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Textuality and interaction: the collaborative production of news stories

The fact is that when the listener perceives and understands the meaning (the language meaning) of speech, he simultaneously takes an active, responsive attitude towards it, and understanding live speech, a live utterance, is inherently responsive, although the degree of this activity varies extremely.

M. M. Bakhtin (1986 p. 68)

“Shared Agreement” refers to various social methods for accomplishing the member’s recognition that something was said according to a rule and not the demonstrable matching of substantive matters. The appropriate image of a common understanding is therefore an operation rather than a common intersection of overlapping sets.

H. Garfinkel (1967 p. 30)

In recent years we have witnessed the emergence of a range of complex technological and organisational environments in which personnel have to rapidly manage a substantial and diverse body of emerging data and material. In this paper we consider one such domain; the editorial section of an international news agency which provides on-line information to financial institutions. Journalists have to deal with the rapid influx of stories from agencies throughout the world and in some cases transmit the news in a matter of seconds. Despite the speed, range and diversity of the materials they receive, journalists are able to deliver timely, relevant and reliable news. The ways in which they accomplish an efficient and coherent service

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and in particular how they coordinate the production of news stories with each other, forms the focus of this paper.

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Textualité et interaction : la production coopérative des reportages journalistiques. On assiste depuis quelques à l'émergence d'une gamme d'environnements technologiques et organisationnels où le personnel doit gérer en vitesse un grand nombre de données de type et de provenance variés. Dans cet article, nous examinons un domaine de ce type: la section éditoriale d'une agence de presse internationale qui fournit des informations en temps réel à des institutions financières. Les journalistes doivent traiter le flux rapide des rapports en provenance des agences partout dans le monde, et à l'occasion transmettre les informations en quelques secondes. Malgré la vitesse, l'étendue et la diversité des données qu'ils reçoivent, les journalistes parviennent à livrer à temps des informations pertinentes et fiables. Cet article est focalisé sur les modes de fonctionnement qui leur permettent de fournir un service efficace et cohérent, et en particulier sur les capacités des journalistes à coordonner entre eux la production des articles journalistiques.

Mots-clés : Textualité, interaction, presse, informations, temps réel, international.

1. INTRODUCTION

It is increasingly recognised that recent developments in digital communications and broadcast technologies will have a wide-ranging impact on conventional news media. For example, we have already witnessed new, experimental television programmes in which on-line audiences can actively participate, and agreements are currently in place to facilitate new forms of co-operation between national broadcasters, newspaper publishers, and telecommunication companies. In the short term, perhaps the clearest example of the ways in which digital technologies are affecting the "media", is illustrated by the enthusiasm with which conventional newspapers, such as the Daily Telegraph, Le Monde and the New York Times are providing on-line new services alongside their conventional broadsheets. These services place considerable demands on those responsible for producing the news. Journalists and editorial staff have to produce new and attractive "products", they have to transform news produced for one media for another, and increasingly, they have to tailor the "same" material for different types of reader.

For some companies providing electronic on-line news services for a heterogeneous readership is by no means new. There are a number of major international companies which have provided real time, on-line news services for some years. Although their services have not been available to the general public, they have had to address many of the problems which now face their colleagues in the conventional news media. For example, they have had to consider how stories need to be designed to enable material to read off screen rather from a newspaper. They have also developed services which tailor the news for a highly differentiated readership, so that the “same” story will be received in very different forms by different readers. It is recognised that such innovations place considerable demands on personnel, and in particular require the real time management, coordination and delivery of a complex array of material by journalists and editorial staff.

In this paper we wish to briefly consider the work of journalists in the editorial department of one such company, namely Reuters in London. The department consists of a number of “desks”, each desk specialising in particular types of financial news. Desks receive particular stories from bureaux throughout the world, and journalists edit the material using a basic information system. They then transmit the stories to particular customers primarily based in financial institutions in London and throughout the world. Journalists edit the material alone, and yet it is critical that they remain aware of stories being handled by other journalists in the newsroom and where necessary, inform colleagues of potentially relevant items they may have received. In this paper, we wish to consider how journalists, who have to manage and edit a substantial corpus of stories and materials in real time, coordinate their activities with each other and provide a coherent and satisfactory news service. In particular we explore the ways in which journalists and editorial staff render textual material “visible” to others within the local milieu, and remain sensitive, to stories being handled by their colleagues.

The type of information system used in Reuters and other companies is principally designed to allow certain forms of data to be produced by particular individuals and passed on to others, who in turn may add to or modify the material. The system does not support the real time collaborative production of textual materials, nor does it allow journalists to view stories as they are actually being edited or rewritten by colleagues. To use an expression common in CSCW, the system supports “asynchronous”, not “synchronous” interaction between

individuals. The system is operated through a conventional workstation including a standard keyboard and a fourteen or twenty one-inch monitor. The system, and its conventional hardware, therefore localises information and the activities in which journalists are engaged. The stories are read and written on screen, and it is difficult, even impossible, to see what a colleague is actually looking at or editing, at any moment at time, even a colleague alongside one at the same desk. In a sense therefore, the journalist would appear to be an example of the individual and skillful “user” often discussed in more traditional studies of “human-computer interaction”.

While colleagues may themselves attempt to “second guess” the activity in which another is engaged, journalists can take it upon themselves to inform colleagues of potentially relevant stories, and in particular stories which may be of interest to other “desks”. Text is transformed into talk and talk into text. Materials localised to the screen and inaccessible to others, are rendered visible to colleagues who may have some sort of professional interest in a particular story or set of events. The newsroom therefore provides an interesting opportunity to explore the relationship between talk and text, and to consider how the competent use of a particular computer system relies upon the individual's ability to coordinate his or her actions, in real time, with the contributions of others. Indeed, competent use of the system necessarily involves socially organised resources through which text is written, read and coordinated with the contributions of others; contributions which are both “synchronous and asynchronous”.

