Analysing the Communication in Chat Rooms —Problems of Data Collection

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Abstract: In the ongoing research project "Process analysis of the communication of children and adolescents in the Internet" several approaches to data collection have been tested. This paper addresses the problems of data collection in qualitative chat research of minor chatters, which we experienced during the course of the project. The anonymity in the Internet in relation to the age restriction of the research project to chatters between 10 and 17 years of age was one of the aspects which caused problems in collecting the data. Another problem lay in the technical conditions of the chat systems themselves. Depending on the possibilities of the automatic generation of log-files, methods of data collection varied (from experimental settings to non-reactive settings) since the project intended to analyse natural chat conversation. This contribution presents three empirical approaches to data collection and their implications for the research project.

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1. About the Project

The research project "Process analysis of the communication of children and adolescents in the Internet" started in July of 1999 with a six-month pilot study. The whole project expects to last two years and is funded by the Berlin-Forschung (FU Berlin). The pilot study provided a summary of the Internet usage of 10- to 17-year-old children and adolescents of Berlin through means of explorative interviews, participating observation and a questionnaire survey.[1] The focus of the research project is on chatting in the Internet, but a detailed overview of the common use of the Internet services by the pilot study will be important for the analysis of the everyday practice of chatting in order to evaluate it in its context of the regular use of the Internet. [1]

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1 See the project's homepage: http://www.cmr.fu-berlin.de/~orthmann/chatkomm.

2. Data Collection

The study of the chat communication started its empirical phase in spring and the process of data collection will end in autumn of 2000. The analytical focus is on the interactive rules of the chat process: The study aims at analysing basic forms of the communication process via an ethnomethodological approach (DEPPERMANN 1999). The analysis focuses on the identification of interactional forms and practices of children's and adolescents' chat communication, intending to find media-specific structures. [2]

The chat communication and the interactive forms are being reconstructed mainly by the collected chat log-files of the computer and will be analysed by means of conversation analysis. Several methods of data collection have been tested within the study, since logging chat communications depends on the technical conditions of the specific chat. Having in mind the rapid development of computer technology and the Internet, many people may find it hard to believe how many problems the qualitative research of chat communication faces today. One of the biggest problems for qualitative Internet research is the aspect of anonymity, which constitutes on the other hand the fascination of chatting for the users. In our case we struggled with the problem: How can a researcher be sure to analyse the communication of children and adolescents and not the chat communication of adults who pretend to be under 18? [3].

So far, most analyses of chat communication come from log-files of college students or the researchers themselves (e.g. DANET, RUEDENBERG, GURION & ROSENBAUM-TAMARI 1998; RUNKEHL, SCHLOBINSKI & SIEVER 1999). Since our research project focuses on minors, we had to find other ways of data collection. Three main empirical approaches to data collection within the study were explored: Concentrating on "IRC-Chatter" (IRCer), focussing on the data collection in webchats, and using the log-files of a youth chat. Only the last one proved to be a workable data collection procedure for our research goal. [4]

2.1 "IRC log-files": co-operation with local Internetcafé

In our first approach we looked for children and adolescents who used the chat environment of the "Internet Relay Chat (IRC)"[2] and who were willing to participate in the study. Based on the findings of our pilot study we knew that chat channels of the IRC were used by adolescents from several Berlin districts. The client programs of the IRC (which have to be installed on the users' computers before entering the chat) have the advantage over other chat programs in that they log the chat communication very easily and in detail. Many additional elements—such as the time stamp of each turn—are included within the log-file and are very helpful for the analysis. [5]

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2   The IRC is a text-based chat system developed in Finland in 1988. IRC has become very popular as more people use the Internet because it enables them to join live discussions online. To join an IRC discussion, an IRC client and an Internet access are needed. The IRC client is a program running on your local computer which exchanges messages via an IRC server. There can be many chats going on at the same time that take place on different "channels".

A co-operation was established with the Berlin Internetcafé "Netti", where adolescents can chat in the IRC as well using other Internet services. A small project for children and adolescents was initiated for the summer vacation, in which they could have chatted as usual in the Café, but, with their own and their parents' permission, their communication would have been logged. Although the project was widely promoted, unfortunately not many children and adolescents were interested in participating. Our further efforts to find young IRCer and motivate them to take part in our research study (just as in other more or less experimental settings) failed. [6]

Based on our experiences during the main study, adolescent IRCer in Berlin seem to be a very small population. Our findings of the pilot study had to be revised due to the fact that chatting in the IRC was a short trend among the young people in the summer and autumn of 1999. The trend soon waned and was replaced by the still growing number of webchats (e.g. www.chatcity.de) which can be handled more easily than the IRC and are more popular by far.[3] Due to these reasons, the intention of collecting data from the chat communication of IRCer had to be abandoned. [7]

