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Virtual Existence and the Virtual Organisation

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ABSTRACT

This paper considers the implications of reifying the social form of virtual organisations by presenting the findings of a case study that explores the interactions of a group of people interacting within a virtual classroom. The study shows that socio-cultural and socio-technical knowledges play an important role in the shaping the actions of the participants. Specifically, culturally know ledge's are constantly shared thus strengthening the group's self-identification. This argument represents a challenge to the dominant representation of the virtual as the binary opposite to physical reality. Although virtual existence is not tied to a physical environment the experiences that can be shared form the nexus for virtual interaction and, consequently, virtual organizations. This paper argues that virtual existence offer a partial release from physically grounded realities, by providing - possibly momentary - experiences that do not require constant physically-oriented presence.

INTRODUCTION

Socio-cultural and socio-technical analysis are the predominant analytical positions for exploring human relationships to computers, organisations and Information Systems (see Avison and Myers 1995; Daily, Whatley et al. 1996; Gainey, Kelly et al. 1999). Socio-technical positions acknowledge the interplay of people and technology as tools for conducting social interaction (Hirschheim and Klein 1992). Similarly, the examination of the user, the developer, and other human components of an Information Systems is well established in Information Systems literature (see Brown 1998; Chan and Zhao 2000; Orlikoswski 1992; Pawlowski, Robey et al. 2000; Sahay 1997). In the spirit of this tradition, this work uses a socio-cultural analysis to explore the interactions of a virtual classroom. This enables an exploration of the complex interplay between humans and technology in cultural processes (Hirschheim and Klein 1992). The complexities of reality construction are such that they are socially and culturally informed and draw upon the physical and emotional experiences of humans when they interact with technology, artifacts and other humans. From this perspective, it is the shared histories, norms and myths that inform users' perceptions of the virtual environment and is the analytical position used by this research.

Culture, in this research, is explored with a critical sociological definition. There is a growing plethora of sociological research that utilises Giddens' structuration theory to examine human computer usage (see Barrett, Sahay et al. 1996). These works explore the structures of social interaction and focus upon underlying ontological positions. The maturity of this analysis is evidenced in the balanced approach that works of this type achieve. However, the most predominant theoretical position exploring online interaction and via chat rooms are behaviorial studies (Wilson, 2001; Arnold and Miller, 2001; Turkle, 1996). These studies recognise the significance of observing human behavioural interaction in order to gain insight into the psychological state of human beings, in these cited cases online and Internet behaviour. Socio-cultural positions in contrast draw upon social anthropology to explore the interactions of technology and people (Avison and Myers 1995). This research has explored the influences of artifacts, tools, signs, symbols and the written word upon the human contexts of the virtual environment. In this way, the virtual environment is understood to be a more technologically-enabled space that necessitates mediating devices such as hardware, software, wiring and cables as well as newly acquired skills and knowledges to enable recognisable and fluid business, social and organisational interactions (Brown-Syed 1999). In short, virtual environments, including classrooms, are socially constructed. All environments of social practice exist within a continuum of less or more technologically enabled spaces (Greenhill, 2002).

This paper firstly presents the research site and methodology that was followed. This section explains the relationship of the case study to the theoretical positions explored by this paper. The study itself is presented using the collected transcripts. These are presented as exemplars of the socio-cultural and socio-technical engagements that were observed.

RESEARCH METHOD AND CASE DESCRIPTION

The empirical research was conducted in a virtual classroom of a large Australian university. This research examined how a group of people used a virtual classroom to communicate and share knowledge. The study was conducted in parallel with a subject delivered in 2001. This university has actively pursued a policy of increasing Web-delivered flexible learning and encouraged the delivery of teaching in this mode. As an examinable part of the course the students were asked to participate in a virtual classroom and then analyse the success of the virtual learning process. To achieve this learning objective it was necessary for all the online interactions of the students and lecturer to be archived. This collected together all the online interactions that occurred between February and May 2001. These interactions were acquired with the permission of all the parties involved and with the approval of the university. The technical platform was "Tutornet Virtual Classroom". At this time the University was trialling this application as an extension to the core flexible learning environment delivered through "BlackBoard". All 28 students enrolled in this subject and one lecturer took part in the study. During the period of the research all the students contributed at least once to the virtual environment, and many students posted many times. The virtual environment, itself, was made available from the university and from remote locations through the university's private dial-in network. The most utilised aspect of the virtual class room was the chatroom. The data gathered from the chat room is the primary focus of this study and containing 10650 individual postings. There was also a mailing board that had 87 messages which were accessed 1089 times by individual people during the study. Other features associated with the environment were less utilised and are not discussed in this paper.

