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Humming the Wedding March

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OUT OF THE PITS: TRADERS AND TECHNOLOGY FROM CHICAGO TO
LONDON

by Caitlin Zaloom

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When I visited it in November 1999, the new financial trading floor of the Chicago Board of Trade was a striking sight, which Zaloom describes well. Opened in 1997, it occupies a separate ‘huge stone block’, rather than the Board’s glorious art deco skyscraper, which was built astride LaSalle Street in 1930. The trading floor is ‘the size of Grand Central Station’, and ‘there are no windows ... no public entry ... The [inside] walls are unadorned granite, shiny, cold, and imposing’, topped with huge electronic displays of prices, index levels and interest rates. ‘Diffuse, bright, fluorescent light comes from the fixtures four stories above. ... There are no internal walls to break up the space’.

The floor’s dominant architectural feature is its pits, the stepped amphitheatres within which trading takes place. In 1999, the pits were crowded with well over a thousand people – nearly all men, although there were a few remarkable women who survived, even thrived, in the pits. The day I visited, the crowds in the pits weren’t in

the frenzy shown on television or in films. Indeed, nothing much seemed to be happening, and I confess to feeling a little let down. I hadn't yet learned that there are extensive dull spells in any market, in which no big orders arrive and prices seem hardly to move.

A young woman was showing me around, braving the odd wolf-whistle-like call from the steps of the pits. She probably noticed my slight disappointment, and when a huge roar came from another part of the floor, we left the side of the pit trading futures on the Dow Jones industrial average, and quickly made our way to its source, the largest of the pits, which dealt in futures on 'long bonds', the long-maturity – up to 30-year – debt of the US Treasury. A 'future' is a standardised contract, traded on an organised exchange such as the Chicago Board of Trade, which is equivalent economically to the two parties to the contract having undertaken to buy and to sell a given quantity of assets (such as bonds, or the stocks in the Dow Jones index) at an agreed price at a set point in time in the future.

None of the usual market-moving factors had caused the roar. Alan Greenspan hadn't said anything, nor had the dollar or the stock market suddenly plunged or soared. Instead, a trader had started using the lid of a large plastic tub as a frisbee. It repeatedly soared over the head of the hundreds of traders in the long-bond pit, enjoyably punctuating their boredom.

The lull of that morning in 1999 was temporary: the markets were quiet because they were waiting for the following day's publication of the unemployment total for the US, a number that does move markets because of its potential impact on

decisions about interest rates. When I visited Chicago again the following year, its ‘open outcry’ pits still thrived.

In the Board of Trade, orders and price quotations were still often carried to the pits on pieces of paper by runners and clerks, and then shouted out by traders and/or ‘flashed’ to others in the pit using the hand-signal language known as ‘arb’. Arb is an abbreviation for arbitrage, the exploitation of discrepancies in prices. If such a discrepancy is spotted, there’s not usually time to despatch a runner: the instantaneity of hand-signals is necessary. Palm outwards signals an offer to sell; palm inwards, a bid to buy. Fingers indicate quantities and the final digits of prices; everyone understands what the leading digits are. Zero is a clenched fist.

As I stood and watched, contracts worth huge sums were agreed by shouts or by eye contact and hand signals. A Dow Jones futures contract, for example, is \$10 for every index point. In November 1999, buying such a single such contract was roughly the equivalent of buying shares worth \$110,000 – and if you dealt only in single contracts you weren’t considered much of a trader. When trading futures, one doesn’t have to put up the full purchase price, but only to maintain an appropriate level of ‘margin’ deposit, and that’s a crucial part of what makes futures attractive. The potential for gain or loss is, however, just as big as it is in trading the underlying asset.

I now feel privileged to have seen Chicago’s open-outcry trading while it was still at its peak, because it was a way of life stretching back to the grain-futures pits of the nineteenth century that was on the brink of disappearing. In 1999-2000, there

were already some signs of the encroachment of technology into the pits of the Board of Trade. Headsets rather than runners were increasingly being used to communicate between the pits and the booths at which customer orders arrived, and some traders (not yet many) already carried hand-held notebook computers.

In the handful of years since 2000, Chicago's pits have emptied, and those who still stand in them focus less on the people around them than on their computers, the screens of which are now not an adjunct to trading but essential to it. Chicago remains central to the world's financial markets – after its recently announced merger with the Chicago Mercantile Exchange, the Board of Trade will be part of the world's largest exchange – but it's now mainly as the hub of electronic networks, not as a set of huge rooms crowded with men's bodies.

