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Title: A narrative approach to sense-making in financial markets: the case of the Istanbul Stock Exchange[2]

Abstract
In this paper, I offer a narrative inquiry approach to daily sense-making activities of market actors before the information and trading screens. I do this by drawing on the organisational sense-making under uncertainty literature and adapting it to financial markets. My evidence comes from in-situ utterances and written statements of market actors from the Istanbul Stock Exchange. I conducted a 10 month field work in this emerging market as part of my PhD research in Sociology at the University of Edinburgh. I believe that by grounding the study of cognitive processes in real setting and in situ narrative and calculative materials produced by market actors, we can identify and get a better grasp of mental frames or viewpoints that are in work during sense-making activities in financial markets.

Key words: Sense-making, viewpoints, narrative inquiry, financial markets, the Istanbul Stock Exchange

Introduction

In this paper, I present a narrative framework to understand sense-making in financial markets. Although Behavioural Finance provides us conceptual tools that can reveal cognitive processes in sense and decision making in financial markets (see Ritter, 2003 for a review), there is almost nothing in that literature which directly takes on market actors' utterances and written statements that are products of in-situ observation and interpretation activities. I believe that by collecting and analyzing in situ and written narratives of financial markets, we can not only reveal more cognitive processes in information processing but also better grasp how they actually work. These findings can be of use to behavioural studies of financial markets.

My findings in this paper draw on a 10 month ethnographic fieldwork of the Istanbul Stock Exchange (henceforth the ISE) in 2008 and 2009. I had participated in daily routine of four different brokerage houses (Houses, A, B, C, and D) in Istanbul as an intern. My data is composed of extensive field notes (with voice recording when permitted) that describe dealing room events in detail, published routine market commentary, analyst reports, news stories on the national business media, and 42 informal and formal semi-structured interviews with traders and analyst.

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In the following paragraphs, first I present a theoretical discussion of narrative mode of knowing under uncertainty in organisations and its applicability to study of financial markets. I then present a framework of narrative inquiry into financial markets by proposing a narrative type, namely momentary stories. This framework is then supported with five narrative examples from the ISE that correspond to elementary features of momentary stories.

Narrative mode of knowing and explanation under uncertainty in organisations

In its simplest form, narrative refers to discursive representation of a chronology of events a protagonist goes through (Culler, 1981 cited in Boje, 2001:6. Toolan, 1992; Johnston, 2001). In literary studies, story refers to what we experience and narrative to its discursive representation. In that respect, narrative is beyond raw experience, it is a work of ordering beyond chronology (Czarniawska, 2004). Our stories or our experiences are edited and made meaningful by our narratives, and what Ricoeur (1984) calls emplotment. Polkinghorne (1988) argues that plotting events and actions is one of the most important forms of meaning making in human existence. This is achieved by imposing temporal, thematic, and logical connections among events and actions the recounter observes and/or goes through.

Although emplotting gives us freedom in creation of meanings out of a set of events, narrative scholars remind us that emplotment should be made within 'socially and culturally comprehensible ways' (Salmon, 2008:78). Moreover, narrative mode of knowing and explanation of events need not be mutually exclusive with paradigmatic and categorical knowledge such as calculation formula for a financial security. Therefore, both narrative and paradigmatic (scientific) knowledge can co-exist in our explanations of past events and actions. In that respect, narrative mode of knowing and explanation provides us richer meanings and explanations that are grounded in both history and scientific theory.

To give an example for this combination, I present an excerpt from FED chairman Ben Bernanke's speech in Washington and Lee University (2004).[i] The speech was about the causes of great depression and the role of monetary (gold) factors:

The market crash of October 1929 showed, if anyone doubted it, that a concerted effort by the Fed can bring down stock prices. But the cost of this "victory" was very high. According to Friedman and Schwartz, the Fed's tight-money policies led to the onset of a recession in August 1929, according to the official dating by the National Bureau of Economic Research. The slowdown in economic activity, together with high interest rates, was in all likelihood the most important source of the stock market crash that followed in October. In other words, the market crash, rather than being the cause of the Depression, as popular legend has it, was in fact largely the result of an economic slowdown and the inappropriate monetary policies that preceded it. Of course, the stock market crash only worsened the economic situation, hurting consumer and business confidence and contributing to a still deeper downturn in 1930.

In this excerpt, Bernanke combines historical events with categorical knowledge about monetary policy in explaining the role of stock market crash in Great Depression, in the above case a dramatic consequence of 'wrong' monetary policy and economic slowdown. Note how inanimate or abstract objects such as economic slowdown or monetary policy are given agency in bringing about a certain outcome. These concepts represent abstract elements in Economics with background theoretical knowledge about how they affect and are affected by other abstracts elements in the relevant theories.

