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THESIShome ~ Abstract.html/pdf ~ Glossary.html/pdf ~ Introduction.html/pdf ~ methodology.html/pdf ~ literature review.html/pdf ~ Case Study 1.html/pdf ~ 2.html/pdf ~ 3.html/pdf ~ 4.html/pdf ~ 5.html/pdf ~ 6.html/pdf ~ 7.html/pdf ~ discussion.html/pdf ~ conclusion.html/pdf ~ postscipt.html/pdf ~ O*D*A*M.html/pdf ~ Bibliography.html/pdf ~ 911 ~ thesis-complete.htm/pdf ~ Terrell Neuage Home

Thursday, December 05, 2002 11:10 AM (10,033 word-count)

<u>CS 2.0</u>
<u>Introduction</u>
CS 2.0.1 Reason for choosing this chatroom.
1
CS 2.0.2 Questions
1
<u>CS 2.2</u>
Methodology2
CS 2.2.1 Computer-mediated communication (CMC)
2
CS 2.2.2 Transcription.
3
CS 2.3
<u>Discussion</u>
CS 2.3.1 Is electronic talk comparable to verbal talk?
<u>CS 2.3.1.1 Instant</u>
Messenger7
CS 2.4 Findings
121

CS 2.0 Introduction

Computer technology impacts on the "interactive" writerly-reader/writerly writer who is responding to the reading of the text as shown in Case Study One. This impact changes the exchange of information. Chatrooms have much in common with oral folk telling. The story is not put into print, it is written then lost. Ideas are written and read and re-written without often knowing where they originated. What differs between computer technology and oral folk telling is that computers can 'capture' the story and examine it and unless the oral speech is recorded there is no record of its existence. How meaning is given to the utterances in a chatroom is dependent on the reader of the text as well as the writer of it. Computer-Mediated Communication (CMC) provides the technology for speech communities to exist with no more than typed characters to hold the chatters together. One aspect of CMC I will discuss in this Case Study is Instant Messenger (IM). 'Over 41 million people (40 percent of Internet users) use it at home. Almost 13 million people use it at work (nearly 31 percent of the work population), spending 45 percent more time on it than at home. Approximately 63 percent of all Internet users are regular participants.' (Carton 2001). '

CS 2.0.1 Reason for choosing this chatroom

Because Instant Messenger (IM) chats cannot be viewed by anyone outside of the cyberspace of the two participants, unless permission is granted, it would be impossible to save an IM chat. I received permission

from the two participants to use this in my work providing I did not identify them in person. For this case study I 'captured' two Instant Messengers conversations. The first is an Instant Messenger conversation in 1999 between mutual acquaintances, whom have never met physically. They had been connected to the same religious cult in San Francisco toward the end of the 1960s and they had met each other thirty years after the cult became defunct, in a chatroom about the ex-Order [1]. I met the two of them in the same chatroom and maintained correspondence with them for the past three years. I physically met one of these two in Los Angles in April 2001.

CS 2.0.2 Questions

I approach this case study with two questions related to Computermediated communication.

Do computers change conversation? and are Instant Messenger chatrooms closer to offline-person-to-person conversation than dialogue in a multivoiced chatroom?

My first question seems obvious in the light of knowing that many of the person-to-person cues of conversation are removed with text-based chat. A study of the medium people use to communicate through, such as this case study is important in answering the question: (see 3.2 question 3 'how is electronic chat reflective of current social discourse?').

CS 2.2 Methodology

CS 2.2.1 Computer-mediated communication (CMC)

Computer-mediated communication is the process of one-to-one, one-tomany, and many-to-many communicative discourse using a computerbased communication channel, taking place predominantly in a text-based environment (Oshagan, 1995; Boudourides 1995). Computer-mediated communication (CMC) is currently theorized within multiple disciplinary frames, including: Spears & Lea's SIDE model, Speech accommodation theory, Walther's Social Information Processing model and Fulk's Social Influence model. Spears and Lea (1992) in their SIDE Model (social identity model of deindividuation effects) explore the social-psychological dimensions of CMC. One of their observations was that groups communicating via computer sometimes exhibit more polarization than equivalent groups communicating face-to-face, but less polarization on other occasions (Lea & Spears, 1991; Spears, Lea & Lee, 1990). As is discussed throughout this thesis chatrooms become a community where the individual takes on the chatroom single mindness. Fish's (1980) "interpretive community" and Bizzell's (1982) "discourse community" are appropriate models by which to explain the acquisition by the group of shared meanings and understandings-shared cognition-which are vital elements in community formation (Sackmann, 1991). For example if the topic is sports, sex, politics or religion, as I have shown in these Case Studies, the users, tend to, have a similar shareness of thought. A 'speech community' can be identified by linguistic convergence at a lexical and/or structural level. Because Computer-Mediated communication is strongly oral in nature (December, 1993; Giordano and Horton, 1999; Ferrara 1991) in that turn-taking is often performed in a playful manner. Chat 'talk' is often similar to talk without sound. People in chatrooms seem to accommodate others in the room by 'speaking' the same language. I show this in several chatroom, specifically Case Study 7 with the chatters using baseball usernames and discuss baseball in an abstraction that only those who understood the game would understand.

Foreign communities online (foreign to the primary source of this 'Western' chatroom research) chatrooms are also based on their culture. Online communities have been dominated by English because of the work done by Microsoft and other English centred software companies. However there are many cultures entering the computer age of communication. After English the most common language on the Web is Spanish followed by Japanese according to the *Courier* International (1968). There are projects in development that will make it possible for foreign languages such Arabic to have their own presence on the Internet (See the online Center for Contemporary Arab Studies at Georgetown University[2]). Speech accommodation theory or "accommodative processes" (Giles and Powesland, 1975) in person-to-person talk is the changing or learning of language and accents in order for the speaker to 'fit in' with the environment. In chatrooms we find changing languages as would be found in oral communication, "language is not a homogeneous, static system. It is multi-channelled, multi-variable and capable of vast modifications from context to context by the speaker, slight differences of which are often detected by listeners and afforded social significance." (Giles, H. & Clair, R. 1979) People make themselves accommodative to those they are with (Edwards, 1985).

What is important in online societies is the offline culture element of the people online. Cultural differences lead to differences in the reception of CMC (Fouser, 2001, p. 268). For example, much of the Japanese

literature on CMC focuses on problems such as social alienation, abusive language and hacking on the Internet (Itami 1997). Chatrooms have been written about in media stories telling how studies have shown women making relations with men other than their husbands (Fouser, 2001, p.269), the studies did not say how many men do the same activity.