The materials discussed in this paper, therefore bear upon contemporary research and debates within various fields. Consider for example HCI (Human-Computer Interaction). Traditional models of the “user” have been subject to sustained criticism in recent years, criticism which has pointed to the conceptual and empirical shortcomings of plan-based, goal oriented models of human conduct (see for example Dreyfus, 1972; Winograd and Flores, 1986, and Suchman 1987). In part these debates have contributed to the growing corpus of naturalistic studies in CSCW concerned with the socially organised character of technology in action. In this regard, it is worth noting that to some extent the focus on the “social” has begun to turn analytic attention from the “individual” and his or her interaction with the system, to the ways in which people use tools and technologies in the course of their everyday activities in collaboration with others. In this paper, like related initiatives drawing on different analytic

approaches, we wish to explore the ways in which an apparently individual activity, writing stories on a conventional work station, is dependent upon, and coordinated with, the real time contributions of those within “perceptual range of the event” (cf. Goffman 1981 and see for example Theureau, 1992; Hutchins, 1995; Goodwin and Goodwin, 1997; Greatbatch et al, 1996; Heath et al, 1995; Whalen 1997). We hope to further demonstrate the ways in which it may be both conceptually and empirically problematic to draw a sharp distinction between the individual and collaborative and the cognitive and the social.

The editorial section of Reuters is an environment, *par excellence*, which would appear to reflect many of the characteristics commonly associated with the possibility of what is sometimes called “cognitive overload”. Whilst not “high tech” environment, journalists are confronted with substantial information, presented in various forms, textual, vocal, and visual, which has to be rapidly analysed, transformed and distributed, and in various and emerging ways, and coordinated with the real time contributions of others. To make matters worse, like settings such as control rooms, casualty departments and dealing rooms, the quantity and quality of information confronted by journalists, and the pace and methods with which it has to be managed, is not always predictable. However, as we find in other domains (see for example Harper et al, 1992; Harper and Hughes, 1993; Heath and Luff, 1992, 1996) these seemingly extra-ordinary demands on cognition and action do not engender particular problems and difficulties. They are managed smoothly and methodically, in organisationally accountable and routine ways. Personnel invoke and rely upon a socially organised body of tacit practices and procedures through which they read and discriminate material, handle and edit stories and coordinate their actions with the contributions of others.

The materials discussed here also bear upon a rather different body of research. In recent years, we have witnessed a growing recognition, in various disciplines, of the importance of the work Bakhtin (1976) on our understanding of text, language, and social interaction. Bakhtin's rich and insightful descriptions of the “active listener” have had profound influence on literary criticism, (consider for example Iser, 1985) and increasingly are informing work in cognitive science (see, for example, Wertsch, 1986). Save for some important exceptions, (for example McHoul, 1984 and in rather different vein, Goffman, 1981), research on text have largely ignored the ways in which reading and

writing may arise within, and bear upon, real time social interaction. In the case at hand for example, we can begin to see how talk and text may be delicately interrelated; speakers voicing textual materials in interaction with others, and participants' transforming the very character, sense and significance of the text in the course of their interaction. These forms of dialogicity, textual analysis, active readership and the like go someway beyond the concerns of Bakhtin and others, and allow us to consider how contemporary developments concerned with "inter-textuality" need to consider how the written word may be inextricably embedded in talk and interaction.

2. THE SETTING

A number of international news agencies provide real time, on-line information to the financial sector as well as to other customers, including television companies and newspapers. These include Bloomberg, Knight-Ridder and Reuters. Reuters is by the far the largest concern and has the most customers. It has offices in most major cities throughout the world and co-ordinating centres in London, Tokyo and New York. In London, the Financial News Section of Reuters is divided into four desks, each with its own editor, journalists, and sub editor(s). These desks are Money and Capital, Equities, Oil and Minerals, and Commodities. The desks are positioned near each other in a large open plan office.

The principal customers of the news are the members of the major financial institutions in London and other major cities. Aside from providing a general financial news service, the aim of the editorial section is to deliver reliable and timely information of relevance to dealers and traders working in particular areas such as in oil and minerals. Journalists on particular desks are expected to identify relevant stories for their particular customers and to tailor the news with regard to the practical interests of the members of the respective financial institutions working in particular areas. This commitment to discriminating the news worthiness of material with regard to the interests of a particular audience is a critical feature of the journalists' work. Indeed, a few years ago Reuters introduced a practice whereby each journalist is expected to spend one day a month with one of its customers in order to become more familiar with their interests and concerns.

The desks in the editorial section receive stories from the various offices throughout the world. The journalists based in the outlying

bureaux provide topic codes for the stories which allocates the material to particular desks. In this way, even before the editorial section receives a story, a journalist has made a preliminary assessment of its potential news worthiness with regard to a particular audience. The stories are also given a priority code, which in certain circumstances involves journalists having to receive, read, edit and transmit the story in less than sixty seconds. The coding allocates the story to one of the desks, where it appears in a "basket" on the editorial screen. Journalists take stories from the basket, check their topic coding, and edit the headline, the "header", and the story. The edited story is then sent directly on-line to the relevant customers or, in the case of longer pieces, say a couple of pages or so, are passed to the sub-editor for a final check.

Individual journalists working on the various desks have a fair amount of discretion in coding, editing and prioritising stories. They largely work on stories alone, and in many cases it is unlikely that the material and its coding will be seen by colleagues before it is sent to customers. All the same, journalists are expected to remain sensitive to the potential relevance of stories to colleagues, and their customers, working in other areas, and to inform their fellow journalists if material is received which might bear upon their respective domains. It is also assumed that journalists in outlying bureaux will often mis-code, or fail to recognise the implications of particular stories for a range of other topic areas, and the editorial section is largely held responsible for re-coding and rewriting incoming stories. Hence, the journalists in London have to assess the potential news worthiness of a particular story with regard to both their own customers, and customers served by other desks.