A narrative like Bernanke's stands on a heap of literature on the Great Depression which has reduced different types of uncertainties about that part of the 20th century history. On the other hand, individuals face with informational uncertainties on a daily basis in everyday and organisational settings without the benefit of such accumulated knowledge. Besides, informational uncertainties may necessitate on the spot and prospective sense-making to harness the repercussion of events and actions. Weick (1995) demonstrates that organisations have stable frames to deal with uncertainty such as organisational culture or ideology, premises, paradigms, theories of action, and traditions about organisational activities and the environment that surrounds the organisation. While these stable frames process information and data on a routine basis, ambiguity, uncertainty, and shock caused by unexpected events lead to what Weick calls storytelling among two or more members of an organisation. Storytelling under such circumstances 'impose[s] a formal coherence on what is otherwise a flowing soup' of information and data (Weick, 1995:128). Once storytelling successfully makes sense of uncertainty by emplotting a set of events and actions, the overall meaning it creates can make it to the more stable frames of sense-making mentioned above. In a reverse manner, stories also exemplify more abstract aspects of organizational sense-making frames mentioned before. Thus, stories with their double function carry these more stable and abstract frames as well as modify them in times of uncertainty and ambiguity.

Narrative mode of knowing and explanation under uncertainty in Financial Markets

When Weick (1995) was writing his book titled *Sense-making in Organisations,* he did not consider financial markets. Nevertheless, his idea of stable sense-making frames and stories and the relationship between the two is applicable to financial markets. To start, let's answer the following question: What kind of uncertainty does affect sense-making activity of market actors? Without an incentive about financial returns and ownership rights, rational actors would not invest in securities issued and traded in financial markets (Cetina and Preda, 2005). Related to incentives, reasons of participation in financial markets assume future events and expectations of profits/losses linked to them. This brings in two types of uncertainty to market actors, namely a future that is unknown (Buenza and Garu: 2007:13), and a present which is flooded with information that needs to be made sense. Reducing both types of uncertainty constitute the narrative and calculative performance of market actors in sense-making. Although mainstream finance theory posits that prices follow a random walk (for a seminal review see, Fama, 1965) and hence cannot be predicted with success, market actors do try to predict the future

trajectory of prices by combining narratives and calculative practices about past and present events.

In predicting the future price of a share that is unknown, market actors resort to calculation of the share's fundamental value: 'the net present value of its future cash flows, discounted using (investors) risks characteristics' (Shleifer, 2000: 2). Such a calculation is generally present in analysts' reports on companies (Kruschwitz and Loffler, 2005; Buenza and Garud, 2007; Ortiz, 2009). It constitutes the numerical conclusion of analysts' qualitative judgements (technical stories) about a company's future cash flow performance based on its past and present revenues and costs. This calculation is an essential part of any analyst report that makes predictions of share value of a company usually for a 12 month period. The prediction is translated in to a target share price and a call for trading action (buy, hold, or sale). The analyst reports combine the qualitative assumptions of analyst and paradigmatic calculations of a valuation method such as Discounted Cash Flow. The models inform what type of judgements an analyst has to make. The calculations of the model are affected by the qualitative judgements. Thus, analyst reports provide technical narratives akin to scientific reports that predict the future. The predictions are theoretically and empirically justified via narratives. In this paper, I do not dwell on this type of narrative as analyst reports are informed by such universal models and hence do not give too much room to narrative imagination in reducing uncertainty.

Making sense of the present flooded with information is a more mundane and bigger challenge for market actors compared with the fundamental valuation activity. The mainstream finance theory as popularized by Fama (1970) assumes that all publicly available information is quickly reflected in prices.[ii] Market actors do the actual constant work of incorporating information into prices by bidding them up or down according to their judgement as to whether particular information is good or bad with regard to associated securities. In the momentary sense-making situation, the uncertainty is concerned with not only making the judgement of whether certain information is good or bad for a given security, but also judging whether that information can actually affect the price of a given security. While categorical or theoretical knowledge a market actor possesses can answer such question, the actual practice may bring forth idiosyncratic and market specific sense-making activities in answering such question. To give an example, if the price of HSBC PLC share is going up without any news related to the company or banking sector in general, market actors may have to find a meaningful information or data on or off the screen to explain this price movement instead of dismissing it as meaningless trading activity in the first place. Observation of a market and finding explanatory connections between events and actions overtime may provide stable sense-making frames that process a large part of information and data flows on the screen and link them to each other in predictable ways. In this way, a seemingly meaningless trading activity can make sense even with a view about its future trajectory.

Another important part of momentary sense-making activity is to contemplate about investor behaviour that may trigger such price events or how market events may affect investor behaviour. Nevertheless, data about investor identity are usually anonymised on

trading platforms. Moreover, any meaningful information about investor motivation behind a specific buy or sell activity or investor emotion in the face of market events is practically impossible to provide given the possible costs of collecting them and loss of trading advantage by revealing such motivations. So the most meaningful data to make such considerations about investor motivation and emotion is price data. However, this limitation is compensated by narrative imagination. What I mean by that is making the otherwise anonymous investor figure an agent with motive and emotions by looking at changes in price data. The investor figure with motives and emotions become a cause behind price movements. Equally it becomes susceptible to market and price events and turns into an effect in causal relationships.

As can be predicted from the above discussion, momentary sense-making is a retrospective activity that strives to find connections among events and actions in order to anticipate their future trajectory (Klein, et al. 2006). Continuous observation and experience of market events lead to development of logical relationships among them. The way momentary narratives work resemble the way we create rules of thumb in daily life. By experiencing similar events over and over again, we start to see a pattern in them by establishing logical and predictive relationships among a set of events. Identification of similar situations leads to invoking of similar momentary narratives that explain them and predict their future trajectory. If the heuristics do not seem to work, then another way of plotting may become more prevalent in the market.