According to the Social Information Processing Model (Walther, 1992) people learn to verbalize online that which is nonverbal offline, by using emotions and images (Utz, 2001). The use of verbal paralanguage becomes an important factor in the development of impressions. Walther and others (1992, see also Hiltz & Turoff, 1981; Rice & Love, 1987) have questioned the validity of online presence being similar to offline communication. People are only motivate to exchange social information with others only if they are able to decode the verbal messages of the communication partner. Walther argues that with enough time spent together people online will form relationships by decoding one another's messages. In this Case Study I have used a chatroom in which I have known the other users to some extent. I do not have available our original chats but over a period of time of several months the chats became more friendly. This would lead one to assume that chatrooms as sites of extended discourse would be contingent on the familiarity of others in the chatroom.

Computer-mediated communication is the fourth age of civilization and its method of communication (Strassmann, 1997). Ferrara refers to synchronous CMC as interactive written discourse (IWD) and suggests that it represents an emergent linguistic register (Ferrara 1991).

Period	Medium	Economic Organization	Civilization
1 million BCE-10,000 BCE	speech	tribal	hunting
10,000 BCE-1500 AD	script	feudal	agriculture
1500 AD-2000 AD	print	national	industrial
2000 AD-	electronic message	universal	information

4 CS 2:1 Literacy: "the ability of individuals to cope with communications within their civilization."

There are several online journals dedicated to Computer-Mediated Communication. The Journal of Computer-Mediated Communication (http://www.ascusc.org/jcmc/) published by the University of Southern California, and the Hebrew University of Jerusalem has had articles on CMC and Higher Education, which shows the value of using computers for distance education; Play and Performance in CMC, an edition discussing the use of Chatrooms in communication and I have referred to several of the articles in this edition in this thesis. The largest and third oldest online journal on communication is The Communication Institute for Online Scholarship (http://www.cios.org/) based at the University of Albany, New York (SUNY) contains thousands of links to academic institutions and scholars who write on topics of CMC. Computer-Mediated Communication

Magazine ran issues from May 1994 to January 1999, reported about people, events, technology, public policy, culture, practices, study, and applications related to human communication and interaction in online environments. Volume 5, issue 1, (January 1998) had a special focus: 'Disability and CMC' which shows the value of communication through computers; Volume 5, issue 1 had a Special Focus: 'Online Relationships' focused on the meeting of people online and couples who had later met offline and formed relationships.

CS 2.2.2 Transcription

The transcription method used in this Case Study I have not used the usernames of the participants. In the conversation between the male and female I have identified their turn-takings with ****** in front of the female utterances and ###### in front of the male's turn-takings. This notation device has no other point to it than to differentiate the two speakers. In the second transcript I 'captured' for this study the female turn-takings are identified with @@@@@@@@and the second speaker, myself, with T Neuage in front of the turn-takings.

CS 2.3 Discussion

'It is in the history of any particular communication that the utterances can be studied for their mappings'[3]. For example, grammar could be derived from distributional analysis of a corpus of utterances without reference to meaning. What is reflected is the consensus users establish at a certain social and cultural moment and location, as to what is or is not utterable, and as to how it may be uttered. The World Wide Web brings new ways of engaging in conversation which are emerging with the growing wide

spread use of computers as a form of communication. How much people begin to rely on the Internet or other computer-based mediating devices as a source of communication will determine much of our future practices in communicating – even impacting on person-to-person conversation. There have already been surveys suggesting that the amount of time some people spend on the Internet in chatrooms is disproportionate to the amount of time they communicate face to face with others [4].

In Case Study One I discussed how chatroom users respond to reading chatroom text. In this case study I consider in more detail the technology which mediates the communicative act. The introduction of computers has changed the communicative act of "conversation" by allowing for new forms of discourse exchange which are not possible with physical offline person-to-person contact. The most obvious is the ability to speak with others over large distances through synchronous textual dialogue, providing an "interactive written discourse" (Allen & Guy, 1974, p. 47). Without the physical cues associated with offline person-to-person conversation, in a chatroom, the "speech splits off from visual copresence" (Hopper, 1991, p. 217). Other ways of transferring meaning then become important, including specific chatroom features, such as emoticons, abbreviations and font style, size and colour of text. Computermediated communication (CMC) has several functions to play in the chatroom communicative act. Several researchers have found that the more emoticons a person uses, the more friendships he or she builds (see Ultz 2001 and Roberts, Smith, and Pollock ,1996).

Firstly, computers can be considered to enhance or to hinder person-to-

person communication. Computers can for instance enhance communication for individuals with disabilities, who cannot easily converse; for people who do not have access to other forms of communication or information sources due to distance or social restrictions; and for people who have social difficulty in communicating with others in face-to-face situations (see Grandin, 1999; Rheingold, 1991, 1994, 1999; Turkle, 1984, 1995, 1996). Computers can however also hinder communication: because of technological problems such as networks malfunctioning, or people hacking into computer systems and disrupting discourse flow or sending information as someone else (Harvey, 1998). Social interaction skills can be underdeveloped within real-world encounters, leading to equal or even intensified inhibition with computer communication (see Perrolle, 1998). As society becomes more dependent on computers those without them may be disadvantaged in communicating with others. And as is discussed throughout this research it is the interchange in online communication that may have the most impact of how we 'speak' in the future.

Secondly, computers are similar enough to physical real-time communication to replace or be an adjunct to offline person-to-person talk. Because of the capacity for anonymous communication in a chatroom environment fellow chatters have little to judge an individual by, except his or her statements (Kollock & Smith, 1996, p. 109; Schegloff, 1991, p. 49). Chatrooms are a virtual 'mindfield' where only the mental activities of chatters are known. It is not possible to know about the other chatters in a chatroom except from what they choose to tell us in their written statements. Therefore, "the most important criterion by which we judge each other in CMC is one's mind rather than appearance, race, accent,

etc." (Ma, 1996 p.176). Therefore computers, as an extension of the self, become the speech act (see Case Study 4).