The journalists therefore face an interesting problem. They receive stories which in many cases may not be received by other desks. They code and edit the story with regard to their customers and area of specialism, and also have to consider the potential relevance of the story for colleagues and customers who have very different concerns, in fields in which the journalist may have little experience or knowledge. Moreover the stories are received on-screen, a screen the size of the monitor on a conventional personal computer, and are not visible to colleagues on one's own desk let alone those working on desks some distance away. Each desk in the editorial section receives a substantial number of stories each day and during peak hours, say between nine and twelve o'clock, the desks may be receiving three or four stories every

five minutes or so, some of which need to be “turned round” in less than sixty seconds. There is not much time for consultation, and colleagues engaged in rapidly rewriting and editing stories, as one can imagine, may not necessarily welcome queries and suggestions concerning potentially relevant stories.

Journalists also need to cooperate with colleagues on their own desks. For example, in passing stories on to sub editors it is often necessary to provide instructions concerning the ways in which the story should be handled; or, in editing a particular item, it may be important to inform colleagues of how the news is potentially relevant to other stories in the basket or news which has broken earlier that day. Decisions to make major changes to a story, its priority or topic coding, often are also done in consultation with colleagues. A case in point is when to delete a story, or spiking, a term still used in the electronic office. Journalists will often talk through stories with colleagues on the same desk before deciding to spike a story. Like their colleagues on other desks however, journalists will be handling a range of different stories, dealing with problems and issues which have arisen, and do not always welcome unnecessary interruptions or interventions.

On the one hand therefore journalists work alone, rewriting and editing stories with regard to the interests of their particular customers, and attempting to tailor materials with regard to a distant audience. On the other hand, journalists need to work closely with colleagues, informing them of important events, and passing on stories which may be of relevance to other desks and their respective customers. A balance has to be achieved in the face of a substantial amount of material, which is received in real-time, on-screen, localised to particular desks and individual screens, and which is largely unavailable and invisible to others for whom it might be relevant within the domain. This has to be accomplished so as to not bombard colleagues with information which may be irrelevant to their readers, or may have been dealt with under the guise of another story. The fact that journalists in Reuters provide a news service which is timely, coherent, and relevant, given the substantial amount of news received by the editorial department in London, this is no mean achievement.

3. GIVING VOICE TO THE NEWS

Given the ways in which stories are localised within the editorial office, one possible solution for journalists might be to simply call out to colleagues to inform them when particular stories are breaking. This

practice is perhaps best exemplified in dealing rooms in financial institutions, where traders will, on occasions, shout important information across the dealing room, for anyone to hear (cf. Heath et al, 1995). Very occasionally, when major news, events occur journalists will follow a similar practice. However, whilst such a practice may seem a relatively efficient way of distributing important information rapidly, to a large number of people, it is by no means the most appropriate or successful method. In the first place, it is obtrusive, especially for personnel who are engaged in writing and editing stories, and a generalised announcement does not necessarily mean that the person or even the desk, for whom the story is relevant necessarily picks up on the news. Secondly, the relevant information can not always be summarised in a single statement, as in the dealing rooms, — for example “Hanson on the bid” (cf Heath et al, 1995), — but rather consists textual stories, some of which can be quite lengthy. Thirdly, stories are not necessarily relevant to all desks and their respective customers, so that in attempting to distribute information, journalists need to be sensitive to who, within the editorial section, may have an interest in the event. Stories are analysed with regard to their potential relevance to different types of customer and the responsibilities of particular journalists. Stories have to be exchanged, transformed and tailored in collaboration with others.

Consider the following example. Things are relatively quiet in the newsroom and as he works on a story about a fall in Israeli interest rates, Peter begins to make a joke of the text he is editing on-screen. Peter’s remarks, which are produced in a pronounced Jewish accent, are not explicitly addressed to colleagues on his own desk (Money and Capital), nor to those on the adjoining desk, Equities. Whilst talking aloud, he continues to look at his monitor and edit the story.

Fragment 1 Transcript 1

Peter: Bank of (.) Israel interest ra(i)te drops.
(0.3)

Peter: Down, down, down.
(0.4)

Peter: Didn't it do this last week.
(13.0)

In talking aloud, Peter gives voice to the story on which he is working. Peter's remarks are loud enough to be audible to colleagues sitting on the adjoining and surrounding desks. By talking aloud, he renders aspects of the text that is documented on his screen “publicly” accessible, or at least audible to others within the immediate location. In so doing, he does not simply talk through the text, but provides a selective rendition which animates aspects of the story, giving it the character of a joke. Interestingly, the way in which the story is voiced and animated, its light hearted rendition coupled with Peter's continuing orientation to and work on the text, does not demand that his colleagues respond, or even acknowledge, what has been said. It places no one under an obligation to respond, or, more technically to produce a sequentially appropriate response. It neither identifies a particular recipient, nor an appropriate next action or activity. The question, “didn't it do this last week” is rhetorical, it elaborates the joke, and perhaps provides a framework for Peter's remarks, but does not demand, nor encourage, a response. In some sense Peter's remarks render the materials on which he is working selectively “visible” to his colleagues within the local milieu, but through the ways in which it is accomplished, it places no one under any particular obligation to respond.

Peter continues to work on the story.


Roughly twelve seconds later, Alex, who is sitting some six feet away at the Equities desk momentarily changes his orientation. He glances towards Peter and then turns back to his own monitor. Peter appears to treat the action as relevant to the story that he voiced some moments ago. He utters “er:::” and after pausing for one second, perhaps to relocate the potentially relevant part of the text, tells part of the story on which he is working. In the illustrations, Peter is on the right, and Alex second from the right.

Fragment 1 Transcript 2




(13.0)

Peter:




er
(1.0)



Bank of Israel er.
(3.2)
cut its er daily (0.4) the rate on its daily
money tender, (0.2) to commercial banks.
(0.6)

Alex:



Yeah. Got that now. Thanks Peter
(0.6)

Peter:

O.kay?

Peter's talk is now addressed specifically to Alex. He no longer makes a joke of the story, nor characterises the text on which he is working, but rather delivers a quote from the material itself. The quote provides a more precise and potentially factual report of the events. Peter's delivery sharply contrasts with the earlier version. It is not rendered as a joke or as a *précis*, but rather as part of the original, authentic story. The ways in which the talk is produced, coupled with the accompanying visual conduct, provides colleagues with the resources to differentiate the status of the two renditions and in particular their "relationship" to the textual version of the story.

