

Imagining the Market: A Visual History

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The financial marketplace has played an integral role in the development of capitalism and yet is often perceived as elusive and mysterious, since it deals primarily in abstractions that complicate and resist figurative representation. One explanation for the recent global financial crisis, for example, is that the very complexity of the market instruments involved made appropriate oversight near impossible: nobody understood what was happening because nobody could see it all, despite, or because of, its looming size.

This curated section of *Public Culture* interrogates the nature of the relationship between representation and finance by exploring how graphic practitioners of various kinds have visualized the financial markets in three particularly significant historical moments. It begins with the notorious South Sea Bubble of 1720; goes on to address the period, around the turn of the twentieth century, in which an imperative to place finance on an ever-more rational, scientific, and technical footing took hold; and concludes with representations of what Ian Baucom calls the “hyperfinancialized” capitalism of the post-1973 era. These three periods of rapid market change and expansion are significant not only for the iconography with which each is now associated but also for their role in developing new financial practices and technologies. The first is associated with the British financial

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1 revolution and the fraught emergence of public debt, the second with the appear-
2 ance of the stock ticker, financial charts, and other new technologies for reading
3 the market, and the third with the thoroughgoing dematerialization of financial
4 capitalism and with what Randy Martin has influentially termed the “financial-
5 ization of daily life.”¹

6 Between the periods with which we are concerned, the location of the most
7 culturally charged and aesthetically important visual representations of financial
8 markets shifted, from satirical prints and pamphlets in the early eighteenth cen-
9 tury to illustrations and cartoons in newspapers and books around the turn of the
10 twentieth century to advanced “fine” art in the contemporary era. As the images
11 we present demonstrate, however, even as this process of generic migration was
12 occurring, certain stylistic conventions and thematic preoccupations were car-
13 ried over. One particular tendency that recurs throughout these three periods is
14 the dynamic tension between visual works that seek to figuratively represent, or
15 personify, the workings of finance capital and those that aim to aesthetically cap-
16 ture, or reproduce, the effects of its powerful social abstractions. In tracking these
17 shifts and continuities, we focus on material relating to Great Britain and the
18 United States, the nations that, during the epoch that frames our project, have
19 stood as the twin poles of the global financial system, as the breeding grounds
20 of the most significant financial innovations, and as the sites of the most active
21 and diverse cultural reckonings with the power of high finance. As we observe in
22 closing, however, this epoch is drawing to an end, and as new economic powers
23 emerge on the world stage, so modes of artistic response rooted in other cultural
24 traditions look set to rise to prominence.

25 26 **Bursting Bubbles**

27 The South Sea Bubble, like the “tulip mania” of the century before, has become
28 synonymous with the modern language of financial mania popularly embodied
29 by texts such as Charles Mackay’s 1841 *Extraordinary Popular Delusions & the*
30 *Madness of Crowds*. In the contemporary and widely disseminated depictions
31 of the South Sea Bubble of 1720, this fear appeared most obviously to relate to
32 anxieties about both the dangerously public nature of the financial market and the
33 compulsive behavior that it encouraged. In *The Bubblers Medley, or a Sketch of*
34 *the Times: Being Europes Memorial for the Year 1720* (fig. 1), for example, the
35 disordered crush of bodies is precisely located in London’s “Change Alley” and
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38 1. Randy Martin, *Financialization of Daily Life* (Philadelphia: Temple University Press, 2002).



Figure 1 The Bubbles Medley, or a Sketch of the Times: Being Europe's Memorial for the Year 1720, 1720. Bancroft Collection, Baker Library Historical Collections, Harvard Business School

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Figure 2 William Hogarth, *Emblematic Print on the South Sea*. Bleichroeder Print Collection, Baker Library Historical Collections, Harvard Business School. CD gb15 xx

in Paris's "Quinquempoix," both streets where stocks and shares were openly sold. The libidinous irrationality of the unregulated crowd is frequently symbolized by a gambling motif, indicated by the playing cards in *The Bubbler's Medley* and by the coin game and the demonic wheel of fortune in William Hogarth's *Emblematic Print on the South Sea* (fig. 2). The presence of the carousel, familiar in other representations of the period, such as the Dutch *Het Groote Tafereel der Dwaasheid*, or *The Great Mirror of Folly*, potently reinforces both the visceral pleasures of the gamble and the interconnectedness of financial risk as a zero-sum game. The clear censure suggested by these images was borne out by their popular appeal, as they have been assumed to possess a wide audience of both literate and nonliterate readers.²

2. Eirwen C. Nicholson, "Consumers and Spectators: The Public of the Political Print in Eighteenth-Century England," *History* 81, no. 261 (1996): 5–21.

1 Yet these images also suggest an analysis more complex than a critique of
2 the moral dangers of a gambling mania. The South Sea Company at the center
3 of the speculative boom of 1720 was a trading company that had assumed
4 the responsibility for managing the debt that the British government had accrued
5 during its war with Spain. The company was given the sole trading rights to the
6 “South Seas” (specifically the right to trade slaves in the Spanish colonies of
7 South America) in exchange for taking over and consolidating the national debt.
8 The South Sea Company was formed as a Tory alternative to the Whig-controlled
9 Bank of England, and both its rise and fall reveal the social and political implica-
10 tions of the financial revolution of the eighteenth century, which involved not only
11 the introduction of paper money and the emergence of the national debt but also
12 a set of new — and often largely anonymous — financial relationships, opportu-
13 nities, and threats made possible by a secondary market in shares and credit.³
14 Underlying these possibilities, as Jonathan Swift’s “Bubble Poem” included in
15 *The Bubbles Medley* suggests, was a version of State sovereignty fundamentally
16 altered by its intimacy with private capital.

