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A call to (Dis)order: An ethnomethodological study of information technology “Disruptions” in the courtroom

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Abstract

Various social and technical imperatives permeate discussions around information technology (IT) implementation. Given the importance of both social and technical elements in IT implementation, IS researchers have begun exploring how implementation outcomes emerge from an unpredictable interaction between these two elements. In this paper, we explore the use of conversation analysis, with its roots in ethnomethodology, to investigate how IT issues disrupt and disorder the conversational flow of a criminal trial, and how these disruptions are handled through secondary conversations that repair this flow. We focus on two IT issues that posed significant disruptions to the court’s orderly conversational process, which during secondary conversations, reveal tacit institutional rules that are brought to the foreground to question and be questioned by these IT issues. We suggest that conversational analysis and ethnomethodological concepts, rarely studied in IS implementation research, provide a complementary research agenda for IS researchers and practitioners – to explore and intervene during the disruptions during IT implementation.

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1. Introduction

We hear that the Internet, computers and information systems have fundamentally changed our world. We hear that we have moved into something called the “Information Age” or the “New Economy”. These proclamations suggest that information technologies, through their implementation, have reorganized society in some essential and deterministic way, creating a new social order. In contrast, others proclaim that information technology is largely shaped and ordered by strategic choices. Both perspectives – labelled technical and social determinism, respectively – contradict what we know about information technology implementation – that the specific socio-technical outcomes are complex, emergent, unpredictable and disorderly. Given this, how can we productively investigate and understand the interactions between IT and social practice?

Various information systems researchers and theorists have explored emergent theories of IT implementation. [Robey and Boudreau \(1999\)](#) looked at opposing influences and logics in organizations that increase the uncertainty around specific IT outcomes; [Orlikowski and Iacono \(2001\)](#) suggest the ensemble approach to explore the embedded social and political setting around a specific IT implementation. Others use structuration theory ([Orlikowski & Robey, 1991](#)), and its adaptive equivalent ([DeSanctis & Poole, 1994](#)) to shed light on IT and institutional interactions. Each of these provides different emergent perspectives of IT implementation.

Focusing on this emergent view of IT implementation, we use ethnomethodology – specifically, conversation analysis – to focus on the active construction and reconstruction of a situation as a constant accomplishment of order from disorder ([Coulon, 1995](#)). Social and technical elements produce conversational disorder, which is eventually but tentatively ordered by participants through conversational repair. In this particular case, we examine a criminal courtroom setting where a woman involved in a multi-level marketing company selling a Web-hosting product, is charged with a criminal act. It was alleged that the company was an illegal pyramid scheme and, therefore, the woman’s participation in the company was a criminal act. As the prosecution attempted to prove her guilty of fraud and the defence counsel attempted to show her as a legitimate businesswoman, various information technology issues disordered the court participants’ attempts to make use and sense of IT.

The court’s primary procedural role is to render judgments about a defendant’s guilt and innocence through orderly courtroom conversation, and, as a result, to maintain order in the courtroom and in society. Well-known expressions such as “order in the court” and “law and order” underscore the significance of order in this task. While “order” is perhaps meant differently in the courtroom and in society, the two are clearly implicated in each other. It is, therefore, instructive to examine the conversations and the actions of various participants as they confront case-related disorder, employing conversational processes to make sense of case details, and repairing the conversational process when disruptions, such as those from information technology issues, arise during the proceedings. We show that various strategies were used to make sense of disorderly IT details to render them meaningful and comparable to previous case law and experience, including: dismissal, retreats and the

incorporation of new approaches and ideas. As a result, we show how the conversational disorder arising from IT renders orderly interpretations that are emergent, often unexpected, and incomplete.

We also suggest that conversational analysis and ethnomethodological concepts, rarely studied in IS at this point, provide an important perspective on how social and technical elements interact in complex and emergent ways during conversations. Through the processes generally identified in conversation analysis and ethnomethodology, our case illustrates that the disorderly effects of IT can be studied through conversation, and that the tentative order produced from these conversations are emergent and unpredictable, yet understandable. Therefore, one role of IS research and practice would be to explore the range of specific interpretations of IT in various settings, while illustrating which IT or social settings limit the range of possible interpretations, and how people are actively engaged in the conversation during IT interruptions and disruptions.

Our paper is structured as follows. We provide background information on the case before discussing our conversation analytical method and introducing the courtroom setting. We, then, discuss the results of the case. The results are organized around two disruptive issues related to information technology: information technology breakdown during courtroom use and issues related to the gathering of Internet evidence. We then conclude the paper, suggesting that conversation analytic and ethnomethodological approaches provide important philosophical and methodological perspectives in understanding the ordering/disordering effects of information technology.

2. The story

The criminal case involved a number of IT, marketing and legal issues that required extensive discussion and deliberation by participants in order to determine the guilt/innocence of the participant. While the court case began in the fall of 2000, the story began to unfold in late 1999 and early 2000. The dot-com era was on the cusp of becoming the dot-bomb era, and all things “Web” were receiving euphoric attention in the popular press. Set in this context, a multi-level marketing company, “WebHosting”,¹ began to offer Web-hosting services to individuals, families and small businesses interested in joining the new economy. For approximately \$100 per year plus an initial \$25 administration fee, individuals received 15 Meg of Web space, training materials, a Web builder, free e-mail and Internet access (Judgment, Paragraph 72). Individuals could also – with or without purchasing the website (although this was a contested issue in the case) – sell the Web-hosting service to others, thereby building their own marketing hierarchy, or “downline”. The participants in the business could earn money – through a rather complex compensation structure – on the sales made by the individuals in their “downline”.

¹ A pseudonym.

One individual from Canada, Jane Woodward (a pseudonym), had been a successful participant in this company – acting as both a purchaser of the Web-hosting product and one of its marketers. Ms. Woodward, a 63-year-old retired schoolteacher, earned \$204,000 in a two-year period and received a Web-hosting company award for being a top earner (Volume 1, Paragraph 1035). It appeared that her success, combined with the prosecution's claim that the Web-hosting product was an ephemeral smokescreen for an illegal lottery (Volume 1, Paragraph 529), attracted the attention of the local Canadian Royal Canadian Mounted Police (RCMP) office.

Multi-level marketing (MLM) is a form of direct selling in which the sales person not only earns money from their own direct sales but also off the sales of their direct and indirect recruits (Vander Nat and Keep, 2002). Perhaps the best-known example of an MLM is Amway. The Amway case of 1979 set the standards for distinguishing between legitimate MLMs and illegal pyramid schemes.

