Bon's influence on Smitley's views on finance is most apparent in the book *Popular Financial Delusions* (1933) in which Smitley drew extensively on the former's work.[158] As a play on MacKay's *Memoirs of Extraordinary Popular Delusions and the Madness of Crowds*, the book's title in itself implied the significance that Smitley attributed to crowds and crowd behaviour in the markets. In the opening of *Popular Financial Delusions*, Smitley quoted a passage from one of Le Bon's final works, *The World Unbalanced* (1924 [1923]), of which the two first sentences read as follows: 'The destiny of nations is governed by psychological influences and economic necessities. The former engender the ideas and beliefs which regulate conduct. The latter fix the material conditions of existence' (Le Bon, 1924, p. 157; Smitley, 1933, p. 1).[159] Smitley applied Le Bon's ideas about collective psychology and the influence it had on individual and collective action directly to financial markets. Just like Neill, he emphasised that it was equally paramount

[158] Prior to the publication of *Popular Financial Delusions*, Smitley had stressed that psychology played an important role in stock speculation (without resorting to Le Bon's crowd theory). In *What Every Investor Ought to Know* (1918) – which comprised articles published in various issues of *The Magazine of Wall Street* written under the pen names 'Arthur N. Slocum' and 'James Kennedy' – he emphasised that in addition to analytical abilities, the speculator needed a 'firm, brave temperament' and nerves trained to withstand 'sudden shocks' (p. 5, 11, 14). (Neill wrote a foreword to a later edition of Smitley's *Popular Financial Delusions* published by the Fraser Publishing Company in 1963 (Neill, 15 May 1963).)

[159] Smitley regarded *The World Unbalanced* as insightful and described Le Bon's words as 'clear and pertinent'. He further stated that the book had inspired him to write *Popular Financial Delusions* (Smitley, 1933, p. 1). A review in the *Journal of Social Forces* described *The World Unbalanced* in less venerated phrases, calling it 'a loose fabric of self-praise, national bigotry, historical misinformation, economic nonsense and political disgruntlement' that, according to the reviewer, had only been published outside of France because of the sales value of the author's name (Knight, 1924, p. 181).

to view the psychology influencing market actors as understanding the fundamentals of the market. Successful speculation required familiarity with both dimensions.

As Hoyne had emphasised, successful speculators were, following Smitley, 'close students of economic theory and practice' as well as 'unconscious experts in crowd psychology and the technique of the stock market's position' (Smitley, 1933, p. 115).[160] The problem was, Smitley argued, that only a minority of market actors adhered to the class of successful speculator. The 'casual speculator', which was Smitley's name for members of the speculative public, had, he argued, next to no knowledge of crowd psychology despite being almost constantly under its sway. As had been emphasised by numerous financial writers over the course of the previous three decades, the public's credulousness and suggestibility to the influence of the psychology of the crowd had become an increasingly larger market problem as the assumedly inexperienced and incapable speculative public had increased in numbers (see Chapters 3 and 4). Smitley subscribed to the negative view of the public and added that the problem was accentuated because some market actors, whom he described as being 'graduates in the knowledge of mob psychology', were actively praying on the suggestibility and credulousness of the public via manipulation (Smitley, 1933, p. 119). Smitley described the public's blind reliance on tips and news as the asymmetrical relation between the crowd leader and the crowd, as explained by Le Bon. He described *casual speculators* in the following way:

> [They have] absolutely no minds of their own. They are swayed and directed by the "tip." The initiative of the "tip" is buried in obscurity. Manifestly it is tossed to the "lambs" by those who are directly interested in developing sufficient mob psychology to attain their purposes in connection with stock prices. Whether these propagandists study mob psychology or just intuitively adapt it, cannot readily be discovered. It would seem, however, that they are capable disciples of the great Frenchman, Gustav

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[160] In an issue of his newsletter, the *Thomas Gibson's Weekly Market Letters*, published on 29 April 1921, Gibson had made a similar assertion arguing that 'the greatest and most successful speculators in the Street are psychologists'. He explained that the great speculator-psychologists 'know full well that the great majority of public speculators will be governed by what is visible and that they will fail to realize or keep in mind the important fact that the good or evil which is now plainly apparent to all has already been measured and discounted marketwise' (Gibson, 29 April 1921a).

> LeBon [sic]. We are told by him that the mystical (?) method for influencing the public mind is composed of four parts: Affirmation, Repetition, Prestige, and Contagion. (Smitley, 1933, p. 116)[161]

Since the majority of speculators in the market rarely acted rationally it would, in Smitley's opinion, be illogical to assume that the market at all times followed fundamental economic laws. This, Smitley asserted, made it necessary for the speculator

[161] In *The Crowd* (1896), Le Bon explained how the crowd leader used a three-stage seduction or persuasion strategy of (1) affirmation, (2) repetition and (3) contagion to hypnotise the crowd (Le Bon, 1896, pp. 125–132). Affirmation was, Le Bon stressed, 'one of the surest means of making an idea enter the minds of crowds' (Le Bon, 1896, p. 126). The affirmation of an idea had, however, but little influence if it was not repeated continuously. Via repetition, the affirmed idea fixed itself in the mind 'in such a way that it is accepted in the end as a demonstrated truth' (Le Bon, 1896, p. 126–127). The two first stages of the persuasion process – affirmation and repetition – required the agitation and therefore the rhetorical proficiencies of the leader, whereas the last stage – contagion – occurred as a derived consequence of the repeated affirmation of the idea in question (Le Bon, 1896, p. 128). When an idea had been repeated enough to a group of people, Le Bon believed that it would start to spread automatically via contagion from one person to the next until the crowd was one unitary, collective mind. In an issue of *If, As and When*, Neill could have alluded to Le Bon when writing that 'PSYCHOLOGISTS tell us that a thought must be repeated again and again before the public as a whole retains it' (Neill, March 1930, p. 5). I write 'could have' since Neill did not refer directly to scholarly work on the psychology of crowds or any other scholarly work for that matter in neither *If, As and When* nor *Tape Reading and Market Tactics* (with the exception of a quote from Francis Bacon's *Novum Organum* (1620)). It was only later that Neill began to cite Le Bon's and Tarde's work in particular. For example, Neill mentioned Le Bon's crowd psychology in his historical account of the booms and busts of the New York Stock Exchange in *The Inside Story of the Stock Exchange: A Fascinating Saga of the World's Greatest Money Market Place* (1950). Here, he explained that Le Bon's *The Crowd* was of value to anyone who wanted to understand mass hysteria and crowd behaviour in financial markets as well as any other possible social setting (Neill, 1950, p. 306). Aligned with the way he perceived markets in general, Neill emphasised that his historical study of the stock exchange was also a 'fascinating psychological study' and noted that the 'human nature viewpoint' ('that is to say, the stock market as it reflects crowd psychology, public and executive thought') was one of the three viewpoints guiding the historical narrative of the study (Neill, 1950, pp. viii–x). Neill further utilised Le Bon's crowd theory as well as Tarde's imitation theory to substantiate his theory of contrary opinion in *The Art of Contrary Thinking* (1954) in which he also briefly drew upon Trotter's *Instincts of the Herd in Peace and War* and William James' *The Principles of Psychology*. Neill had discussed Tarde's notion of imitation and Le Bon's notion of the crowd in his market letter prior to the publication of *The Art of Contrary Thinking*, but it was in the latter that he emphasised that his theory of contrary opinion was based on three 'laws' of sociology and psychology: (a) a crowd 'yields to basic instincts which an individual acting alone represses'; (b) '[p]eople are gregarious; instinctively they follow the impulses of the "herd"'; (c) [sic] '[c]ontagion and imitation of the *minority* (follow-the-leader [sic]) make people susceptible to *suggestion*, to *commands*, to *customs*, to *emotional motivation*'; (d) '[a] crowd never reasons, but follows its emotions; it accepts without proof what is "suggested" or "asserted"' (Neill, 19 September 1951, 2010 [1954], p. 10, italics in the original).

to occasionally 'disobey economic imperatives' and 'act in an abnormal manner' (Smitley, 1933, p. 278). Thus, Smitley argued that sometimes crowd psychology trumped economic imperatives, and knowing exactly when to disobey or go against a trend in the market was the question that puzzled all contrarians.