17 It is hardly surprising, then, that at the time of the South Sea Bubble, an alle-
18 gorical, typological, or emblematic mode predominated, reflecting a sense that
19 financial exchange substituted strange, imaginary, fantastical entities for “real,”
20 tangible things. The social and political satire enacted in Hogarth’s etching, for
21 example, is carried by its heavily allegorical content: trade sleeps while the devil
22 throws chunks of Fortune’s body to a horror-struck crowd, and the caption on
23 the monument compares the effects of the South Sea crash to the Great Fire of
24 London, as a man-made natural disaster that would require the rebuilding of the
25 city itself. The playing cards featured in *The Bubbles Medley* became themselves
26 the carriers of allegorical satire, as in 1721 a set of South Sea playing cards was
27 published, each card featuring a quatrain caricaturing speculators and their losses
28 and gains. Yet this figurative mode was also suffused with a concern about the
29 possibilities of representation itself. The trompe l’oeil form of *The Bubbles Med-*
30 *ley* points us toward an awareness of the implicit duplicity of representation itself,
31 to the widespread anxiety about “trickery, artifice, and the kind of fictions that
32 lay at the heart of stockjobbing” and that the crash laid open.⁴ The implications of
33 *The Bubbles Medley*’s ability to so artlessly reproduce the texts that it apparently
34 mocks have become central and recurring concerns of “money artists” from Wil-

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36 3. Bruce G. Carruthers, *City of Capital: Politics and Markets in the English Financial Revolution* (Princeton, N.J.: Princeton University Press, 1999).

37 4. Mary Poovey, *Genres of the Credit Economy: Mediating Value in Eighteenth- and Nineteenth-*
38 *Century Britain* (Chicago: University of Chicago Press, 2008), 82.

1 liam Harnett and John Haberle to J. S. G. Boggs, all of whom have explored the
2 ironies of a paper image of paper money.⁵

3 Many of the visual representations of the South Sea Bubble also speak more
4 covertly to the social and political changes that underlay the well-rehearsed con-
5 cerns about panic and crowd behavior in this period. The crush of women in the
6 unsteady balcony in the Hogarth etching evokes the literal and discursive changes
7 in gender with which the South Sea scheme has now become associated. The
8 economic historian Helen Paul, for example, disputes the assumed irrationality of
9 the South Sea Company investor and argues that this very language was itself a
10 result of the fact that the scheme “became a focus of worries about religious and
11 national identity, misogyny and class prejudice” as the public nature of stockjob-
12 bing allowed “Jews, dissenters, [and] women” to interact without being properly
13 overseen.⁶ This literal access of cultural outsiders to the financial marketplace
14 was matched, as cultural critics including Emma Clery and Catherine Ingrassia
15 note, by the “perceived feminization of culture” in this moment, as the licentious
16 and irrational language of panic as depicted in these images was itself frequently
17 profoundly gendered.⁷

18 **Bulls, Bears, and Stock Tickers**

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20 The allegorical approach to depicting finance in satirical cartoons continued in
21 the nineteenth century in Britain and the United States, not least in response to the
22 recurrent and increasingly globally interconnected panics that punctuated eco-
23 nomic life on both sides of the Atlantic. Crashes were explained partly through
24 reference to familiar visual tropes of natural catastrophes, drawing on biblical
25 images of floods and plagues. Many cartoons in antebellum America relied on
26 traditional explanations of individual moral responsibility for financial ruin, in the
27 absence of larger, systemic explanations: bankrupts were not victims of an imper-
28 sonal economic system but were foolhardy profligates who had brought misfor-
29 tune upon themselves. If they did seek wider explanations, they did so through the
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32 5. Walter Benn Michaels, *The Gold Standard and the Logic of Naturalism: American Literature*
33 *at the Turn of the Century* (Berkeley: University of California Press, 1987).

34 6. Helen Paul, *The South Sea Bubble: An Economic History of Its Origins and Consequences*
(London: Routledge, 2011), 10.

35 7. Catherine Ingrassia, *Authorship, Commerce, and Gender in Early Eighteenth-Century*
36 *England* (Cambridge: Cambridge University Press, 1998); Emma Clery *The Feminization Debate*
37 *in Eighteenth-Century England: Literature, Commerce, and Luxury* (Basingstoke, U.K.: Palgrave
38 Macmillan, 2004).

1 moralized lens of political economy, in which the trials and tribulations of finance
2 were portrayed as the result of specific policies or manipulation.⁸

3 In nineteenth-century political cartoons, animal imagery featured regularly
4 as stock visual shorthand, drawing on the classical tradition of animal fables,
5 with political and financial actors taking on the roles and appearance of foxes,
6 wolves, lambs, and other emblematic creatures such as the English bulldog, the
7 American eagle, or the Republican Party elephant.⁹ *The Bulls and Bears in the*
8 *Market* (1879) (fig. 3), by William Holbrook Beard (1824–1900), references what
9 had become a standard way of describing those who gambled, respectively, on a
10 rising and a falling market. However, Beard's painting also marks a new departure,
11 not least because it weds the visual allegory of political cartoons to the dramatic
12 narrative and realism of late nineteenth-century high art. Beard had already
13 made a name for himself as an accomplished painter of humorous, anthropomorphic
14 scenes, including several involving gatherings of rapacious and bacchanalian
15 bears in the woods.¹⁰ Although the bears in those earlier images referred
16 obliquely to professional speculators, in *The Bulls and Bears in the Market* there
17 is no doubting that the subject is Wall Street: the stampeding herd of bulls and
18 bears, tearing the flesh from one another, rush past the clearly demarcated classical
19 facade of the New York Stock Exchange (NYSE), threatening to overwhelm
20 the viewer. If the cause of the devastating panic of 1873 is to be found anywhere,
21 this painting suggests, it is not in the moral failings of ordinary citizens or even in
22 the political machinations of Washington but in the heart of Manhattan's financial
23 district. The canvas combines a melodramatic panorama of the chaotic struggle
24 between the bulls and bears with realistic attention to the details of horns, fangs,
25 and hooves. It also couples animal brutality with recognizably human expressions,
26 poses, and actions, such as the bear trying to lasso a bull in the background
27 on the right-hand side. Beard thus reliteralizes the metaphor of social Darwinism:
28 here in Lower Manhattan the law of the jungle reigns, with the bulls and bears
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30 8. On representations of the panic of 1837, see Jessica Lepler, "Pictures of Panic: Constructing
31 Hard Times in Words and Images," in "Hard Times," special issue, *Common-Place* 10, no. 3 (2010),
32 www.common-place.org/vol-10/no-03/lepler. For the panic of 1873, see Scott Reynolds Nelson, "A
33 Financial Crisis in Prints and Cartoons," *Journal of the Gilded Age and Progressive Era* 10, no. 4
(2011): 425–33.