The exposition of the story is occasioned by Alex's momentary orientation to Peter. Peter treats Alex's action, as requesting further information concerning the story and in particular its relevance and potential news worthiness. Although the original joke is not specifically addressed, the informing is designed to enable Alex to receive accurate and authentic information concerning the recent change in Israeli interest rates.

It looks as if the telling is over following Alex's acknowledgement of the story with "Yeah. Got that now. Thanks Peter". However, some seconds later, Peter reads aloud the sentence that describes the actual fall in interest rates. By pausing in the delivery of the sentence, Peter momentarily renders the description problematic, and on completing the sentence, he goes on to correct the story. The correction involves the speaker realigning his position to the text, from narrator to commentator. Peter differentiates his version from the original text and publicises, at least across the two desks, the editorial correction.

Fragment 1 Transcript 3

Peter: Half a percent, (1.2) to eleven percent.
(0.2)

Peter: I think they mean a half a percentage Point
(15:04)

Peter: Service Jerusalem (0.5) with a drop copy to Nicosia, right?
(0.7)

Alex: Yes

Finally, Peter marks the completion of the handling the Israeli Interest Rate story, by checking with Alex as to which Reuters' bureau should receive copies of the corrected version.

What begins as a joke, therefore, turns out to have some serious import for news production. The Israeli Interest Rate story gets publicly corrected, distributed to more than one desk and subsequently to the customers of both Money and Capital and Equities. It also features in, and is referred to, in other stories that are handled by the two desks on that day. The story achieves its wider circulation by virtue of Peter's joke. The joke is delicately designed to establish these possibilities. It does not demand that others abandon the activities in which they are engaged or even take up the story. Rather, it renders visible the gist of the story which he is currently editing. It momentarily displays the activity in which he is engaged. It provides colleagues with news concerning the Israeli Interest Rates but does not demand a response. The talk is produced by Peter (and treated by his colleagues) as if devoid of sequential relevance and yet invites others to consider the import of the story with respect to their own activities and responsibilities.

In gaining some indication that a colleague is interested in hearing more of the story, Peter transforms the way in which he presents the text to the others. Instead of continuing the joke, he provides an authentic rendition of the text, (re)presenting the change in interest rates. The speaker therefore differentiates the informing by virtue of the ways in which he presents the text, though in both cases, it is as if he is simply reading aloud the story on the screen. In the final part of the informing the speaker once again alters his standpoint *vis-a-vis* the text, visibly locating and correcting an error in the original copy. In rendering his activity visible, the speaker exploits, through the ways in which he talks through the story, differential standpoints with respect to the text itself. In this way he ongoingly tailors the sequential significance and sense of the story for those within the local milieu.

In this way a textual story, located temporarily on the screen, is transformed into talk, and rendered visible to others within the local domain. It informs the activities in which the journalists engage both individually and collaboratively.

4. APOSTROPHIC READINGS

The ways in which a story are characterised, even when the characterisation is itself a quote or rendition from the text, may be transformed, not only through successive utterances, but within the developing course of a single turn at talk. Differentiating and transforming the text in this way, is embedded in, and coordinated with, the actions of the potential recipient(s) and the ways in which they participate in the text's rendition.

In fragment 2, Peter returns to the desk after his lunch break. A fellow journalist on the Capital and Money Desk begins to tell Peter what he is working on.

Jan announces that he is working on the Nigerian Crisis and raises a question concerning the story's news worthiness. He receives no response from Peter, and continues by giving a flavour of the story which reveals perhaps why it might not be worthwhile sending it out. Although Jan's utterance serves to suggest that he is continuing with the exposition, Peter takes up the possibility raised in the introduction, namely, deleting or spiking the story. At the same time, Peter remains oriented towards his own screen and appears reluctant to engage in further discussion concerning this story of the Nigerian crisis.

Fragment 2 Transcript 1

((Peter sits down))
Jan: I'm looking at this Nigeria Crisis. (.) I don't think it (.) tells us anything we don't know already.
(4.2)
Jan: There's people saying i(t). it's unclear why the Government has opted for new elections.
Peter: Well then spike it. It's crap.
Jan: erm (0.8) I fear the way things are going, said a cigarette vendor.
(.)
Peter: A cigarette vendor?
(0.2)
Peter: He's one of the er major analysts we spoke to?
Jan: He's one of our key sources.
.
.
.
Jan: No I don't think we need this.

Despite Peter’s response, and his seeming lack of commitment to participating further in the exposition, Jan attempts to encourage his colleague to listen to further details concerning the story. He produces “erm”, suggesting perhaps that he is about continue, but withholds the projected utterance. Roughly one third of a second into the pause, Peter lifts his hands from the keyboard and turns from his own monitor towards Jan.

Fragment 2 Transcript 2
J P



Jan treats Peter's actions as displaying his willingness to listen to the story. He continues to talk about the Nigerian crisis but transforms the way in which the text is rendered visible within the talk. Rather than describe, in his own words, what the story says, Jan quotes a quote from the text. The talk achieves the character of a quote by virtue of the way in which Jan conducts himself both vocally and visually. He remains oriented towards the monitor, even after Peter has turned towards him, and appears to read the text. Moreover, the way in which the text is spoken of — in particular, the use of the first person pronoun, the present tense, and the expression “I fear” — displays to the Peter that the quote is itself a quote from the story. In the way in which Jan talks therefore he appears to produce a seemingly authentic version of the text itself; a quote that is presented as a simple, unsoiled, voicing of the voice quoted in the story.

Jan however, transforms the story and his own standpoint towards the text. The ascription of the quote to a cigarette vendor delightfully changes the telling into a joke. It not only underscores retrospectively the absurdity of the quote, but also reconfigures the speaker's position *vis-a-vis* the talk he has produced; it even renders questionable the authenticity of the quote which it now turns out was delivered “tongue in cheek”. The joke, of course, turns on the idea that a quote from a cigarette vendor would feature in a Reuters's story and is “newsworthy”. Through the ascription, the speaker's voice is reconstituted retrospectively, and prospectively reconfigures the nature of the activity and its sequential relevance.