Thinking and trading against the norm was exactly the approach to the market that Neill advocated. In an issue of *If, As and When*, Neill noted that someone had told him that if he traded '*opposite*' to his 'snap conclusions' and 'contrary to what *appears* logical', he would consistently make money (Neill, August 1930, p. 16, italics in the original). This someone could in principle have been the stalwart contrarian Fred C. Kelly, who just like Smitley and Neill, was a former Wall Street professional turned financial writer. Kelly's how-to book *Why You Win or Lose* (1930) was, in Neill's opinion, incredibly interesting and inspiring because it thoroughly dealt with the 'human side of the market' (Neill, September 1930, p. 16).[162] Like the person who had advised Neill to trade contrary to what appeared logical, Kelly argued that being illogical would greatly enhance the speculator's chances of success, by which he meant that following the common-sensual 'surface logic' of the public would be tantamount to failure (Kelly, 1930, pp. 17–18).[163] The ideas and suggestion brought forward by Kelly in *Why You Win or Lose* (1930) were all aligned with the single guiding maxim that '[t]he crowd always loses because the crowd is always wrong' (Kelly, 1930, pp. 1–2). In order to 'win', speculators had 'to do exactly the opposite from what nearly everybody else is doing' and actively try to follow Kelly's mantra and 'be *contrary*!' (Kelly, 1930, p. 1, italics in the original). Hence, being a

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[162] Previous to his work on the 'human side' of speculation in financial markets, Kelly had written a how-to book on the related but broader topic of human nature in business. In *Human Nature in Business: How to Capitalize Your Every-Day Habits and Characteristics* (1920) Kelly, among other topics, discussed people's habit of following the crowd and suggested that there were certain ways in which business people could abstain from this inclination (pp. 42–58). The irrational crowd behaviour that Kelly associated with urban life in *Human Nature in Business* was directly applied to the financial markets in *Why You Win or Lose*.

[163] Financial writers often argued that the public's massive presence in the markets tended to obfuscate the idea of what was and what was not 'logical' in a market context. Gibson, for example, noted that the public's 'imperfect logic' caused ordeals in the markets (Gibson, 1907, p. 22). Tortuously, Richard Wallace Schabacker reasoned that since the public's logic was in fact illogical, acting contrary to what seemed to be logical was the only logical way to act in the market (Schabacker, 1934, pp. 126–127).

contrarian meant, following Kelly, to anticipate what the crowd, i.e. the majority of market actors, were likely to do and to 'outwit' or 'outplay' them (Kelly, 1930, p. 33, 35). Unlike Moore and McNeel, Kelly did not suggest for people to attempt to beat the market; rather, he recommended that they realise how important it was to know when to get in and out of it at the right time and thus beat the crowd (Kelly, 1930, pp. 58–59).

Whereas Kelly stressed that it was paramount to be contrary at all times because the crowd was wrong at all times, Neill had a less damning verdict on the speculative competencies of the public, arguing that they were not wrong all of the time while stressing that at 'important *turning points*' they tended to be (Neill, 1931b, p. 153, italics in the original). Instead of being contrary out of principle, Neill suggested that the investor or speculator be contrary when necessary. Like Hoyne, who argued that the successful speculator knew when to follow, stay away from and counteract the crowd (i.e. the public), Neill suggested that his readers should strive to act 'intelligently contrary', which was an approach he had also encouraged his clients to adopt when assuming the role of investment consultant.[164] The contrarian market philosophy prescribed certain modes of conduct as well as a particular mode of analysis. Though the analytical dimension and the rules of conduct aspects of the contrarian approach were intertwined, it is possible to discuss them separately. In the following section, I examine Neill's tripartite approach to market analysis and then discuss the influence market information (news, noise, tips, gossip etc.) ostensibly had on the average speculator and how Neill thought that the contrarian should deal with it.

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[164] In the beginning of the 1930s, Neill (together with his colleague Buck Tyson) opened the investment consultancy Neill-Tyson Inc. In 1932, the consultancy published the short booklet or brochure *Neill-Tyson Service: Including an Explanation of the Neill Safety Plan for Market Trading* in which the firm's services and approach to investing and speculation were described (Neill and Tyson, 1932). Under the header 'It Pays to be Contrary', it was stated that '[w]e have learned – and losses have been our teacher – that being intelligently contrary is the safest market rule to follow' (Neill and Tyson, 1932, p. 4). The second half of the brochure was entitled 'The Neill Safety Plan for Market Trading', and it comprised an outline of the human factors and frailties that investors and speculators ought to be aware of insofar as they were planning on profiting from their ventures into the stock market (Neill and Tyson, 1932, p. 8).

Fundamental, technical and sentiment analysis: Crossing the public at the psychological moment

There was, Neill argued, a 'constant tug of minds' between proponents of fundamental and technical analysis (Neill, April 1930). Instead of arguing for one or the other or proposing a third contrarian way, Neill advocated for a combination of technical and fundamental analyses and for supplementing them with the study of market psychology.[165] In a somewhat simplistic way, Neill explained how the three forms of market analysis supplemented each other. Analysing fundamental factors such as the content of companies' financial statements, interest rates, employment and production would, he argued, reveal *which* stocks were attractive for investment. The study of past and current action of a particular stock – the technical factors – would reveal *when* to sell or buy. However, it was the study of the psychology of the market and an in-depth understanding of crowd psychology that revealed *why* other people were following this or that trend in the markets (Neill, April 1930, pp. 9–15). Since market action was, Neill concluded, a '*reflection* of the public's opinion of fundamentals', it simply did not make sense to separate fundamental analysis and technical analysis (Neill, April, 1930, pp. 14–15, italics in the original).[166] Following Neill, it also would not make sense to avoid taking into account the sentiment of the public that had a tendency to amplify or dampen the intensity of speculation in the markets. Hence, conducting fundamental and technical analyses in conjunction and supplementing these analyses with a study of market psychology was, according to Neill, the optimal way of detecting if and when the public should be opposed or, to put it in technical terms, 'crossed'.

[165] In an issue of *If, As and When*, Neill advocated for what he termed a 'three point focus' on (1) fundamentals, (2) 'market psychology as reflected in technical action and technical market positions' and (3) 'the analysis of daily market action from the ticker tape as all buying and selling orders pass in review' (Neill, February 1930, p. 11). This three-point focus corresponds, to some extent, to the following three-steps of successful speculation Neill outlined in the preface to *Tape Reading and Market Tactics*: The speculator had to 'first, familiarizing himself with the power and the methods of the professional speculative groups which operate "behind the tickers;" second, learning the principles whereby he may interpret the maneuvers of those groups and the actions of the public; and third – and most important – attaining a mastery of himself: of his temperament, emotions, and the other variables that go to make up human nature' (Neill, 1931b, p. ix).

[166] In *Tape Reading and Market Tactics*, Neill made the same argument, phrased somewhat differently, when stating that market action was 'a *reflection* of fundamentals and of speculative and investment sentiment' (Neill, 1931, p. 195, italics in original).