A framework for narrative inquiry into momentary sense making in Financial Markets

Although price data or news narratives may not mean anything to an outside observer beyond numerical signifiers and text about events, market actors eventually turn them into ordinal (good, bad, neutral) and cardinal (price estimates, upside potentials) values by momentary and technical narratives. These narratives reduce uncertainties related to present and future. Below, I demonstrate how they do so by looking at their plot creation and use of discursive tropes in momentary stories.

Momentary Stories

The recent well-documented trend of computerization in financial markets (Cetina and Brugger, 2002, Zaloom, 2006, Mackenzie, 2009) has meant that face to face interaction on trading floors have been replaced by actor-screen-actor type of interaction. In this form, screen connects different and usually anonymous actors to each other by exchange and price data, news about events inside and outside the market place, and execution of trades. This setting is where the first type of sense-making story emerges, i.e. ‘momentary stories’.

Momentary stories may plot a set of figures and narratives on the screen or alternatively they may invoke terse stories about past experiences (Boje, 1991) and plot them with current figures and/or narratives on the screen. Terse stories can be seen as view points or cognitive shortcuts used by human beings to reduce the cognitive load on our mental

processes (Klein, et al, 2006b; Bless et. al. 2004). The aim of the momentary stories is to reduce uncertainty about as to why price changes happen, and to anticipate the future trajectory of price changes by imposing logical relationships among a set of events.

The uncertainty about reasons behind price changes does not solely happen because of lack of information. The plethora of information and figures about local and global markets available on a typical trading screen may increase uncertainty if the observer cannot establish meaningful relationships among all or some of them in order to explain price changes. Foremost among the logical relationships used by market actors are cause and effect, correlation and/or simultaneity, and similarity. Although mainstream finance theory has long argued that prices follow a random walk and hence cannot be predicted (Fama, 1965); and all the publicly available information is reflected in prices at any moment in time (Fama, 1970), momentary stories may imply or make quick predictions about the future trajectory of prices by retrospective sense-making activity drawing on publicly available information, and on past market experiences.

On the other hand, in order to reduce another type of uncertainty and to establish investor motives and emotions as meaning makers, momentary stories resort to what Gabriel (2000:36-7) calls poetic tropes. Poetic tropes like rhetorical tropes infuse meanings on a set of events and turn them into meaningful wholes. The relevant poetic tropes to investor motives and emotions are 'attribution of agency, motive, responsibility, emotion, unity, and fixed qualities'. By virtue of these figures of speech, otherwise anonymous investors are classified into categories with stable qualities, and corresponding motives. They are attributed agency and responsibility in bringing about market outcomes with these qualities and motives. The emotions attributed to them are construed as causes or consequences of market outcomes. These emotions lead to responses in the form of buy or sell activity. It has to be reminded here that attribution of one or more of these poetic tropes happen in the face of informational uncertainty related to data about investor profile and behaviour. Therefore, this narrative practice borders on fantasy yet narrators anchor their narratives to proxy data such as price, clearing(settlement), intermediaries used in transactions (their overall trading activity on a given day), and so on.

Predictions made by momentary stories are similar to what Boje (2001; 2008) calls ante-narratives. Boje (2001:1-2) uses the prefix ante to denote two meanings, namely 'before' and 'bet'. First, he claims that ante-narratives are 'before' a hegemonic narrative in which alternative interpretations or meanings are absent because of one single coherent plot retrospectively putting everything in order. Secondly, Boje (2001:3) claims that ante-narratives are speculations 'as to what is happening in the flow of experience'. Both meanings are applicable to momentary stories since they are formed as time unfolds and brings forward new figures, events, and actions on to the screen to be made sense of. Such a flow and concomitant sense-making activity prevent one dominant meaning taking hold in the face of fluidity. 'More sensemaking keeps displacing closure' (Boje, 2001:3)

To give an example of a momentary story plotted around changing index figures on the screen, and a terse story about past experiences that embodies one of the logical relationships mentioned above, namely correlation, I present the following short in situ

conversation between two dealers in House B during the morning session of the ISE trading (9 April 2008). These dealers serve domestic retail investors in the ISE. The in situ conversation was prompted by the changes in the DAX and the ISE index values. I noted down the conversation as it happened.

- *Dealer A: They are buying here again!*
- *Dealer B: DAX is now – 0.80, that is enough a reason for them!*
- *Dealer A: They are buying holdings…[then to his customer on the line] if they buy ISCTR, I will change the order*

The conversation contains a terse story about correlation between the DAX (the German Stock Market Index) and the ISE 100. The terse story is invoked by the sentence 'that is enough a reason for them!' This sentence connects changes in each index value, reiterating the belief on the part of domestic investors 'them' and dealers alike in the strong one way correlation between the DAX (and other leading world indexes) and the ISE (being affected as an emerging market).[iii] Then Dealer A observes more buying activity in the ISE, and announces an action that is conditional on observing buying activity in a leading bank share which has significant weight on the value of the ISE index (ISCTR is the code name of the share).