In Canada, legislation governing multi-level marketing organizations falls in two arenas. The first is in Sections 55 and 55.1 of The Canadian Competition Act. An informational website from the Competition Bureau of Canada, “2001 Multi-level Marketing & The Competition Act” (Government of Canada, 2001), suggests the following six criteria are necessary to distinguish legitimate multi-level marketing programs from pyramid schemes under Canadian law:

1. Is the product or service “real”?
2. Are claims about earnings typical of its participants?
3. Are participants expecting to earn money by recruiting people into the plan?
4. Are people forced to buy product to participate in the plan?
5. Are individuals expected to keep unreasonable levels of inventory that they likely cannot sell?
6. Is there a fair buy-back policy or right to return goods on reasonable terms?

This case, however, was prosecuted under section 206(1) (e) of the Criminal Code of Canada that states:

“Every one is guilty of an indictable offence and liable to imprisonment for a term not exceeding two years who (e) conducts, manages or is a party to any scheme, contrivance or operations of any kind by which any person, on payment of any sum of money, or the giving of any valuable security, or by obligating himself to pay any sum of money or give any valuable security, shall become entitled under the scheme, contrivance or operation to receive from the person conducting or managing the scheme, contrivance or operation, or any other person, a larger sum of money or amount of valuable security than the sum or amount paid or given, or to be paid or given, by reason of the fact that other persons have paid or given, or obligated themselves to pay or give any sum of money or valuable security under the scheme, contrivance or operation”;

This legislation was originally enacted in 1935 (before MLMs existed) and has been tested in several other trials starting from the code's initial test in 1949 (*R. v. Roe* (1949), 94 C.C.C. 273, [1949] 2 D.L.R. 785, [1949] S.C.R. 652, 8 C.R. 135) until as recently as 1996 (*R. v. Partridge* (1996), 148 Sask. R. 67). This particular case was the first test of the law involving an information technology product.

Despite the fact that the case was being brought under Section 206 (1) (e) (and not the Competition Act), the guidelines from the Competition Bureau were used during the trial in determining guilt or innocence. The reason for this was that this section of the criminal code was written before MLMs, and because its scope and intentions are unclear. The judge in the appeal case comments:

“The words of s. 206(1)(e), taken literally, have a wide reach, and could apply to many commercial transactions, in particular multi-level marketing schemes. The difficulty with the section is that its exact purpose, or to put it in another way, the exact intentions of Parliament, cannot be discerned from the words themselves. They do not refer to multi-level marketing, pooling of commissions, sale of products, sale of business opportunities, or, for that matter to chain letters and pyramid or money exchange schemes”. (Appeal Verdict, Paragraph 78).

3. Method: Conversation analysis

Our analysis of the influence of information technology on court proceedings is informed by ethnomethodology (Coulon, 1995) and conversation analysis. Conversation analysis is a form of sociological study in which social activities and the methods of social organization are the targets of study (Button & Lee, 1987). It begins from the recognition that social activities are “co-ordinated and accomplished” (p. 20) through talk and interaction, and that detailed analyses of this observable interaction can reveal this co-ordination and the methods of its accomplishment.

Conversation analysis is sometimes considered to be a stream of research within the ethnomethodological tradition. It is, alternatively, considered to be its own stream of sociological research that shares some common assumptions and views with ethnomethodology (Maynard & Clayman, 1991). Either way, it shares with ethnomethodology the view that “all natural language is indexical” (Maynard & Clayman, 1991: p. 398) – that the meaning of language can only be understood within the context in which it is uttered (Coulon, 1995). Rather than seeing this as problematic, conversation analysts and ethnomethodologists see it as an opportunity to better understand the conditional and active productions of social order through active agents engaged in making sense of a situation.

“Indexical expressions are a window, then, though which to gaze upon the bedrock of social order. Actors achieve all manner of relationship, interdependence, and commitment (Rawls 1989a), and perform an infinite variety of social actions, through the precise placement of single turns of talk in relation

to surrounding vocalizations and nonvocal gestures as well (Goodwin 1986). Thus, one bond between conversation analysis and ethnomethodology resides in the extensive exploration, provided by conversation analysis, into one profoundly ordered property of indexical expressions, that is, their sequential organization” (Maynard & Clayman, 1991: p. 400).

Conversation analysis focuses much of its attention, then, on how participants create order in conversation. In one of the seminal works in conversation analysis, Sacks, Schegloff, and Jefferson (1974) show that turn taking is a critical element in creating this order. Turn taking involves a set of practices, or rules, to which members orient. These practices guide speakers in deciding when one speaker’s speaking turn is done and when another’s begins. Further, what can be said in one turn – and who can say it – is often constrained by what has been previously said. Turn taking, however, is not a set of rules imposed on members from outside, but, rather, an active accomplishment of the members themselves.

An important concept within conversation analysis is “adjacency pairs” – pairs of utterances that, when the first part of the pair is produced, the recipient is expected to produce the second part (Atkinson & Drew, 1979; Button & Lee, 1987). For example, question/answer, invitation/response and summons/acknowledgment are all well-documented adjacency pairs. The second part of the pair is “marked” in that the speaker of the first part marks both the individuals whom are to speak next and the form to which the next utterance should conform (Button & Lee, 1987). If the second part of the adjacency pair is not issued as marked, the producer of the first part will usually attempt to repair the interaction.

“Repair is a speech activity during which speakers locate and replace a prior information unit. Because they focus on prior information, repairs achieve information transitions anaphorically – forcing speakers to adjust their orientation to what has been said before they respond to it in upcoming talk” (Schiffrin, 1987: p. 74).

Repairs are of significant interest to ethnomethodologists in that they demonstrate how participants in an interaction build and/or restore social order. To study how these repairs occur, ethnomethodologists and conversation analysts may deliberately create interactional disruptions (as in Garfinkel’s “breaching experiments”) or, alternatively, study situations in which frequent disruptions exist (as in studies looking at speech in people with dementia or people who have a loss of language comprehension due to brain injury or disease) (Lynch & Peyrot, 1992; Lindsay & Wilkinson, 1999; Watson, Chenery, & Carter, 1999).

Repairs may be categorized based on who conducts the repair (self-repair/other-repair) as well as who initiates the repairs (self-initiated/other-initiated) (Piazza, 1999; Schegloff, 1992). Repairs both initiated and completed by the same person are generally less troublesome and generate less discussion (Piazza, 1999). Watson et al. (1999) summarize seven types of repair including repetition and revision. Repair, Schegloff (1992) argues, is the last line of defence of intersubjectivity. It is used when parties to an interaction sense that misunderstanding has occurred – that is,

their intersubjective understandings are misaligned. This instigates one or both sides to fix the problem. In this sense, repair is “*locally managed, locally adapted and recipient designed*” (Schegloff, 1992: p. 1338, italics in original).