Transforming the telling into a joke, undermines the news worthiness of the story. It is no longer relevant, at least in the next turn(s), for the co-participant(s) to address the import of the story with respect to its news worthiness, but rather to recognise and respond to Jan's joke. Rather than deal with the organisational relevancies of the story, Peter takes up the joke delightfully, juxtaposing “cigarette vendor” with “major analyst”, with Jan in turn producing “key sources”.

Although Jan's remarks may appear more concerned with telling a funny story than dealing with the news, like fragment 1, the exchange has some relevance for the work in which the participants are engaged. It not only informs Peter what story Jan is working on, but also allows Peter to know which story he should take next from the basket. Moreover, Jan's remarks provide Peter with a characterisation of the story, a characterisation that suggests that the story might be worth spiking and invites Peter's response. Although Jan may be more

concerned than Peter with whether the story is worth salvaging, he establishes Peter's support in spiking the story if he so wishes. By the completion of the episode, not only is the story spiked, but all those working on the desk know that it has been spiked and know why. In one sense, therefore, no matter how jocular or trivial Jan's remarks might seem, they provide the foundation for a collaborative decision not to transmit a news story concerning the ongoing crisis in Nigeria. This might seem unimportant to us now, but for those in the trading floors in the City of London, financial services and elsewhere at that time, the decision to spike the story may well have been consequential. It is not surprising, therefore, that you might seek the thoughts of your colleagues, however indirectly, before taking such a decision.

The articulation of the story is accomplished progressively, in the light of both the speaker's ability to establish particular forms of co-participation and the recipient's willingness to cooperate as an interested listener. An important feature of the story's articulation is the speaker's shifting alignment to the on-screen text displayed within the talk. The different standpoints that the speaker adopts in relation to the story and particular components within the material, including the reported speakers and their utterances, are contingent on and accomplished with respect to the (co-) participation of a colleague(s). Moreover, in the light of particular forms of co-participation, the speaker can not only articulate particular "voices" and reconfigure these "voices" retrospectively but, in so doing, transforms, within the articulation of a single utterance, the activity in which he is engaged. In consequence, the sequential and interactional import of particular actions, and the trajectories of conduct which emerge therein, transforms as Jan shifts the way he voices the text.

5. VIEWING STORIES TOGETHER

In some cases journalists encourage colleagues not simply to listen to a story on which they are working, but to look at, even read, the text with them. These collaborative viewings are a recurrent feature of the journalists' work, seemingly more concerned with generating a discussion concerning particular stories rather than actually working on the text together. Consider the following example. It is drawn from the Equities desk and begins with one of the journalists. Paul, noticing that IBM have just announced massive lay-offs.

Nick is reading some material on his screen. Rather than bluntly announcing the story, and risk interrupting the activity in which his

colleague is engaged, Paul attempts to delicately seek Nick's commitment as a recipient, before telling the tale. A moment or so before remarking on the lay-offs, Paul firstly turns towards Nick and then towards Nick's focal domain his colleague's screen. Producing a loud in breath, Paul then returns his gaze towards his own monitor.

Fragment 3 Transcript 1

- Paul: *h h h h Well that certainly is (a) definition of downsizing.
(0.7)
- Nick: What thirty five thousand?
(.)
- Paul: Yeap
(0.3)
- Nick: How many, ? out of. how
- Paul: ? Fifty thousand in a(v) (.) le ft or committed to
leaving in ninety three an through actions taken today(.)
another thirty five thousand (.) are leaving I.B.M.
- Nick: Bloody Hell
- Viv: What is that in terms of.....
.
.
- Paul: It used to be three hundred and fifty thousand (.) it may

Paul's actions occasion a shift in orientation by his colleague. Nick turns and looks at Paul, just at the moment that Paul's gaze arrives at his own monitor, where the story is based. As Nick turns, Paul begins to speak. Without interrupting his colleague, Paul then establishes a potentially willing listener even before he begins to speak. He also establishes a listener oriented towards a potential speaker who is looking at his own screen, thereby revealing perhaps that whatever is going to be said is related to on-screen material. Having encouraged Nick to temporarily abandon the activity in which he was engaged, Paul delivers comment on the story displayed on his monitor.

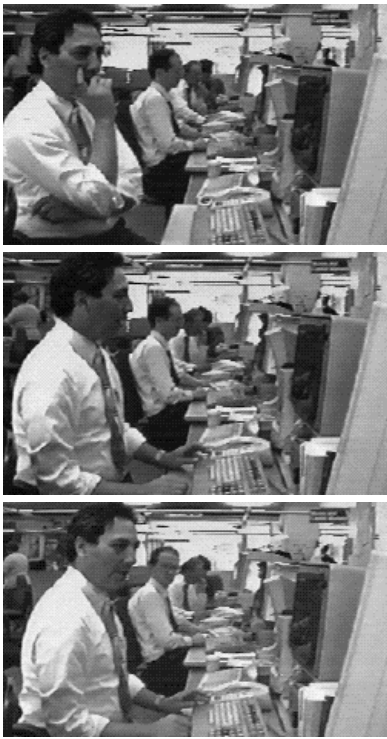
Having secured Nick's alignment towards the initial remark, Paul's comment may itself be designed to secure his cooperation in a more detailed exposition of IBM's cutbacks. The comment 'Well that certainly is definition of downsizing' has the flavour of what Sacks referred to as a story preface, an utterance which projects a story, gives

a flavour of its interest, and attempts to secure the relevant alignment of a recipient (cf. Sacks, 1992). Whilst revealing that he has seen the figures, Nick's response ("What thirty five thousand") elicits confirmation from Paul. He then momentarily glances at Paul's screen, and asks for further information "How many, out of. how".

In this way Paul establishes a recipient who is not only prepared to listen to the details of IBM's decline but is also visually oriented towards him. Paul exploits the recipient's commitment by delivering an extensive quote from the story. Even so, as the quote emerges, the perturbation "a(v) (.) left" encourages the Nick to shift how he participates in the exposition. In juxtaposition with the perturbation, Nick turns and looks at his colleague's monitor, the source of the story.