The practice of crossing the public was described and praised for its effectiveness by the financial editor of *Forbes Magazine* Richard Wallace Schabacker.[167] In *Stock Market Profits* (1934), Schabacker explained that crossing basically meant trading against the public, which meant trading 'contrary to current reasonable stimulus, but', he added, 'exactly in consonance with the dictates of psychology' (Schabacker, 1934, pp. 193–194). The most important aspects of crossing were to 'anticipate public desire' and to know when to buy and sell (Schabacker, 1934, p. 190). Neill explained crossing as the practice of selling '*before* the public on the signal of the increased volume and price activity which mark turning points, and not wait to go in the opposite direction at the first signs that the public is selling' (Neill, 1931, p. 154, italics in the original). The ideal situation, Neill added, was a result of the following:

> [of having] timed your actions so that you precede the public in buying – that is, but when stocks are being accumulated – then you can go along with the majority during the major portion of the advance, and can part company at definite signs of increased public participation without corresponding progress in the movement of the stock. The greatest public participation is near and at the tops, because, as we have learned, rising prices attract a following. (Neill, 1931, p. 156)

The intricate part of the operation was to detect these definite signs of increased popular participation in due time. The best way to figure out the right time to cross the public was by simply observing the public. Schabacker argued that the right 'psychological time' (i.e. the psychological moment (see Chapter 4)) to cross the public occurred:

> [when] bullish news is featured in the press over a considerable period of time, when "bull tips" are circulating swiftly, when everyone (even the crowd in the subways) is reading the financial section of the newspapers, when you can get market advice from your barber or your elevator boy, when there is "standing room only" in the board-room of your broker's office. (Schabacker, 1934, p. 65)

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[167] Neill was fond of and inspired by Schabacker's work on technical analysis. It also happened that Schabacker read and commented on the manuscript for *Tape Reading and Market Tactics* (Neill, 1931, p. 11, 150).

What Schabacker essentially argued was that studying the psychology of the public was, at least to some extent, an anthropological endeavour. It was anthropological in the sense that the analyst had to observe people in various social settings in which they were exposed to and engaged with market information in order to arrive at some sort of conclusion as to the emotional state of the public mind. In addition to this anthropological angle on the study of the psychology of the public, the analyst could browse the newspapers for indications of the mood of the market public. Detecting the right time to cross the public through an analysis of the newspapers was, as I have examined in Chapter 4 and which I will return to towards the end of this chapter, a perilous strategy that could allegedly cause an obfuscation of the boundary between the observer and the observed, i.e. the analyst and the crowds in the market.

Neill encouraged his readers to internalise his triadic perspective on market analysis. Schabacker did something similar, asserting that the operator needed to practise technical and fundamental analyses as well as study market psychology until they became 'second nature'. When the three dimensions of market analysis had become second nature to the operator, she or he would, according to Schabacker, have 'emerged from the state of study into that of experience' (Schabacker, 1934, p. 319). Like Hoyne had pointed out, the successful speculator was thus someone who was knowledgeable of and constantly observing the psychology of the crowds in the markets, while remaining impervious to its influence. Whereas Hoyne suggested that the speculator should at all times keep in 'intimate touch' with the psychological crowds in the market, Neill suggested that the speculator maintain mental as well as, on occasion, physical distance from the crowds in the market.

To prevent becoming part of crowds in the market, while still being able to study their psychology, Neill advised his readers to 'trade alone' (Neill, 1931b, p. 146). Explaining more precisely what he meant by trading alone, Neill addressed the aspiring speculator or investor in the first person:

> Close your mind to the opinions of others; pay no attention to outside influences. Disregard reports, rumors, and idle boardroom chatter. If you are going to trade

> actively, and are going to employ your own judgment, then, for heaven's sake, stand or fall by your own opinions. If you wish to follow someone else, that is all right; in that case, follow him and do not interject your own ideas. He must be free to act as he thinks best; just so must you when trading on your own initiative. (Neill, 1931, p. 146)

The speculator should shy away from sharing opinions with others and should never ask anyone for her or his opinion. She or he should, Neill recommended, become 'a clam, an unpleasant cynic' (Neill, 1931, p. 147). Failing or refusing to comply with these suggestions meant that the speculator was letting down her or his mental guard and exposing her- or himself to mental contagion.[168] Thus, what Neill meant by trading alone was that the speculator should trade independently and not let suggestions, opinions and other stimuli influence her or his decision-making. One technique that Neill suggested for the speculator to make use of was to occupy the mind and concentrate one's attention by using a 'pad and pencil' (Neill, 1931, p. 147). Another way speculators could shield themselves from the destructive influences from news, rumours, chatter and the overall contagious atmosphere of the brokerage office or exchange was by keeping a physical distance from the financial markets and becoming a so-called 'out-of-town trader'.[169] These 'techniques of isolation', as Stäheli labels them were, he adds,

[168] In *Common Stocks and the Average Man* (1930), J. George Frederick emphasised how important it was for the speculator to guard or 'insulate' her or his mind against various forms of stimuli. In the second of twelve principles of common stock buying, Frederick, like Neill, addressed his reader in the first person, telling her or him: 'You should insulate yourself absolutely from all "crowd psychology" or "follow-the-sheep" feeling, and from all "impulses," "hunches" and hearsays which would tend to make you act without reason and analysis' (Frederick, 1930, p. 210). Although Neill encouraged his readers to disregard all kinds of outside influences in *Tape Reading and Market Tactics*, he was slightly ambiguous when it came to emotions in the market. Stäheli claims that the contrarians rejected the idea that emotions could serve a purpose in speculation and instead committed themselves to an emotionless approach (Stäheli, 2013, pp. 158–159). However, Neill did not seem to advocate a fully emotionless approach. In an issue of *If, As and When*, Neill noted that even though the emotion of fear – which he perceived as the emotion that had the greatest influence on the markets – 'paralyzes sound reasoning' he insisted that a healthy amount of fear could be a good thing: '[*A*] *certain form of fear*', Neill argued, 'is a wonderful safety valve' (Neill, 30 October 1930, p. 10, italics in the original). Hence, if it was not overpowering, the emotion of fear could, Neill thought, generate caution and counterbalance the feeling of enthusiasm in the individual speculator.

[169] Already in the beginning of the twentieth century, Nelson argued that there were certain advantages to being a so-called 'out-of-town trader' who only occasionally was physically present in

strategies of 'communicative isolation' that were supposed to mitigate the risk of mental contagion from the markets by either occupying the mind so that external affectations were kept at bay or by decoupling oneself physically (Stäheli, 2013, pp. 161–163). As Stäheli notes, it was important for the contrarian speculator to create communicative isolation, since physical distance could not in itself prevent the contagion emanating from the market from reaching the individual speculator (unless the isolation was complete with all communicative lines to the outside world shut).

The evolution of communication technology in the late nineteenth and early twentieth centuries meant that presence was, as had been pointed out by Le Bon and later Ross, no longer a prerequisite of contagion and mass suggestion.[170] For this exact

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the market (Nelson, 1902, pp. 65–68). Nelson contested that proximity to the financial markets, in his case the stock market on Wall Street, was not always an advantage in trading. The out-of-town trader had, Nelson noted, one great advantage over the 'office trader' and that was that she or he 'did not hear the rumors and see sudden movements in prices' (Nelson, 1902, p. 66). To distance oneself from the market was, Nelson pointed out, also something large operators were fond of doing: As Nelson argued, they liked to 'work from Newport or Saratoga or other distant points in order to look at the trading with an unbiased mind' (Nelson, 1902, p. 68). (Charles H. Dow's *Scientific Stock Speculation* (1920) contains a chapter on the out-of-town trader that is identical to the one found in Nelson's *The ABC of Stock Speculation* (Dow, 1920, pp. 67–72).) Selden was another financial writer who stressed that it was sometimes necessary for the speculator 'to close all commitments and remain out of the market for a few days' (Selden, 1912, p. 114). In *Studies of Stock Speculation* (1966 [1924]), Wolfe stressed that even though out-of-town or 'long-distance' traders were generally more successful than office traders, it was nevertheless the case that office traders could 'show results far exceeding any that are within the reach of out-of-town speculating' (Wolf, 1966, pp. 87–88). Therefore, out-of-town trading allegedly had its advantages and disadvantages. When it came to remaining clearheaded while trading, out-of-town traders had, Wolf noted, a clear advantage over 'those who hang over the ticker or frequent the board-room' (Wolf, 1966, p. 155). Bond held the same opinion about the virtues of out-of-town trading as Wolf. He argued that the trader 'who cannot watch the ticker from hour to hour, is less unsuccessful than his apparently better equipped co-speculator in Wall Street' (Bond, 1928, p. 174).