34 9. For an overview of these tropes in economic imagery, see Mike Emmison and Alec McHoul,
35 "Drawing on the Economy: Cartoon Discourse and the Production of a Category," *Cultural Studies*
36 1, no. 1 (1987): 93–111.

37 10. For details of these images, see Sarah Burns, "Party Animals: William Holbrook Beard,
38 Thomas Nast, and the Bears of Wall Street," *American Art Journal* 30, nos. 1–2 (1999): 9–35.



Figure 3 William Holbrook Beard, *The Bulls and Bears in the Market*, 1879. New-York Historical Society

personifying those “animal spirits” of greed, fear, panic, and exuberance deemed to be ruling the market, and familiar from other exposés of the era into the “men and mysteries of Wall Street.”¹¹

Much financial imagery in nineteenth-century America, however, was designed to counter a similar problem of representation that the emergence of paper money and a credit-based economy created in eighteenth-century Britain. With more than three thousand banks issuing paper notes, for example, it became virtually impossible to distinguish real from illegitimate money, to the extent that even the counterfeit detectors published by banks to aid the public in recognizing false notes were themselves sometimes counterfeited.¹² In both the iconography of their paper currency and the architectural style of their buildings, banks and other financial institutions therefore aimed to convey a symbolic sense of solidity, prosperity, and confidence as a counterweight to the insubstantiality of a credit economy.

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11. James K. Medbery, *Men and Mysteries of Wall Street* (Boston: Fields, Osgood, 1870).

12. Stephen Mihm, *A Nation of Counterfeiters: Capitalists, Con Men, and the Making of the United States* (Cambridge, Mass.: Harvard University Press, 2007).

1 More straightforwardly realist depictions of finance in the United States did
2 begin to emerge in the second half of the nineteenth century, from James Cafferty
3 and Charles Rosenberg's oddly static painting of the 1857 panic, *Wall Street, Half*
4 *Past Two O'Clock, October 13, 1857*, to early daguerreotypes showing vistas of
5 Wall Street.¹³ What is puzzling about the proliferation of attempts to represent
6 high finance in middle- and lower-middle-class publications in the last decades
7 of the nineteenth century is that very few of these readers actually participated
8 in the market (the best estimate is that only 0.5 percent of the population held
9 any form of securities in 1910).¹⁴ However, the increasing popularity across the
10 nation of bucket shops (brokerages in which punters bet against the house on
11 a rise or fall in stock prices, without having to actually buy any actual stock)
12 meant that many more Americans had experience of the drama of the market than
13 the official figures of stock ownership suggest.¹⁵ Likewise, the repeated panics
14 that shook the wider American economy ensured that the stock market loomed
15 large in the public imaginary in the last quarter of the nineteenth century, most
16 often depicted in lurid tales involving legendary financial schemers such as Daniel
17 Drew, Jay Gould, and Cornelius Vanderbilt.¹⁶ The guidebooks, memoirs, and
18 profiles of the nation's stock and commodity exchanges in popular magazines of
19 the period grappled with the question of how to distinguish between gambling,
20 speculation, and investment: did the popularization of share ownership signal the
21 end of republican ideals of hard work as greedy individuals gave in to gambling or
22 were fleeced by corrupt insiders in the unregulated marketplace; did it represent
23 new possibilities for democracy by allowing everyone to become an owner in the
24 age of mass corporations; or did speculation provide welcome hedging opportunities
25 for ordinary Americans by redistributing risk to those professional investors
26 most able to bear it?¹⁷

27 Some of the accompanying illustrations featured heroic or villainous titans of
28 the market, capturing the fantasy or the nightmare (depending on one's political
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30 13. For a selection of these images, see Leonard Levinson, *Wall Street: A Pictorial History* (New
31 York: Ziff-Davis, 1961).

32 14. Julia Ott, *When Wall Street Met Main Street: The Quest for an Investors' Democracy* (Cam-
33 bridge, Mass.: Harvard University Press, 2011), 17.

34 15. David Hochfelder, "'Where the Common People Could Speculate': The Ticker, Bucket
35 Shops, and the Origins of Popular Participation in Financial Markets, 1880–1920," *Journal of American*
36 *History* 93, no. 2 (2006): 335–58.

37 16. John Steele Gordon, *The Scarlet Woman of Wall Street: Jay Gould, Jim Fiske, Cornelius*
38 *Vanderbilt, the Erie Railway Wars, and the Birth of Wall Street* (New York: Grove, 1988); Steve
Fraser, *Wall Street: A Cultural History* (London: Faber, 2005).

17. See Ann Fabian, *Card Sharps and Bucket Shops: Gambling in Nineteenth-Century America*
(Ithaca, N.Y.: Cornell University Press, 1990); and Ott, *When Wall Street Met Main Street*.



Figure 4 “The Recent Panic—Scene in the New York Stock Exchange on the Morning of Friday, May 5th,” *Frank Leslie’s Illustrated Newspaper*, May 18, 1893. Library of Congress

stance) that the Invisible Hand of the market could be controlled by the hand of a larger-than-life individual. Other illustrations of these popularizing accounts of the market depicted the frantically waving arms and panicked faces of the crowd on the floor of the stock and produce exchanges (fig. 4), a motif that even today is used to illustrate news reports of market activity despite the relative decline of face-to-face open outcry trading.¹⁸ These illustrations did not merely pick out moments of high drama but, in effect, gave visible form to psychological theories about the mass hysteria of crowds that began to gain currency in the late nineteenth century, thereby extending the earlier understandings of animalistic passions encapsulated in Beard’s painting.¹⁹

The images of frenzied brokers on the floor of the exchanges also implicitly assumed that the best place to view the market was from the visitors’ gallery of the NYSE. However, the increasing deterritorialization, abstraction, and anonymity of the financial markets in this period created a new problem of representation. Stories by writers such as Edwin Lefèvre, published in the popular middle-class periodical *McClure’s Magazine* (more often associated with muckraking exposés), humanized the seemingly impersonal realm of finance through melodramatic plotlines in which

18. For a witty take on the iconography of brokers as a visual stand-in for the market as a whole, see the *The Brokers with Hands on Their Faces Blog*, brokershandsontheirfacesblog.tumblr.com (accessed December 10, 2011)

19. On the turn to crowd theory as a way of accounting for panics, see David Zimmerman, *Panic! Markets, Crises, and Crowds in American Fiction* (Chapel Hill: University of North Carolina Press, 2006).