Paul therefore successfully secures the co-operation of a colleague not only to listen to the story but also to actually look (or rather attempt to look) at the material on the screen. In the following frames, Paul is on the left, and Nick is second from the left.

Fragment 3 Transcript 2



Paul:

hhhh Well that

certainly is (a) definition of
downsizing.

(0.7)

Nick:

What thirty five thousand?

Towards the end of “thirty five thousand”, Nick begins to turn back to his own monitor. Paul momentarily pauses, in the telling of the text. The next component “are leaving IBM” is produced with a downward intonation and as a potential completion of the relevant or interesting part of the story. Nick's shift in orientation perhaps encourages Paul to complete the informing, and in response, he mumbles, “Bloody Hell.” It is left to Viv (the editor on the desk) to develop the discussion; she elicits further information about the story and they go on to discuss its implications. Viv elicits just the information that Nick was asking for earlier, namely what proportion of IBM's work force is being sacked. As the discussion continues, Viv announces that they Paul should write a feature on the IBM story.

So whilst the original telling may simply be concerned with pointing out a certain irony concerning the behaviour of IBM and the stock market, the voicing of the text brings the story to the attention of others on the desk and leads to a feature which may not otherwise have been written. This moment of “small-talk” turns out to have some significance for the organisation of the work in which the participants are engaged, particularly in collaboratively deciding what to do with a story. Many of the tellings have this sort of character. In various ways they render textual material, based on-screen and largely unavailable to others within news room, “visible” in particular ways. These outlouds, informings and renditions do not simply allow others to have an idea of the activity in which a colleague is currently engaged, though this can be important, but rather flavour the stories in ways that are potentially of interest to the conduct of others. In many cases such tellings may simply lead to a story being spiked, and recognisably so, but in other instances, it may lead to news which would not otherwise be available being transmitted to customers or, as in the last case, features being written on topics which otherwise would remain passing news items. So, whilst these tellings might appear slight, they can have a profound impact on the production of news and in turn the behaviour of the market.

6. DISCUSSION: TEXTS IN INTERACTION

The production of a timely and comprehensive news service in Reuters relies upon journalists on the editorial desks keeping each other informed of particular stories and events. The incoming news stories are addressed to particular desks, and it is the responsibility of journalists to read those stories not only with respect to their own customers, but the customers and interests of their colleagues. The journalists have to envisage who might have an interest in the stories they have received, and the circumstances under which those stories might become relevant for others, even though, at this moment, they would not appear to have any bearing on their own practical concerns.

The journalists selectively render visible or animate the texts on which they are working. The texts located on-screen and largely inaccessible to their colleagues are animated with regard to the practical interests of colleagues and customers. The materials are animated in such a way that whilst journalists might themselves believe a story is critical to the practical concerns of other desks, their colleagues are given the autonomy and responsibility for deciding on the relevance, the news-worthiness, of the materials. In rendering stories visible in this way journalists preserve the territorial and organisational rights of colleagues so that their colleagues do not necessarily have to respond to, or make anything of, the story they are being told. The ways in which journalists therefore give voice to stories have a lightness of tone. They do not demand a response, but rather provide their (potential) recipient(s) with the opportunity to reply if they so wish. They provide a gist, a sense of the news, without bombarding colleagues with information. They seek the interest and commitment of a colleague before revealing the details of a particular story. Even then, the materials are often explicated in cursory and passing fashion. It is hardly surprising that journalists often render texts visible through jokes and quips. Such objects can be treated lightly. They allow the tellers to distance themselves from imbuing the talk with unwarranted relevance, and the (potential) recipients to ignore the story if they so wish. In animating texts, journalists preserve the integrity of the activities in which others are engaged, and respect the organisational responsibility of colleagues to decide on the relevance and news-worthiness of particular stories.

It is not surprising therefore that in animating texts journalists are sensitive to the willingness of colleagues to listen to the story before delivering the news. Many of the tales are prefigured by a story preface

or a joke which gives flavour of the news, even whether it is important or not, before telling the tale (cf. Sacks, 1992). The preface or quip is itself often positioned with regard to the current activity, as far as it can be inferred of the potential recipient, the speaker anticipating upcoming boundaries which might avoid interruption and maximise the possibility of a colleague listening to the exposition. Failure to elicit a response or appropriate alignment from a potential recipient, can encourage a speaker to abandon a story even before its delivery.

The teller is not only sensitive to the conduct of the recipient prior to the delivery of a story but also during its exposition. We have seen the ways in which tellers progressively establish the particular form of co-participation they require within and across utterances. So, for example, a teller might seek to establish the alignment of a recipient towards the text for the delivery of a quote, whereas a précis of the story might be delivered whilst the “co-participant” is looking at his own monitor and editing a separate story. Moreover, in failing to secure relevant co-participation for the accomplishment of a particular type of action, such as a reading, the teller may transform the projected activity and deliver the news in a different fashion than suggested in the preceding talk. Journalists not only render particular activities in which they are engaged visible to others within the local milieu, but develop selective characterisations of stories, differentiating the various forms of co-participation they require for different parts of those renditions. Quotes, précis, readings, summaries are differentiated in the talk itself and systematically accomplished with respect to different forms of co-participation from the recipient(s). The accomplishment of the tellings, the step-by-step production of (a characterisation of) a story, are produced with respect to the current conduct of the co-participant and, in particular, his or her orientation to different components of the characterisation during its articulation. On the other hand, the characterisation itself and the ways in which the textual story is rendered visible, is contingent on the co-participation of the recipient during the course of its production.