Conversation analysis generally involves very detailed transcriptions of particular talk-in-interaction events, based often on videotape recordings of the interaction. In this case, we use publicly available, official court transcripts of the trial proceedings.² While this is not the usual source of data in conversation analysis, Atkinson and Drew (1979), in their seminal work on conversation analysis in the court, discuss the significant pragmatic difficulties of documenting courtroom interaction using the more traditional, detailed video transcripts. While noting that official court transcripts pose their own theoretical challenges, Atkinson and Drew conclude that they are “strongly in favour of such data as an essential requirement for the rigorous empirical analysis of court-room interaction. . . ” (p. 3).

4. Courtroom testimony and case background

The Canadian government, the jurisdiction for this case, links its legal system to the maintenance of order in society.

“We need law, then, to ensure a safe and peaceful society in which individuals’ rights are respected. But we expect even more from our law. Some totalitarian governments have cruel and arbitrary laws, enforced by police forces free to arrest and punish people without trial. Strong-arm tactics may provide a great deal of order, but we reject this form of control. The Canadian legal system respects individual rights while, at the same time, *ensuring that society operates in an orderly manner*”. (Department of Justice, Government of Canada, 2003, emphasis added)

Enforcement of laws is undertaken in the courts, where an accused act is evaluated as to its guilt and innocence, and the punishment is levied against the guilty. The court is the arena where disorderly conduct is ordered to be deviant (or not), and social order is purported to be restored through legal remedy.

In order to produce legal and social order, the courtroom itself is a place of procedure and process. The process of determining guilt and innocence is organized in a very particular fashion. The proceedings are organized into phases (prosecution case and defence case) and sub-phases (examination and cross-examination). Within these phases, a particularly pervasive aspect of courtroom organization is the question and answer format (an oft-studied adjacency pair). Unlike much naturally occurring conversation, courtroom testimony follows a fairly rigid, institutionally defined turn taking protocol (Atkinson & Drew, 1979). Witnesses brought to testify do not

² The second author of this paper was involved in this case as an expert witness for the defence, providing expertise to the court in the area of e-commerce. Participants were aware of the author’s desire to use the trial in future research. In this paper, however, we have confined our analysis to data taken from official court proceedings and have not relied on the author’s inside knowledge of the trial and associated events.

tell their story in narrative form. Rather, the prosecution and defence counsels pose questions to witnesses who respond. So, not only is the form of interaction pre-determined, but also the allocation of these turns is established and disciplined from the outset. Lawyers get to ask the questions and witnesses are expected to answer.

Atkinson and Drew (1979) point out, however, that despite the pre-allocation of turns, the talk-in-interaction³ that takes place in the courtroom is still locally managed through overlaps and the length of a turn (turn-size). As well, the authors argue that interruptions – and how the participants in the interaction handle them – are of particular interest. Not all interruptions are violations of turn taking, however. Some – like the objection – acceptance/rejection adjacency pair – are a part of the accepted courtroom process. As well, judges may self-select into the interaction in order to seek clarification. However, many other interruptions are seen as violations of the normal interaction.

In this paper, we are specifically interested in the interruptions from information technology. How these interruptions are managed and the inter-subjective meaning that is established to preserve order provide emergent insights on the meaning of IT in particular settings. This legal case provides a unique opportunity to consider technology's role in organizing and disorganizing conversational interaction.

5. Results

Discourse analysts suggest that participants in a conversation accomplish orderliness in conversation (Thornborrow, 2002). We see, in this court case, that various information technology issues disrupted courtroom interaction. We examine two disordering influences of IT on the courtroom process: using IT in the courtroom and the recording of Internet evidence. We focus on these disruptions and particularly on the repair strategies used by courtroom participants to repair courtroom order.

5.1. *Using information technology in the courtroom*

Information technology use in the courtroom is relatively new. In this particular case, both the prosecution and the defence had extensive boxes of paper including website printouts, legal proceedings, and submissions to the courts. As will be discussed in more depth later, the underlying motto in the courtroom is that the evidence is “worth the paper it is written on”, and thus electronic information is held with some considerable suspicion because of its changing nature.

However, the judge used a laptop throughout the trial, which posed various disruptions to courtroom proceedings depending on its presence or absence. We see in the following two passages that the absence of a computer posed particular problems to the orderly conduct:

³ Conversation analysts use the term “talk-in-interaction” to refer to all forms of interactional talk. Conversation – informal, naturally occurring talk – and institutional talk – like that occurring in courts, organizations and other institutional settings – are different forms of talk-in-interaction.

THE COURT ⁴: I forgot my computer. I'm going to deal with the – where we were when we broke, and then I'm afraid I'm going to have to go and collect my computer before I can take notes again. . . . So that's the procedure we'll follow, and I apologize, but we'll adjourn now for five minutes while I go recover my computer. (Volume 7, Paragraph 322).

And later,

THE COURT: Okay. I am prepared to give my decision concerning Dr. Chiasson. This time I forgot my computer in the courtroom and so I had to hand-write my notes, which is an even worse situation because I usually can't read my handwriting, so excuse me if I stumble a bit as I am trying to deliver this judgment. (Volume 7, Paragraph 590).

In the first paragraph, the judge has forgotten her computer and cannot continue taking notes without it, causing a delay in the proceedings. In the second paragraph, the judge makes it clear that delivering her judgment would proceed more smoothly (orderly) with the use of her computer. In both instances, the judge offers a self-initiated self-repair – “I apologize” and “excuse me” – indicating a violation of normal, ordered courtroom interaction. The absence of the computer causes a disruption because her ability to maintain court order is dependent on its continuous availability.

In the following, we see another example of how the courtroom is improperly designed for the use of IT:

THE COURT: Before you carry on, I have a – I guess an announcement to make and that is, we're not going to sit any longer today than after your conclusion of your direct examination. This – I won't say this case. This bench has given me carpal tunnel syndrome, and my fingertips are numb so I don't think I can last much longer. Also for tomorrow, we're going to move to courtroom 6 where the bench is lower. We won't need any of the technology equipment, will we? (Volume 8, Paragraph 427).

Given a need to deal with the carpal tunnel syndrome, the courtroom process was seriously disrupted by a need to move to a different setting because the existing courtroom had become a storage location for much of the paper evidence.

In addition to the judge's use of IT, its use by witnesses during court proceedings also disrupted the orderly flow of court proceedings. In many cases, the IT was being used in order to demonstrate the Web-hosting product or associated marketing materials. In the following set of excerpts, the prosecution was attempting to use IT in order to illustrate the fraudulent practices of the company and the accused.

In the first passage below, the prosecution is examining its own RCMP witness, Sergeant Jones.⁵ They would like to show a presentation stored on a floppy diskette but the laptop that Sergeant Jones has brought does not have a floppy drive.