1 the moral is that speculation is best left
2 to professionals. Although the illustrations
3 tend to feature familiar scenes of
4 individual speculators, it is striking that
5 many of them focus on the act of reading
6 the tape, with the stock ticker itself
7 figuring centrally again and again (see
8 figure 5, by the illustrator W. R. Leigh
9 [1866–1955], who later went on to a
10 successful career as a painter of epic,
11 mythologizing Western landscapes).
12 The ticker is often graphically at the
13 heart of the action, as if the heroic
14 figures are merely bit players to the
15 machine that not only ventriloquizes
16 the voice of the market but comes
17 to stand in for the whole of the market
18 itself, not as a herd of speculators
19 (whether personified in animal guise or
20 not) but as an impersonal aggregate.

21 The imagination of the market as
22 more than the sum of individual, face-
23 to-face transactions indeed began to
24 alter dramatically with the develop-
25 ment of new representational technolo-
26 gies such as the stock ticker, invented
27 in the late 1860s. On the one hand, the
28 ticker machine and the streams of tape
29 came to serve as convenient symbols for
30 the dangers of speculation, with cartoons
31 depicting individuals caught up in
32 endless streams of tape. On the other
33 hand, the stream of prices produced by
34 the ticker was not merely a more accurate
35 and technologically efficient way of
36 recording the price-making activities of
37 brokers on the floor of the exchange;
38 the flow of numbers read on the tape in
brokerage houses and bucket shops
throughout the nation (and, increasingly,
the world) became the market itself,
experienced immediately but also
placelessly through the minute-by-
minute fluctuation of prices. Lefèvre's
stories and Leigh's illustrations endeavored
to depict the market through colorful
anecdotes and melodramatic scenes of
individual Wall Street characters, but
even they registered the increasing
pressure to imagine the market as
anonymous and abstract.

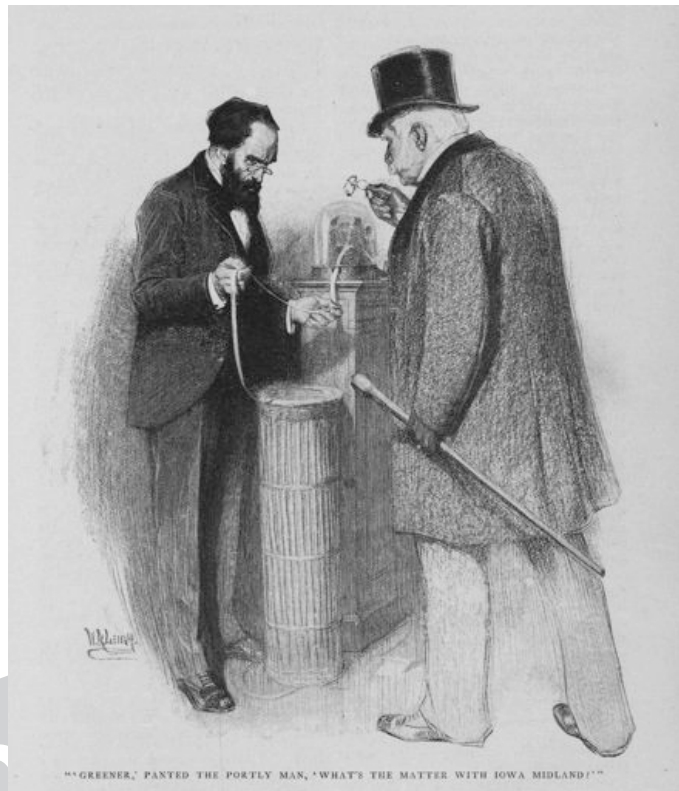
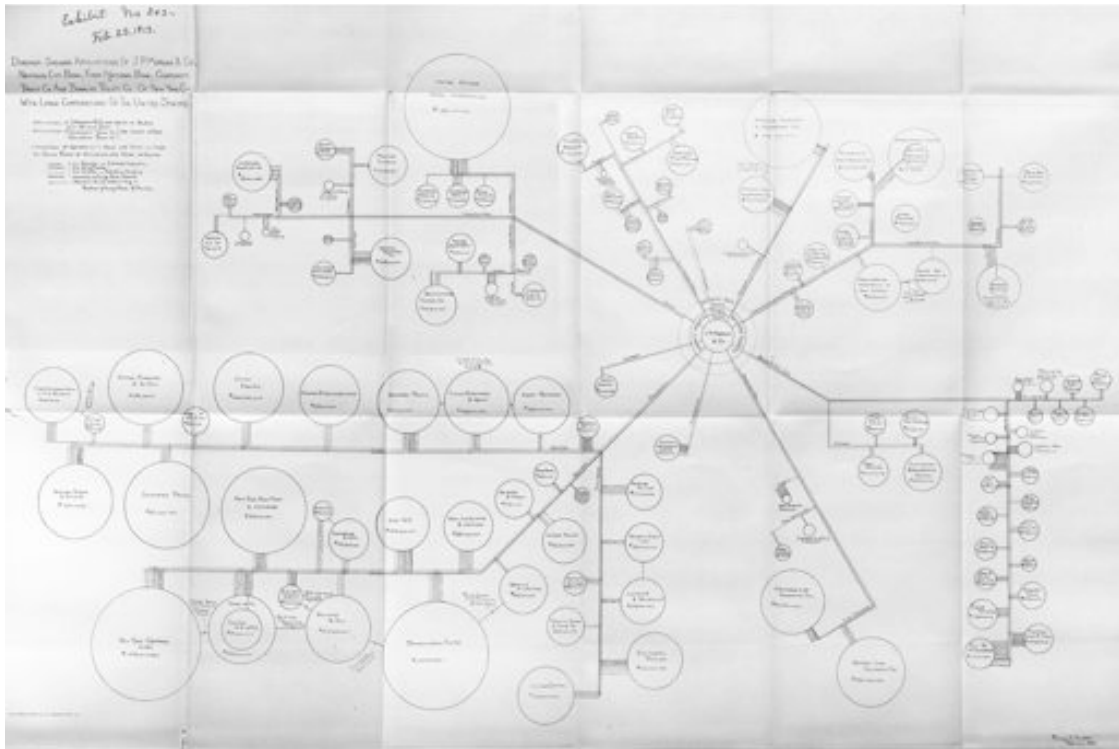