170 Inspired by insights from Le Bon as well as Tarde's discussion of the press and the public, Ross eloquently explained this development towards 'another presence' in the following excerpt from *Social Psychology* (1908): 'PRESENCE is not essential to mass suggestion. Mental touch is no longer bound up with physical proximity. With the telegraph to collect and transmit the expressions and signs of the ruling mood, and the fast mail to hurry to the eager clutch of waiting thousands the still damp sheets of the morning daily, remote people are brought, as it were, into another presence. Through its organs the exited public is able to assail the individual with a mass of suggestion almost as vivid as if he actually stood in the midst of an immense crowd' (Ross, 1908, p. 63). Ross' analysis of the derived consequences of the proliferation of new communication technologies coincides with the propositions Weber made in his research proposal for a sociology of the press that I briefly touch upon in Chapter 2 (see Weber, 1998 [1911]).

reason, Neill believed it was paramount to understand the influence financial news had on the public and further how members of the public should act in order to prevent being unconsciously swayed by the stories detailed in the papers. The simple solution was, according to Neill, to imitate the big operators and simply ignore the financial news circulated in the papers:

> I am told that many big operators scarcely ever read the financial pages of newspapers because they wish to draw their own conclusions and formulate their own judgments from cold statistics, realizing that unconsciously they may be swayed by publicity releases and financial writers' opinions. (Neill, August 1930, p. 13)

The problem of the press was allegedly that it both succumbed to and induced unconscious imitation.[171] One additional concern Neill had with the proliferation of financial news in the newspapers was that the myriad of short and often polemical stories could impair the individual's ability to concentrate and remain adamant (Neill, 1931, p. 146). Hence, newspapers were accused of creating and to some extent encouraging imitation and herding behaviour. Instead of informing the public, the different outlets of financial news were allegedly leading the public to financial misery (Neill, March 1930, p. 7). In his prescription of prophylactics against mob mind in *Social Psychology* (1908), Ross argued that people often became victims of mental contagion through what they read in the columns of sensational newspapers. The reader of newspapers did, according to Ross, often catch what he called '*paragraphesis*' by which he meant the 'inability to hold the mind on a subject for any length of time' (Ross, 1908, p. 86, italics in the original). In order to avoid being infected with paragraphesis, Ross suggested that people completely shun the 'dithyrambic press' (Ross, 1908, p. 86). Neill's

[171] In *Physics and Politics* (1873), Walter Bagehot explained how writers writing for different newspapers tended to succumb to unconscious imitation of the style of the newspaper for which she or he was writing. '[I]nvariably', Bagehot claimed, the author 'catches the tone of each paper while he is writing for it, and changes the tone of another when in turn he begins to write for that' (Bagehot, 1873, pp. 32–33). This stylistic isomorphism was what Neill argued was happening on the macro level when newspapers were swayed by financial writers' opinions and publicity releases. Additionally, as examined in Chapter 2, Le Bon claimed in *The Psychology of Socialism* (1899) that the newspaper functioned as a medium for the incitement of public excitement and collective action.

suggestion not to consult the financial pages for sound market knowledge resonated with Ross' mob mind antidote. However, even though Neill advised his readers not to make up their minds about the financial markets on the basis of what they read on the financial pages of the newspapers, he still insisted that news had a tremendous impact on 'public sentiment' (Neill, February 1930, p. 6).[172] Ambiguously, to Neil, the newspapers were a source of distraction and mental contagion, yet at the same time they were a channel through which it was possible to detect public sentiment.

To recapitulate, two composite dimensions constituted Neill's theory of contrary opinion: a *market analytical* dimension and a *conduct-oriented* dimension. Neill's tripartite market analysis was supposed to enable the analyst to single out *which* stocks to invest in (via a study of the fundamentals), *when* it was the right time to buy, sell or stay out of the market (via an analysis of the technical factors) and finally *why* the speculative public were taking the positions that they did at a given time (via a study of the psychology of the market). The prophylactics against mob mind, constituting the conduct-oriented dimension of Neill's contrarian market philosophy, were supposed to enable the individual contrarian to undertake the aforementioned tripartite market analysis. The contrarians self-techniques did, following Stäheli, make it possible to observe the crowd without being absorbed by it (Stäheli, 2013, p. 162). It is true, as Stäheli notes, that the self-techniques and self-practices of the contrarians were supposed to enable them to have a clear mind when analysing the markets. However, the approach to market analysis proposed by Neill was not one that 'abandoned external sources such as fundamental data', as Stäheli argues that the contrarians' did in their market analysis (Stäheli, 2013, p. 152). It was only some of the rather heterogeneous group of contrarian-imbued financial writers who based their market analysis completely on the study of crowd psychology.

[172] In *Breaking the Backbone of American Industry* (1933) – a book that aimed to ensure that the public was not hit as severely by future financial crises as had been the case in 1929 – the author Walter T. Beveridge gave an explanation as to the causal relationship between media coverage of financial stories and public buying. The public, Beveridge argued, 'always buy on the top of the market, during the distribution period because they read the glaring articles in the newspapers. Then again, they always sell the market short on the bottom, because they read the bearish news' (Beveridge, 1933, p. 107).

As just mentioned, despite the overlaps, Neill's contrarian approach differed from the more simplistic beat the market and beat the crowd approaches of the likes of Moore, McNeel and Kelly in the sense that it did not neglect the importance of the fundamental factors, but rather suggested that the collective psychological dimension of market actors should be an integral part of every analyst's approach to trading. Whereas the beat the market/crowd approaches seemed aligned with Steiner's suggestion to substitute reasoned analysis for studies of mob psychology (as presented in the chapter's introduction), Neill's market philosophy was akin to Baruch's approach to trading and to the views he presented in the foreword to MacKay's *Memoirs of Extraordinary Popular Delusions*. Like Baruch, Neill's application of crowd psychology was a response to what he perceived as the realities of the stock market. When active on Wall Street in the late 1920s, Neill experienced at close quarters how unpredictable the stock market could be at times of excessive speculation. The crash was, according to Neill (as it was to Baruch), a reminder that there were certain behavioural patterns and innate human tendencies influencing the conduct of market participants. Accounting for these influential factors when conducting market analysis was not, in neither Neill's mind nor Baruch's mind, a plea for a radical rethinking of the discipline of economics. Instead, it was a pragmatic response to the actual dynamics of a stock market as they experienced them as observing partakers.

Conclusion

The contrarian approach to speculation in the financial markets, which is still employed by investors and speculators in today's markets, was historically, as I have shown in this chapter, inextricably connected to the how-to literature. Although there are examples of how-to books advising readers not to follow the public and in some cases trade in the exact opposite direction of general trends in the markets dating back to the late nineteenth century, it was only during the early 1920s that more elaborate accounts of contrarian approaches emerged in the how-to literature. While financial advice on how to trade wiser than the hapless public and on how to avoid being subjected to the mental contagion of the public was found in many how-to books published in the 1920s, the formalisation of an actual market philosophy based on contrarian thinking first appeared in the aftermath of the stock market crash in October 1929. While the contrarian way of approaching business in the financial markets was informed and influenced by the popular perceptions of the speculative public (see Chapter 3) and the *psychologisation* of the market actor and the markets as such (see Chapter 4), the market collapse in 1929 served as a reminder to the how-to book authors of how important it was not to blindly follow the crowd.