And thirdly, CMC embraces several genres of communication, with the multi-layeredness of online communications such as email, or discussion lists as well as chatroom interactions. Together, these provide a range of new genres for the transference of ideas, information and creativity. There are many ways available to create new textual landscapes within the possibilities of collaboration available with online communication. This study will suggest however that linguistic, lexical, and stylistic convergences form faster in chatrooms than in discussion groups and newsgroups, due to the instant collaborations between chatters. Asynchronous study allows time for reflection between interactions: it offers the same forms of critical "distantiation" offered by print-based media - in effect merely dispatching printed text more speedily than physical means, and making it more readily available for transformational use in reception than in competitive contemporary text transfer systems such as faxing. Synchronous interactions allow real-time interactive chats or open sessions among as many participants as are online simultaneously, creating for the first time the possibility of immediate text based reciprocal exchange.

CS 2.3.1 Is electronic talk comparable to verbal talk?

Chatrooms are close to combining 'spoken' and 'written' language.

Computer-mediated communication is still largely a narrow-bandwidth technology and it will be another decade before world wide usage of fibre optics or 4th generation WAP will be available to carry videos and the

amount of data needed to enable full communication world-wide (Technology Guide, 2000^[5]). Much of the information we obtain in face-to-face interaction is from body language, sound (phonetics and phonology), and other physical codes. In narrow-bandwidth communications, such as on the Internet of 2000, this information was not transmitted, causing frequent misinterpretation. When cam-recorders are mounted on the top of computers and combined with text-based chatroom 'written' language, and participants can see one another and write at the same time, we will have other tools to analyze how language between people is exchanged. In the meantime, it is important to assess existing techniques for observation and analysis of the emergent new "talk" of this interactive communicative format.

The impact these forms of communication may have on future interactions between people is just beginning to be studied. Verbal language was the first major step toward interconnection of humans (Chomsky 1972, 1980; Pinker 1994) which led to a fundamental change in the way we collected knowledge about the world. With symbolic language people are able to share experiences and learn about others' lives as well as share information on their own. Chatrooms are one area of this rapid evolution in the sharing of minds. Language has allowed us to become a collective learning system, building a collective body of knowledge that far exceeds the experience of any individual, but which any individual could, in principle access. We have made the step from individual minds to a collective mind. As shown in table 4 CS 2: 2 above individualized communication has evolved from tribal to feudal to national to the current universal collective sharing of ideas and 'talk'. The Internet provides a global brain that is based on the integration of computer technology and

telecommunications (Russell, 1983; Bloom, 2000). With the various forms of online communication chatrooms are the closest to person-to-person offline conversation. Chatroom conversations are more hastily carried on than email is. Conversations in chatroom are rarely planned out, making this environment an ideal source of casual conversation analysis. Chatroom conversations are informal, often experimental and frequently used for entertainment and escape (Rheingold 1999). Virtual conversations, as they are in chatrooms, can be undertaken with the intention that they have little to no real life significance, or they can be as real as any off line community is.

The Internet provides the link for an electronic interactive conversational. Electronic digital technologies lack a sense of linearity; in fact, they are based on a nonlinear structure that tends to facilitate a more associative way of organizing information, e.g., hypertext. (Landow, 1994 and 1997; Bolter, 1991). While print media works as a flow of conversation or writing directed in an organized progression, online conversations fragment multidirectionally. Conversation on the World Wide Web, whether in chatroom, Instant messenger (IM), discussion groups, or even in role-playing games such as MUDs and MOOS involves two new paradigm shifts (See Introduction 2.3.3.2). Firstly, there is the shift from print to computerization. Print relies on hierarchy and linearity (see: Comte, 2002; Landow, 1994; Chandler, 1999). Critical theorists point out that traditional print is linear, while human thought is not (Edwards, 1996; McElhearn, 2000). With computers and hypertext we can leap from thought to thought without a sequencing event.

Computer interactivity can be either asynchronous or synchronous.

Instant Messenger, ICQ, and PalTalk, have only two voices at one time, but not necessarily following one another. In text-chat though only one line shows at a time unlike he overlaps in voice-chat or in real-life chat. People still "talk" at the same time. One does not always wait for a response. If two people are typing rapidly back and forth, they can return and respond to something which was said whilst the other was typing.

Asynchronous communication is communication taking place at different times or over a certain period of time. Several currently used examples are: Email, electronic mailing lists, email based conferencing programs, UseNet newsgroups and messaging programs. Asynchronous communication requires using computer conferencing programs and electronic mailing lists that reside on a server that distributes the messages that users send to it. Any computer user with email and a connection to the Internet can engage in asynchronous communication. Web-based conferencing programs that distribute many messages, or messages containing attachments, require more system power and a current model computer with a sound card and speakers and a fast connection to the Internet. (Aokk, 1995; Siemieniuch & Sinclair, 1994).

Synchronous communication is communication that is taking place at the same time. Several voices can be going at once or there can be multiple conversations involving multiple subjects happening at the same time Several currently used examples of synchronous communication are: Chatrooms, MUDs (multiple-user dungeons), MOOs (multiple object orientations), videoconferencing (with tools like White Pine's CUSeeMe and Microsoft's NetMeeting) and teleWeb delivery systems that combine video programs with Web-based resources, activities and print-based

materials.

To use synchronous communication in a text-based environment one can have the chatroom on their server or the chatroom can be imported into their Web site as an applet. An applet is a program written in the Java programming language that can be included in an HTML page, much in the same way an image is included. These programs open in a separate window than the main source window being used. Real-time interactive environments like MUDs and MOOs are Unix-based programs that reside on servers. In both kinds of synchronous communication, users connect with the help of chat-client software and log in to virtual "rooms" where they communicate with each other by typing onscreen. Because MOOs and chatrooms frequently attract many users, it is advisable to access them using a high-end computer and a fast connection to the Internet. MOOs and chatrooms often have their own sound effects to denote communicative gestures (such as laughter and surprise); to use or hear them, the computer must be equipped with a sound card and speakers.

A second paradigm shift is currently taking place around the changing environment of on line discourse, parallel to the shift from print to the Internet (See Introduction 1.4.2). Within the Internet interactive environment, there is a shift from email and discussion groups, to chatroom and "Instant messenger" and ICQ by users of online technology. (Cassell, 1999; Atkinson, 2000). Email and discussion groups are more or less a one-way road. For example, one usually waits for a return email, which often is a complete response with several paragraphs: a considered and edited "textual" piece. Conversely, chatroom environments are

composed of one or two lines of text from one person followed by a response of one or two lines from another person. Chatrooms thus consists of spontaneous and casual "conversational" text, while discussion groups are emailed "texted" responses, which are usually thought out and spell and grammar checked before they are sent to the discussion group. Discussion groups, I hypothesize, are even more controlled and planned than emails, more "textual". In other words, the Internet has already produced its own set of "text-talk" genres and practices. The online universe of discourse is rapidly diversifying.