Figure 5 W. R. Leigh, illustration for Edwin Lefèvre, "The Man Who Won," *McClure's Magazine*, August 1901, 363. Harvard College Library

1 The continual churn of the stock ticker vastly increased the available infor-
2 mation about price fluctuations and therefore made desirable a representational
3 technology that could provide the equivalent of the view from the visitors' gallery
4 of the NYSE. The emerging profession of technical analysis in the late nineteenth
5 and early twentieth centuries promised to provide that bird's-eye view of the mar-
6 ket, by plotting the minute-by-minute flow of price variations into patterns on
7 graphs or distilling the overwhelming tide of data into a single figure combining
8 the dozen stocks that Charles Dow chose to represent the market in his creation
9 in 1896 of what became the Dow Jones Industrial Average (DJIA).²⁰ Financial
10 chartism built on the turn to mathematical analysis and the graphic presentation
11 of statistics in the neoclassical revolution in academic economics in the late nine-
12 teenth century, but it also presented itself as a more pragmatic tool that would be
13 useful to both professional brokers and the increasing number of middle-class lay
14 investors. By making the market seem a coherent totality that obeyed the natural
15 laws of physics, and by portraying that regularity in graphical form, the chartists
16 contributed to the democratization of stock market investment by making market
17 movements comprehensible to lay investors at a single glance.

18 However, other attempts to provide a bird's-eye view of the market as a coher-
19 ent system took an oppositional stance to financial capitalism, enabled precisely
20 by seeing it as a coordinated whole rather than a set of isolated transactions.
21 Exhibit 243 (fig. 6) was produced by the congressional Pujo Committee investi-
22 gations into the so-called money trust in 1912–13. Part of the wider antimonopoly
23 movement, the Pujo Report concluded that large swathes of American industry,
24 public utilities, and transport were under the control or influence of a handful of
25 financiers in a complex pattern of interlocking directorships and voting trusts.
26 Having meticulously noted all the interlocking directorships in a master table,
27 the team of clerks commissioned by the Pujo Committee prepared two diagrams
28 that provided a visual synthesis of the detailed information. Exhibit 243 focuses
29 on J. P. Morgan and Company, marking a significant shift in the public view of
30 Morgan, from the Napoleon of finance who had rescued the nation from the brink
31 of ruin in the panic of 1907, to a sinister spider at the center of the national finan-
32 cial web in 1912. One of the very first attempts to provide a graphic analysis of
33 interlocking directorships, the diagram ironically uses the visual language of the
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35 20. On the different technologies that allowed seeing the market up close and from afar, see Alex
36 Preda, *Framing Finance: The Boundaries of Markets and Modern Capitalism* (Chicago: University
37 of Chicago Press, 2009), chaps. 4–5. On the DJIA as a performative technology, see Marieke de
38 Goede, *Virtue, Fortune, and Faith: A Genealogy of Finance* (Minneapolis: University of Minnesota
 Press, 2005), chap. 4.



corporate organization chart pioneered by the Erie Railroad in the 1850s. In contrast to corporate organization charts, however, the Pujo diagram uses schematic simplicity to present the industrial trusts formed in the Great Merger Movement of 1889–1902 not as the epitome of rational efficiency but as the embodiment of conspiracy and corruption. It can also be viewed as a schematic representation of an octopus, a favorite symbol in countless satirical cartoons of the Gilded Age for the frightening size, reach, and rapacity of monster corporations. Although unable to represent finance directly, Exhibit 243 nevertheless allows its viewers to take in at a single glance the seemingly impenetrable web of financial capitalism.

Figure 6 Exhibit 243, Pujo Committee Report, 1913. Courtesy FRASER (Federal Reserve Archival System for Economic Research, Federal Reserve Bank of St. Louis)

Abstract Exchanges

The representational challenges posed by financial capitalism entered their most recent phase of intensification in the early 1970s, when the demise of the Bretton Woods system of gold-backed currencies and fixed exchange rates decisively severed the connection between monetary instruments and material repositories

1 of value and unleashed waves of speculation and volatility onto global markets.
2 Since then, the scale of the financial economy, in terms of volume, valuation, and
3 participation, has massively expanded; new and often arcane asset classes have
4 proliferated; regional and national markets have gradually converged into what is
5 in effect a single world market; and, amid the systemic upheavals of the “credit
6 crunch,” the locus of global financial hegemony has shifted from its centuries-old
7 transatlantic axis toward the emergent economies of Asia.

8 The political impulses inscribed in artistic responses to this period of expansion,
9 innovation, and instability in financial markets are often complex and
10 ambivalent. So, too, is the relationship between such artworks and their audi-
11 ences. Where the illustrated pamphlets and books discussed in the previous sec-
12 tions were targeted at wide, even mass, readerships, and understood themselves
13 as dedicated to the democratizing project of making finance intelligible to those
14 subject to, but largely excluded from, its gyrations, the contemporary works of
15 advanced art featured in this section are open to the charge of appealing exclu-
16 sively to an elite coterie of gallerygoers and art connoisseurs. While the producers
17 of such works may, to a greater or lesser extent, be “inside” the rarefied world of
18 contemporary fine art, however, they are decidedly “outside” the world of finance,
19 looking in. To that extent, at least, their gaze coincides with that not of a small
20 minority but of a vast majority of citizens.