The contrarian approaches disseminated in how-to books in the 1920s and 1930s were presented as help for ailing small speculators and investors – the primary readership of books in the how-to genre – who did not desire to share the destiny of their fellow members of the speculative public. The main aims of the how-to guides to contrarian speculation were to provide (a) rules of conduct that would help the individual speculator to avoid the mental contagion that the inexperienced were so often infected by and (b) a crowd psychology-informed approach to market analysis that would enable the speculator to trade contrary to the public at the right moment. These two elements or dimensions of the contrarian approach were inextricably connected: It was perceived as impossible for the speculator to conduct an accurate market analysis let alone determine the right moment to counteract the public if her or his intellectual faculties were numbed by the contagion from the crowd. Intellectual self-mastery was therefore a prerequisite of successful speculation, and it was emphasised as crucial in all the crowd psychology-informed how-to books disseminating contrarian advice, which have been examined in this chapter. However, when it came to the market analytical dimension, the rather heterogeneous group of how-to book authors whom I have referred to as contrarians were divided in two 'camps': those who based their market analysis entirely on the precepts of crowd psychology and those who perceived crowd psychology as a factor in the market that ought to be given the same attention as the fundamental and technical conditions.

The first of the two 'camps' offered readers advice on how to beat the market, and the only way for a small speculator to beat the market was by beating the crowd. The rationale behind the beat the crowd approach was that since the small speculator did not have access to the same market information and did not possess the same level of experience and competence as the professional speculator, the only viable strategy for the small speculator was to base her or his investment decisions on the psychology of the market. Since the psychology of the market was perceived as being more or less identical to the psychology of the crowd, the contrarians beat the market strategies reduced speculation to a game of identifying and trading contrary to the public, i.e. the crowd, while making sure not to become one with the crowd. These contrarian approaches were responses to a practice, i.e. speculation in financial markets, to which the average person was by default disadvantaged compared to the seasoned professional. By reducing speculation to a practice of studying crowd psychology or human nature in the market and counteracting the public, who were always wrong, the beat the market approaches provided the means to make a profit in the markets without possessing the competences, market knowledge or experience of the professionals. Market psychology was, in these approaches to speculation, perceived as the single most important factor for the small speculator to understand. Fundamental conditions were for others to think about.

The main difference between these rather simple contrarian approaches and the contrarian market philosophy that Neill started to formalise in the beginning of the 1930s was that Neill and other how-to books authors who shared his contrarian views did not think that a study of the psychological factors in the markets could nor should replace examinations of fundamental or technical factors. On the contrary, market psychology should be integrated in a tripartite approach to market analysis that accounted for the fundamental, technical and psychological conditions influencing market movements. Neill's theory of contrary opinion was, as I have shown, not a call for a radical rethinking of what the market was but rather an attempt to introduce a neglected dimension – the crowd-psychological dimension – to the study of markets. Hence, the market was not a crowd as most proponents of the beat the market strategies proposed, but it was, according to Neill and likeminded contrarians, vital not to neglect that crowd psychology played an increasingly important role in the financial markets because of the increase in public participation. The contrarian market philosophy, as conceived by Neill, was a response to a "reality-void" in the general perceptions of and approaches to financial markets. Taking the psychology of the market seriously and accounting for it in analyses of market constituted, following Neill, the only way to fully grasp the reality of the financial markets. Through selective reading and a slight bending of notions, the contrarians showed how crowd theory could be mobilised as a theoretical legitimation of contrarian approaches to speculation.

Chapter 6: Concluding remarks and perspectives

This dissertation has analysed forms of problematisations of crowd phenomena in the U.S. financial markets as expressed in practical, popular and academic financial writing between 1890 and 1940. The analysis has explored how certain market processes, practices and developments were problematised and responded to as crowd problems (i.e. problems concerning some form of collective action and crowd psychology) and what influence these critical interventions had on perceptions of financial markets and approaches to trading. In other words, the dissertation has examined a particular period in the history of American finance with an emphasis on the market disorder and instability that financial writers saw as being caused by forms of collective behaviour and crowd mentality among market actors. The overall aim of the dissertation has been to demonstrate that the way crowd phenomena in financial markets were reflected upon, debated and responded to had influence on perceptions among advocates as well as critics of financial markets. This overarching aim boils down to the following three objectives: A first objective was to illuminate the market conditions, contexts and specific developments in relation to which crowds were increasingly becoming objects of concern, controversy, and conflict. A second objective was to outline the ways in which terminology and tropes from late nineteenth century crowd theory were employed and began to proliferate in various genres of financial writing. Finally, a third objective was to establish that the increasing attention crowd phenomena were given by financial writers led to reconfigurations and alterations of approaches to the practice of analysing markets as well as trading in them. Instead of summarising all the themes and discussions taken in the dissertation, this conclusion draws attention to the, in my opinion, most central aspects, contributions and implications of the present historical exposition.

First, as the nineteenth century was coming to a close the scholarly interest in crowds was reaching a highpoint, especially in academic milieus in France and Italy. Soon thereafter, the sociological and psychological inquiries of crowds, developed in continental Europe, were taken up and critically assessed by American psychologists and sociologists. The figureheads of the academic field of crowd psychology were Le Bon and Tarde, whose ideas about the distinctive social and psychological characteristics of crowds had a significant influence on sociology, social psychology as well as social thought more broadly in the late nineteenth and beginning of the twentieth centuries. While the crowd theorists' penchant for referring to various examples of social unrest such as revolutions, workers protests and political rallies (when explaining the psychological characteristics of crowds) has been covered in great detail in the existing literature on the history of crowd psychology, this dissertation has dealt with an aspect of crowd theory that has largely been overlooked. The specific aspect or dimension of crowd theory that I am referring to here is the ways in which crowd theorists explained and empirically anchored their theoretical ideas by applying them in critical accounts of financial market phenomena. With specific focus on the work of Le Bon, Tarde and Sidis, the analysis has demonstrated how these crowd theorists applied their ideas and concepts to the financial context.

Though Le Bon did not pay a lot of attention to the way financial markets worked and how trading was conducted in them, he did reflect on the implications of what he perceived as the manipulative and almost autocratic behaviour of leading figures in the world of finance. Le Bon presented the debacle surrounding Joseph Leiter's failed attempt to corner the wheat market at the Chicago Board of Trade in 1897 and 1898 as an emblematic example of the disastrous socio-economic consequences that the actions of powerful, self-interested and seemingly scrupulous financiers tended to have. By reducing finance to an uneven relationship between powerful 'cosmopolitan financiers' and a more or less hapless public, Le Bon allowed himself to identify the leader-crowd relation as an organising principle in the markets. Thus, Le Bon turned to the manipulations and excessive speculation in American finance in order to substantiate his idea that modern Western societies were in decay and moving towards becoming ochlocracies.

Contrary to Le Bon, Sidis made a rather lengthy discussion of financial markets and especially the panics and crazes that had marred them for centuries. The way Sidis approached his examination of financial markets was aligned with Le Bon's, in the sense that he simply transposed his theoretical ideas about social suggestion to different empirical cases of panics and crazes, which he by the way borrowed from Charles MacKay's *Extraordinary Delusions and the Madness of Crowds*. Inspired by his teacher and colleague William James, Sidis claimed that there was a direct connection between the freedom to move physically and the ability to think independently. If an individual's voluntary movements were limited, the person in question would, according to Sidis, slip into a state of suggestibility (a mental state in which the 'waking', rational self was subverted by the subconscious self). In the market context, Sidis' rationale meant that the closer traders were pressed against each other on a trading floor of an exchange, the more likely was it that the entire mass of traders would enter into a state of pathological collective suggestibility. The consequence would then be that the traders, *en masse*, succumbed to irrational mob action.

Compared to Le Bon's and Sidis' rather polemical and little substantiated reflections on financial market phenomena, there was a stronger academic gravity to Tarde's way of dealing with the trading conducted in the stock exchanges. What Tarde attempted to do was to carve out an economic psychology that encompassed his ideas about the social as organised by imitation dynamics and crowd psychology. He argued that the markets and the persons acting in them were subjected to the same inclinations, vices and habits as they were in every other social setting. One of the central points that Tarde made about the modern commercial exchanges was that despite the fact that they were highly rationalised institutions in which everything seemed carefully quantified, subjective factors such as *prestige*, *contagion* and *imitation* nevertheless greatly influenced the way trading was conducted, how prices were formed and thus how market prices fluctuated. Pointing his critical crosshairs at economists' understanding of markets, Tarde not only claimed that the business conducted in financial markets simply could not be completely quantified; he also proposed that the aid of socio-psychological theory was required in order to fully comprehend the functioning of markets.