Whole stories about the integration of the ISE to the world markets and its quasi-categorical consequences in this decade are folded into a terse story to make sense of the buy activity in the ISE. The level of integration or correlation between major world indexes and the ISE can be subjected to longitudinal empirical scrutiny with data readily available on trading platforms. However, the dealers suffice with looking at the figures on the screen and make sense of them by invoking the terse story in narrative mode.[iv] There may be other random causes (not readily available through screen or not noticed by dealers) behind this seemingly correlated move at that particular time on that given day, or behind the buying activity of 'them' (which is almost impossible to find out with the available transaction data) but the dealers ignore this possibilities and stick to the terse story to emplot these two price events and come up with an explanation of the price change. Notice how domestic investors are attributed motive (buy the ISE when DAX is up), and unity (they all believe in this correlation and act accordingly in bringing about a positive change in the index value).

Below is another example of a momentary story. It is told by a sales trader in House C to her global institutional clients (foreigners) via email in English (12 August 2008). The occasion for this email is a routine morning call based on the trader's daily morning scan of newspapers, news wires, and her chat with others in the trading room. The email presented here is verbatim apart from numbers assigned to each hyphen. I removed points 2, 3 and 4 as they basically conveyed news that were available on the news media and trading screens without any comment about future trajectory of prices. The email invokes both correlation and cause-effect as logics of explanation in explaining the present and predicting the future.

g'day.. *+ve sentiment to continue..*
(1)-just ignore the news that IMF deal at risk..i am hearing from

Ankara that the govt will cut the deal w IMF by early sept..this wud increase the confident in the mkts..+++ve..

***

(5)-we continue to watch the global sentiment..we move in line may have a bit stronger sentiment though..i wud go long for early sept,IMF deal, falling interest rates, Cyprus talks r my bets

The points presented above are her opinions about the future of the index value. In point 1, she contradicts the news story about the deal between the IMF and Turkey by conveying the meaning came out of the private deliberations of the head of the house with some government officials in the capital city (as told by the head that morning). In point 5, she presents an argument as to why the ISE may have a stronger (positive) sentiment than the global one for the near future by bringing together a set of expected events for September 2008. 'The IMF deal, falling interest rates, Cyprus talks' refer to unfinished stories on the agenda in the sense that they have not reached a resolution yet. The phrases represent terse stories about each issue. The shared experience and tacit knowledge about these issues by the trader and her clients allows the trader use the stories in terse form in her narrative.

Before moving on to 'her bets', the trader observes the recent index movements in the ISE which are in line with the global markets' movements. This statement invokes the above mentioned belief in the correlative movements between the global markets and the ISE. After reiterating that perception frame, she makes her case as to why the ISE would fare better than the leading indexes. In doing that, she singles out three important causes that are predicted to deliver that effect. The falling interest rate (in Turkey) paradigmatically implies a diminished return for bond investors and may lead to diversion of capital to the ISE. The IMF deal for Turkey means fresh cash injection to the economy as well as a fiscal stability program beneficial to macro economy in globally turbulent times. The start of Cyprus talks by September raises the hope for a solution to a long standing political issue that hampers Turkish bid to EU membership.

As she makes it clear at the end, her momentary story is a bet about future based on unresolved terse stories. There is no retrospective factual coherence in terms of historical facts as this momentary story is about future expectations and sanctions a 'long' buy position in the ISE for short-term profit. It is an ante-narrative as espoused by Boje (2001:2). It is a bet about the future and before the coherence of discourse of historiography, facts and figures (Polkinghorne, 1988; Gabriel, 2000). [v] It is also important to highlight the implicit assumptions about prospective investor behaviour in this narrative. The story told by the female dealer assumes an investor mass that will interpret the outcome of all three events as she does here. Only by such an assumption, her bets can make sense as they do in the above excerpt.

As shown above, plotting of price data, a set of events, with or without the help of terse stories invoke cause-effect and correlation like relationships among them. The emplotment as such imply a certain future trajectory for the index value or price of a specific security. These bets or predictions are linked to ordinal notions such as good,

neutral, bad or to actual numbers as in the case of expectation surveys done among market professionals. These surveys have become one of the most important epistemic tools in financial markets in interpretation of data and news flows about the local and global economy and companies. In the case of the ISE, global macro data releases, especially about the US and EU economies are more closely followed than the local ones, especially in the Houses that serve only domestic investors. This can be seen as another repercussion of the belief in the strong (one way) correlation between major world indexes and the ISE.

This belief is supported by the market data about share ownership and trading volume presented below in annual terms. The overall picture painted by these statistics is that the ISE as an emerging market is owned by 'foreign' investors but traded predominantly by 'domestic' investors. The foreign ownership data is updated on a daily basis by the Central Registry Agency and disseminated via data platforms. It is another epistemic tool followed in the houses that serve domestic investors to gauge foreigners' investment moves and motives. To support this, market actors observe trading activity of local brokerage houses owned by global investment banks or houses that are believed to serve foreigners. Their buy and sell activity is used as another proxy to gauge what the 'foreigner' or 'owners of the ISE' feel and do.