The relationship between the informings and the text is both curious and complex. In the production of an informing, tellers differentiate the status of different components of the characterisation with respect to the original text. The text itself, the existence of an authorised and written account, is exploited in the telling in a variety of ways. It is used to produce and present the factual version of some set of events to enable others to build or transmit stories that will have a significant

impact on the behaviour of particular markets. It is used to make political comments or to ridicule the journalism of colleagues. Within each fragment, we find the teller systematically displaying the relationship between the informing and the text, and demarcating his own standpoint or “voice” with regard to the original author and even sources within the text itself. So for example, we can observe the ways in which the teller can display that he is rewriting that story within the course of its telling and retrospectively recast the authority of the text. Or, for example, we can see how tellers prospectively establish a quote of a quote and display their own alignment towards the relevance of the story for news production. The text is selectively rendered visible. It is revealed within the talk and through the ways in which the teller animates or embodies the text. The developing rendition, the ways in which the talk embodies the text, is dependent on, and embedded in, the emergent interaction with others within the local milieu, and in particular the teller's ability to establish and sustain particular forms of co-participation during the production of a telling.

The text therefore, or at least the text displayed on the monitor, does not so much “mediate” the interaction, but rather is ongoingly constituted in the interaction.

The observations discussed here provide further support to the critique of the conduit metaphor of communication, the idea that communication is simply a channel through which individuals exchange information. The critique developed by Bakhtin (1986) and others such as Wertsch (1991) elucidate the dialogic nature of talk and show how activities arise in and through the communication of the participants. In the case at hand, we can begin to see how text is interleaved with talk and, following Bakhtin (1986) and Volosinov (1973) can consider the ways in which talk reproduces and relies on a particular textual genre (news reporting) which may be theoretically distinct from the current context and yet forms integral part of retelling and editing stories within the newsroom. But the character of the dialogicity and textual rendition discussed here goes beyond the idea of genres characterised so profoundly by Bakhtin and developed in diverse ways by Todorov (1990), Lodge (1990) and Goffman's (1974) frame analysis of talk. In particular, we find that the delivery of a piece of news to a colleague, itself a selective rendition of a textual report, is produced with respect to the shifting alignment and participation of the recipient. How the text is (re)produced is thoroughly embedded in the activity at hand, as that activity emerges in and through the interaction of participants. The

relationship between the speaker and the author, the report and the original text, and the distinction between *de dicto* and *de re* (cf. Coulmas, 1986) is thoroughly contingent on, and embedded in, the emergent interaction between the participants, even during the shifting course of a single utterance and textual rendition.

In recent years there has been a growing interest in how individuals produce and sustain language and interaction in institutional settings (see, for example, Drew and Heritage, 1992). An important feature of institutional conduct which has served as a central focus of such research is the asymmetrical relationship between the participants. So, for example, there has been a burgeoning body of studies concerned with how a patient and doctor orient to, and preserve the distribution of knowledge, expertise, power and status ordinarily associated with incumbents of the two roles (see for example, Parsons, 1951; West, 1985; Heath, 1992). In the editorial section of Reuters, we find rather different forms of "asymmetry". Here, whilst the journalists may stand on "equal footing" with each other, they have particular access to certain stories, and the materials on which they work are largely invisible or unavailable to colleagues. Screen-based technologies localise the activity; the text is received and read on-screen, changes are typed on the keyboard, and the computer cannot be easily passed between individuals like a piece of paper. Stories can be sent to others, though interestingly this largely occurs when journalists have already discussed a story, and agreed to pass it onto another desk. In a sense therefore, the sorts of practice that we have discussed in this chapter are ways in which journalists deal with asymmetrical access to each other's activities and the materials on which those activities are embedded or based. By selectively rendering their screen-based textual materials visible to each other, journalists systematically provide their colleagues with relatively unobtrusive ways of receiving information which may be of relevance to their work and responsibilities.

Written stories are exposed and transformed in and through the journalists' talk; talk which arises in and through their interaction and which, in turn, is transformed into the stories which are transmitted to financial institutions of London and elsewhere.

The use of the editorial system in Reuters therefore is thoroughly bound into and inseparable from the interaction and collaboration between journalists. Journalists have, for example, developed various ways in which textually embedded on-line stories, received by particular desks, can be rendered selectively visible within the domain, to enable

colleagues to see or at least hear for themselves whether it is worthwhile to pick up on particular news items. Journalists have developed practical solutions to the ways in which the technology and its accompanying organisational arrangements localise information to particular individuals and desks. Stories are read and edited with regard to the “interests” of colleagues and their respective customers, and journalists are able to keep each other informed with respect to the more relevant and amusing stories which might be breaking. Even so, in animating stories, journalists are sensitive to the concurrent activities of colleagues, activities which are themselves produced in and through their “interaction” with the system. These activities have limited visibility within the domain, and journalists use whatever they can to retrieve from their colleagues’ use of the technology and position and coordinate their own contributions. An individual’s “interaction” or use of the system is coordinated, ongoingly, with his or her interaction with colleagues within the local milieu.

The materials at hand point to ways in which certain, pervasive models of the user, task, and even information, appear to ride roughshod over the everyday organisation of technologies and practice. Journalists engage in individual and highly specialised tasks, which may well involve a complex array of cognitive abilities, and yet we can see how the practical accomplishment of their activities relies upon a community of practice and procedure, a social organisation which informs the ways in which they read and write and coordinate the production of the news. Whilst the tools and technologies in question, namely the Reuters editorial system, are in one sense operated by individual journalists, it is clear that a complex array of contributions feature in the real time use of the system, and it would be both empirically and conceptually mistaken to ignore how co-participation and interpersonal interaction features in the emergent production, the reading and writing, of news stories. As undoubtedly other authors in this special issue suggest, in addressing such topics as “cognitive overload” and like, it may well prove problematic to disregard the socially organised practices and procedures through which participants collaboratively constitute the emerging scene and accomplish their activities in concert with others. In the editorial room at Reuters, the control rooms of London Underground, the news of the BBC and other complex work settings which we are familiar, the indigenous, tacit and methodical work practice of the participants provide the resources through which seemingly extra-ordinary events and information are

handled, and handled in routine and unproblematic ways, as part of the participants day-to-day working life.