In their critical reflections on financial market phenomena Le Bon, Sidis and Tarde all conflated market and crowd dynamics as well as market and crowd problems. That is not to say that they perceived the market as a crowd, but rather that the inter-social and inter-mental processes and dynamics characteristic of crowds were considered influential factors in the functioning and malfunctioning of markets. Comprehending how prices were formed in a market and the reason why people acted as they did was, according to Le Bon, Sidis and Tarde, therefore considered conditional on understanding social action and collective psychology.

Second, and related, the developments that made the crowd phenomena seemingly pertinent to writers concerned with the functioning of the markets in the stock and commodity exchanges were the popularisation of and increased public participation in the financial markets. In the late nineteenth century and in particular in the beginning of the twentieth, public participation and its possible consequences for the prevailing dynamics and institutionalised practices in the exchanges became a hot topic among financial writers. As has been thoroughly discussed in the dissertation, the debates about public participation and 'the public' in the markets tended to evoke questions about the competencies and qualities required of market actors. Some of the rather intangible qualities that a speculator or investor ought to possess, according to specific observers, included independent judgement, self-restraint and self-control. Often doubts were cast as to whether the newcomers possessed the mental strength (the poise) needed in the financial markets. They surely lacked experience and practical knowledge, which, according to the conventional market wisdom, made them highly suggestible to all sorts of influences from individual market actors or from the accumulated mass of actors cramped together on trading floors or in broker's offices. Public participation thus brought the problems that crowd theorists and others ascribed to the masses into the financial markets. The public's assumed general lack of competence in market matters and alleged propensity to become overly excited or depressed made 'the public' a crowd problem. The public participating in the markets came to constitute the antithesis to successful speculation and the idea of 'the public' was in many respects almost synonymous with the idea of 'the crowd' as expounded in crowd theory.

The popularisation of finance furthermore made financial writers draw a sharp distinction between professionals and amateurs in order to separate those who were familiar with the processes and practices of the market from those who apparently were not. The distinction between professional and amateur was reiterated as a distinction between participator and spectator (even though the market public were more than mere inactive observers). The drawing of these distinctions contributed to the stigmatisation of the small investor or speculator as constituents of a participating audience, who were swayed by the emotions, sign, gestures and rumours swirling around in the markets. The public were perceived as unable to see through the commotion and spectacle in the markets and conduct a thorough assessment of the technical or fundamental conditions of the market and on that basis decide whether to buy, sell, hold the position or stay out of the market.

Third, as financial writers, during the second and third decades of the twentieth century, became gradually more aware of the allegedly important role the public played in the financial markets, writers began to focus more systematically on the psychology of the public and the psychology of the market. Especially in how-to books, psychology was presented as an intangible element in markets that defied and meddled with the common assumptions about what factors made market prices move. It was, however, not exclusively authors of handbooks to prospective investors and speculators who ascribed importance to market psychology. The psychological factors in the markets were also, as has been discussed throughout the dissertation, vividly discussed in academic texts by economists who were open minded to frontier research in social psychology and the then still popular crowd theories of the likes of Le Bon and Tarde (as well as American successors in the crowd psychology tradition such as Ross and Giddings). The proliferation of ideas, tropes and terminology from lay perceptions of psychology as well as actual theoretical work within the field of psychology was so significant that I dared to term it the *psychologisation* of financial writing.

Across genres of financial writing, theoretical ideas, tropes and terminology from the discipline of psychology (social and crowd psychology) were, as it has been elucidated in the dissertation, employed for descriptive, explanatory and prescriptive purposes. Collective psychology was drawn upon in order to describe certain forms of market behaviour especially on the part of the public. It furthermore provided some – in the eyes of several how-to book authors, some economists and a couple of regulatory agencies – plausible explanations of why it was mainly constituents of the speculative public who tended to act in seemingly irrational ways. In relation to this, crowd psychology was, according to the sceptics, becoming an almost default explanation of unfounded fluctuations in prices and of why market actors occasionally "lost their heads" and acted in what seemed to be complete discord with their own interest. Psychology was, as mentioned, also utilised for prescriptive purposes. Some economists suggested that insights from psychology could be valuable in formulating more 'realistic' theories of economics than the ones dominating the discipline at the time. Federal regulatory reports on the grain trade in the futures markets suggested that crowd psychology ought to be taken seriously and thus into consideration in legislative matters. In how-to books, crowd psychology was basically functioning as an indicator of what the speculator or investor should attempt to avoid and as the basis on which rules of conduct and techniques of self-restraint and self-control could be formulated. The dissertation has demonstrated that (crowd) psychology was not just a popular label attached to market phenomena that seemed to defy conventional modes of explaining crowd phenomena in markets. The proliferation of psychologised representations and explanations of financial market practices had indirect and direct influences on, for instance, how approaches to speculation and market analysis were formulated.

Finally, and pertaining to the abovementioned utilisation of crowd psychology for prescriptive purposes, the analysis has shown that the problematisations of crowd phenomena in the financial markets not only shaped perceptions of markets, but that they also influenced approaches to investment and speculation as formulated in the how-to literature. The dissertation has not provided evidence that the way business was conducted in the markets and the way people invested in securities in general fundamentally changed due to the increased emphasis on crowd problems and market psychology in the examined literatures. What has, however, been thoroughly analysed is the way the concerns with the public's role in the markets and the increased use of crowd theoretical terminology and ideas influenced the advice offered in how-to books and thereby arguably the investment strategies of some of the readers of such books. In the case of the emergence of contrarian approaches to market analysis and speculation, crowd psychology and the assumption that the public mostly acted in a crowd-like manner played crucial roles. Contrarian 'market philosophies' were informed by the dictums of crowd theory and the psychology of crowds in the markets were considered as important as (and in some instances more important than) market fundamentals. The contrarians perceived the exchanges and broker's offices as contagious, rumours and news as viral and market actors (at least those who fell into the category 'the public') as suggestible and prone to imitation. Because of these alleged 'facts' of financial markets, an approach to speculation had to include rules of conduct that would shield the individual market actor against her or his own inclination to follow the crowd and all the external affectation that lured them towards the majority. The analysis of contrarian market philosophies have demonstrated that approaches to speculation and market analysis circulating in the how-to literature were informed by crowd theory and the assumption that financial markets were, to some extent at least, under the influence of the psychology of crowds. Before the small investors and speculators even thought about attaining knowledge about market fundamentals, they had, according to several authors of how-to books promoting contrarian approaches, to familiarise themselves with the psychology of the market. Only then would they be able to withstand the mental strain of the market and keep a clear head, which was considered the main prerequisite of successful speculation.

Although the present historical exploration of problematisations of crowd phenomena in the U.S. financial markets has not extended further than 1940, the problems and central topics examined in the dissertation should not be regarded as outdated and thus irrelevant to contemporary discussions of financial markets. As intimated in the dissertation, concerns about crowd behaviour in the financial markets have not completely vanished from the practical, popular and academic discourses on markets. I will end this dissertation with some thoughts on crowd phenomena in modern financial markets.