⁴ In the testimony transcripts, the judge is referred to as “The Court”, as per Canadian tradition.

⁵ A pseudonym.

Q: Okay. I'm producing to you an item that is marked with an Exhibit Number 00617004, that for court purposes we're going to refer to it as Exhibit 99. There's some writing on that disk. It's a disk. Can you tell me whose writing is on the disk and what it says?

A: The writing on the disk is mine. It says, "Woodward Fireball Presentation, Downloaded on April 1, 2000".

Q: Okay. And do you have the ability to put that into your laptop and produce it on the screen for us?

A: Maybe not on this laptop at this time.

Q: You don't have a CD – right.

A: Hang on. I don't have a – I don't have the – I don't have the "A" drive capacity on this at this time. I will later.

Q: Okay.

A: Excuse me.

PROSECUTOR: I wonder, Your Honour, if you'd mind, if I could just run and get my laptop. I'd like to start with the fireball presentation, and I do have my drive here, so I can just substitute mine as long as it doesn't get tendered into evidence at some point, if you don't mind?

THE COURT: Okay. Do you need me to adjourn for you to do that?

PROSECUTOR: It's going to take about five, ten minutes to set up.

THE WITNESS: Yes.

PROSECUTOR: It might be better if we did adjourn because it might take a little bit longer than we expect.

THE COURT: Okay. We'll adjourn for ten minutes then.

PROSECUTOR: Thank you, Your Honour. (Volume 1, Paragraphs 123–137)

Sergeant Jones is a member of the Commercial Crimes Division of the RCMP and identifies himself, in another section of his testimony, as having computer expertise, but is not a "geek". The prosecutor's statement (not a question) ("You don't have a CD – right") violates the usual question–answer format. Jones replies "Hang on. I don't have a – I don't have the – don't have the 'A' drive capacity"... You see here that both the prosecutor and her witness are hesitant. The question and answer format of courtroom procedure falls into disarray. This disruption is repaired through an adjournment – a retreat – in which the technical difficulties can be straightened out. When the court reconvenes, there is a short discussion to re-orient the participants on the outcome of the problem.

PROSECUTOR: Thanks, Your Honour. As it turns out, there is a CD, and that the Officer, as usual, was in the right and I was in the wrong. He has a CD copy of this item.

THE COURT: Okay.

PROSECUTOR: It's faster to run it off the CD than the disk, and I've just canvassed with my friend if he has any problem with us doing that. He indicated there should be no problem.

THE COURT: So is the disk going to be introduced as Exhibit 99 instead?

PROSECUTOR: No, it's actually marked as 104. We'll put them both in so that the original and the copy are both there.

THE COURT: Okay.

PROSECUTOR: So 99 is the disk, which is the original, and 104 is the copy which the Officer made. (Volume 1, Paragraphs 140–146).

It is particularly interesting to see that, as part of the repair, the prosecutor re-establishes the witness as the technology expert, "As it turns out, there is a CD and that the Officer, as usual, was in the right and I was in the wrong". It is important for the prosecution's case that the witness demonstrates the necessary expertise to the judge. Notice that nowhere in the earlier passage does Sergeant Jones suggest that there is a CD. Therefore, the prosecutor's statement not only repairs the disorder to court proceedings, but also repairs the witness's credibility that might have been damaged by a perceived lack of knowledge about IT.

However, the floppy drive issue was only one of many IT issues to confront the court. In the following passage during the Crown's continued Examination-In-Chief⁶ of Sergeant Jones, a connection to the Internet is required in order to show an example of a Web page. As before, the technology does not cooperate.

Q: Okay. And just explain to us – do you have to dial up (inaudible – both speaking at once)

A: I have to dial up. I'm going to see if this is available on the Internet at the moment.

Q: Okay. So you can't – you don't have it saved (inaudible – both speaking at once)?

A: I didn't – I didn't save that, no.

Q: Okay.

A: I – I just – SkyMail is something – their – their Web pages are quite a bit more complex. I'll just –

Q: So you're dialing up to the Internet right now?

A: Yes. I'm accessing the Internet by a connection that the RCMP has an account for.

Q: Okay.

A: Hang on. No, that's okay. It's not really busy, I didn't dial nine to get out.

Q: Oh, okay.

A: It's likely busy, but in the building here somewhere.

PROSECUTOR: Okay. Your Honour, what we could do is while – is adjourn at this point because I would think I'd be no more than about a half an hour with him this afternoon to finish this bit off, and we can make sure we're dialed up before we get into court this afternoon, and then we'll just go right to it and finish him off. That might make just as much sense. (Volume 3, Paragraphs 637–649).

⁶ In the Canadian courts, questioning of a called witness follows three main phases: "Examination-in-Chief" (questions from calling counsel), "Cross-examination" (questions from opposing counsel) and "Re-examination" (questions again from calling counsel).

We see the question-and-answer turn taking interrupted by the apparent failure of the technology. Even when the prosecutor is asking questions in this passage, she is not serving her usual purpose of establishing the case against the defendant but rather, filling in interactional space that would otherwise have been left empty as the participants waited for the dial-up connection to be made. In the end, an adjournment is used to repair the situation.

In the final excerpt of this set, the courtroom encounters additional difficulties with information technology. During the Examination-In-Chief of Sergeant Jones, the witness attempts to play a CD presentation on his laptop but the computer “freezes”. An attempt is made to fix the problem but when it can’t be fixed, the problem is considered to be “computer-based” rather than just a problem with the CD.

Q: Before you do that, could you just read the first two lines off the screen into the record for me?

A: Yes, “Jane Woodward welcomes you to WebHosting 2000”.

Q: Okay. And if you could press “enter” now.

A: And that sometimes happens.

Q: Okay. So what’s happening now?

A: This program has frozen for some reason. I’m not quite sure what –

Q: Okay. Can you start us over again and get it fixed? (PAUSE WHILE COMPUTER IS BEING FIXED)

Q: Sorry? Can you do it, Officer, or is it a bigger problem?

A: It looks like it might be a computer failure as opposed to –

Q: We’re just not having much luck with it today. Why don’t we move onto the next thing and we’ll come back to it?

A: Yes.

Q: Okay. So we’ll put 99 and 104 aside for a moment. The next exhibits that I want to refer you to, sir, I understand came from a search of a particular residence. And can you tell us about that search, when it took place, and whose residence it was? (Volume 1, Paragraphs 174–185).

In addition to this, a couple of questions later, the judge’s computer begins to act up and testimony is again disrupted.

THE COURT: Sorry, could I stop you there? Now, I’m having trouble with my computer.

PROSECUTOR: It’s something in this room, I think. If you could just stop –

THE WITNESS: Yes.