For all the role of financial trading in shaping today's world, there are few observational studies of it to complement the thousands of econometric studies of price fluctuations. Zaloom's book is a superb example of what's needed. It's a double-site ethnography. She first worked as a clerk on the Chicago Board of Trade, like any good anthropologist learning the local language – she's proficient in arb. Then she moved to London, where open-outcry trading has now vanished (except in niches such as the London Metal Exchange's venerable 'ring'), and there she was trained in and then practised the very different skills of the electronic trader.

Until you began to see pattern in what was going on, a busy Chicago pit looked like bedlam: hundreds of people jumping up and down, gesticulating, shouting and jostling each other – indeed, every now and then throwing a punch. Yet the

appearance of chaos hid a complex social order beautifully delineated by Zaloom. Pit traders faced each other day in, day out, year in, year out. Friendships, cliques and hostilities abounded. You quickly learned who ‘did size’ (traded in large amounts) and who traded only in ‘5-lots’ – contracts equivalent to a mere \$500,000 or so – or less.

Where you stood in a pit reflected your economic and social status, with the top rung reserved for the brokers who brought large customer orders and the experienced, well-financed traders who could accommodate them. No formal rule barred a neophyte trader who didn’t yet ‘do size’ from the upper rungs, yet someone who tried to stand there before having earned the right to do so would simply have been shoved back into the lower-level ‘soup’ in which he belonged.

Open-outcry trading is a continuous double auction, a market mechanism well regarded by economists, in which traders competitively quote not only their ‘bids’ (the prices and quantities at which they will buy) but also their ‘offers’ (the prices and quantities at which they will sell). Even a very large order from an external customer, whether it is to buy or to sell, could be accommodated quickly by a Chicago pit, often by the broker who handled it dividing it up amongst a number of traders. There was no need always to find an external buy order that matched a sell order (or vice versa), because pit traders were ‘market makers’. They took on at least limited risk on their own or their firm’s account, hoping to make money by successful prediction of short-term price moves or simply by buying, on average, at the prevailing bid price and selling, on average, at the higher offer price.

Ties of reciprocal obligation could easily form in a pit. Unless you ‘blew up’ (became bankrupt), you might stand in the same pit for years, even decades – and some of those who blew up found a way back in. Traders might, for example, take on a position that they knew would most likely cause them to incur losses in order to help a broker fill an external customer’s order at a reasonable price. They would be confident that the broker’s gratitude would express itself in the form of a healthy share of subsequent attractive orders. The formal rules of pits mandate that in a situation in which several traders are quoting the same bid or offer, the deal must be struck with the first whose shout one hears or hand-signal one sees. But as anyone who has tried to attract the attention of a busy waiter knows, one can easily avoid hearing or seeing when one doesn’t want to.

Pit trading was a hard skill to learn. You had to command not just practical matters such as arb, but also, Zaloom emphasises, a specific, disciplined emotional attitude: the capacity to set aside money’s ordinary referents, to avoid being influenced unduly by the fact one has just lost, or could over the next few seconds lose, the equivalent of a car, a child’s college education, or a house.

Furthermore, money was obviously needed. Even a pit trader who didn’t ‘do size’ had to be able to maintain margin deposits and absorb at least modest losses. The capital required went beyond the resources of most working-class or middle-class people, and Chicago’s pits didn’t attract large numbers of the already privileged. Since an inexperienced trader wasn’t a plausible applicant for a large bank loan, traders usually had to find others prepared to back them financially. Hence the importance of the informal apprenticeship provided by the poorly paid job of clerk or

runner. Such a job helped you learn not just practical skills such as arb, but also to discover the disciplined self a successful pit trader had to possess. Traders, too, could assess whether a clerk or runner who wanted to start trading was the kind of person it might be worth backing financially.

Chicago's originally tightly-knit neighbourhoods seem to have helped by providing recruits who would already be known through connections of kinship and friendship. It's common to find traders whose fathers or uncles had also been in the pits, and even in the 1990s there were still traces of an ethnic divide. The Board of Trade had been the primary province of Chicago's Irish community, while its rival, the Chicago Mercantile Exchange – originally Chicago's junior exchange, trading futures on butter, eggs and onions rather than grain, but more successful as a financial market in recent years than the Board of Trade – was often thought of as dominated more by the Jewish community.

In a pit, a degree of trust between nominal competitors was needed. Once a deal was struck by voice or by hand-signals and eye contact, each party to it recorded its details on a trading 'ticket', and their clerks then reconciled the two tickets. I was told that on the Board of Trade in the late 1990s the clerks typically found discrepancies in as many as 5-10 percent of cases – in open-outcry terminology, such cases are called 'out trades'. The system of separate recording of trades was potentially also vulnerable to opportunism. If became clear that a trade would cost one money (and that could become clear in seconds), one could deny having entered into it and discreetly discard or fail to fill in the trading ticket. Pits are often videotaped, but such recordings would often not to prove a deal had been struck.