Perspectives on the study of crowds in financial markets

When crowd phenomena and crowd psychology in the financial markets are being discussed today it is most often in the context of some sort of disruption of the established market order. In the aftermath of the 2007–2008 global financial crisis, several commentators turned to the crowd psychology vocabulary in order to describe the markets as they crashed. In a column in *The New York Times*, the Nobel Laurate Paul Krugman stated that economists ought 'to face up to the inconvenient reality that financial markets fall far short of perfection, that they are subject to extraordinary delusions and the madness of crowds' (Krugman, 2 September 2009). (Note the close resemblance between Krugman's wording and the title of MacKay's *Memoirs of Extraordinary Popular Delusions and the Madness of Crowds*.) Exactly one year after Krugman had described markets as subjected to crowd madness, the market analyst Robert Prechter told the online news media *International Business Times* that '[a] hundred percent' of today's financial markets are driven by crowd psychology and further claimed that crowd behaviour had been the sole cause of the crisis (Li, 2 September 2010).[173] While Krugman and Prechter refer to crowd madness and psychology in attempts to argue the irrationality of financial markets (or at least that markets are not perfectly rational), I think that there are other more intriguing and more thorough ways in which crowd phenomena are being discussed in the context of today's financial markets. In the following final sections of this chapter I shall briefly reflect on two perspectives on crowd phenomena in contemporary market contexts. The first perspective discusses the 'wisdom of crowds' argument. The second attends to the concept of 'herding' in behavioural finance and argues that the field would benefit from a serious engagement with the history of the concept.

[173] Prechter is perhaps best known for his reinvigoration of and devotion to the so-called 'Wave Principle', which is an unorthodox form of price forecasting comprising insights from crowd psychology as well as pattern and fractal recognition. The wave principle was conceived by the American accountant Ralph Nelson Elliott in his book *The Wave Principle* (1938).

The wisdom of crowds argument[174]

As it has been demonstrated in the dissertation, many of the discussions of crowd phenomena in financial writing between 1890 and 1940 touched upon themes such as the reliability (or lack thereof) of the public opinion and the assumed lack of knowledge, competencies and qualifications on part of the market public. Informed by a Le Bon-like perception of the psychology of the masses (or crowds), the public were generally understood to be unknowledgeable in market matters and known for accentuating their ignorance collectively via processes of contagion and imitation. With respect to the production of knowledge in crowds, Le Bon assertively argued, '[i]n crowds it is stupidity and not mother-wit that is accumulated' (1896, p. 9). More than a century later, in his popular science bestseller *The Wisdom of Crowds: Why the Many Are Smarter Than the Few* (2005), the financial journalist and author James Surowiecki turned Le Bon's dictum on its head when claiming that crowds were indeed intellectually superior to isolated individuals and thus not inferior as Le Bon had argued (pp. xvi–xvii, cf. Le Bon, 1896, p. 41). The wisdom of crowds argument that Surowiecki has popularised basically says that the average of a group's judgments provides a more reliable and thus precise measure than that of an individual expert.

The wisdom of crowds argument has been tested in and substantiated by several recent studies of the stock-price prediction capabilities of various online communities, i.e. online crowds (Bollen, Mao, and Zeng, 2011; Chen, De, Hu, and Hwang, 2014; Gottschlich and Hinz, 2014; Hill and Ready-Campbell, 2011; Nofer and Hinz, 2014; Zhang, Fuehres, and Gloor, 2011). At first glance, the wisdom of crowds argument appears to completely turn upside down the general understanding of crowds, as expressed in late-nineteenth-century crowd theory. However, taking a closer look at the recent studies of the wisdom of crowds argument reveals that central ideas from classical crowd theory nevertheless seem to be percolating the rationale and challenging the basic

[174] The discussion of the wisdom of crowds argument has previously appeared in my article 'Contrarian investment philosophy in the American stock market: On investment advice and the crowd conundrum', *Economy and Society*, 44(4) (2015). With slight modifications, exemptions and additions, the discussion of the wisdom of crowds argument appears here as it does in the article.

assumptions of the argument. The following reflections on the wisdom of crowds argument demonstrate that discussions of crowd phenomena in financial markets remain pertinent and that some of the ideas that have been examined in the dissertation can inform contemporary debates.

To substantiate his claim, Surowiecki opens *The Wisdom of Crowds* by telling the story of how the British polymath Francis Galton came to realise that popular judgement could be trusted, in some cases, even to a greater extent than individual judgement. Galton came to that conclusion after having conducted an analysis of the results of an ox-weighing competition at the 1906 annual West of England Fat Stock and Poultry Exhibition in Plymouth. What he had discovered was that the *vox populi* (measured as the mean of all the 787 guesses of the ox's weight) was much closer to the actual weight of the ox than the individual estimates (Galton, 1907). Surowiecki sees Galton's study as a proven case of crowd wisdom (Surowiecki, 2005, p. xv). In other words, it showed that 'averaging all judgments will lead to a more accurate judgment than that of the average judge' (Gottschlich and Hinz, 2014, p. 52). The recent studies, which have affirmed Surowiecki's hypothesis, are not significant solely because they support the wisdom of crowds argument, but because, in the process, they cast doubt on the reliability of expert verdicts – which are, under the right circumstances, trumped by the crowd. By implication, small investors and speculators cannot be reduced to mere erratic noise traders who provide liquidity simply by virtue of being wrong, but allegedly have to be recognised as part of a potentially rich reservoir of aggregated market knowledge.

The studies of the alleged wisdom of crowds have shown that the precision of the crowd's predictions relies on, among other preconditions, the individual members' ability to make independent judgments and on group heterogeneity (Ray, 2006, p. 4). Although the different studies clearly indicate that under the right conditions the crowd can be proven "wise", it is questionable whether the alleged wisdom of crowds can be systematically and strategically employed in investing and forecasting, because a context such as the financial market seldom allows for the right conditions. For instance, it is exceptionally difficult to know whether traders act on the basis of their own private information or follow other traders. If the crowd is to be considered wise, 'crowd members should primarily rely on private information and follow their own beliefs instead of trusting other market participants' (Nofer and Hinz, 2014, p. 325), but since prices in the financial markets are not static and traders are, to some extent at least, able to observe the actions of others (contrary to Galton's study, in which there was one right answer and where the participants were not able to see each other's guess), there is an imminent risk of imitation.

An important problem regarding the wisdom of crowds is therefore the imminent risk of social influence, which has the negative consequence of diminishing the accuracy of the crowd's judgments. Lorenz et al. (2011) have shown (in an experiment in which the estimates of others were disclosed within the crowd, free from 'group leader effects, persuasion, or any other kind of social psychological influence') that a little social influence is enough to cause 'herding behavior and negative side effects for the mechanism underlying the wisdom of crowds' (p. 9024). The convergence of opinions often happens qua imitation or mimicry, which is considered the main driver in a so-called 'informational cascade'. Informational cascades occur 'when it is optimal for an individual, having observed the actions of those ahead of him, to follow the behavior of the preceding individual without regard to his own information' (Bikhchandani, Hirshleifer and Welch, 1992, p. 992). Thus, 'once a cascade starts, the private information of subsequent investors is never included in the public pool of knowledge' (Bikhchandani and Sharma, 2000, p. 286). One problem with the informational cascade is, as mentioned, the fact that private information does not count once the cascade is rolling, which makes it fragile and highly vulnerable to mass behaviour initiated by only the slightest external shock. The fragility of informational cascades indicates that the borderline between crowd wisdom and irrational crowd behaviour is exceptionally thin and difficult to comprehend. All in all, whether you land on one side or the other depends on 'who is interacting with whom' as well as 'the level and mode of interaction and interdependence' (Felin, 2012, pp. 289–290).

Ultimately, the wisdom of crowds heavily depends on the exclusion of imitation from the collective sphere, but it is difficult to imagine a situation in the financial market where any form of social influence on participants is annulled and everyone acts as atomistic individuals (assumed the actors are not algorithms). The obsession with purely independent judgments and opinions is a common denominator between the wisdom of crowds proponents and the contrarians. In order to explicate the intricacy of speculation, Hoyne (see Chapter 5) wrote that '[t]o speculate successfully is the most difficult of all human activities, and the ability to do it is not to be acquired by any mere monkey-like mimicry of the doings of others, but only by the development of high qualities of intellect, including iron self-control' (Hoyne, 1922, p. 165). So for Hoyne, although mimicry was not a recommended speculation strategy, it was nonetheless tempting for the less well-informed small speculator to follow the lead of more experienced and seemingly more well-informed investors. Thus, the most crucial and daunting task for contrarian investors and speculators was, as demonstrated in the dissertation, to shield themselves from their own propensity to throw individual judgment to the wind and uncritically rely on imitating others. The contrarian approach was, in itself, a response to what was considered a basic human inclination to affect and be affected by others – a predisposition that was more pronounced in an intense environment such as the financial market.