THE COURT: I have no idea what just happened. Is there any possibility we’re getting power interruptions or surges or something like that?

PROSECUTOR: Something unusual is happening, I think, but I’m not sure what.

THE WITNESS: Mine might be burnt out.

PROSECUTOR: Okay.

THE COURT: Okay. I’m back in. I don’t know what happened. Go ahead, sorry. (Volume 1, Paragraphs 187–194).

Again, testimony (i.e., the normal practice of the courtroom) is held up while the technology is attended to. Note that the only person with technology experience is the witness. Based on a series of coincidences, the participants piece together another explanation. Two computers break down within minutes of each other and the judge, the prosecutor and the witness appeal to common sense in order to establish possible explanations. As the disruptions continue, the explanations grow – a glitch that could be fixed by restarting, a more serious computer failure and then a problem with the entire room. Seconds later, however, the judge gets “back in” and the trial continues. As a result, the explanation produced a repair in the conversation, by filling in the conversational void between IT breakdown and repair, thus ameliorating the disordering effects of information technology.

5.2. *Recording of Internet evidence*

An important aspect of a court trial is maintaining an accurate record of the evidence. The trial record serves several purposes (Jaconelli, 2002), which include: aligning the courtroom process with the notion of “open justice”, and providing a permanent record for deciding and trying potential appeals. “Open justice” is the view that trials must occur in an open forum so that justice can, not only be done, but also be seen to be done. This is a critical aspect of attempting to maintain order in society through generally accepted respect for the judicial process.

In the following passages, information technology poses challenges for maintaining this record. At this particular point – during the Crown’s Examination-In-Chief of Sergeant Jones – Sergeant Jones has connected to the Internet to demonstrate the availability of other potentially comparable Web-hosting products. Approximately 50 question-and-answers during the testimony followed, mostly related to demonstration of free Web-hosting products. This line of questioning is important because a crucial element of the prosecution’s case is that Web hosting is essentially a free good and charging for a free good implies a scheme. The judge brings the following concern forward.

“THE COURT: I’m going to stop you just here for a moment now. I can’t at the moment see the relevance of going through this, but I’m sure that there will be some. What I’m now concerned about is, what is this doing to our record? Do we have all of this as a paper copy?”

PROSECUTOR: No. No, because we’re actually right on the Internet right now, but he can print it off afterwards.

THE COURT: Well, that’s what I’m concerned about is that everything that we are seeing on the screen should be available for the record of the proceedings, and with us skipping around with him on the computer, I’m not sure how we are accomplishing that.

PROSECUTOR: And there’s no good way, if we’re going to access the Internet at all, there’s no good way for us to do that. So it’s – well, to some extent I’ve encountered it before, but he can print off what’s on here after he finishes testifying.

JONES: I – I can actually –

Q: Can you – can you actually – save it off this –

A: I can save it.

Q: Okay. So can you save this page – so you’re saving what we’re looking at right now?

A: I’m saving this page as we’re – that we’re looking at right now.

Q: And you can then print it off later on?

A: Yes.

THE COURT: Okay. I think certainly we should be doing that. (Paragraphs 820–823 removed here for brevity)

THE COURT: – made me realize that especially when you’re having a witness simply highlight something that we’re looking at, it has to be preserved for the record if –

PROSECUTOR: Yes. And I think that’s a really good point, Your Honour –

THE COURT: – for later.

PROSECUTOR: – so he’s – right now, just as you mentioned it, he saved that file, and he will in fact print it out and we can tender that later on.

THE COURT: Okay.

PROSECUTOR: But he has preserved what he’s been looking at, so there’s no room for changes to the site”. (Volume 3, Paragraphs 809–829).

At issue here is whether the Internet evidence can be captured in order to provide a running and permanent record of the evidence presented. This causes a disruption to the testimony as demonstrated by the need to leave the normal question–answer format of the court testimony. The court participants decide that the best course of action is to preserve the testimony by using the “Save” function provided within the browser that is being used and, then, print off the pages after the testimony is complete. However, as we see below, this solution does not completely satisfy the court’s need to preserve the record.

THE COURT: That doesn’t address the first issue that the defense counsel raised. Are we going to be looking at the other paper ones or –

PROSECUTOR: Sure. And I think now that we’ve saved this one, I think maybe what we’ll do then is just have you print that out and we’ll tender it as long as my friend is okay with that, and it can actually just go on as an exhibit and we can rely on it from that point on. I sort of wanted to give you the sense too in terms of how you access one of these free Web pages and how you go about – like what sort of information they have on them, like a privacy statement and that sort of thing.

THE COURT: Well, I’m fascinated to see how you get onto these things and all of that, but I’m just concerned about how somebody reading a transcript of the proceedings is going to follow it.

PROSECUTOR: Okay. So I think what we'll do is we've gone through some of the conditions on – or restrictions on the use of this one, and I think we'll just print off the rest of it and tender it in that fashion.

JONES: I'll have to back up and save.

PROSECUTOR: Okay. Okay. Could you do that?

JONES: Yes. (Volume 3, Paragraphs 830–836).

The problem is that the current versions of the websites will be shown, but paper copies are required in order to allow others to determine what evidence was used during the trial. In fact, there is some evidence that the judge in these proceedings might limit this testimony because of the difficulties of producing the court record. “Well, I’m fascinated to see how you get onto these things and all of that, *but* I’m just concerned about how somebody reading a transcript of the proceedings is going to follow it” (Volume 3, Paragraph 832, emphasis added). The “*but*” suggests that even if the testimony is interesting, it may not be allowable because it cannot provide the evidentiary trail necessary. The prosecutor, however, suggests they continue the testimony, saving screen shots as they go and producing, later, paper printouts of the websites as evidence. With this solution in place, testimony continues but hits another roadblock when a similar issue disrupts the court process.

PROSECUTOR: EXAMINATION-IN-CHIEF CONTINUES:

Q: Okay. And if you could just describe what you’re doing now, sir?

A: I had – from the Web page I highlighted or selected the text from “Privacy Policy” where I’d read before, and then I did a – I did Control C to copy it, and then I opened up WordPad, which is a program which comes with Windows 95, and then I did a Control V to paste it into that – into the word processor there, and now I’m going to just save that and – and I saved that. I’m saving it with the same Free Servers Privacy Policy.doc.

Q: Okay. Can you save any other of the pages that we looked at in this Web page?

A: I’m just going to – I’m going to go back to the – the document, the acceptable use policy and I’m going to save it in the same format, and select it and I’m going to Control C to copy it, and then I’m going to go to the WordPad, Control V to paste it in and it comes in in a format where the – the actual formatting from the Web page is lost, but I’m going to save it in that format, and that was –

Q: Acceptable use?