Out trades and opportunism could have crippled open-outcry trading, but they didn't. Out trades were typically settled quickly and efficiently on a rough-justice, split-the-difference basis, and opportunism was very rare. It would bring the heavy punishment of freezing out from subsequent trading: who would catch the eye of a known opportunist? Chicago's pits worked as places of repeated interaction with others whose identities and reputations were known, not as places where atomistic economic agents confronted each other anonymously.

Open-outcry pits were also quintessential places of the body. The stories pit traders tell you are frequently bodily tales: of the voice coach who taught them to shout repeatedly without becoming hoarse; of the need to control bodily functions if one wanted to be in the pit for an entire trading day; of one's knees giving way in middle age from the strain of standing all day, every day; of shoes with platform heels to gain an economically-crucial inch or two in height, and the inevitable accidents then caused by tripping on the steps of a pit; of being showered with spit from one's neighbour shouting; of the fear of being stabbed in the eye by the pencils one's neighbours used to fill in trade tickets, and the realisation that feeling that fear meant it's time to retire; of catching a glimpse (contrary to pit etiquette) of a large order being flashed to the pit, and taking instant, profitable action; of noting the arrival in the pit of a broker who worked for a big, predictable customer; of a friendly broker being prepared to indicate, via a discreet little hand movement, whether the balance of customer orders he would seek to fill in the frantic last seconds of a day's trading was to buy or to sell; of the important information conveyed simply by the level of noise in a pit; of watching for the uneasy fidgeting that indicates fear, or listening for a

voice making the fatal transition Zaloom describes from ‘controlled loud’ to ‘panic loud’.

It’s not surprising that external customers and pit traders often have sharply conflicting attitudes to electronic trading. It gives customers direct, low-cost market access, while making the bodily skills of the pit trader redundant and rendering at least part of their network of personal relationships irrelevant. Across the world, pit traders have fought to preserve the pit – most fiercely in Chicago, where the open-outcry pit was born – but electronic trading has triumphed.

Pit traders typically find the transition to electronic trading hard. You can instal in your computer a program that turns the pace of market activity into a corresponding level of simulated pit noise, but such programs can seem too poor a substitute. Instead, trading futures electronically means staring hour after hour at a silent computer screen.

In place of the rich sensory information provided by a pit, the market is represented to an electronic trader of futures as two subdivided coloured bars dancing up and down his or her screen. The bar representing offers is conventionally coloured red, and the bar representing bids is blue. The subdivisions of the bars are the allowable prices at which deals can be struck (for each type of future a rule specifies the ‘tick size’, the minimum price increment), and each subdivision contains a constantly-changing number indicating the quantity of bids or offers at each price. Alongside the bars is a box that indicates the price at which an algorithm running on the exchange’s computers has most recently been able to find both a bid and a offer,

and thus has been able to conclude a transaction. In one system I've seen, the box remains white if that price is unchanged from the price of the immediately previous transaction, turns green if the most recent price is higher (and the market thus has risen) and turns red if it's lower.

The bids and offers on the screen are anonymous, and unlike a human body and voice they never directly convey confidence or fear. Although in some electronic exchanges there are differences in matters such as the maximum data rate of the connecting lines, getting the best access is essentially a matter of being prepared to pay for it, for example by buying membership of an exchange. You don't have to punch someone who is trying to push you off the top rung, or prove that you are worthy of standing there.

So has an entirely individualised, atomistic, asocial market finally been created? Zaloom's answer is 'no'. Her fellow electronic traders struggled hard, and sometimes successfully, to turn the impoverished information provided by their screens into a meaningful cast of characters. You couldn't any longer see a clerk flashing an order or notice a broker walking towards the pit, but you could see when the total bids or offers at a particular price suddenly jumped or fell by a large amount, especially a large round number: for example, from 471 to 971. That was taken as the typical sign of the arrival or departure of a big player.

Special attention, Zaloom notes, was placed on spotting a 'spoofer'. That's someone who places a large number of bids just below the prevailing market price, or offers just above it, hoping that the presence of those bids or offers will convince

others that demand outweighs supply, or vice versa, and that prices are about to move accordingly. A spoofer doesn't want the bulk of his or her bids or offers to turn into trades, and indeed might not be able to meet the margin demands if they do. He or she will want to remove the majority of the bids or offers before the order-matching algorithm can turn them into trades, but also to profit from doing a smaller number of trades at temporarily favourable prices.