Table 1	***Percentage of market value of shares owned in TL****		***Percentage of nominal shares owned***		***Percentage of trading volume made***	
	Domestics	***Foreigners***	***Domestics***	***Foreigners***	***Domestics***	***Foreigners***
2008	32.6	67.4	33	67	73	27
2007	27.7	72.3	27.5	72.5	76	24
2006	35	65	32	68	81	19
2005	35.17	64.83	33	67	79	21
2004**	48	50.7	39	61	87.3	12.7
2003**	55.71	42.76	49	51	91.3	8.7

* closing value of the shares as of 31/12/2008
** values for each investor type for market values of shares will not add up to 100 due to unidentified accounts.
Source: The Association of Capital Markets Intermediary Institutions of Turkey (ACMIT) <http://www.tspakb.org.tr/>

Before moving on the excerpt about data releases and how they are as news events incorporated into narrative explanation of the ISE price and index events, I present the below excerpt about observation of world indexes and supposed foreigners' trading activity. The below excerpt demonstrates the effects of viewpoints about foreign share ownership, foreign trading activities, houses foreigners supposedly use, and correlations between the world indexes and the ISE on momentary sense-making of price and index value events on the screen. On 10 March 2008, the strategist of the House A, who provides daily web commentaries on the house's website, writes the following comments (excerpt) as he observes his local trading screen and Bloomberg terminal. House A serves

only domestic retail investors. The commentaries below are about price or index events, making sense of a range of numerical figures and symbols on the trading screen:

14:l8 Europe is in positive, the ISE is slightly negative, a foreign house has sold 30 Million TL in banking sector
…
14:11 the money exit in the ISE is 20.4 million TL, most of it in bank shares
…
10:24 the ISE has gone into positive before the Euro markets by the buys in Eregli
10:12 there is money exit in the ISE, 20 Million TL, 18.2 of that is in Garanti (Bank)
...

One would question the term 'money exit' in the 10:12 entry as buying and selling activity is achieved at a single price and fixed quantity between parties to a transaction. What is meant by money exit is the net trading activity of the top 10 houses by volume at a given time in day. Depending on this, money exit or entry becomes an epistemic tool that predicts the direction of the index. Particularly important in this observation activity is the type of houses who engage in the activity. In the ISE, there are around a dozen houses owned by global investment banks and locally owned houses associated with executing foreign 'tickets' (buy/sell orders). Such associations can be made by continuous observation of trading screen, tacit knowledge about brokerage houses trading in the ISE, and ensuing viewpoints about what a phrase and corresponding figures on a screen correspond to in terms of future.

In the comment at 14:18, the strategist invokes this viewpoint by stating 'a foreign house has sold…' he refrains from stating the name of the house. However, people in the audience who share the viewpoint know what this means retrospectively (the index is down because of these sales) and prospectively (if the sale continues, the index will continue to be like this) despite the increase in values of European stock markets. Bearing in mind the belief in the (one-way) correlation between the major world markets and the ISE, the strategist implies that a similar move could be the case in the ISE if it was not for the foreign house selling banks. Contrast this with the comment at 10:24 which attributes cause and effect relationship between Eregli (biggest steel manufacturer of Turkey) and the ISE index being positive (before the Euro markets!). Eregli undermines the correlation and helps the ISE outperform the major markets in Europe. In daily commentaries written or oral, the conceptual universe of recounters is shaped by beliefs in such causal and correlative relationships. Numbers and figures on the screen are made meaningful by these logical connections unless there is a specific news event. Market actors sustain these connections by discursive practices as shown above.

Coming back to data releases as news events effective on the ISE, in all the four houses, the standard morning bulletins sent to employees and clients alike contain the list of data releases or important statements by global and local market actors on that particular date. These lists are usually accompanied with the result of market expectation surveys corresponding to each data release. Below is an excerpt from the daily produced in House A on 4 March, 2008 that lists 'Market Calendar- Data to be Released'.

Market Calendar-Data to be released
Today

- *Treasury to reissue 3 year maturity, fixed coupon TL rate bills*
- *Eurozone growth data (12:00)*
- *Eurozone January Producer Price Index (12:00)*
- *US retail sales data (14:45)*
- *US Redbook (All retailers' sales data) (15:55)*
- *FED Chairman Bernanke speak about the mortgage crisis (16:00)*
- *FED's Fisher speak about US inflation and growth (20:00)*
- *FED's Mishkin speak about the US economy.*

In the above example, there is only one item that is related to the Turkish markets, namely the first item about the Treasury re-issue. The rest are about Eurozone and US economy, including speeches of FED chairman and other FED officials. Although the market expectation about data releases are missing in this excerpt, the trading platforms used by traders provide the expectation and the actual data once it is released. This usually provokes loud reactions from the dealers in the trading room of all the houses I had been in, in the form of 'hey, data's come good!'; 'oh data bad!' 'data's come as expected! depending on the discrepancy between the expectation and the actual value. Such instantaneous reactions are not just confined to utterances. The trading activity in the ISE is also affected by data releases. Day trading investors served in the House A like other day traders I directly or indirectly observed (via their dealers) in the other houses take or adjust trading positions in equities and future contracts before data releases. This is done in accordance with the expectations about actual value of data, and by buying, selling or holding depending on the discrepancy between the estimate and the actual value.

Another repercussion of data releases or news events in the ISE trading is the momentary stories that incorporate them as causes of daily index moves. Below is a selection of momentary stories from another daily commentary by the House A's strategist as broadcasted on the house website on 4 March 2008. Notice how he links some of the data releases (news events) mentioned above to the index movements in the ISE and other markets.