A: Acceptable use. I’m going to save that as Free Servers and Acceptable Use.doc.

PROSECUTOR: Okay. And, Your Honour, to some extent, sometimes taking things off – that’s part of the difficulty, taking things off the Internet, you can’t tell it was printed with everything on, and we saw that from some of the websites that he had printed previously in Exhibit 77 where he had to handwrite some things on because

they just didn't print off. So to some extent we're losing some of the button bars and things along the sides, but we're getting the text.

THE COURT: Well, as long as we're getting the text, I guess that's the best we can do.

PROSECUTOR: Okay.

THE COURT: There's got to be a better way of doing this so that you can preserve it for Appeal though. Maybe running a video on the camera or something like that, and then making the video an exhibit as well. You have to be able – you have to somehow reproduce what went on in the courtroom.

PROSECUTOR: And I think if he talks about the links that he's going through and if we sort of limit ourselves in terms of going to those links and that text, perhaps that. But to some extent – because for example I want to show you a pop-up ad, and to some extent you can't –

THE COURT: That's what I'm saying. I mean, with this – this technology you can almost do anything if you think about it enough, and I think if you could – there's got to be some way to be having what we're doing videotaped. Like a videotape of what's on the screen, even if all you do is focus a camera on the TV screen, there's got to be some way to do that. I'm not saying that we do it now, but –

PROSECUTOR: Yes.

THE COURT: But for future –

THE WITNESS: I would think it would be possible even with a VCR.

PROSECUTOR: Okay. (Volume 3, Paragraphs 837–853).

This disruption is a clarification from the prosecutor that saving the Web page does not always result in an exact copy of the page. She comments, "So to some extent we're losing some of the button bars and things along the sides, but we're getting the text". (Volume 3, Paragraph 844) This "active" text such as banner ads is important because the defence counsel argues that free websites are incomparable with the Web-hosting product because the free sites subject the user to unwanted advertising and loss of screen real estate. This is, however, precisely the evidence that is lost in the preserved record. Yet no one – not even the defence – objects to losing this part of the record. The judge then questions the approach again, suggesting that perhaps in the future, a VCR recording of the Internet proceedings would be preferable, but since there isn't one immediately available, the court will continue.

But the issue remains. At various points in the remainder of the prosecution's direct examination of Sergeant Jones, the issue of how to save a record of the Internet-based testimony re-appears. Not all pages have a "Save" option so the witness instead uses screen capture tools. In some cases, the screen capture function is unable to capture all of the text because the text doesn't fit on one screen. In another case, the witness selects the text and copies and pastes it into a word processing document and then saves the document. This process is laborious and error prone as demonstrated in the following passage.

DEFENCE COUNSEL: I just wonder, I at some point in time would like to see some things on this page. Now, I don't know we're coming back to it or whether it's going to be gone. I'm kind of concerned if – like the flashing thing there, I don't know what that is.

THE COURT: At the top?

DEFENCE COUNSEL: Yeah. The “Win \$10,000”, I want to see what I can win.

Q: Okay. Do you want to click on that?

A: I'm clicking on a “win \$10,000”, it's a – an animated graphic, which is a link, and it opened another – it opened another Web page. And – and it's to – comes up with a – a Web page which reads, “Jobs Online”, as a – in the upper left- hand corner. And then there's a form which can be filled out. On the left-hand side it has a – Registration as a heading, and below registration it has some –

DEFENCE COUNSEL: I'd like to read – what does it say on the top there under – under registration?

THE WITNESS: The top of registration. “Register now with the Internet's fastest growing and most popular career website, Jobs Online. When you register you'll be entered in our Tools for Success giveaway. Get a new wardrobe with a \$1500 gift certificate, a new coach”, a little trademark symbol, “briefcase, coach”, trademark, “watch and Nokia”, trademark, “9000 communicator. Click here for rules”. And below that –

DEFENCE COUNSEL: Can we – can we see that? Is it possible to see that?

THE WITNESS: The “Click here for rules”?

DEFENCE COUNSEL: When – and then – yeah.

THE WITNESS: Did you want me to continue reading or click here for rules?

DEFENCE COUNSEL: I'd like to see the rules.

THE WITNESS: Rules. That is – again has a Jobs Online little logo at the top, and then a menu bar, which was on the previous page, I didn't mention it. And then it doesn't appear that it fits in this screen, just – I'm going to make it just a little bit wider, and I – I don't know if I can get all of that on this screen. As – I'm sure it's not all on this screen. Hang on here. And I copied that and – I selected it and copied the contents of the – that page, and –

DEFENCE COUNSEL: The other thing –

THE WITNESS: Now, I can – now, I can read what it said on that previous page as I – as I copied the text into WordPad.

DEFENCE COUNSEL: Okay. If I can interrupt, and I don't mean to be interrupting, I'm just trying to understand this. Something blurbled out there that “Michelle wants me to buy a home busi-

ness”. I saw that, what was that? I don’t know if anybody else saw it, but I think I saw it. Do you know where that came from?

THE WITNESS: I don’t know where that came from, no. Did –

DEFENCE COUNSEL: It’s not subliminal or anything like that, it just says, “Michelle” – “Michelle wants me to buy a home business”, that’s what I saw. Okay. It’s okay, I’m sorry, I just – I thought maybe you knew what it was.

PROSECUTOR: Okay. So is there anything else that my friend wants preserved for the record in terms of information from this –

DEFENCE COUNSEL: I’d like to see what it said.

THE WITNESS: In here – in this?

PROSECUTOR: What – what else do you want to see because there were –

DEFENCE COUNSEL: Well, unless it can be printed out. I mean, I’d like to know all this –

THE COURT: I think he saved it so it can now be printed.

THE WITNESS: I – I’ve got – I haven’t saved it yet, I’ve – I’ve got the contents in a document and if – if I could have a –

PROSECUTOR: On a note.

THE COURT: Well, you should be saving and printing anything that we’re looking at. Just assume that.

PROSECUTOR: Okay. Just so it’s clear, Your Honour, we – the Crown isn’t going into this icon, it’s Defence who wanted to go into this icon. (Volume 3, Paragraphs 990–1017).

At the beginning of the passage, the defence asks a question about the Internet-based testimony. The prosecution asks the witness to show the defence counsel the information he seeks but this exposes a number of problems. First, we see that the defence counsel and the witness fall into the typical question-answer format of testimony. However, the direct examination of the witness by the prosecution is interrupted by objections from the defence counsel. During that examination, an unexpected event occurs, which the defence counsel identifies as a “blurb” about “Michelle wants me to buy a home business”. The witness does not appear to have seen this at all. Since no one can verify that this even happened, the issue gets dropped. At the end of this passage, the defence counsel says that everything’s fine if it’s all been printed out. The judge responds, “I think he saved it so it can now be printed”. It turns out, though, that this has not been done. By the end, the judge reminds the witness, “Well, you should be saving and printing anything that we’re looking at. Just assume that”.

