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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revolution and the fraught emergence of public debt, the second with the appearance of the stock ticker, financial charts, and other new technologies for reading the market, and the third with the thoroughgoing dematerialization of financial capitalism and with what Randy Martin has influentially termed the “financialization of daily life.”

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

Bursting Bubbles

The South Sea Bubble, like the “tulip mania” of the century before, has become synonymous with the modern language of financial mania popularly embodied by texts such as Charles Mackay’s 1841 Extraordinary Popular Delusions & the Madness of Crowds. In the contemporary and widely disseminated depictions of the South Sea Bubble of 1720, this fear appeared most obviously to relate to anxieties about both the dangerously public nature of the financial market and the compulsive behavior that it encouraged. In The Bubblers Medley, or a Sketch of the Times: Being Europe’s Memorial for the Year 1720 (fig. 1), for example, the disordered crush of bodies is precisely located in London’s “Change Alley” and

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

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

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

4. Mary Poovey, *Genres of the Credit Economy: Mediating Value in Eighteenth- and Nineteenth-
Century Britain* (Chicago: University of Chicago Press, 2008), 82.
liam Harnett and John Haberle to J. S. G. Boggs, all of whom have explored the
ironies of a paper image of paper money.5

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

Bulls, Bears, and Stock Tickers

The allegorical approach to depicting finance in satirical cartoons continued in
the nineteenth century in Britain and the United States, not least in response to the
recurrent and increasingly globally interconnected panics that punctuated eco-
nomic life on both sides of the Atlantic. Crashes were explained partly through
reference to familiar visual tropes of natural catastrophes, drawing on biblical
images of floods and plagues. Many cartoons in antebellum America relied on
traditional explanations of individual moral responsibility for financial ruin, in the
absence of larger, systemic explanations: bankrupts were not victims of an imper-
sonal economic system but were foolhardy profligates who had brought misfor-
tune upon themselves. If they did seek wider explanations, they did so through the

at the Turn of the Century (Berkeley: University of California Press, 1987).
7. Catherine Ingrassia, Authorship, Commerce, and Gender in Early Eighteenth-Century
England (Cambridge: Cambridge University Press, 1998); Emma Clery The Feminization Debate
Macmillan, 2004).
moralized lens of political economy, in which the trials and tribulations of finance were portrayed as the result of specific policies or manipulation.\(^8\)

In nineteenth-century political cartoons, animal imagery featured regularly as stock visual shorthand, drawing on the classical tradition of animal fables, with political and financial actors taking on the roles and appearance of foxes, wolves, lambs, and other emblematic creatures such as the English bulldog, the American eagle, or the Republican Party elephant.\(^9\) *The Bulls and Bears in the Market* (1879) (fig. 3), by William Holbrook Beard (1824–1900), references what had become a standard way of describing those who gambled, respectively, on a rising and a falling market. However, Beard’s painting also marks a new departure, not least because it weds the visual allegory of political cartoons to the dramatic narrative and realism of late nineteenth-century high art. Beard had already made a name for himself as an accomplished painter of humorous, anthropomorphic scenes, including several involving gatherings of rapacious and bacchanalian bears in the woods.\(^10\) Although the bears in those earlier images referred obliquely to professional speculators, in *The Bulls and Bears in the Market* there is no doubting that the subject is Wall Street: the stampeding herd of bulls and bears, tearing the flesh from one another, rush past the clearly demarcated classical facade of the New York Stock Exchange (NYSE), threatening to overwhelm the viewer. If the cause of the devastating panic of 1873 is to be found anywhere, this painting suggests, it is not in the moral failings of ordinary citizens or even in the political machinations of Washington but in the heart of Manhattan’s financial district. The canvas combines a melodramatic panorama of the chaotic struggle between the bulls and bears with realistic attention to the details of horns, fangs, and hooves. It also couples animal brutality with recognizably human expressions, poses, and actions, such as the bear trying to lasso a bull in the background on the right-hand side. Beard thus reliteralizes the metaphor of social Darwinism: here in Lower Manhattan the law of the jungle reigns, with the bulls and bears

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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.

¹¹ James K. Medbery, Men and Mysteries of Wall Street (Boston: Fields, Osgood, 1870).
More straightforwardly realist depictions of finance in the United States did begin to emerge in the second half of the nineteenth century, from James Cafferty and Charles Rosenberg’s oddly static painting of the 1857 panic, *Wall Street, Half Past Two O’Clock, October 13, 1857*, to early daguerreotypes showing vistas of Wall Street.¹³ What is puzzling about the proliferation of attempts to represent high finance in middle- and lower-middle-class publications in the last decades of the nineteenth century is that very few of these readers actually participated in the market (the best estimate is that only 0.5 percent of the population held any form of securities in 1910).¹⁴ However, the increasing popularity across the nation of bucket shops (brokerages in which punters bet against the house on a rise or fall in stock prices, without having to actually buy any actual stock) meant that many more Americans had experience of the drama of the market than the official figures of stock ownership suggest.¹⁵ Likewise, the repeated panics that shook the wider American economy ensured that the stock market loomed large in the public imaginary in the last quarter of the nineteenth century, most often depicted in lurid tales involving legendary financial schemers such as Daniel Drew, Jay Gould, and Cornelius Vanderbilt.¹⁶ The guidebooks, memoirs, and profiles of the nation’s stock and commodity exchanges in popular magazines of the period grappled with the question of how to distinguish between gambling, speculation, and investment: did the popularization of share ownership signal the end of republican ideals of hard work as greedy individuals gave in to gambling or were fleeced by corrupt insiders in the unregulated marketplace; did it represent new possibilities for democracy by allowing everyone to become an owner in the age of mass corporations; or did speculation provide welcome hedging opportunities for ordinary Americans by redistributing risk to those professional investors most able to bear it?¹⁷