21 Perhaps the best-known visual document of finance capital’s contemporary
22 ascendance is German photographer Andreas Gursky’s *Chicago Board of Trade II*
23 (1999) (fig. 7). An icon of contemporary photography, which enjoyed a long spell
24 as one of the most prominent exhibits at London’s Tate Modern gallery, the image
25 is part of a series of shots of trading floors—in cities ranging from New York to
26 Singapore to Kuwait—taken by Gursky since the early 1990s. While works like
27 *Hong Kong Stock Exchange, Diptych* (1994) display spaces entirely given over to
28 desk-bound, computerized exchange—oversize versions of the open-plan offices
29 that are now the standard trading environments in financial districts across the
30 world—Gursky’s visits to the Chicago Board of Trade (CBOT) (first in 1997 and
31 then in 1999) allowed him to capture scenes of traditional open outcry trading in
32 all its drama, dynamism, and energy. As such, *Chicago Board of Trade II* recalls
33 nineteenth-century illustrations of stock exchange panics, in which human pas-
34 sion and frenzy are seen to animate the market. At the same time, though, one can
35 hardly ignore the massive presence of technology in Gursky’s image: technolo-
36 gies of representation, recording, calculation, and transmission—descendants of
37 the stock ticker that already, in the late nineteenth century, endowed the function-
38 ing of the market with an impersonal, placeless air. Moreover, though full-size

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prints of the photograph (Tate Modern's is six feet by eleven feet) allow close-up scrutiny of the poses and expressions of individual traders, a view of the scene as a whole finds these figures thoroughly de-individualized, aggregated; meanwhile, Gursky's intentional blurring of his high-definition image (he customarily superimposes several pictures of the same subject over one another) both evokes the urgent movements of the traders and renders the image "reminiscent of an Abstract Expressionist painting."²¹ As Caitlin Zaloom comments, "The acid colors of trading coats swirl in and around the dealing pits. Hands and faces blur as they work to buy and sell financial commodities."²² In the image's drift from the figurative to the abstract—its tendency to appear less as a transparent representation of bodies and objects in space than as a pure geometric arrangement of color, form, and pattern—the specific site of financial exchange on which Gursky trains his camera comes to function as a kind of visual analogue for the vast, anonymous networks of the global financial system as a whole. Via a scene that, for all its complexity, a viewer may survey in its entirety from a single vantage point, Gur-

Figure 7 Andreas Gursky, *Chicago Board of Trade II*, 1999. © Tate, London, 2011. Courtesy the Estate of Andreas Gursky

21. Rachel Taylor, "Chicago Board of Trade II," Tate Online, 2004, www.tate.org.uk/servlet/ViewWork?workid=27067&tabview=text.

22. Caitlin Zaloom, *Out of the Pits: Traders and Technology from Chicago to London* (Chicago: University of Chicago Press, 2006), 1.

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1 sky offers a “privileged representational shorthand” for a totality that itself defies
2 direct figuration.²³

3 Comparable attempts to provide what Fredric Jameson calls “cognitive maps”
4 of the occulted realities of global finance were made by the American neoconceptualist
5 Mark Lombardi in the 1990s. From the early years of the decade until his
6 death in 2000, Lombardi used a carefully archived file of news reports (eventually
7 running to some twelve thousand entries) to produce meticulous pencil-on-
8 paper diagrams of financial and political scandals ranging from Whitewater and
9 Iran-Contra to the savings and loan and Vatican Bank affairs. *World Finance*
10 *Corporation, Miami c. 1970–79* (1997) (fig. 8) charts the hidden webs of influ-
11 ence, investment, money laundering, and embezzlement that linked this company,
12 founded by a CIA-backed anti-Castro Cuban, to Colombian cocaine smugglers,
13 Floridian realtors, and banks and to government departments in the United States,
14 Latin America, and elsewhere. Also produced on a large scale (*World Finance*
15 *Corporation* measures about two feet by five feet), Lombardi’s drawings, like
16 Gursky’s prints, enact an interplay between proximity and distance that may well
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32 **Figure 8** Mark Lombardi, *World Finance Corporation, Miami, c. 1970–79* (4th version), 1997.
33 Graphite on paper, 75.2 x 150.4 cm. Judith Rothschild Foundation Contemporary Drawings
34 Collection, Museum of Modern Art, New York. © Photo SCALA, Florence, 2011.
35 Image courtesy Donald Lombardi and Pierogi Gallery. Photo credit: John Berens
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37 23. Fredric Jameson, *Postmodernism, or The Cultural Logic of Late Capitalism* (London: Verso,
38 1991), 37–38.

1 be integral to representations of finance in general. For the viewer confronted
2 with work of this kind, to focus in on the details of individuals or institutions is
3 to lose sight of the whole, while to survey the whole is to allow signifying detail
4 to blur into formalist abstraction. Lombardi also shares with Gursky a capacity to
5 imbue a single static image with a temporal dimension: while Gursky combines
6 successive exposures to achieve the effect of bodies “hurtl[ing] headlong into the
7 future,” Lombardi plots his drawings along a central timeline, from which the
8 various actors branch off as they enter the saga, resulting in works that are, in
9 his own preferred terms, not so much diagrams as “narrative structures.”²⁴ Lom-
10 bardi is particularly alert to the fact that one of the challenges to representation
11 posed by financial systems is that they are not simply complex networks arrayed
12 in space but dynamic phenomena forming and reforming themselves over time.
13 A further point of commonality between Gursky and Lombardi is the ostensi-
14 bly neutral, impassive quality of their images. Here, though, the two artists also
15 diverge, for if Gursky’s stock exchange images carry a “critique,” then it remains
16 “implicit” and “inscrutable,”²⁵ while behind the scrupulous, methodical tabula-
17 tions that make up Lombardi’s work there clearly lies a critical, activist impulse.
18 Like the charts produced by the Pujo Committee, Lombardi’s images use the
19 resources of abstraction to reveal patterns and connections that are indiscernible
20 at the level of direct personal experience.