We see in these passages that the technology – here the use of the Internet in testimony – creates unexpected disruptions to the evidentiary trail necessary for the court. As discussed above, several interruptions to the orderly flow of testimony are experienced. As well, later transcripts show that the court must essentially repeat the original testimony in order to have the hardcopy versions of the websites

accepted into evidence. This lasts for approximately 137 paragraphs of testimony. Various repairs are attempted but remain unresolved.

In the passage below, the defence is preparing to start its case. The judge presupposes, correctly, that the defence case will involve looking at the Internet. The issue of the court record is raised again and, again, the printing solution is put forward. “THE COURT: All right. And is that the best way that we can come up with to create a record, to print as we’re going along?” (Volume 5, Paragraph 8). This time, though, the prosecution (whose case is finished) has another solution.

PROSECUTOR: To assist my friend, Your Honour, I did ask the police to make some inquiries, after we adjourned last day, and they’ve tried a couple of things, but I think they do have an option of videoing if that’s something that you need. There’s one difficulty with the lap-top that this witness is currently using, in terms of having the right feed, but I think we can make arrangements so that we can contemporaneously make a record of exactly what’s being seen. (Volume 5, Paragraph 14).

This is the first time that “contemporaneously” has been brought up as a necessary element of the court record. The defence counsel responds that they will really not be using the Internet too much; implying that the effort to get the videotape set up is probably unnecessary.

THE COURT: I’d feel much more comfortable if we were creating a video of what we’re seeing because we saw during the Crown case that things can change and be lost forever because of something that simply appears visually for a moment.

DEFENSE COUNSEL: Yes.

THE COURT: Even before there’s a chance to print it.

DEFENSE COUNSEL: Yeah, we brought some blank tapes.

THE COURT: And is this something that we need to take some time to set up?

PROSECUTOR: If I could, Your Honour.

THE COURT: Sure.

PROSECUTOR: Yeah, ‘cause we’re going to have to actually line up a different lap-top, but we’ve taken that into account as a contingency, so it shouldn’t take a great deal of time. We could do his evidence up to the point of going on the Internet, if that works.

DEFENSE COUNSEL: I think, Your Honour – I realize there’s a fair bit of effort going into this. I think we can print out what’s done. That is, it’s not that much. And we can – building a page, we can print it right – that’s why – immediately. I don’t think it will be that –

- THE COURT: But – I’m sure you’re right, we could print it once it’s done, but what record do we have of the process that you go through to build it?
- DEFENSE COUNSEL: Well, we can print every step, they’re aren’t that many. Print the step –
- THE COURT: I just would be more comfortable with a video, I think, that would give the whole story of how long it takes, how it works and so on. If it’s something that we can do reasonably easily, I’d much prefer to do it that way.
- PROSECUTOR: Yes, Your Honour. And maybe if we could take an adjournment we could talk to my friend and work out some of the details and see how quickly we can get it set up and just do a little experiment to make sure it will work. We tried it on Friday. I think the officer did and it seemed to work. (Volume 5, Paragraphs 6–29).

The defence tries to implement the solution that the prosecution was allowed (i.e., just save as you go and print later), but they are not given the same freedom. The judge points out that reconstructing the “whole story” of the testimony requires knowing “how long it takes, how it works and so on”. Yet this wasn’t the same standard to which the prosecution was held. The definition of what constitutes an accurate transcript has now been redefined.

The real-time nature of the Internet also poses difficulties for the trial in making it difficult to predict and control testimony.

- DEFENCE COUNSEL: Sorry, Your Honour, I don’t mean to interrupt again, but I saw, “One minute can save your life”, flash before my eyes.
- DEFENCE COUNSEL: Stop time [sic: stop sign].
- DEFENCE COUNSEL: I don’t know where – “One minute can save your life”.
- THE WITNESS: Okay. I didn’t see it.
- DEFENCE COUNSEL: And a stop sign beside it.
- THE WITNESS: I – I can get that for you if it’s there.
- DEFENCE COUNSEL: But where – I mean, it just flashed across, what is it?
- PROSECUTOR: I didn’t see it and neither did he, so we’re not sure what you’re talking about.
- DEFENCE COUNSEL: Well, we both saw it.
- PROSECUTOR: Yes.
- DEFENCE COUNSEL: “One minute can save your life”.
- THE WITNESS: This – this Web browser, Internet Explorer first – it first loads on the Microsoft’s MSN.ca site, and I’m not sure if what was – what’s being referred to is on there or not.
- PROSECUTOR: EXAMINATION-IN-CHIEF CONTINUES:
- Q: Okay. Can we (inaudible) going back to that Web page?
- A: Yeah.

Q: I'm not sure if my friends – they haven't really indicated where they saw it. We're just going to back up the Web page.

THE COURT: Was it to do with that pop-up ad?

DEFENCE COUNSEL: Your Honour, as soon as we got to the screen, a red stop sign, it said, "Stop! One minute could change your life".

PROSECUTOR: The only reason we're going here, Your Honour, is I want to show an example of a pop-up ad. That's the only reason we're here.

DEFENCE COUNSEL: Okay. Well, let's see it then? (Volume 3, Paragraphs 1055–1072).

In the above passage, the prosecutor is attempting to demonstrate to the court what a pop-up ad looks like. As they were doing this, the defence counsel sees a pop-up ad appear and disappear suddenly, which neither the witness nor the prosecutor see. It is unclear whether the judge sees this, but given that she failed to support the defence counsel, it is likely that she also missed it. Outside the courtroom, the witness (again Sergeant Jones), in trying to create the printed record, has an opportunity to revisit this website. When recalled to the stand to finish his testimony, the witness clarifies what happened.

THE WITNESS: Actually what – what I did was, I saw the – what they were talking about in relation to the Stop, One Minute Could Change Your Life –

THE COURT: Okay.

THE WITNESS: – and that appears where – on the Jobs Online website to which I was referred. And the word "Registration", which is at the top left underneath the Jobs Online logo, that appeared before the word "Registration". There was a graphical image that – I believe it's a graphic, but it had the words and a stop sign. It had a stop sign and then One Minute Could Change Your Life, I believe. And –

THE COURT: So we know the defence counsel weren't dreaming that flashing stop sign, okay –

DEFENCE COUNSEL: I feel better.

THE COURT: – that's helpful.