17:07 the ISE has closed the day with % 0, 97 loss at 42.923. The total volume of trading is around 1.1 billion TL
16:34 the 2nd half of the ISE has receded to 42.742 level with Bernanke's statements. The main support point for the ISE is 41.700
16:07 with Bernanke's statements come the sales to the markets, we have receded back to 42.800, the general loss is around % 1,13
14:54 the ISE's losses in the second half is limited to % 0, 14 due to Petkim effect
14:07 Petkim hit the price ceiling at 7, 85
14:05 Petkim resumed trading at the price ceiling
14:05 During the trading halt, Intel has lowered its profit expectation and the inflation rate in the Eurozone has reached its highest value in the last 17 years, these have led to a sales-dominated second half opening in the ISE

(Trading halt in the ISE)
11:54 the Euro markets have turned to sale before the growth and inflation data at 12:00, the US futures continue with light sales
11:35 the return of volatility in the Euro markets and the negative value in the US futures have taken the ISE back to its opening value

In the momentary stories dispatched at 11:35; 14:05; 16:07; and 16:34, the strategist attributes cause and effect relationship between outside price and news events and the ISE value. The discursive explanations are in line with the belief in the one way correlation between major global markets and the ISE. Even the lntel's lowering of its profit forecast (although not highlighted in the daily since probably such a statement was not expected by the markets) affects the ISE's trading activity. Immediately after the Intel and the Eurozone inflation story, the analyst observes the resume in Petkim's trading. Petkim is a major petrochemicals company in Turkey and it is one of the leading industrial shares in the ISE. Due to a rumour spread via news in the morning session about its privatization process, the ISE officials halted trading in the share and requested a clarification from the company. After the resumption of trading, the share price hit the price ceiling (a % 10 price ceiling in a given session imposed by the ISE on a share's weighted average price from the previous session to prevent upward volatility). The strategist expecting a higher loss in the ISE index due to the negative news events coming from abroad makes sense of the limited losses in the ISE by Petkim's solid performance in trading. Nevertheless, the statements of the FED chairman about the mortgage crisis in the US diminish the Petkim effect and the ISE recedes more. All these momentary stories are based on the figures and narratives the strategist observes on his screen. He plots them together by cause-effect logic. However, this plotting is informed by the other prevalent logic among the market actors in the ISE, namely the correlation. If the correlation does not seem to work, Petkim comes to rescue to make sense of it. Observation of figures that seem to confirm or explain variations in these logical relationships reinforce the belief in them among market actors. Although there is no prediction in the commentary above, the logical relationships discursively (re)established among above concepts are conducive to make predictions under similar conditions.

The explanatory and predictive power of momentary stories comes from observation and reaffirmation of the above mentioned logical relationships among events related to the ISE trading in the narrative mode. It seems like in the case of the ISE, no market actor that invokes such stories scientifically studies the actual performance of such stories in predicting future direction of prices or subjects them to falsification or verification on historical or statistical scale to establish categorical knowledge. As state before, the way momentary stories work resemble the way we create rules of thumb in daily life. By experiencing similar events over and over again, we start to see a pattern in them by establishing logical and predictive relationships. Identification of similar situations leads to invoking of similar momentary stories that explain them and predict their future trajectory. If the heuristics do not seem to work, then another way of plotting becomes more prevalent in the market. In this respect, momentary stories are ante-narratives as espoused by Boje (2001). They are speculations about the past and future before the

coherence of history with facts, figures, and a hegemonic plot that explains and closes their meanings.

The last example for a momentary story demonstrates how past experiences and stories about them and identification of similarities between them and the current situation shape the present sense-making and lead to trading advice based on them. This is a conversation between the head of trading in the Institutional Sales department in House D and one of his institutional clients based in London. The conversation took place on 25 May 2009 via the trading platform chat programme the head of trading uses to communicate with his clients. House D is has the largest institutional sales and research department among all the houses I had been in, mainly catering for the 'foreigners'.

C: Client; HoT: Head of Trading
11:12 C: What is the view on Turkish banks at these levels? Thanks
11:14 HoT: we think that they are pricey
11:15 HoT: Analyst doesn't think that we have an upside on banks, we prefer industrials rather than banks
12:27 C: agreed, but are they a short?
12:27 C: and which industrial?
12:28 HoT: For the industrials are TOASO, TTKOM, and small caps BIMAS, AKENR and TATKS
12:30 HoT: shorting banks are pretty risky in my opinion, the mkt is purely driven by flows and intl mkts. Even though we short for example GARAN, when a 10 mn shs of buy ticket comes, immediately it is up by + 5% with locals trying to front run and churning as well.
12:31 HoT: Shorting any stock against the mkt sentiment without having a decent fundamental reason, just for the technical reason is pretty a ballsy move. We tried a couple of times and did not really work.
12:34 HoT: You may want to talk to [the head of research] as well but shorting stock without seeing any major negative catalyst (corporate or global sentiment) is just pissing against the wind
12:38 HoT: Heading out for a quick bite, I am on my cell if you need anything
12:45 C: thanks
12:52 C: Checked INDU vs Banks, no trade.