21 The intimations of the cosmic or sublime in Lombardi’s images of financial
22 interconnection have seen the works described as “celestial diagrams.”²⁶ Much
23 the same could be said of the visual effects produced by Lise Autogena and Joshua
24 Portway’s digital media installation *Black Shoals Stock Market Planetarium* (fig.
25 9). Viewers of Autogena and Portway’s installation— at Tate Britain in 2001
26 and at the Nikolaj Contemporary Art Center in Copenhagen in 2004— entered
27 a darkened room to gaze up at a computerized night sky projected onto a domed
28 ceiling above their heads. Each star in this artificial firmament represented a sin-
29 gle stock, which glowed whenever a live Reuters data feed relayed news of trad-
30 ing activity anywhere in the world. Over time, correlations in trading on stocks
31 in the same sector caused individual stars to cluster together into galaxies and
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33 24. Zaloom, *Out of the Pits*, 1; Lombardi quoted in Frances Richard, “Obsessive–Generous:
34 Toward a Diagram of Mark Lombardi,” *Wburg* 2, no. 2 (2001–2), [www.wburg.com/0202/arts/
35 lombardi.html](http://www.wburg.com/0202/arts/lombardi.html).

36 25. “*Chicago Board of Trade I*,” Christie’s, 2010, [www.christies.com/LotFinder/lot_details
37 .aspx?intObjectID=5313637](http://www.christies.com/LotFinder/lot_details.aspx?intObjectID=5313637).

38 26. See John-Paul Stonard, “Mark Lombardi,” MoMA, 2009, [www.moma.org/collection/artist
39 .php?artist_id=22980](http://www.moma.org/collection/artist.php?artist_id=22980).

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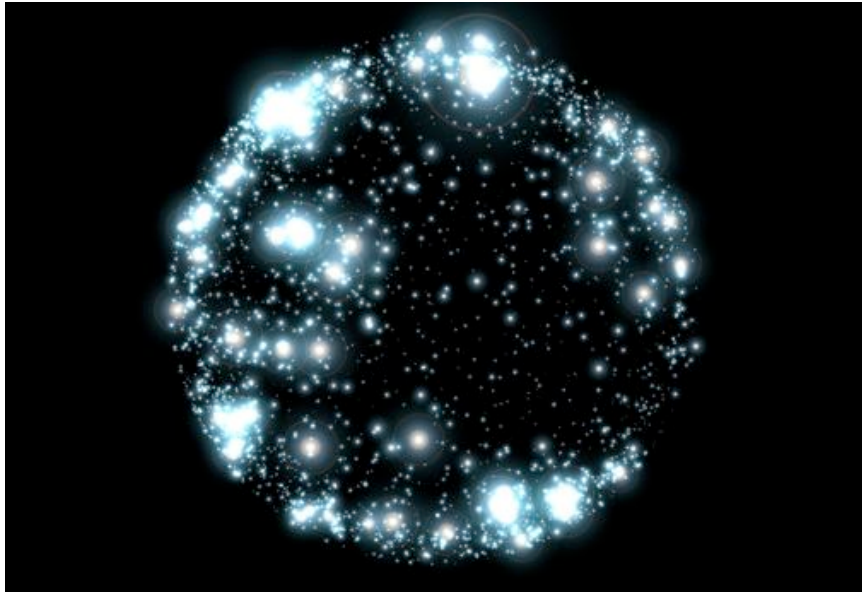


Figure 9 Lise Autogena and Joshua Portway, *Black Shoals Stock Market Planetarium*, 2001, 2004.
Image courtesy Lise Autogena

nebulae. The title of the project plays on the famous Black-Scholes-Merton formula for pricing options contracts, which earned Myron Scholes and Robert C. Merton a Nobel Prize in 1997 (Fischer Black was ineligible for the prize, having died in 1995). Scholes and Merton reaped huge profits when they set up their own hedge fund, Long-Term Capital Management, but the widespread adoption of their strategies by other investors eventually generated a positive feedback effect that meant that when economic conditions turned against the fund in 1998 its losses were massively amplified, leading not only to its own collapse, but also to the near-seizure of the wider financial system.²⁷ Feedback loops are crucially important for further key elements of Autogena and Portway’s digital cosmos: “shoals” of artificial organisms that “feed” on the light emitted by the stars and whose numbers wax and wane with the rhythms of trading. As the programmer of these electronic beings, Cefn Hoile, observed, “The creatures’ relationship with their artificial world of stars is a mirror image of our relationship with the financial markets—they strive to survive, competing with each other in a world

²⁷ See Donald MacKenzie, *An Engine, Not a Camera: How Financial Models Shape Markets* (Cambridge, Mass.: MIT Press, 2006), chap. 8.

1 whose complexity they are too simple to fathom.”²⁸ To contemplate the *Black*
2 *Shoals* universe is to see the markets as vast, remote, radiant, and unknowable
3 (an effect heightened in the work’s initial installation when Reuters refused to
4 allow the stars to be tagged with the names of their corresponding companies,
5 rendering the dome a wholly abstract expanse of pulsing light and impenetrable
6 darkness). On this reading, *Black Shoals* (like *Chicago Board of Trade* and *World*
7 *Finance Corporation*) allows us to see everything while (in contrast to these other
8 works) permitting us to know and understand nothing. Conceptualized differ-
9 ently, however, one could argue that the very perfection with which the work
10 distills a view of financial markets as natural, eternal, and serenely indifferent to
11 everyday human life performs a parodic and didactic function, making visible to
12 us not the reality of finance capital but rather its own idealized self-image.²⁹ As
13 Autogena and Portway themselves state, “*Black Shoals* was designed as a kind of
14 parody of the trading desk of the übermensch—the Mount Olympus from which
15 they would survey their creation.”³⁰ More than anything else, perhaps, what we
16 see projected in the darkened confines of the *Black Shoals* planetarium are the
17 flickering dreamscapes of these financial “masters of the universe.”