Because of Computer-Mediated communication (CMC), the World Wide Web has taught a new form of communication to hundreds of millions of people in less than a decade. Such learning is a social and interpretive activity in which multiple members collaboratively construct explanations and understandings of materials, artifacts, and phenomena within their environment (Dewey 1966, c.1916).

World Total	544.2 million
<u>Africa</u>	4.15 million
Asia/Pacific	157.49 million
<u>Europe</u>	171.35 million
Middle East	4.65million

181.23
million
25.33
million

In the past five to ten years millions of people have learnt how to send emails and use computers to participate in chatrooms. As *figure 1* shows there were approximately 544.2 million people online at the beginning of 2002^[6], whilst an estimated thirty-million people were online world-wide in 1995. One in twelve people world-wide have learnt a new communication

technology over the past six years.

This case study introduces the technology into the new online discourse between people. The technology used for text based interactive chatroom discourse is CMC based. As technology advances and changes so too does communication – and CMC techniques are proving no exception. One of the primary changes away from the text-based-chatroom (TBC) is the move to new technologies which replace text with talk and multimedia capabilities of videos, DVDs, webcams and sounds as well as 3D animated worlds and author/avatars. In the new chatrooms the text is replaced by sound waves, which may not be the author's actual voice, but a simulation of his or her voice, tone and mood or as constructed "other" as substitute "self". The author's username is replaced with a representational avatar. Even the simple one-to-one messaging services of ICQ and IM are now multimedia communication tools which contain features such as file transfer^[7], voice chat, SMS paging, post-it notes, todo lists, greeting cards, and birthday reminders. Chatrooms which were once text-based only are in the process of incorporating virtual worlds and the use of "intelligent agent" avatars[8] instead of just usernames. Meanwhile, each variant within the new sets of on-line interactive communications media is establishing its own sub-culture of use.

CS 2.3.1.1 Instant Messenger

Computer-mediated communication which uses the Internet takes one via email, discussion groups and chatrooms beyond the immediate physical world. Within online communication one becomes socialized by learning a number of new "socio- technical" skills such as typing, reading and writing at the same time and learning the protocols of online discourse which

includes emoticons and abbreviations. Of the several chatroom milieus, i.e. multiperson chatrooms, MUDs and MOOs^[9] and Instant Messenger formats that are in use I have chosen to focus on chatrooms and for this case study I have narrowed that to Instant Messengers.

The different forms of interactive or 'conversational" CMC genre such as email (see, Hawisher and Moran 1993), discussion groups (see, Giordano, Richard and Horton, Roy) and chatrooms have different talk-texting behaviours. Chatrooms provide the most easy to talk back and forth behaviour in real-time. Email functions as a primary online utterance. Spooner and Yancey (1996) argue that email is "pre- genre, i.e., in the process of becoming genre "because the material conditions of the late 20th century have enabled a group of generally well educated, relatively affluent people to communicate in a new medium". Within the chatroom genre the Instant Messenger chat arenas are the closest to one on one offline dialogue as I will discuss below with the examples for this Case Study.

ICQ which began in November 15, 1996 has grown to an online communication network with more than 120-million registered users by 2001^[10].



4 CS 2: 3 ICQ Table

The importance of online communication has been highlighted by a study released by Jupiter Media Metrix (November 2001) which found that Americans last year spent over 18.5 billion minutes, or 309 million hours, logged into IM services such as ICQ and Instant Messenger. Accurate world-wide studies of how much time people spend online in chatrooms are not currently available but one would assume the amount of time spent world-wide, with people logged into IM services would be high, and the number of people logged into online chatrooms of all kinds is growing. The Australian Bureau of Statistics in 2002 reported that half of Australians now use the Internet, and a third of all households have Internet access. About ninety percent of 16-20 year olds use the Internet regularly. Almost

55 percent of all Australians, or 10.6 million people, had Internet access in January 2002, according to Nielsen NetRatings. These are higher levels of penetration than most European countries. Email/chat remains as the Internet's "killer application" since 92% of the users reported using email/chat and 71% of the users ranked it as the most frequently accessed application. (http://www.abs.gov.au/). One study reported in BetaNews111 estimates that more than one-hundred million people are in chatrooms each day. Computers as a form of communication affect many aspects of human discourse from daily correspondence to entertainment and information purposes.

The sheer mass of such activity raises the question: do computers change how people communicate? Firstly, Computer-mediated communication (CMC) can be expected to promote more diversity of thought than offline communication primarily because people from so many cultures and social groupings, i.e. age, race, gender and beliefs, are able to be together without the hindrances of physical presence. As my subsequent analysis will show, the discourse is different from that between people in offlineperson-to-person conversation. It has been argued (See Sarkus, 2001; Sloman - "The Computer Revolution in Philosophy" published in 1978 is relevant to this discussion and a discussion on a bulletin board Forum: "Intelligence & Machines" with the thread, "Man is obsolete" [12], discusses the AI (Artificial Intelligence) concept of a computer with a conscience) that computers as a tool take one out of the physical, and using only mind as the sole communicative device displace prior offline-person-to-person discourse mechanics with new forms of symbolic exchange. It is even possible that computer-mediated communication (CMC) enhances

dialogue. A study by Ruberg (1996)^[13] reveals that the CMC discourse encourages more experimentation, sharing of early ideas, increased and more distributed participation, and collaborative thinking compared with face-to-face communication.

Instant Messenger Services are an outgrowth of MUDs and MOOs which are textual created games and learning environments as is discussed in the Introduction. Chatrooms, ICQ and IM especially, are reader/writer driven interactive sites. One participant enters and writes text and another person responds. Often there is the feeling that one is writing and reading at the same time. In chatrooms this can become chaotic due to the near impossibility of following the rapid scrolling of text, it is especially difficult in a room where there may be dozens of people not waiting for one person to say something then answering that one person. What differentiates "speakers" within chatrooms is their logon names. If there are several voices, none following any particular protocol, all "talking" at once, the question becomes, "what is being said?" and at the same time "what is being heard?" To date, no explicit protocols have emerged for managing the flows of talk, or even for identifying the flow of talk, though for my analysis in the individual case studies, I have developed a transcription methodology to examine online chat flows and types of speech.