The C asks for the HoT's opinion about the banks. As a standard practice, the HoT refers to the research department's call on the banks and then mentions several industrial company shares as their favourites to buy after consulting with the research department. The C wants to see whether the house recommends a short selling on the banks given that they have a negative call on the banks. The HoT without consulting the research department gives his opinion about the risks in shorting any share in the ISE in that particular moment. The risk stems from the correlation mentioned before. It is exacerbated by lack of any fundamental 'story' or investment theme in the global and local markets. In a themeless environment and given the way bank shares go up due to domestic investors' opportunist trading activities when there is a significant 'foreign' buy order, a short sell on banks such as Garanti Bank (GARAN) would be an unwise move

due to unpredictable volatility. His previous experiences of trying short sell in similar circumstances allow him to see a similarity between them and the current situation. He uses the metaphors of 'pissing against the wind' and 'ballsy move' to infuse stronger meanings on the idea of short selling and his previous experience as such. Again domestics are attributed unity and motive (front run, churning) and fixed quality in opposition to foreigners, which makes *locals* opportunistic investors at the expense of foreigners.

Later on, the HoT explained me why he gave a no short selling call on banks by reiterating the points he made above. Below is an excerpt from his account (Field notes-House D, 25 May 2009: page 39)

the reason why I gave a call like that because you don't know where the market is heading and you short Garanti and if there is something like a positive close in the US, all of a sudden Garanti is up by 5 %. I have shorted it several times and found myself in that situation, so it is risky in uncertainty ... so it is very risky to give a call like that. So if there is no global trend, it is hard to give calls to proprietary traders with confidence because here is just linked to news driven flows.

As shown in the above examples, momentary stories need unpacking to be meaningful to an outside observer. They can afford to be 'incomplete' in comparison to a full story thanks to members' shared experience of events (Boje, 1991). They are reactions to fast unfolding agenda of the market in terms of numbers and events. The screen as a tool presents market actor with a multitude of epistemic tools, figures, and narratives that can be used in emplotment of events unfolding in the market. The interpretation of data and information flows via emplotment as demonstrated above not only discovers meanings within each fact and figure on the screen, but also infuses larger meanings on a set of events, meanings that are not readily available within a single event. (Gabriel, 2000:35). This is generally done via logics of cause-effect, correlation, and similarity pertinent to the market in question. Discursive tropes are also used to infuse meanings on events and enrich the plots by turning objects into subjects with capacity to act with motivation and in unity. In usage of these logical relationships and poetic tropes, there is hardly any attempt on the part of recounters to scientifically or empirically question them beyond the use of numbers and figures on the market screen and invoking the viewpoints about investor types. In this vein, momentary stories are ante-narratives before the enclosure of a hegemonic or scientific narrative that would judge these discursive tools' ultimate success in explaining and predicting market events and actions.

Conclusion

As I have demonstrated above, discursive practices of market actors infuse meanings on a diverse range of on and off screen events and actions and bring them together meaningfully and in a way that is consequential over the ISE trading. In doing so, market actors invoke viewpoints or what Klein, et al. (2006) and Bless et al. (2004) call cognitive shortcuts. These cognitive short cuts are informed by both local market experiences and categorical or theoretical knowledge about elements of securities trading. While both types of knowledge feature in momentary stories, the market actors seem to use cognitive shortcuts as

heuristic devices without subjecting them to vigorous empirical tests in order to judge their effectiveness and the 'truth' in them. As long as the screen confirms the short cuts by providing the convenient numbers, the short cuts are (re)confirmed and (re)constituted discursively. If they don't seem to work, then an event or a set of events are singled out to explain the 'anomaly' and feature them as causes of ISE related effects.

In this paper, I have not dwelled in detail about the social profile of each house or the recounters. However, I believe that these matter in storytelling in financial markets. It is because financial markets are highly hierarchical organisations in terms of division of labour within and among institutional investors and intermediaries; capital at the disposal of different types of investors, and informational (dis)advantages these factors bring to market actors in general. In this paper, I have only looked at intermediaries in the ISE. In the word of one sales trader serving global institutional clients (Interview, 8 June, 2009), these organisations are at the bottom of the food chain when one considers the global financial trading in the City of London. However, the sales trader occupies a more privileged position in the ISE compared to the strategist in the House A, at least in terms of access to direct information and knowledge about what the foreigners actually do should that bring any trading advantage. In this respect, study of viewpoints or cognitive shortcuts with a narrative approach should be made by taking the context into consideration and without an attempt to make sweep generalizations about interpretation and investment behaviour based on our local, socially and historically contingent findings. After all, market actors are quite resilient in changing their viewpoints to adjust to a changing market in terms of main drivers.[vi] As students of financial markets, we too should be resilient in our theoretical convictions about them!

References

BERNANKE, B (2004) 'Money, Gold and the Great Depression' At the H. Parker Willis Lecture in Economic Policy, Washington and Lee University, Lexington, Virginia March 2, 2004.

BLESS, H, K., Fiedler, and F, Strack (2004) *Social Cognition: How Individuals Construct Social Reality.* New York: Psychology Press.

BOJE, D. (1991) 'The Storytelling Organization: A Study of Story Performance in an Office-Supply Firm,' *Administrative Science Quarterly,* Vol. 36, No. 1, pp.106-126.

BOJE, D. (2001) *Narrative Methods for Organizational and Communication Research.* London: Sage.