If another trader detects the electronic traces of a spoofer, he or she can profit by 'riding the spoofer's tail', also trading at favourable prices. A brave and well-financed trader can even call the spoofer's bluff, 'selling into his bid' or 'buying his offer', and waiting for the spoofer's nerve to fail or for his or her capital limitations or management-imposed position limits to be reached.

It's also worth noting that few markets are in reality entirely anonymous and electronic. Especially when very large trades are concerned, market participants typically want to know with whom they are dealing before quoting a firm price. The pervasive fear is of trading with someone who knows something that you don't. In consequence, traders frequently face a problem that is the opposite of that posed by normal social interaction, in which one doesn't want to suffer embarrassment by revealing one's ignorance. You'll often get a better price if you can convey convincingly that you don't know anything – if, for example, you can make it clear that you are an index-tracking fund and are buying or selling shares simply to ensure that your portfolio continues to match the composition of the index.

In some supposedly anonymous electronic markets, participants thus sometimes deliberately signal their identities, for example by offering to buy not 10,000,000 shares, but 10,000,467, or bidding at \$92,700,059 where the '467' or '59' conveys one's identity. More commonly, however, electronic trading is supplemented by telephone broking or 'voice broking'. Such brokers help to handle orders that are so big that they would have an undue, costly impact on prices if they were placed wholesale into the electronic trading system, and they facilitate the trading of products that are more complicated and more diverse in their characteristics than simple, standardised futures. 'Voice brokers' don't just call up traders. They pay for a dedicated telephone line permanently kept open to each of their clients, connected at each end to a 'voice box' (loudspeaker, microphone and switches) that allows instant communication.

Brokers don't simply find buyers to match to sellers and vice versa. They're also repositories and conduits of information. Broking is 'a relationship business', you're frequently told, one that traditionally was cemented by extensive, and expensive, entertaining. (I'm told that as both brokers and their clients have aged, there's less drinking and late-night entertainment than there used to be.) A good broker has at least a rough idea of what his clients (it's another predominantly male niche) are trying to do and of what they would do if offered a particular quantity of a product at a specific price or an inter-bank deposit at a particular interest rate. There's an etiquette that governs broker-client conversations. You're not allowed to pass on what Deutsche Bank, for instance, is doing, but a euphemism such as 'a big German' can sometimes be acceptable.

As Zaloom emphasizes, although the ideal of the anonymous, atomistic market is a powerful one, it's probably destined to remain just that – an ideal. I've spoken to lots of professional traders, and found few who conceived of themselves as individuals confronting an impersonal market. All the markets I know well are full of gossip about who is doing what and why, and this gossip is often consequential in terms of what is done and when.

Traders' culture is rich and reflexive. The recently-emerged academic specialism of 'behavioural finance' uses experimental evidence and price data to identify psychological biases that affect how traders behave, but traders already understand at least some of those biases. A common bias, for instance, is reluctance to realise a loss by liquidating a loss-bearing position. Even professional traders will often avoid selling securities in a situation in which they would never dream of buying them, because to sell them would turn a 'paper' loss into a 'real' one.

Traders call being attached irrationally to a position being 'married' to it. Managers watch out for it amongst those they manage. Zaloom records one such manager hissing into the ear of a 'married' electronic trader: 'Wishing, hoping, and praying'. In the pits of the Chicago Board of Trade, she notes, the signs of marriage could elicit just as direct a response, with one's fellow traders starting to hum Mendelssohn's wedding march.

With their gossip, their rich cultures, and their social bonds (still important, even in the epoch of electronic trading), financial markets cry out to be studied by the methods of social anthropology or qualitative sociology. But such study is hard.

Getting access, especially for observational work, is difficult. You're often 'studying up', as anthropologists put it: researching those higher in the socio-economic scale. As a professor at a well-known university with fancy letters after my name, I don't usually have trouble persuading people to let me interview them, but it's noticeably harder in financial markets than elsewhere.

Zaloom got lucky. Family friends in Chicago offered not just a place to live in their basement apartment, but had a son who traded futures on the Chicago Board of Trade. Her request for an exploratory interview was met with a quintessential Chicago combination of brusqueness and generosity: 'I can't tell you anything. It is just something that you have to see for yourself. ... Can you be at work on Monday?'

It's a good-luck story of the kind that probably attends all successful fieldwork. Like the trader she eventually became, Zaloom rode her luck, and turned it to solid intellectual gain. Only a handful of studies have provided genuine ethnographic insight into trading in financial markets. *Out of the Pits* is at least the equal of any of them.