Instant messenger services come closer to an offline-person-to-person conversational turn-taking environment. Unlike multi-voiced chatrooms and discussion groups no one else can enter the dialogue. Here the "talk-text" dynamic comes especially close to that isolated in the "turn-taking" categories of Conversational Analysis, so that IM can operate as a foundational text for other Net forms, such as the multi-voiced Internet

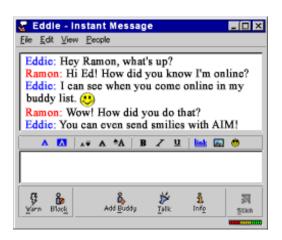
Relay Chat (IRC) services.

One other aspect of Instant Messenger 'talk' that is different from the multivoiced chatrooms is that with some computers there can be a voice wave used. Instant Messenger utilizes Text-to-Speech technology. When a new message appears the computer reads it in a chosen voice. You can hear the voice whilst running any program, such as a graphics or word program and do not have to bring AOL IM to the front to hear it. The voice is not the other person's voice but a simulation by the computer that is picked by the user. For example, I was using an Apple brand computer during my dialogues with the person I have referred to in this case study. I was able to chose from a large range of voices and chose a voice called 'princess'. Every time my IM buddy wrote words the computer would read the words back to me in the 'princess voice' which was a soft feminine voice. Over several months I equated this person with the voice of my computer. After nearly six months of daily correspondence in Instant Messenger she telephoned me. She lived in California and I was in my office in Adelaide. Her 'real' voice, her offline physical voice was much different than the 'princess voice' I had heard on the Internet. Instead she had a deep husky voice and swore every other word, something she has never done during our Instant Messenger chats. It was difficult to associate with her offline voice and my impression and future relationship with her changed.

In the film "You've got mail", (1998 Warner Bros.) Tom Hanks and Meg Ryan dialogue through an IM environment. However, people still have to find one another online before they pair off - unlike in a chatroom where people meet through a random chance meeting. One of the features of chatroom 'talk' I am interested in is establishing at what point the dialogue between strangers or even acquaintances changes in the on-line environment. For example, in the movie 'You Got Mail' the dynamics between the two strangers change when one of the participants (Tom Hanks) writes, "we should meet". This is however a fictional dialogue - one which parallels a major "moral problem" discourse in relation to IRC and the constitution of electronic persona.

In Instant Messenger someone steers the conversation into a particular area of discussion, establishing, in CA terms, the "flow" or speaking space for a topic (See Case Study 6). This allows me to look at a simple two-person chatroom before I begin to analyse the multi-voiced chatrooms. Multiuser chatrooms are public and anyone in the chatroom is capable of viewing what others are saying, unless participants go into a private chatroom and only allow one other person to join in. Instant Messenger chatrooms can only be used by the two-people in them.

My research data for this Case Study consists of two conversations, one between two people I knew to be IM users, and one between another person and myself. Otherwise the very privacy of this format makes it extremely difficult to observe and study.



4 CS 2: 4 Figure 1

In this Case Study I use dialogues from an Instant Messenger chat with only two people participating. I use this chat to show the turn-taking sequence that is difficult to isolate in a multiuser chatroom. Instant Messaging and other forms of private typed communication allow for real-time dyadic exchanges. I have used chats from people I know to see if there is a different conversation than is usual between people who do not know each other. I have identified by gender and age to give an idea of who was present in the conversation. This is almost always impossible to do in a chatroom where the users are unknown. In one of the 'captured' conversations there is a female aged 48 and a male aged 52 speaking. In the second conversation there is the female and myself speaking. I have spoken in person and met one of them so I know them, though at the time of recording this conversation I had not met them and they had not met each other.

When I 'captured' these two chats in 1997, AOL (American Online) Instant Messenger (left) was the only IM available and it was only useable as a text-based turn-taking instrument. The two people 'speaking' could observe letter by letter what was being written by both themselves, and the other person on the screen in real time. Instant Messenger does not have the chaos of multi-chat entries that most chatrooms have. Though it is done in real-time, it is similar to letter writing or email in that two people are in dialogue with one another. Currently, in 2002, there are several other IMs. Microsoft Messenger is available in 26 languages. Yahoo Instant Messenger, begun in March 1998^[14], has entered the virtual world chatworlds with the release of Yahoo Messenger 5.0. ("IMVironments are interactive, themed backgrounds for Yahoo! Messenger conversations that

appear directly in the instant messaging window!") As such "themed" environments become available, it will be interesting to observe whether the online environment, such as the background images of the chat area, influences the dialogue. Yahoo IM is available on mobile (cell) phones as well as hand-held computers.

As well as Yahoo, ICQ and American Online, which started its service in May 1997^[15], there are IMs from Lycos, Odigo, Microsoft, begun in July 1999^[16], Netscape and Paltalk, which have video conferencing facilities as well as IM, voicemail and PC-Phones.



4 CS 2: 5 American online IM

Odigo, Inc., was founded in 1998, claims to have a worldwide community of over 8 million users (2002). Their IM is shown below.



As well as being engaged in a chat with another person by entering Instant Messenger, a person may simultaneously be doing other things, such as writing a thesis whilst having the Internet on. This differs from person-to-person conversation as we are seldom aware of what the other person we are communicating with online is doing. A little icon online appears on the screen showing when the person is working online. Unlike text messaging on mobile (cell) phones which are currently limited by the use of 26 characters typed in at a time, and the limits of sending, and then waiting for a response, IM users are capable of writing as much as they wish and in real-time synchronous conversation. In addition to this, IM users have the ability to engage in texted chat with someone at any time and any place (using a palm computer or a laptop).

The two features I have emphasized in this Case Study which can only exist as a real-time electronic chat are, firstly, the ability for people to engage in real time conversation with people in different locations far removed from each other. This has always been possible for telephone or telegraphic correspondence but not until the World Wide Web has this been possible with conventional written text. For example in the IM that I use in Case Study Two one person is in California and the other is in Australia and as the characters are typed on one keyboard they appear on the other person's computer.

In this conversation the two speakers had started out about spirituality but the male (speaking in capital letters) quickly turned it into a sexual theme with the female ending the conversation with;

34. *****: oh my god!...thats what i thought you were going to say.....but i didnt want to go there!