The danger of having your mental machinery thrown out of gear was imminent according to the contrarians as well as to advocates of the wisdom of crowds argument. Imitation, whether due to seemingly irrational forces derailing the individual investor's mental scheme or due to a deliberate rational choice to imitate, thus seems to be considered an inevitable condition of investment and speculation. From this, I definitely do not draw the conclusion that traders are, by definition, irrational and therefore that markets are too, but rather stress that the early-twentieth-century popular finance discourse, especially the writings on contrarian investing, had a sensibility towards the dynamics of the social in which the market and its participants were embedded. From a sociological perspective, it is interesting how the emphasis on the importance of autonomous decision-making (as a prerequisite for the crowd to be wise) is simultaneously accentuating the influence of inter-subjective dynamics on market movements. Although their bleak diagnosis of the market was perhaps questionable, the contrarians' concern with the ramifications of collective behaviour in financial markets remains to this day a recurrent concern that is yet to be fully comprehended.

While crowds may proof accurate in their predictions in a highly organised and controlled experimental setting such as, for instance, a 'prediction market' (Ray, 2006), the idea seems to implode in the context of a "real" market in which people do interact with, influence and imitate one another. The following reflections attend to the way questions about social and psychological influence in markets are addressed in literature on herding in financial markets.

On the concept of herding

One of the concerns that financial writers were most preoccupied with between 1890 and 1940 was, as emphasised several times in the dissertation, that market actors would unintentionally begin to follow other market actors without exercising any form of appropriate judgement. Such concerns about crowd following were, according to the majority of financial writers whose work I have examined, inextricably connected to public participation. More specifically, crowd following in markets was generally perceived as a logical consequence of the public's alleged incompetence and inability to restrain themselves emotionally. As discussed in Chapter 3, the public repeatedly followed fads without thinking or, as the financial journalist Colin Armstrong expressed it during an address delivered at The Congregational Club of New York City and Vicinity in January 1903, the public did what everybody else were doing, because of their 'susceptibility to the influence of the crowd' (Armstrong, 1903, p. 10). The public's supposed lack of experience and therefore lack of practical knowledge about market matters allegedly made them unable to withstand their inclinations to imitate and to control their gregarious instincts. In other words, many financial writers, at the time, assumed that the public followed the crowd because they did not have the sufficient amount of market knowledge to make decisions independently and therefore succumbed to their alleged natural inclinations to imitate or be gregarious.

These conceptions of market actors, information and imitation bear a similarity to ideas found in the present literature on herding (see Banerjee, 1992; Bikhchandani and

Sharma, 2000; Scharfstein and Stein, 1990; Shiller, 1995; Spyrou, 2013). Herding is basically understood in this literature to be an act of imitation that an actor makes on the assumption that other persons are better informed. While herding behaviour can be associated with perfectly rational action, it entails the risk that it might lead to informational cascades and thereby irrational behaviour (as discussed in the reflections on the wisdom of crowds argument). Yet and arguably due to the incessant preoccupation with rational action in contemporary economics, the distinction between rational and irrational action is often sharply drawn in the present herding literature. Comparatively, in discussions of imitation and crowd behaviour in the historical period examined in this dissertation the distinction between rational and irrational action was often less pronounced. The historical conception was thus able to establish a continuum (rather than a dualism) of rational and irrational behaviour.

In most studies of herding in financial markets, herding is considered to involve deliberation and intent on the part of the actor (Bikhchandani and Sharma, 2000, p. 281). The assumption that herding is intentional and therefore based on rational action (although the decision to herd may prove to be irrational in economic terms) does not resonate with most of the historical accounts of crowd following and imitation explored in this dissertation. For example, one of the main assumptions of Tarde's influential theory of imitation was that deliberate intentionality was *not* a prerequisite or necessary condition of imitation. According to Tarde, imitation could be deliberate and therefore a result of a conscious decision, but it could just as well be an outcome of unconscious suggestion, that is, to paraphrase Sidis, the intrusion on the mind of an idea that is realised unreflectively and almost automatically (Sidis, 1919 [1898], p. 15; Tarde, 1903). Though these are ideas formulated in the academic realm and, in Sidis' case, empirically tested in the psychological laboratories at Harvard University, they were, as the dissertation has shown, also employed rather liberally by financial writers. In other words, these academic ideas proliferated and were often used in popular and distinctively practical discussions of financial market between 1890 and 1940. In summary, the discussion of herding behaviour was, at that time, based on a quite different theoretical framework and used with quite different practical implications than it is in contemporary herding literature. While I do not want to argue that late-nineteenth-century crowd theory holds the key to an all-encompassing explanation of why herding behaviour occur, I do think that a historical exploration of the theoretical underpinnings of the concept of herding and of the circulation of imitation and suggestion theory in academic, popular and practice accounts of financial markets can contribute to a broader understanding of herding behaviour. By 'broader', I mean a historical contextualisation of herding in financial markets that is not limited to a narrow focus of academic literature, but one that also examines the impact these theoretical considerations had on discussions in vernacular finance.[175]

Another way to engage with the herding literature from a critical historical perspective is to attend to the relation between imitation, herding behaviour and technology (see Beunza and Garud, 2007; Gemayel and Preda, 2015; Lange, 2016). Daniel Beunza and David Stark (2012) have argued that the ideas of informational cascades and herding 'do not account for the existence of technology in the decision-making process' and further suggest that a situation in which actors subjugate themselves to 'the dictates of the mass' is unrealistic and unviable within modern computerised finance (p. 387). Following Beunza and Stark's argument, the question is then if herding, informational cascades and crowd following are still important phenomena in financial markets moving towards automation. Yet seen in a historical perspective, I would be hesitant to affirm the claim that technology eliminates irrational herding behaviour in the financial markets. On the basis of the analysis made in the dissertation, it would, on the contrary, be possible to venture and argue the opposite claim, namely that technology may equally *accelerate* processes of imitation and thereby crowd behaviour. In the late nineteenth century and beginning of the twentieth many financial writers perceived the proliferation of communication technologies such as the telegraph, the stock ticker and

[175] I am only aware of a single contemporary study that attempts to give a historical account of the concept of herding in economic life (see Rook, 2006). The study is, however, quite limited in its scope and does not account for the 'migration' of ideas from social psychological theories on herd, imitative and crowd behaviour to the field of economics. It furthermore does not account for the great extent to which terminology and tropes from such social psychological theories were employed in practical literature on financial markets and in business more broadly (see, e.g., N. Hill, 1928).

the printed press as intensifying imitative behaviour and mental contagion among market actors. Although the ticker, to give one example, rationalised the dissemination of quotations and fundamentally changed trading, it was simultaneously seen as a source of 'mental intoxication, which foreshortens the vision by involuntary submissiveness to momentary influences' (Harper, 1926, p. 10). Today's financial markets are obviously and in many respects – in particular in terms of the amount and character of technology involved – completely different from the ones I have studied in this dissertation, so a claim of equivalence between different technologies used in the markets (then and now) would be almost absurd. The modest point, derivable from the historical examination, is rather that the influence of technology on imitation must be carefully considered and empirically examined for each kind of technology. Accordingly, the historical material urges us to question the conversely immodest conclusion that the influence of technology is uniform and that it somehow eliminates all processes of imitation.

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In summary, the purpose of the above reflections has been to briefly elucidate and specify the connections, overlaps and frictions between contemporary discussions of crowd phenomena in financial markets and the historical problematisations examined in the dissertation. This purpose coalesces with the overall aim of undertaking this particular analysis in the first place, which was to attempt to shed light on ways in which crowd phenomena in the financial markets were debated, reflected upon and responded to by a variety of financial writers between 1890 and 1940.

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