Some of the accompanying illustrations featured heroic or villainous titans of the market, capturing the fantasy or the nightmare (depending on one’s political

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¹³. For a selection of these images, see Leonard Levinson, *Wall Street: A Pictorial History* (New York: Ziff-Davis, 1961).


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. 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.

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)

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

The imagination of the market as more than the sum of individual, face-to-face transactions indeed began to alter dramatically with the development of new representational technologies such as the stock ticker, invented in the late 1860s. On the one hand, the ticker machine and the streams of tape came to serve as convenient symbols for the dangers of speculation, with cartoons depicting individuals caught up in endless streams of tape. On the other hand, the stream of prices produced by the ticker was not merely a more accurate and technologically efficient way of recording the price-making activities of brokers on the floor of the exchange; 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
The continual churn of the stock ticker vastly increased the available information about price fluctuations and therefore made desirable a representational technology that could provide the equivalent of the view from the visitors’ gallery of the NYSE. The emerging profession of technical analysis in the late nineteenth and early twentieth centuries promised to provide that bird’s-eye view of the market, by plotting the minute-by-minute flow of price variations into patterns on graphs or distilling the overwhelming tide of data into a single figure combining the dozen stocks that Charles Dow chose to represent the market in his creation in 1896 of what became the Dow Jones Industrial Average (DJIA). Financial chartism built on the turn to mathematical analysis and the graphic presentation of statistics in the neoclassical revolution in academic economics in the late nineteenth century, but it also presented itself as a more pragmatic tool that would be useful to both professional brokers and the increasing number of middle-class lay investors. By making the market seem a coherent totality that obeyed the natural laws of physics, and by portraying that regularity in graphical form, the chartists contributed to the democratization of stock market investment by making market movements comprehensible to lay investors at a single glance.

However, other attempts to provide a bird’s-eye view of the market as a coherent system took an oppositional stance to financial capitalism, enabled precisely by seeing it as a coordinated whole rather than a set of isolated transactions. Exhibit 243 (fig. 6) was produced by the congressional Pujo Committee investigations into the so-called money trust in 1912–13. Part of the wider antimonopoly movement, the Pujo Report concluded that large swathes of American industry, public utilities, and transport were under the control or influence of a handful of financiers in a complex pattern of interlocking directorships and voting trusts. Having meticulously noted all the interlocking directorships in a master table, the team of clerks commissioned by the Pujo Committee prepared two diagrams that provided a visual synthesis of the detailed information. Exhibit 243 focuses on J. P. Morgan and Company, marking a significant shift in the public view of Morgan, from the Napoleon of finance who had rescued the nation from the brink of ruin in the panic of 1907, to a sinister spider at the center of the national financial web in 1912. One of the very first attempts to provide a graphic analysis of interlocking directorships, the diagram ironically uses the visual language of the

20. On the different technologies that allowed seeing the market up close and from afar, see Alex Preda, *Framing Finance: The Boundaries of Markets and Modern Capitalism* (Chicago: University of Chicago Press, 2009), chaps. 4–5. On the DJIA as a performative technology, see Marieke de 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.

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

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

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

sky offers a “privileged representational shorthand” for a totality that itself defies
direct figuration.\textsuperscript{23}

Comparable attempts to provide what Fredric Jameson calls “cognitive maps”
of the occulted realities of global finance were made by the American neococeptualist Mark Lombardi in the 1990s. From the early years of the decade until his
death in 2000, Lombardi used a carefully archived file of news reports (eventually running to some twelve thousand entries) to produce meticulous pencil-on-
paper diagrams of financial and political scandals ranging from Whitewater and
Iran-Contra to the savings and loan and Vatican Bank affairs. \textit{World Finance
Corporation, Miami c. 1970–79} (1997) (fig. 8) charts the hidden webs of influ-
ence, investment, money laundering, and embezzlement that linked this company,
foundered by a CIA–backed anti-Castro Cuban, to Colombian cocaine smugglers,
Floridian realtors, and banks and to government departments in the United States,
Latin America, and elsewhere. Also produced on a large scale (\textit{World Finance
Corporation} measures about two feet by five feet), Lombardi’s drawings, like
Gursky’s prints, enact an interplay between proximity and distance that may well

