Forum Contact Space: Serendipity in the Workplace

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ABSTRACT
This paper explores whether chance encounters which occur within the workplace can be reproduced within a virtual environment. Participants’ interaction in the Forum Contact Space, a networked virtual world designed to support chance encounters, was investigated over a three month period. The initial findings suggest that chance encounters occurred as participants reported examples of interactions which triggered events that may not have occurred otherwise. Future research should explore whether Contact Space chance encounters for distributed team members produce a feeling of group cohesiveness or create an enhanced awareness of one’s co-workers.

Keywords
chance encounters, informal communication, collaborative virtual environments, CSCW, avatars

INTRODUCTION
In recent years, Collaborative Virtual Environments (CVEs) have been increasingly attracting attention within the field of Computer-Supported Cooperative Work (CSCW). The purpose of a CVE is to provide affordances in order to reproduce conditions that augment interpersonal interaction in a physical environment. Designers of these multi-user virtual environments have focused on creating the necessary conditions conducive to rendering a virtual place for geographically distributed users to interact, socialise, and communicate in a shared space [4].

Within a workplace setting, the majority of office interactions, such as reminding a colleague about a meeting, tend to be brief (seconds not minutes) [5], frequent [2], spontaneous [2], and may be related to physical proximity [5]. Opportunistic (one person sees another ‘by chance’ and remembers wanting to discuss a certain topic), and spontaneous (unplanned interaction because people see each other ‘by chance’ which results in a discussion that was not prearranged) are two types of interpersonal interaction [2]. According to Isaacs, Tang, & Morris [1], colleagues often meet at high traffic areas (i.e. a coffee machine or water cooler). Previous research has shown, that these types of conversation that occur ‘by chance’, to be essential for the co-ordination, cohesiveness and productivity of one’s group [1, 5].

THE FORUM1
The Forum is a networked, virtual world with three-dimensional avatar representation. It was created as a research project by the eCollaboration team at BT Adastral Park. The Forum is divided into two shared spaces; a space for interacting and ‘hanging out’ in (Forum Contact Space) and a workspace for synchronous meetings using audioconferencing support (Forum Meeting Space) [3]. The Contact Space is composed of semi-transparent levels (visible in figure 1) based on activity (i.e. typing a document) and zones within each level based on subject area (i.e. CSCW). Navigation can be system-generated or user-initiated to levels, zones, or people. System-generated navigation occurs when an agent called Jasper, moves a person to a level or zone based on their corresponding activity or subject interest. For example, a person writing a groupware paper while another reads a CVE document on the World Wide Web should each be navigated by the system into the same CSCW zone. Communication with others in one’s zone is text-based (figure 2).

Figure 1: Interaction Figure 2: Communication

This paper is part of a larger investigation of the Forum, building on previous evaluation and usability studies. In this paper I report on a study of the first networked version

1 This research took place while the author was a summer intern at the Advanced Communications Technology Centre at BT Adastral Park, Ipswich, U.K.
of the Contact Space that investigates the existence of chance encounters.

**METHODLOGY AND SETTING**

This study was conducted June-August 1999 at the Advanced Communications Technology Centre at BT Adastral Park in Ipswich, U.K. using qualitative (interviews, focus group, personal diaries, video diary) and quantitative analysis (user data logs). There were thirty-five participants, twenty-six whom were active, both onsite and distributed (i.e. London). The composition were Forum developers, Forum team members and BT Advanced Communications Technology Centre employees. Twelve one hour face-to-face interviews took place. Interviews were recorded with Contact Space screenshots being used as visual aids. A pre-interview questionnaire was emailed to each interviewee. A pilot session gauged the quality and effectiveness of the interview. Order, length, and the type of interview questions were redesigned following the pilot session.

**PRELIMINARY FINDINGS**

The initial findings seem to support the existence of chance encounters within the Contact Space.

- Participants recalled meaning to speak with another colleague, but not remembering until seeing them in the Contact Space. They reported that this triggering of their memory resulted in a text chat or instigated a workplace conversation.

  "...I've got a mind that I need to ask say Michael a question...and then I've seen him in the contact space and that's reminded me that I need to ask him something and I'm there opening up a text chat and do that."

- The majority believed that the Contact Space fostered chance encounters as interactions occurred they felt ordinarily wouldn’t have happened.

  *I have been next to people in the contact space...that I'm never next to in the office and I've chatted to them rather than just smiling at them as I walked past.*

- A participant outlined two such examples. The first incident involved her seeing a colleague in the Contact Space. This colleague spoke about how well a previous workshop that they had attended together had went. This then triggered in her the idea to invite him to another workshop she was organising. Ordinarily she wouldn’t have thought of inviting him since they were short on spaces and she had no plans to email or phone him.

  *...having seen him in the space and talking to him about something else I just thought oh you know by the way do you want to come to this thing...I wouldn't have perhaps asked otherwise.*

- The second situation involved her seeing a colleague in the Contact Space shortly before lunch. After inviting him to lunch, he stated that he was about to go to a lunch-hour presentation. She then recalled she had forgotten about the presentation and had actually planned to attend.

  *And about five minutes after seeing him in the contact space I saw him at the ASK presentation so again I wouldn't have found that out because I'd totally forgotten...but I just happened to mention to him about lunch time and he suggested it.*

**DISCUSSION**

The preliminary findings suggest the existence of chance encounters within the Contact Space. Participants reported examples of interactions that triggered events which they stated may not have occurred without the Contact Space. It should be further studied whether these findings indicate the emergence of a new behaviour, the transfer of an existing behaviour, or if another interpretation is plausible.

**FUTURE WORK**

The benefit of producing Contact Space chance encounters for distributed team members should be explored. For example, when geographically separated, do chance encounter experiences produce a greater feeling of group cohesiveness or create an enhanced awareness of one’s co-workers? In addition, for those that didn’t experience chance encounters the contributing factors should be examined.

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