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References

- Atkinson, J.M. & Heritage, J. (eds) (1984) *The Structures of Social Action*. Cambridge, England: Cambridge University Press.
- Bakhtin, M.M. (1976) *Speech Genres and Other Late Essays*. (Translated by V. W. McGee) Austin: University of Texas Press.
- Card, S.K., Moran, T.P., & Newell, A. (1983) *The Psychology of Human-Computer Interaction*. New Jersey: Lawrence Erlbaum Associates
- Conein, B., Michel de Fornel und Louis Quéré (eds.) (1990) *Les formes de la conversation*. 2 volumes. Paris : CNEF.
- Coulmas, F. (1986) *Direct and Indirect Speech*. New York: Mouton de Gruyter.
- Drew, P. & Heritage, J. (eds.) (1992) *Talk at Work: Interaction in Institutional Settings*. Cambridge, England: Cambridge University Press.
- Dreyfus, H. L. (1992 [1972]) *What Computers Still Can't Do: A Critique of Artificial Reason*. Cambridge, MA: MIT Press.
- Engeström, Y. and Middleton, D. (1997) "Introduction: Studying work as a mindful practice" Engeström, Y. and Middleton, D. (eds.), *Cognition and Communication at Work*. Cambridge.
- Filippi, G. and Thereau, J. (1993) "Analysing cooperative work in an urban traffic control room for the design of a coordination support system" *Proceedings of ECSCW'93*. Milan, Italy, pp. 171-186.
- Garfinkel, H. (1967) *Studies in Ethnomethodology*. Englewood Cliffs, NJ: Prentice-Hall.
- Goffman, E. (1974) *Frame Analysis: An Essay on the Organisation of Experience*. New York: Harper Row.
- Goffman, E. (1981) *Forms of Talk*. Blackwell: Oxford.
- Goodwin, C. & Goodwin, M. H. (1997) Formulating Planes: Seeing as a Situated Activity. In Middleton, D. & Engestrom, Y. (eds.) *Cognition and*

- Communication at Work: Distributed Cognition in the Workplace*. Cambridge, England: Cambridge University Press.
- Goodwin, C. (1981) *Conversational Organisation: Interaction between a Speaker and Hearer*. London: Academic Press.
- Goodwin, Ch. and Goodwin, M. H. (1997) "Seeing as situated activity: Formulating planes" Engeström, Y. and Middleton, D. (eds.), *Cognition and Communication at Work*. Cambridge, pp. 61-95.
- Greatbatch, D., Heath, C., Luff, P. and Campion, P. (1996) "Conversation analysis: Human-computer interaction and the general practice consultation" A. F. Monk and G. N. Gilbert (eds.) *Perspectives on HCI: Diverse Approaches*. London: Academic Press, pp. 199-222.
- Greatbatch, D., Luff, P. K., Heath, C. C. & Campion, P. (1993) On the use of paper and screen in the general practice consultation. *Interacting with Computers*. 20, pp. 216-234.
- Harper, R. H. R. and Hughes, J.A., (1993) "What a f-ing system! Send 'em all to the same place and then expect us to stop 'em hitting. Making technology work in air traffic control" Button, Graham. (ed.), *Technology in Working Order. Studies of Work, Interaction, and Technology*. London and New York: Routledge and Kegan Paul 1993, pp. 127-144.
- Harper, R.H.R. (1998) *Inside the IMF*. London: Academic Press.
- Heath, C. C. and Luff, P. (1992) "Collaboration and control: Crisis Management and Multimedia Technology in London Underground Line Control Rooms" *CSCW Journal*, Vol. 1, Nos. 1-2, pp. 69-94.
- Heath, C. C., Jirotko, M., Luff, P. and Hindmarsh, J. (1993) "Unpacking Collaboration: the Interactional Organisation of Trading in a City Dealing Room" *Proceedings of ECSCW 1993*, September 13th-17th, pp. 155-170.
- Heath, C.C. (1986), *Body Movement and Speech in Medical Interactions*. Cambridge, England: Cambridge University Press.
- Hughes, J.A., Randall, D. and Shapiro, D. (1993) "From ethnographic record to system design. Some experiences in the field" *Journal of CSCW* 1:3, pp. 123-141.
- Hutchins, E. L. (1995) *Cognition in the Wild*. Cambridge, Mass.: MIT Press.
- Iser, W. (1985) *The Act of Reading*. London: Routledge.
- Kendon, A. (1991) *Conducting Interaction: Patterns of Behaviour in Focussed Encounters*. Cambridge, England: Cambridge University Press
- Lodge, D. (1990) *After Bakhtin*. London: Routledge.
- Markova, I. & Foppa, K. (1990) *The Dynamics of Dialogue*. London: Harvester Wheatsheaf.
- McHoul, A. (1984) *Telling How Texts Work*. London: Routledge.

- Sacks, H. (1992) *Lectures in Conversation: Volumes I and II*. Oxford: Blackwell.
- Suchman, L. (1987) *Plans and Situated Actions: the Problem of Human Machine Interaction*. Cambridge: Cambridge University Press.
- Suchman, L. (1993) Technologies of Accountability: On Lizards and Aeroplanes. In G. Button (ed.) *Technology and the Working Order*. London: Routledge, pp. 113-126.
- Theureau, J. (1992) *Le cours d'action: analyse semiologie*. Peter Lang: Berne.
- Todorov, T. (1990) *Genres in Discourse*. (Translated by Catherine Porter) Cambridge, England: Cambridge University Press.
- Vygotsky, L.S. (1978) *Mind in Society: The Development of Higher Psychological Processes*. Boston, Mass: Harvard University Press.
- Wertsch, J. V. (1991) *Voices of the Mind: A Sociocultural Approach to Mediated Action*. London: Harvester Wheatsheaf.
- Whalen, J. (1997) "Expert systems versus systems for experts: Computer-aided dispatch as a support system in real world environments" P. J. Thomas (ed.) *Social and Interactional Dimensions of Human-Computer Interfaces*. Cambridge: Cambridge University Press.
- Winograd, T. and Flores, F. (1986) *Understanding Computers and Cognition: A New Foundation For Design*, Norwood, NJ: Addison-Wesley.