METHODOLOGY

This study is both qualitative and interpretive. It utilises the technological capacities of the system under examination to store the interactions of those observed.. Subsequently, a series of interviews with the student and staff participants were conducted. The gathered data was interpreted using traditional sociological methodologies. This meant that transcripts of all the communication were coded according to classifications based on type of interaction, for example: location, education, social, or emotional display, conflict situation, and the changing expression of individual over the duration of the study. "Tutornet Virtual Classroom" software also provided a diary of the times

and dates when specific interactions occurred. These capacities enabled a log of activity to be compiled for the observation period. The logbook was also drawn upon to examine the shifting forms of interaction over time.

DISCUSSION AND ANALYSIS

The group of people studied provided many clear examples of how social engagement is a dynamic social exchange. All of those involved, apart from the lecturer, knew each other as they were in the third year of a degree programme. The bulk of those observed had already studied and interacted together. Within the group, however, there were varying levels of friendship ranging from vague acknowledgement, to well-established friendships lasting many years, some reaching back to secondary school attendance. The study, however, enabled these people to get to know each other in the different less familiar context of a virtual classroom. The participants' ages ranged from late 40s to early 20s with some cultural differences among the group. However, the group were predominantly young, white Australian males. The other significant observation to be made regarding this group was their level of experience in chat rooms. This varied from frank admissions of obsessive addiction, to never having used an electronic chat or forum before. The most obvious changes in socio-technical practice were observed amongst those people who had the least amount of technological experience and therefore had restricted capacity to express ideas and emotions in a virtual setting.

SOCIO- TECHNICAL CHANGES USING EMOTION AND EXPRESSION

The first group interactions were both simple and direct. Most of the group posted plain one line questions or answers. These were noticeably in lowercase with only the occasional exclamation mark or question mark to represent an expression or emotion.

GA-has entered.
GA-hi Matthew I am here
GA-How did you find it getting into the system? It took me a bit of time particularly uploading the java
GA-and of course getting the login to accept my user name and password....
MS-has entered
MC-I'm at the uni so just got straight on
MC-by the way, whats a java?
MS-Hullo all
GA-It's a coffee haven't you seen George of the Jungle??
MC-I,ve got a five year old - Ive seen George about 30 times.
MS-Lucky You Ive seen that many times cause my girlfrien loves the guy in it
GA-Do you get my Java Java Java joke then

In these exchanges the participants begin to slowly engage. The general salutations extend to conversations that use common cultural reference points to continue the flow of the conversation. In this example the use of the technology, who is already online, why they were there and reference to a movie are all used. At this point it is clear that the conversation is relatively superficial, so less specific reference points were embellished with details about individual family members to situate the discussion and seek connections within the group. In this example, and in many other cases throughout the observation, media and television experiences glue together the conversation.

Increasingly, as the group became more experienced their conversations and interaction altered. By the end of the research all the regular participants were well versed in using emoticons – the symbols for textual statements with *feeling* and third person descriptions. This example highlights the differences in expressive style and interaction that the group experienced.

KG-what
SL-hey
KG-no what
SL-what the what to you what
RN-what the what what is what going on what heerr
KG-what what what what
SLwwwwwwwwhhhhhhhhhhhhhaaaaaaaaaaaaaaaattttttttttttttttttttttt
RN-pardon???
KG-WHAT
RN-now you guys are just being silly!!!!
RN-no need to shout
KG-yes dad
KG-YAGGGGGHHJHHHH
SL-what

A variety of participants spoke with emotion and utilised third person descriptions

JS-*J hands K come panadol*
KG-are the broncos playing the bulldogs tonite?
JS-*nods*
GA-What happened to you all last night. Too busy with ethics
RN-stop sucking up jay
JS-I was werkin Angela. :o(
SL-yep up all night
KG-rob jealous?
JS-:P~~~
RN-ooopps found out run away run away!!!!!!!