4 CS 2: 6 IM dialogue I

At this stage the female writer (lower case text) could have been revealing a familiarity with social norms (i.e. Male sexual behaviour) or with IRC practices or both. Without other cues: visual, knowledge of the participants and their familiarity with one another, it will be difficult to define the "talk". Yet the female participant suggests that she manages to do just that because she is familiar with whom she is speaking with. Here the grammar, fonts and abbreviations are all significant. Several of the abbreviations are shorthand for several phrases. How font size is used online is well illustrated in this chat. The male uses what is conventionally considered 'shouting' by writing everything in capitals as illustrated in

example 3. In net-etiquette using the caps key all the time in an online conversation, whether it is email, a user group or in a chatroom, is considered rude. However, when a reason is given or understood as to why someone carries on certain behaviour, it may not be considered rude. For example, the person who types in capitals in this Instant Messenger types in capitals all the time whether it is in chatrooms, in usergroups or in emails. He believes he is a master teacher of a religious cult and that the only way he can show his 'authority' and 'high attainment' is by using capitals.

In line 10, "LOL" is shorthand for "lots of laughs". In chatroom talk LOL is also used for "lots of love" or "laughing out loud", but in this context I believe it is "lots of laughs" as it follows the word "HE", as in "he he he".

10. ######: I PRACTICE THE 4 RULE. I HOPE YOUR NOT INTO THE EQUALITY TRIP BUT I FEEL THE MAN ONE THE WOMAN 4. THAT WORKS GOOD SHE REALLY SMILES A LOT AFTER THAT HE LOL

IM dialogue II

Two abbreviations in this IM I am not familiar with. That, and the way that both abbreviations are used within a few lines of one another suggests that these two speakers have their own rules of engagement for meaning exchange. The two abbreviations I am referring to "OBE" in line 11 and "IBE" in line 14 - though in line 15 the writer clarifies IBE by saying that the I is for "in". To an outsider such as myself who does not know what the abbreviation represents it would not be possible to know what is being said. Language here is used as an antilanguage where the ones who

know what is being said are the participants who at some time must have given a shared meaning to the used words or abbreviations (see Halliday on "antilanguage", Halliday, M. A. K. 1978).

11. *****: and where does she live....I hope not in Australia.....thats too far even for a good old fashioned OBE

CS 2:1 IM dialogue III abbreviational talk

1

14. ######: WE DO A LOT IBE

15. ######: THE I FOR IN

CS 2:2 IM dialogue IV abbreviational talk

2

To some extent the textual "appearance" of IRC script is accidental. If people are not skilled at typing, they make a lot of errors trying to keep up with IRC conversation. This is especially true in chatrooms where there are several people all 'speaking' at the same time. Nevertheless, contributors in Instant Messengers do also use text forms in deliberative ways.

As the chat below shows, sequential dialogue even in an IM space is difficult to maintain. If there is not a turn-taking process in which one person waits for the other before 'speaking again' the dialogue is as difficult to follow as one in a multiuser chatroom is. In example Table 4 CS

2:3 below the IM chat on the left, even though between two people, does not show a "listening then responding" regime. Speaker <*****:> does not respond to <######:> who has made references `to knowing her in another lifetime. Unlike in offline person-to-person conversation, topics are rarely pursued. In this instance there is no more discussion after turn number seven on the topic of other life times. In multiuser chatrooms there are similarly few times when topics are continued, but that is often because there are so many people 'speaking' at once. In the same number of turns as the Instant Messenger example, the multiuser chatroom shown below shows few instances of continued dialogue,

I
www.afghanchat.com/chatroom.htm
rAnderson] hopefully Zahir Shah elp to bring all AFG tribes - her in peace & establish fair rning body singRay] Si RANKY] I CAN RECOGNIZE HIS ONIC SPEAKING WAYS WHERE ANKIE] you are so low you have ve an umbrella to keep the ants - peeing on you rAnderson] texasrose: are U in s? raid] gina, where are youu iv] HEI FRANK YOU AFRAID

IM dialogue VI compared with Afghan talk

Discontinuity exists even in the IM space. In Chatrooms, notes Werry, "successive, independent speech acts are simply juxtaposed, and different topics interwoven. The kind of sequencing evident contrasts significantly with that of oral discourse, as well as most forms of written discourse" (Werry, 1996, p. 51). Conversations branch out constantly as participants follow several streams at once and interact with many others at a time. However, in the Instant Messenger genre, with only two speakers, there is still overlapping and going backward if the conversation is not strictly in the question and answer genre of talk. In person-to-person conversation adjacency pairs are one method by which people structure conversation. But due to overlapping conversation in chatrooms this is rarely found. Both people in an IM situation could be writing at the same time but because of the longer life span of text printed on the screen (when compared to verbal speech) a speaker is able to scroll back up and read what occurred earlier when one was writing. Also in IM there are not as many people to contend with as there are in multi-speaker chatrooms therefore the chatroom users do not have to contend with overlapping conversations. But as shown in the example above sometimes they do.

In the second example of an Instant Messenger dialogue, between myself, and the female in the sequences above, the dialogue is more continuous and there is turn-taking which is based on writing then reading the other person's writing before responding. This is difficult in a multiperson chatroom because of the interruptions of other chatters and even of advertisement ads, which some chatservers put in between turn-takings.

As I was one of the participants in the chat below I am able to give a

different and more informed interpretation than for the previous IM example. With any conversational analysis the interpretation is key to the understanding of the textual interaction. There are limitations to how people speak, even with others they are already familiar with. One of the areas of on-line conversation that would be worth of study in future is to investigate the differences between conversations of already-known participants and unknown chatters. Most chatrooms conversations are between participants unknown to one another. In IM however, the "speakers" are generally known to one another as they need to know each other's 'handle', 'screen name' or username before they can access one another's personal account . Instant messenger is thus similar to face-to-face talk in that participants already are familiar with each other, even if through only a few correspondences.

One person whom I met in a chatroom and got to know quite well over a short time period on IRC is the person in these two Instant Messenger examples. This person has a history of psychiatric illness, confirmed not only by her, but also several others on my buddy list. (IM has category lists such as Buddy, family, Class-mates). Most of our chats were just bantering and at times quite silly. Our IMs were more entertainment than anything and provided me with a break from the stresses of every day life. However, there were times when this person drifted into suicidal talk, wanting 'to return to her home in the cosmos', her cue that she "wanted to die". Mood and directional changes affect the dialogue even without having tonal or gesture signals. This can be read back within the flow of talk by creating a string of text of lines 1, 7, and 9, or as coded above: 1>7>9. It is line 9, when the person says "on this plane", that the message becomes clear. Even though it is using the same text: "on this plane", by

line 9 it has taken on new meaning, following line 7 "I am am (sic) not going to be around too much longer". It is now clear the person is thinking of dying.