\textbf{Figure 8}  Mark Lombardi, \textit{World Finance Corporation, Miami, c. 1970–79} (4th version), 1997.
Graphite on paper, 75.2 x 150.4 cm. Judith Rothschild Foundation Contemporary Drawings
Image courtesy Donald Lombardi and Pierogi Gallery. Photo credit: John Berens

\textsuperscript{23} Fredric Jameson, \textit{Postmodernism, or The Cultural Logic of Late Capitalism} (London: Verso,
be integral to representations of finance in general. For the viewer confronted
with work of this kind, to focus in on the details of individuals or institutions is
to lose sight of the whole, while to survey the whole is to allow signifying detail
to blur into formalist abstraction. Lombardi also shares with Gursky a capacity to
imbue a single static image with a temporal dimension: while Gursky combines
successive exposures to achieve the effect of bodies “hurt[ing] headlong into the
future,” Lombardi plots his drawings along a central timeline, from which the
various actors branch off as they enter the saga, resulting in works that are, in
his own preferred terms, not so much diagrams as “narrative structures.”

Lombardi is particularly alert to the fact that one of the challenges to representation
posed by financial systems is that they are not simply complex networks arrayed
in space but dynamic phenomena forming and reforming themselves over time.
A further point of commonality between Gursky and Lombardi is the ostensibly
neutral, impasive quality of their images. Here, though, the two artists also
diverge, for if Gursky’s stock exchange images carry a “critique,” then it remains
“implicit” and “inscrutable,” while behind the scrupulous, methodical tabula-
tions that make up Lombardi’s work there clearly lies a critical, activist impulse.
Like the charts produced by the Pujo Committee, Lombardi’s images use the
resources of abstraction to reveal patterns and connections that are indiscernible
at the level of direct personal experience.

The intimations of the cosmic or sublime in Lombardi’s images of financial
interconnection have seen the works described as “celestial diagrams.” Much
the same could be said of the visual effects produced by Lise Autogena and Joshua
Portway’s digital media installation Black Shoals Stock Market Planetarium (fig.
9). Viewers of Autogena and Portway’s installation—at Tate Britain in 2001
and at the Nikolaj Contemporary Art Center in Copenhagen in 2004—entered
a darkened room to gaze up at a computerized night sky projected onto a domed
ceiling above their heads. Each star in this artificial firmament represented a sin-
gle stock, which glowed whenever a live Reuters data feed relayed news of trad-
ing activity anywhere in the world. Over time, correlations in trading on stocks
in the same sector caused individual stars to cluster together into galaxies and

24. Zaloom, Out of the Pits, 1; Lombardi quoted in Frances Richard, “Obsessive–Generous:
Toward a Diagram of Mark Lombardi,” Wburg 2, no. 2 (2001–2), www.wburg.com/0202/arts/
lombardi.html.


.php?artist_id=22980.
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. 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...

whose complexity they are too simple to fathom.”

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

Another artist whose work appears at once as a neutral, technical reflection of the markets and as a materialization of a fantasy vision of financial activity is the British-born Chinese painter and collagist Gordon Cheung. The basic material from which Cheung constructs his art has remained consistent since he began his career in the mid-1990s: the stock listings pages of the *Financial Times* (*FT*). His signature technique is to combine the *FT*’s distinctive pink pages into a background before overlaying computer-generated images and applying layers of paint with a brush or spray can. The endless rows of densely packed company names and prices that hover in the background of Cheung’s images recall the French artist Claude Closky’s *Untitled (NASDAQ)* (2003), a wall hanging that covers the gallery space from floor to ceiling with price listings from the NASDAQ exchange. Whereas Closky’s installation ushers the viewer into a sublime realm of pure technical information, however, Cheung’s lurid, phantasmagoric superimpositions—images of chimerical creatures and scenes of postapocalyptic


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

Figure 10  Gordon Cheung, *Lion Dance 2*, 2010. Image courtesy of Gordon Cheung, 2012
Western viewers.\textsuperscript{34} If, that is, phases of capital accumulation proceed in epochal cycles, as Arrighi persuasively argues in \textit{The Long Twentieth Century}, then so, too, may the cultural forms that chart them.\textsuperscript{35}

Allegory is one representational dynamic that we have traced in the preceding sections; another is the tension between figuration and abstraction. As we hope to have shown, a simple, linear narrative in which visualizations of markets were once upon a time figurative and then became increasingly abstract is unduly simplistic; on the contrary, a dialectical interplay between the two modes has been a recurrent feature of such visualizations over the past two centuries. By the same token, however, it is self-evidently the case that, to put it crudely, \textit{Black Shoals} is more abstract than \textit{Stock Market Planetarium} and \textit{World Finance Corporation} more abstract than \textit{An Emblematic Print on the South Sea}. Abstraction has always been with us, that is, but it has indeed become progressively heightened or intensified. Again, this aesthetic process finds a correlate in Arrighi’s model of the unfolding logic of capital itself, where phases of intensified speculative activity, in which financial exchange predominates over the materialities of production and consumption, periodically recur, but each time redoubled or raised to a higher power: yet more expansive, more pervasive, more abstract. The powerful effect of the images gathered here is to allow us to see this process unfolding before our very eyes.