BOJE, D. (2008) *Storytelling Organisations.* London: Sage

BUENZA, D. and R. Garud (2007) 'Calculators, Lemmings or Frame-Makers? The Intermediary Role of Securities Analysts,' *Sociological Review,* Vol. 55, No.2, pp. 13-39.

CETINA, K.K. and U. Brugger (2002) 'Inhabiting Technology: The Global Lifeform of Financial Markets,' *Current Sociology,* Vol. 50, No.3, pp. 389-405.

CZARNIAWSKA, B. (2004) *Narratives in Social Science Research.* London: Sage.

FAMA, E. (1965) 'The Behaviour of Stock-Market Prices, *Journal of Business,* Vol. 38, No: 1, pp. 34-105.

FAMA, E. (1970) 'Efficient Capital Markets: A Review of Theory and Empirical Work', *Journal of Finance*, Vol.25 No.2, pp. 383-417.

GABRIEL, Y. (2000) *Storytelling in Organisations.* Oxford: Oxford University Press.

JOHNSTONE, B. (2001) 'Discourse Analysis and Narrative' in D. Schiffrin, D. Tannen, and H. E. Hamilton (editors) *The Handbook of Discourse Analysis..* Oxford:Blackwell.

KLEIN, G., B. Moon. and R.F., Hoffman(2006). 'Making Sense of Sensemaking I: Alternative Perspectives.' *IEEE Intelligent Systems*, Vol. 21, No.4, pp. 70-73.

KRUSCHWITZ, L. and A. Loffler (2005) *Discounted Cash Flow: A Theory of the Valuation of Firms.* West Sussex: John Wiley & Sons.

MACKENZIE, D. (2009) *Material Markets: How Economic Agents are Constructed.* Oxford: Oxford University Press.

ORTIZ, H (2009). 'A political anthropology of the 'weighted average cost of capital' Paper presented at Critical Finance Studies Conference II, Facultés Universitaires St-Louis , Brussels, 5-7 August, 2009

POLKINGHORNE, D. E. (1988) *Narrative Knowing and the Human Sciences.* Albany: State University of New York Press.

PREDA, A. and K.K. Cetina. (2005) 'Introduction' in K.K. Cetina and A. Preda (editors) *The Sociology of Financial Markets*. Oxford: Oxford University Press.

RICOUER, P. (2004) *Time and Narrative, Vol.1.* Translated by Kathleen McLaughlin and David Pellauer. Chicago: Chicago University Press.

, J. (2003) 'Behavioural Finance,' Pacific-basin Finance Journal Vol.11, No. 4, pp. 429-37.

SALMON, P. and C.K. Reissman (2008) 'Looking Back on Narrative Research: An Exchange' in M. Andrews, C. Squire, and M. Tamboukou (editors) *Doing Narrative Research.* London: Sage.

SHLEIFER, A. (2000) *Inefficient Markets: An Introduction to Behavioural Finance.* Oxford: Oxford University Press.

TOOLAN, M. (1992) *Narrative: A Critical Linguistic Approach.* London: Routledge.

WEICK, K. (1995) *Sense Making in Organizations (Foundations for Organizational Science)* London: Sage.

ZALOOM, C (2006) *Out of the Pits: Traders and Technology from Chicago to London.* Chicago: Chicago University Press.

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[i] http://www.federalreserve.gov/boarddocs/speeches/2004/200403022/default.htm

[ii] There is a plethora of studies in mainstream finance regarding how quickly news are incorproated into prices. For an accessible review that is not inundated by mathematical models, see Schuster (2006)

iii I use quotation marks to denote that it is a summary of what I have been told by these and other dealers. Due to space restrictions, I am not presenting a whole story about the ISE's integration to global markets.

ivWhen asked by me, one senior dealer plotted the chart of DAX and ISE 100 index values together on his computer screen over the last 5 years. He explained the reasons why at various points, this apparent correlation did not work. He highlighted several critical political and economic events that affected Turkish economy. The full stories about the integration are usually contrasted with stories of the 1990s which are about domestic and political events moving the ISE index.

v. None of the bets apart from falling interest rates have materialized as of September, 2009

[vi] See for instance the below story about the past viewpoints prevalent among the intermediaries in the ISE. The recounter has been working in brokerage houses that predominatly serve domestic investors (informal chat , 3 September, 2008)

2001 Eurobond, if it was up, the market would go up
2002 Argentine, Brazil, plunder and then consolidation, similar to Turkey's story.
2003 hmm, I don't remember
2004 South African Rand, if it wents up significantly, dollar would go up in Turkey.
2005 new members of the EU because of our EU story
2006 global Future markets
2007 USA data
these are what we have used, say if the US inflation goes up the recession is not a threat any more but then there wouldn't be any rate cuts. That is to say, it is a double whammy. I think this data observation stuff is a bit manipulated, for instance in 2001, a guy bought 5 million USD worth of Eurobonds, and the stock market was up by % 3 in two consecutive days, then it turns out that this guy had taken a 10 million USD position in the ISE and to take it up he opens up this position in the Eurobond market, once the ISE is up like that he exits his positions in the ISE with % 6 gain and the bond market by only recurring a loss of % 1 -2 in the bond market. How did I hear this, this was on the papers, I think this necessitates both good command of economics and good coordination. Speculators are no fools, they know events very well, and they make very solid moves.