ROLE PLAY AND SOCIO-CULTURAL REFERENCE

As the group consolidated so too did its interactive practice. Increasingly they were more willing to share experiences and correct each other. An extreme example is provided by three close friends in the chat room late one night. The group re-enacted a crucial scene from *The Fight Club*. This example highlights the preparedness and complexity of some interactions. The three's communication about the movie included themselves while excluding others. This may have happened because they were so involved in their 'game' or other offline factors. These three members were also the most experienced online chatters. Their interaction displays a sophistication and engagement with the technology and draws upon intimate socio-cultural knowledges that excludes other group members. However, it is important to note that these three also played an important role within the group. They directly contributed to teaching others and engaging with many of the newer participants of the virtual environment. They provided advice and entertainment. The three established a sub-culture and personal bonds through the sharing of the online experience.

RN-angela is trying to establish an under ground network of individuals who meet with a common purpose at exclusive sites around brisbane
SL-where is angela any way????
SL-she should be here
RN-I HAVEN"T FINISHED!!!
SL-sorry, keep going
RN-yes and underground network
RN-i think she got the idea from Fight Club
RN-cept this is Type Club
SL-or teenage mutant nija turtles
RN-not underground as in the sewers*exasperated sigh*
SL-first rule about Type Club is you do not talk about Type Club
RN-underground as in secret
RN-second rule of type club is u DO NOT TALK ABOUT TYPE CLUB
RN-third rule of Type Club is if this is your first log on you have to TYPE
SL-look at my fingers im a member of the type club
RN-clearly from the narly scars and rock hard calouses on your finger tips
SL-yes
RN-i wonder what her project mayhem will be
SL-the first rule about project mayhem is we do not talk about project mayhem
RN-sorry sir

RN-Got any thing to say that might captur the moment?
SL-i arnt innk ofn enifing
RN-sorry let me just take that gun outa your mouth
SL-i still cant think of any thing
RN-*thinks* this conversation.....
SL-this conversation
RN-*thinks* .....is over!
SL-is over

This conversation became so intertwined and exclusive that it ends up becoming nonsense to anyone but those who participated. The references and utilisation of technology was on display for other participants to observe and learn from. The result was that others read it and took up more expressive forms of conveying meaning to the group.

The group reminded each other of prevailing social protocol. Most obviously, in the virtual fight.

KG-i saw you and steve
RN-get a giggle?
KG-and your saying i have no life
KG-he he
RN-ethics man ethics
KG-are we seriously meant to write an assingment about this?
RN-thats my excuse and i'm sticking to it
RN-yeh guess so
KG-angela i'll only be able to write one sentence
KG-hey you left the room!
KG-snob!
RN-hey watch or we'll have a virtual punch up
KG-bang pow kicvk - ooooooo he's down!
RN-and i'll virtually bleed all over the virtual carpet in here
KG-'''''''' ' ' ' ' ; ; ' ' virtual blood

The group members were now familiar enough to extend their corporeality into a virtual setting. In this example the fight is carried out between a female and male. The emphasis in the fight is fictitious which is evident when they blur the real blood with a virtual display of blood. These ritualised interactions expand with increased familiarity of one another and as the technology.

JS-wb Rob
RN-sorry?
KG-look at the chat expert - "wb"
CW-Jay did you get the prototype I tagged to an email?
JS-:P~~
RN hey wanna make it like a proper chat room
KG DRINKS ON KAT
RN-<———————————— has nude piks on his profile at www.grosemonkey.com
KG-WHAT
RN-STOP YELLING
KG-NUDE PICS?
KG-I'M BLIND
RN-WE KNOW
SL-ha ha
KG-thanks for starting the car the other nite
RN-shhh u'll wake the baby if u keep yelling
RN-thats cool

RITUALIZED INTERACTIONS AND PROTOCOLS – "STOP YELLING"

The interaction and learning through shared experience and play was regularly displayed by the more experienced users to others who were willing to engage in the fun. "RN" on many occasions was the teacher of online protocol. Without intruding "RN" persistently lets "KG" know that she is yelling, blurring the roles of student and teacher. The conversation leads to innuendo. Irrespective of this, the three involved are testing the graphical capabilities of the virtual environment and sharing in a socio-technical exchange.