18 Another artist whose work appears at once as a neutral, technical reflection of
19 the markets and as a materialization of a fantasy vision of financial activity is the
20 British-born Chinese painter and collagist Gordon Cheung. The basic material
21 from which Cheung constructs his art has remained consistent since he began
22 his career in the mid-1990s: the stock listings pages of the *Financial Times* (*FT*).
23 His signature technique is to combine the *FT*’s distinctive pink pages into a back-
24 ground before overlaying computer-generated images and applying layers of paint
25 with a brush or spray can. The endless rows of densely packed company names
26 and prices that hover in the background of Cheung’s images recall the French
27 artist Claude Closky’s *Untitled (NASDAQ)* (2003), a wall hanging that covers
28 the gallery space from floor to ceiling with price listings from the NASDAQ
29 exchange. Whereas Closky’s installation ushers the viewer into a sublime realm
30 of pure technical information, however, Cheung’s lurid, phantasmagoric super-
31 impositions—images of chimerical creatures and scenes of postapocalyptic
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33 28. Quoted in Rita Raley, *Tactical Media* (Minneapolis: University of Minnesota Press, 2009),
34 148.

35 29. The political ambivalences of *Black Shoals* are discussed at length in Raley, *Tactical Media*,
36 chap. 3; and Julian Stallabrass, “A View from the Fish Tank,” *Black Shoals Stock Market Plan-*
37 *etarium* web site, www.blackshoals.net/Writing.html (accessed May 22, 2012).

38 30. Lise Autogena and Joshua Portway, “Thoughts behind the Project,” www.blackshoals.net/Thoughts.html (accessed May 22, 2012).

1 desolation—imbue the blank, neutral financial data in the background with a
2 sense of frenzy and delirium. In Cheung’s own words: “I’m interested in hal-
3 lucinatory spaces. The stock market is this place people are chasing after. Like
4 the pot of gold at the end of a rainbow. So I want this ‘delirious’ aspect to the
5 work.”³¹ If, as Cheung maintains, finance capital is a “dream-world,” then one
6 preoccupation that has recurrently troubled its sleep in recent years is the rise to
7 economic power of China.³² Though he has consistently resisted an identitarian
8 reading of his work, preferring instead to align himself with an “in-between-ness”
9 reflected in the eerie “non-places” he depicts, Cheung nonetheless acknowledges
10 the resonances between his Chinese heritage (his parents emigrated from Hong
11 Kong to London in the 1970s) and what Jackie Wullschlager describes as “the
12 geological drama and still sense of eternity in traditional Chinese brush and ink
13 landscapes.”³³ Both Chinese cultural traditions and urgent issues surrounding the
14 nation’s present-day global standing figured especially prominently in an exhibi-
15 tion of Cheung’s work, *The Sleeper Wakes*, held at the Other Gallery in Shanghai
16 in the fall of 2010. There Cheung displayed a series of images based on traditional
17 Chinese lion and dragon dances, including *Lion Dance 2* (2010) (fig. 10). With
18 its stylized lion’s head, etched with fierce, imperious expression, and four aggres-
19 sively posed human legs, the creature depicted in *Lion Dance 2* skillfully plays
20 on Western fantasies and fears of the China that now increasingly presides over
21 the terrain of global finance: a nation imagined as belligerent, inscrutable, and
22 exotically other. At the same time, by tapping into a Chinese mythological tradi-
23 tion in which animal figures carry a dense array of symbolic meanings, Cheung’s
24 work recalls the allegorical style of eighteenth-century visual responses to the
25 South Sea Bubble. If allegory was the mode proper to the inauguration, among
26 the stockjobbers of eighteenth-century London, of what Ian Baucom, drawing
27 on the work of the Marxist economist Giovanni Arrighi, calls an “Atlantic cycle
28 of accumulation”—a “long twentieth century,” 250 years in duration—then it
29 may be that the current supersession of this cycle, as economic hegemony shifts
30 inexorably across the Pacific, will find itself imagined in similarly allegorical
31 terms, albeit within a lexicon of figures, types, and symbols largely unfamiliar to

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33 31. Quoted in Tim Birch, “Breathing Space: Regarding Gordon Cheung, Artist in Residence
34 at the Chinese Arts Centre,” *City Life*, May 2004, gordoncheung.com/PAGES/archive/Arc_Press_Reviews/Rev_CityLife_May04.html.

35 32. Quoted in Len Horsey, “Gordon Cheung,” *Flux*, July–August 2004, 39, gordoncheung.com/PAGES/archive/Arc_Press_Reviews/Rev_Flux_July04.html.

36 33. Quoted in Jackie Wullschlager, “Market Gains,” *Financial Times Magazine*, October 16,
37 2004, 37, gordoncheung.com/PAGES/archive/Arc_Press_Reviews/Rev_FT_Oct04.html; Wull-
38 schlager, “Market Gains,” 37.



Figure 10 Gordon Cheung, *Lion Dance 2*, 2010. Image courtesy of Gordon Cheung, 2012

1 Western viewers.³⁴ If, that is, phases of capital accumulation proceed in epochal
2 cycles, as Arrighi persuasively argues in *The Long Twentieth Century*, then so,
3 too, may the cultural forms that chart them.³⁵

4 Allegory is one representational dynamic that we have traced in the preceding
5 sections; another is the tension between figuration and abstraction. As we hope
6 to have shown, a simple, linear narrative in which visualizations of markets were
7 once upon a time figurative and then became increasingly abstract is unduly sim-
8 plistic; on the contrary, a dialectical interplay between the two modes has been a
9 recurrent feature of such visualizations over the past two centuries. By the same
10 token, however, it is self-evidently the case that, to put it crudely, *Black Shoals*
11 *Stock Market Planetarium* is more abstract than *The Bubbles Medley* and *World*
12 *Finance Corporation* more abstract than *An Emblematic Print on the South Sea*.
13 Abstraction has always been with us, that is, but it has indeed become progres-
14 sively heightened or intensified. Again, this aesthetic process finds a correlate in
15 Arrighi's model of the unfolding logic of capital itself, where phases of intensified
16 speculative activity, in which financial exchange predominates over the materiali-
17 ties of production and consumption, periodically recur, but each time redoubled
18 or raised to a higher power: yet more expansive, more pervasive, more abstract.
19 The powerful effect of the images gathered here is to allow us to see this process
20 unfolding before our very eyes.

34. See Ian Baucom, *Specters of the Atlantic: Finance Capital, Slavery and the Philosophy of History* (Durham, N.C.: Duke University Press, 2005).

35. See Giovanni Arrighi, *The Long Twentieth Century: Money, Power, and the Origins of Our Time*, 2nd ed. (London: Verso, 2009).