The following dialogue has the other party's name deleted. Until this scenario begins the respondent was telling jokes and seemed quite happy. As this stage I have only arranged the text into single exchanges, omitting the full transactional coding, which I have used in other case studies as my transcription method. In those I have shown the order of discourse, i.e. [34\lambda 33\lambda 32\lambda 31\lambda 29\lambda 10] where the numbers show the previous turntakings which are part of the topic or thread [17] and so build a sense of the inter-weaving of the talk. Instead, here I have added interpretive commentary; to indicate the response processing underway as the exchange proceeded. At a later period I intend to use the more objective "coding" on this transcript as well, to test the efficiency of my own "intuitive" conversational responses.

In the conversation below my comments, which are not part of the original transcript are written in italics. These comments help to clarify bits of text as the conversation went forward.

- 1. @@@@@: Terrell.....we will probably never meet on this plane
- 2. @@@@@@: realize that

- 3. T Neuage: really we will never meet [at this point I thought she meant because she lived in California and I lived in Australia and due to the distance this would never go beyond a cyberfriendship.]
- 4. T Neuage: why not [I second posted here as there was a long pause of several minutes without a response]
- 5. @@@@@@: I dont know
- 6. T Neuage: but you believe that?
- 7. @@@@@@: I am am not going to be around too much longer [here I first realize she is talking about leaving the world]
- 8. T Neuage: that is not true
- 9. @@@@@: on this plane
- 10. T Neuage: why do you say that
- 11. @ @ @ @ @ @: it is so
- 12. T Neuage: that is silly stuff
- 13. T Neuage: it is not so
- 14. T Neuage: for what reason would you leave [*I triple* posted here as there was several minutes with no response and *I* was feeling impatient at the time]
- 15. @ @ @ @ @ @: it ois time soon
- 16. T Neuage: i am not into control but you can't go
- 17. T Neuage: it is not time soon

- 18. @ @ @ @ @ : but I will always be with you [a metaphysical translation being that she believes she will die and her spirit will be with me]
- 19. T Neuage: who told you that that you will leave
- 20. T Neuage: it is not true
- 21. @ @ @ @ @ @ : I am not sure.....but I am am being taken soon [here begins the 'I will be taken' beliefs. She claims to be an 'experiencer' an "alien" abductee. An alien abuductee is one who believes they have been kidnapped by a being from another planet or galaxy or realm of existence. There is a support group for victims of alien abductions on the Internet at:

http://www.cosmiverse.com/paranormal101102.html]

- 22. T Neuage: you need to be around different people
- 23. T Neuage: by whom [this refers back to 21]
- 24. @ @ @ @ @: it is not people [this confirms she is not talking about earthlings]
- 25. T Neuage: if they take you can they come and get me too
- 26. @ @ @ @ @: I have had a good life [proclaiming her death sentence here]
- 27. T Neuage: and you will have a better one Here on this planet
- 28. @ @ @ @ @: I have to go home soon
- 29. T Neuage: where is your home

30. @ @ @ @ @ : inside my heart
31. @ @ @ @ @: becausethis is not my life
32. T Neuage: It is not fair for you to have information that yhou won't share with me
33. T Neuage: I thought we were mates
34. T Neuage: mates share
35. T Neuage: tell me
36. @@@@@@: I gave up my lifeso what is left is not up to me
37. T Neuage: what
38. T Neuage: come on you can't believe that
39. @@@@@@: I should be deadshould beand am not [proclaiming her death sentence again]
40. T Neuage: no you should not be dead
41. @ @ @ @ @: yes
42. T Neuage: you can not trade or sell your soul
43. T Neuage: that is myth
44. @ @ @ @ @: no
45. T Neuage: reality is what you are in right now
46. @@@@@@: my daughter was my dear friend and she died 26 years ago from an overdose of heroin

47. T Neuage: what about your daughter now
48. @ @ @ @ @: I really better not tell you anymore
49. T Neuage: up to you
50. T Neuage: we can change the subject
51. @@@@@: she is still my friendwe are not like mother and daughternot at all
52. T Neuage: what about the daughter you said died
53. T Neuage: mixed me up
54. @ @ @ @ @: never mind
55. T Neuage: ok
56. T Neuage: how is your bird [time to # - change the topic]

Table 4 CS 2:4 IM dialogue VIII complete transcript with Terrell

Example 7.

The next day this respondent was back on-line, seemingly with little memory of the day before conversation. Apart from the psychological implications of such conversations, systematic analysis shows that such conversation may seem aimless in structure, but it is in fact a structured conversation. "Casual" format is carrying serious social, and maybe psychological, consequences. Yet I had not met this person at the time of this interaction. Nor am I sure of how our interaction operates within this construction of a social self. There is more involved than casual

I would have left the chat and gone on to another person if I were in the mood to have a conversation with someone at the time. This is one of the primary differences between online chatting and face-to-face conversation, the user can disappear and never be seen again. But in this case we had each other's email address and even home phone numbers and we had shared a similar experience decades earlier of being in the same religious order in the 1960s.

CS 2.4 Findings

My question and the reason for choosing Computer-Mediated communications as an analysis tool for Case Study 2 was to find whether computers change conversation between people and I have found that they do. As discussed above and throughout this thesis computers do not replace but supplement communication - though how that occurs is dependant on both the sender of the message and the receiver. I would suggest that computers are an effective way of transferring information quickly. What is different between the multi-speaker chatrooms and the Instant Messenger services is that there are only two speakers at a time in conversation, however they are still able to carry on several conversations simultaneously. This gives a selective 'hearing' response to the answers in that one responds only to what they wish to or by changing topics a new thread can begin. In text-based chatrooms information can be viewed as one would view gossip, it may be useless or it may be of interest. The conversation changes when there is absence of participators in real life. Computer-mediated communication is not person-to-person

communication as it is when there is physical presence.