PROSECUTOR: RE-EXAMINATION:

Q: And do you have a picture of it or –

A: Actually there's some other clarification that probably needs to be done as well because the – the ads do change, I hadn't seen the \$10,000 symbol link to which – which lead to the Jobs Online website and that's – that's represented in the other material. I believe it's now an everyone.net link, was formally a \$10,000

symbol and that's – I think the difficulty with the Internet is it's continuously changing. I have a – the pop-up link is just a reference to Yahoo Mail, never saw the Beanie Babies ad again. They're like television ads, is, they change from day to day or even from minute to minute sometimes, I guess. And I also had – I also had an access to a *dailyfive.html* and then a – then we looked at the top part of a text document, which as it turned out was 33 pages when I printed it off and I brought 33 pages and I don't know that you want them all.

THE COURT: Well, I think we should probably take in everything that relates to what –

THE WITNESS: And I had printed –

THE COURT: – you think we saw and if it's not relevant we won't have – worry about it. (Volume 4, Paragraphs 281–292).

Again, a few interesting issues arise. It is clear that one of the difficulties the court finds in this trial involving the Internet is that it is dynamically changing. This is problematic because unpredictable and changing events produce courtroom and evidentiary disorder.

In addition, we see in the above passage the attempt to push aside what is difficult to understand. When the witness indicates that he has determined what caused the “stop sign” to appear, the judge says, “So we know the defence counsel weren't dreaming that flashing stop sign, okay” (Volume 4, Paragraph 284). While we assume the statement was meant in jest, there remains a feeling that the court would have found it easier to believe that the counsel had imagined it. The witness, when asked to provide evidence of the “stop sign” pop-up ad, explains, “I think the difficulty with the Internet is it's continuously changing”. It's clear that the ever-changing nature of the Internet is seen to pose problems for the normal procedure of the court. The judge says “Well, I think we should probably take in everything that relates to what you think we saw and if it's not relevant we won't have — worry about it”. In this repair of another interruption due to technology, the judge makes it clear that the witness's explanation is still conjecture (“what *you think* we saw”) and essentially gives permission to dismiss the interruption.

In dealing with the challenge posed by the Internet evidence, then, we see the participants using a variety of strategies to manage disorder and restore order. Clearly, the Internet evidence was not originally seen to pose any problem because the testimony continued for some time without complaint. When the judge does raise the issue, an initial solution is worked out among the participants so that the interaction – that is, the testimony – can continue. But this solution meets continued challenges as the testimony proceeds, because it is shown to be incomplete (it does not capture all of the Web page), laborious and error-prone. A new solution is eventually proposed and implemented.

What is perhaps most interesting about this issue is that the participants' understanding of the *court record* changes and deepens as new challenges and solutions are discussed. Initially the issue is identified as "THE COURT: Well, that's what I am concerned about is that everything that we are seeing on the screen should be available for the record of the proceedings, and with us skipping around with him on the computer, I'm not sure how we are accomplishing that". (Volume 3, Paragraph 811) Through these challenges, we learn that it is not just that everything on the screen should be available for the record but that it should be "contemporaneously" (Volume 5, Paragraph 14) captured and should include "the whole story of how long it takes, how it works and so on". (Volume 5, Paragraph 28). Participants, therefore, reordered/redefined their view not only of the information technology but also of the court record as information technology challenges were encountered.

6. Conclusion

At the outset, our question of interest was "How can we investigate and understand the interactions between IT and social practice during IT implementation, without social or technical determinism?" Like the emergent approaches that avoid technical and social determinism, conversation analysis focuses on how individuals strive to collectively make sense of what is essentially a chaotic and infinitely complex world – a world that is constructed and reconstructed through on-going conversation. Given the infinitely large number of possible meanings that could render this world meaningful, "reality" is essentially an on-going and emergent accomplishment of participants through conversation.

Information technology, like any new and foreign artefact introduced into a social setting, challenges and is challenged by this on-going conversational flow. The result can be many rips or tears in the conversation, produced and exposed by the foreign IT object. As a result, often hidden and assumed social and technical rules are brought to the foreground in order to deal with these rips and tears.

The disruptions and subsequent repairs described in this paper offer insights into how participants worked to re-order conversational procedures in response to disruptions from information technology in one particular setting. Despite many periods of silence and unproblematic use of information technology in the courtroom, the transcript excerpts demonstrate that various IT issues disrupted the courtroom conversation. Specifically, we have shown how the question-and-answer format of courtroom procedure is interrupted by IT breakdown during use and by the recording of Internet evidence. Each provides numerous moments where the normal order of the courtroom process is often substantially disrupted, interpreted, and then repaired using various conversational strategies in order to recover courtroom order. As a result, we observed the rules behind courtroom conversation, and the methods used by participants to re-establish courtroom order.

Having observed the re-ordering that occurred in this context, what, if anything, can we generally conclude about IT use in this and other settings? Ethnomethodology

and conversation analysis have been critiqued as micro-analytic approaches that leave limited room upon which to speculate beyond the context of a particular case. However, Hilbert (1990) explains,

“... ethnomethodologists have repeatedly announced their suspension of belief in social structural phenomena per se as objects of theoretical inquiry... The purpose of this methodological stance, referred to sometimes as “ethnomethodological indifference” ... is not to legitimize one level of structure at the expense of others, but rather to examine social practices whereby structure is made to happen, made to appear – i.e., accomplished by and for members of society” (p. 795)

In keeping with this view, we are arguing that society is not uniformly changed by new information technology but rather that individuals experience and manage the disorderly effects of IT disruptions in their local circumstances. The social practices through which this order is accomplished “occur in real-time and real-space and are distributed, i.e., “linked” sequentially and biographically in empirical space-time” (Hilbert, 1990: p. 805). That is, as individuals move through different contexts – in courts and homes and organizations, etc. – and experience IT disruptions, the repairs and re-ordering that occur in these new contexts are influenced and informed by other distant experiences and conversations. Particularly in the legal setting, the management of electronic evidence, as experienced in this case, can become institutionalized through case law precedents that are communicated and used in other settings.

We also conclude that conversational analysis and ethnomethodological concepts, rarely studied in IS implementation, provide an important perspective on how social and technical elements interact in complex and emergent ways during conversations. Through ethnomethodology then, the role of IS researchers and practitioners may be to describe the range of ethnomethodological processes and outcomes that are observed in various settings, to illustrate which IT or social settings limit the range of possible interpretations, and how people actively engage in and critique conversational processes during socio-technical disruptions. In this methodological vein, IS research and practice is an exploration of how the outcomes of IT implementation are enabled in and through disruptive events that produce conversations, which draw upon tacit institutional practices to repair conversational order.

In conclusion, the use of ethnomethodology and conversation analysis has been essential in showing that technological disruptions serve as local “Calls to Order”. Participants – across different times and places but in their own local settings – respond to these calls and re-build, through conversation, social order.

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