KG-i was just cutting you off
RN-cutting off my what ?
KG-what what whats are you talking about?
SL-what
RN-ms bobbet
KG-your drawing
KG-what
SL-hey
KG-no what
SL-what the what to you what
RN-what the what what is what going on what heerr
KG-what what what what
SLwwwwwwwwwhhhhhhhhhhhhhaaaaaaaaaaaaaaattttttttttttttttttttt
RN-pardon???
KG-WHAT
RN-now you guys are just being silly!!!!
RN-no need to shout
KG-yes dad
KG-YAGGGGGHHJHHHH
SL-what
KG-how do you clean the board?
RN-i'm getting a virtual headache
RN-whiteboard icon
KG-take a virtual tampered with panadol
KG-which is the whiteboard symbol?
KG-draw an arrow to it
KG-steve dont you like drawing?
RN-above the location thingy
SL-depends if its rude pictures or not
RN-ooooooo i'm dobbing
KG -;)
SL where in there
KG play
SL play what
RN ha ha look at the bottom right hand of the screen
KG what am i looking at?
RN-the drawing screen
RN-use the scrole bars
KG-nothings there
SL-check it out www.kat4.....com
KG-WHERE
SL-bottom right
SL-middle right
RN-settle
KG-MATURITY
SL-a bit harsh
KG-YOBS
SL-stop yelling your hurting my ears

LOCATION

The most consistent socio-cultural reference observed by all participants was location. Questions of "where are you?" and details of where aparticipant was physically blurred physicality with virtuality.

KG-r u next to each other?
KG-laughed out loud
SL-no what are you talking about
RN-no he's still in london
RN-plan B steve
KG-hello i'm here

This discussion remains unclear as to the precise location of the participants however later on they reveal that the two of them are sitting next to each other in a university lab - however it is the virtual environment that is the focus of their attention. The physical condition of rooms also enters the conversation.

KG-i've got a tempurature
RN-interactive internet marketing
KG-this room is hot
KG-oh cause i'm in it
KG-he he
RN-come to mathan
RN-ha ha :P
KG-mathan?
SL-nathanb
RN-next to nathan
RN-sorry LOL

PLAY - GENDER AND INNUENDO

The group matured and was comfortable with the social, cultural and technical arrangements of the chat room and one another. Restrictions of physicality were effaced. The two most experienced members of the group morphed sex when the lecturer requested the presence of more women in the room.

GA-I wish there were more girls here ;)
RN-i'll try if u like
GA-I said you can tell anyhow
RN-so angela what shade of nail polish r u wearing??
JS-*j changes into a mini skirt and boob tube*
RN-*dressing gown and slippers with mad pack*
RN-*cucombers on the eyes and shaved legs*
CW-Rob wot are you doing, you can't cross dress in a chat room!
RN-so now that i'm comfortable
GA-No I went to the gym so it's not a slippers and nail polish night
RN-i didn't i piked
JS-I'm not passing any lycra comments
RN-did u see dan there
GA-YOur crazzzy Jay
JS -*j stands on his head*
JS-just a lil
RN-wasn't insinuating you had nail polish on just trying to find common ground
RNhard to do when my panty hose are riding up
RN-must go guys
RN-have places to go and people to be

CONCLUSION

This study reveals how dominant socio-cultural, socio-technical and historical perspectives impact on the ability to understand the virtual classroom. Individual historical association with chatrooms reveal the ease that computer-mediated communication can become expressive. Acknowledging this history and educating other group members about the differences between online conversation and conventional typing can positively contribute to a group's acceptance of virtual existence. A shift from offline cultural practices was also observed within the group. This group provided a clear example of how physically bound socio-cultural references inform group members actions. Shared 'virtual' practices influenced their approach to this environment while physically bound references enhanced these same experiences. The groups understanding of the chat room developed from the shared socio-cultural awareness of physical location, play, ritualized interaction, emotions and feelings.

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