A second question I explored in this case study is whether Instant Messenger, one-to-one dialogue, is closer to offline person-to-person conversation than dialogue in a multivoiced text-based chatroom is. As I have shown in this case study and in the other case studies, is that it is. Multivoiced text-based chat confuses discourse to the point that not only is dialogue difficult to follow but it is difficult to know who is dialoguing. One-to-one online discourse is personal, uninterrupted and closer to 'normal' offline conversation. A third feature of text-based chat is the random placement of an utterance. This happens when the enter key is pressed following the typing on a keyboard of what one has to 'say'. The utterance made can fall entirely in a place not expected due to the rapidly movement of text. In a multivoiced text-based chat this can give a very random effect to dialogue and unless a chatter identifies who he or she wishes to communicate with the line can be out of place.

CMC has changed the communication landscape. In a recent study (2000) a (Nomura Survey - Japan) survey of Japanese public attitudes toward the Internet and Computers compared with Korea and the US showed the following results:

Q. Do computers and other information technology increase human			
communica	ation?		
	Japan	Korea	US
Yes	43.2%	75.4%	73.8%
No	56.4%	23.6%	25.0%

One of the major problems with Arabic and Asian languages being used on the Internet is the obstacle of imputing into a foreign (other than English) word processor. For example, in Japanese the writing system requires two stages of imputing, which slows typing and making chatroom participation difficult. Users must press the space bar to bring up the desired combinations of Chinese characters, which are then entered in the text by pressing the enter key. This contrasts with English and Korean, both alphabet languages in which the typed letters enter the text as they are typed. The Nomura survey shown below shows that Japan has the lowest level of keyboard literacy of the four nations surveyed:

Typing proficiency – Nomura Survey on keyboard literacy				
	Japan	Korea	US	
Fast without looking	6.2%	16.8%	29.8%	
Fast but Look	17.5%	14.8%	24.6%	
Slow and Look	39.2%	26.2%	31.8%	
Barely Use	36.7%	42.2%	11.4%	

Typing proficiency January 2001 -

http://www.nri.co.jp/english/news/2001/010131.html

Until faster or better translators become available chatrooms will be populated primarily by English speaking users.



- [1] Holy Order of Mans was a cult pseudo-new age religious group that existed from 1968 until 1976. There is a page of links for this sect at http://se.unisa.edu.au/h.html
- [2] Centre for Arab Studies at Georgetown University is at http://www.ccasonline.org/
- [3] 'The Media History Project' Promoting the study of media history from petroglyphs to pixels http://mediahistory.umn.edu/index2.html Thursday, 5 December 2002
- [4] What do users do on the Internet? Standford University has some statistics on Internet usage at: http://www.stanford.edu/group/siqss/Press_Release/press_detail.html
- [5] http://www.techguide.com Viewed, 26/01/2002
- [6] How Many Online? http://www.nua.ie/surveys/how_many_online/
- [7] File transfer allows text and images to be uploaded to a chat at any time.
- Avatars are representatives of the self in a chatroom represented by a figure: character of an animal, structure or any abstraction imaginable that is displayed in a single pictorial space. Avatars can be a simple smiley faces or a Medieval an animated drawing. Text is still used for conversation. As long as one is connected to the Internet server of the chatroom presence is maintained by one's graphical representation which remains as long as the chatter is in the chat arena. One problem that avatars present is that they can distort or limit conversation by providing the same representative expression that over-rides all communication. Avatars as of early 2001are not as complex as word description is.
- [9] MUD: Multi-User Dungeon, MOO: Multi-user Object Oriented environment, MUSE:

Multi-User Shared Environment, Shared "virtual space" . A MOO is "a network-accessible, multi-participant, user-extensible virtual reality whose user interface is entirely textual," says pioneering MOO designer Pavel Curtis. "Participants (usually called players) have the appearance of being situated in an artificially-constructed place that also contains those other players who are connected at the same time. Players can communicate easily with each other in real time."

[10] ICQ Celebrates Five Years By Andrew Niese and Nate Mook, BetaNews November 15th, 2001, 11:53 PM.

http://www.betanews.com/article.php3?sid=1005886405

- [11] Andrew Niese and Nate Mook ICQ Celebrates Five Years BetaNews BetaNews November 15th, 2001, 11:53 PM.
- http://www.betanews.com/article.php3?sid=1005886405
- [12] The Forum: Intelligence & Machines is on the sciforums.com intelligent science community at http://www.sciforums.com/archive/32/2001/10/1/3798
- [13] Ruberg, L. and Moore, D. and Taylor, C. (1996). "Student participation, interaction, and
- regulation in a computer-mediated communication environment: A qualitative study", Journal of Educational Computing Research, 15(3), pp. 243-268.

http://www.epicent.com/journals/social/603ruberg.html Viewed 5/23/02.

- [14] Yahoo Messenger began in 1998, http://docs.yahoo.com/docs/pr/release158.html
- [15] America Online Announces Limited Beta Release of AOL Instant Messenger(TM) http://media.aoltimewarner.com/media/press_view.cfm?release_num=181
- [16] Microsoft Launches MSN Messenger Service http://www.microsoft.com/PressPass/press/1999/Jul99/MessagingPR.asp
- [17] The turn-takings which these turn-takings refer to are:
- 10. ######: I PRACTICE THE 4 RULE. I HOPE YOUR NOT INTO THE EQUALITY TRIP BUT I FEEL THE MAN ONE THE WOMAN 4. THAT WORKS GOOD, SHE REALLY SMILES A LOT AFTER THAT HE LOL

- 31. ******: dont get it...please explain better for us illiterate unpsychic ones 4 what?....ask i thus
- 32. ######: THE WOMAN HAS FOUR ORGASIMS, A LEAST ONE VERY BIG TWO MEDIUM AND ONE OR MORE SMALL THE MAN HAS ONE BIG AND MAYBE A FEW SMALL ONES
- 33. #####: THIS RATIO KEEPS THE NIGHT ALL NIGHT.
- 34. ******: oh my god!...thats what i thought you were going to say.....but i didnt want to go there!
- [18] Whatever one says lays dormant and does not exist in cyberspace until the utterance has been committed. Unlike person-to-person conversation when what is said is heard instantly, in a chat dialogue what is said is not heard until the speaker-writer wishes to reveal the content to the chatroom. Once the enter button is pressed there is no taking back what was said. If the chat can be saved, either by saving the screen shot of the chat or by copying and pasting or reading the chat logs the dialogue can be 'captured' for future reference.