2.2 "Webchat" log-files: quasi-experimental setting at the CMR

At the beginning of the project it was planned to collect additional data from the participants in order to achieve a more holistic view of the communicative process. Thus it was considered to video tape the communicative situation in front of the monitor as well as to record everything that appears on the monitor (e.g. the usage of other Internet services besides chat). [8]

According to the findings of our pilot study, webchats were the most commonly used chat rooms by children and adolescents of Berlin. Unfortunately they provide no possibility for the chatter (and hence also not for the researcher) to log the communication in an ordinary setting. The plan—of collecting further data on the communicative process and analysing the communication in webchats— provided the additional advantage of dealing with the most popular chat form. Due to the technical apparatus required, participants were invited to come to the Center for Media Research (CMR) in order to use the Internet and to chat from there. Since we were not interested in a traditional psychological experimental situation, we tried to normalise the situation as much as possible. The children and adolescents could decide whether they wanted to come alone or together with one or more friends. Altogether ten children and adolescents (5 female: 5 male) came to the CMR to use the Internet and to chat. [9]

They were between the ages of 13 and 17 and came between one to five times to the CMR. A total of 28 sessions were recorded lasting from one to three hours each. In addition to these recordings, the participants and some parents filled out

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3   In order to install an IRC client, to log into an IRC net and its channels as well as to become familiar with the IRC commands, much more computer competence is needed than to use a webchat. Webchats have a colourful interface design and many belong to well-known firms and institutions (e.g. television channels): all three aspects add to their popularity.

a questionnaire, and the children and adolescents took part in a short interview. Due to many technical problems, chat data are only available from 12 sessions, which could be transformed into log-files by the following procedure: The data consist of screenshots from the active window which were taken automatically by a remote computer about every 12 seconds. In several steps each screenshot needs to be cut to its right size and length. Afterwards the screenshots are put together in a text processing program resulting in the log-file. The effort to transform these screenshots into log-files usable for analysis would be enormous, since per session about 400 screenshots were taken. In order to avoid this time-consuming procedure and considering future critique about the data collection method (of being rather quasi-experimental), we were looking for better ways to collect a data corpus. [10]

2.3 "www.berlin.de/europa-chat": non-reactive setting through chat server access

Our final approach to collect the data corpus makes use of a non-reactive data collection procedure: The chat used automatically creates a log-file on the server and additionally marks the time at which each conversational turn arrives at the server. With a password, the log-file can be downloaded from everywhere. The "europa-chat" is a chat only locally known which has been used virtually since May, every Thursday for two hours by several Berlin youth institutions. On the 7th of July, a first local chat party was organised which was mainly visited by 10- to 14-year-olds. So far we have collected 18 log-files from Thursday chats.[4] In order to make sure that the chatters were minors, we carried out a small questionnaire survey which validated our observations: the average age of the users was 13 years. The youth institutions informed the chatters that their internet usage in the institutions, and hence also their chat communications, was recorded and reviewed for several purposes. [11]

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nick1 (Thu 16:40): WER MÖCHTE CHATTEN

BigBrother: BLUME für nick2!

nick3 (Thu 16:41): nick1, kannst du auch was anderes schreiben ...?

nick1 (Thu 16:41): WER MÖCHTE CHATTEN

BigBrother: KUSS für nick2!

Nick4 (Thu 16:41): hehe

BigBrother: SENF für nick2!

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4   The server logs only the public chat conversations. Whispered messages between two chat partners-which can only be seen by them and not by the other chatters—are not recorded. On one hand, this private communication is a common practice of chatters and thus we regret not being able to analyse that important aspect of chat communication. On the other hand we have to follow the ethical guidelines of research and respect the privacy of the chatters.

This empirical approach proved to be the best data collection procedure since the chat is a naturally-occurring conversation among minors of Berlin and the data collection procedure was adequate considering the time and effort. [12]

3. Conclusion

Collecting data from the Internet is considered a very easy procedure (KÖHLER 1999). This may be true for experimental settings in which test persons are instructed to chat in specific chat rooms or when log-files are collected without a need for further information such as the chatters' age. Aiming at an ethnomethodological study of children's and adolescents' chat communication raises many technological and methodological problems. A general solution cannot be offered, although we expect that a further development in software will improve the situation. Even though the process of problem-solving was very time-consuming, it was still an important part of our study as it deepened our understanding of the subject. In the first months of our empirical phase, we made several implicit assumptions about the children's and adolescents' use of chat systems. After becoming more familiar with the technical preconditions and functions of the chat systems, we were forced to make our assumptions explicit and to revise many ideas. Our next step will be to start the data analysis in autumn. [13]

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