

Archaic Elements of Computer-mediated Communication

Kai J. Jonas & Margarete Boos

Key words:
computer-
mediated
communication,
chat, virtual
seminar

Abstract: Virtual seminars as a form of tele-learning are becoming a well-established instructional form within universities and educational offers for adults. The critical gist of many virtual seminar projects are two problem sets, typical for tele-learning applications: low media-competence and low participation rates. During a virtual seminar, based at the University of Goettingen and at the Rensselaer Polytechnic Institute, Troy, New York, these phenomena were investigated. Communication media for the seminar were synchronous (chat) as well as asynchronous CMC tools. A clear positive result of media competence training was an overall good achievement and a higher participation rate both in off-topic, casual and in on-topic communication. The focus of the article is on the qualitative analysis of a chat-protocol, revealing a number of critical phenomena which should be considered in the planning and implementation of virtual seminars.

Table of Contents

- [1. Virtual Seminars as a New Form of University Education](#)
- [2. The Seminar](#)
- [3. Evaluative Research](#)
 - [3.1 Selected results of quantitative analyses](#)
 - [3.2 Qualitative analysis of a chat-sequence](#)
- [4. Space/Location](#)
- [5. Anonymity and Identity](#)
- [6. Word Games and Rhymes](#)
- [7. Change of Topics](#)
- [8. Sexuality](#)
- [9. Hierarchies of Dominance](#)
- [10. Discussion](#)

[References](#)

[Authors](#)

[Citation](#)

1. Virtual Seminars as a New Form of University Education

Internet technology offers new forms of educational instruction. As one possibility out of many tele-learning solutions virtual seminars are developing towards a wide-spread and accepted instructional choice in universities and adult education. The advantages are imminent: independence of time and space, knowledge- and student population-dependent content offers, an up-to-date and general enlargement of the course-list (SCHUMANN, 1999). The first evaluative studies report problems as well. HESSE and GIOVIS (1997) state low participation rates, REIMANN (1998) mentions technical difficulties concerning hard- and software, NISTOR and MANDL (1995) report the heavy load on cognitive resources and

UTZ and SASSENBERG (1999) found high drop-out rates as central points of difficulty. UTZ and SASSENBERG (1999) showed, too, that high identification with a virtual seminar proves to be a solution for some of the above mentioned problems. One field that is not covered at all in studies on virtual seminars, due to a lack of acknowledged influence, is the media-typical style of interaction, in other words the specific character of computer-mediated communication (CMC). Early research on CMC posits a set of typical behaviors, such as flaming (HILTZ, TUROFF & JOHNSON, 1989), i.e. a derogative way of interaction with the communication partner, the playful use of new or multiple identities (TURKLE, 1995), the dissolution of the space-time continuum, group-specific dialects (BOWERS & CHURCHER, 1988), the parallel handling of several topics (BLACK, LEVINE, MEHAN & QUINE, 1983), new turn-taking norms (McKINLAY, PROCTER, MASTING, WOODBURN & ARNOTT, 1994) and special strategies of discourse management (CORNELIUS & BOOS, 1999). Some of these results, such as the selective self-presentation of one's own identity (McKENNA & BARGH, 1998; WALTHER, 1992, 1996), have been verified many times empirically, others, like flaming, have found rare verification and are considered to be doubtful in their generality (LEA, O'SHEA, FUNG & SPEARS, 1992). Certain results on language style and communication rules seem akin to rituals that are now uncommon in everyday face-to-face (fff) communication. If someone wants to take a turn in a group of interacting people he/she heightens his/her voice or indicates the intention by using the eyebrow flash. Nowadays, it is out of question in everyday fff communication to ritually pass the word on to somebody. It might seem paradoxical that a high-tech communication technology (re)-bears elements, e.g. explicit turn-taking rules, that put interaction principles that are taken "democratically" for granted into question. [1]

Interaction protocols of a virtual seminar are used to show communication style and behavior of the participants, that is in line with the literature but also exceeds those results. Interaction principles that allude to archaic phenomena are analyzed and cover different phenomena such as space/locality, anonymity, word games and rhymes, conversation norms, sexuality and hierarchies of dominance. [2]

2. The Seminar

The joint virtual seminar with a social- and organization psychology content was offered by the University of Goettingen and the Rensselaer Polytechnic Institute, Troy, NY. A total of 31 students was participating. The virtual classroom was a password-protected homepage containing synchronous (chat) and asynchronous (BSCW shared workspace [GMD-Fit, 1999]) CMC tools. Additional features included newsboards of the instructors, reading lists and downloadable literature, syllabus, lists and information about participants, technology in use, codes of behavior and grading requirements. The seminar was divided into two phases only for the German participants. First came a partially virtual preparation phase, during which class meetings were held weekly on a face-to-face (fff) and CMC basis. The use of the homepage commenced and the offered communication tools were introduced, tutored and gradually put into usage. The communication content was to discuss the reading computer-mediated, to accomplish surfing

tasks and to compose field reports about those experiences. Concerning upcoming technical and organizational problems the students were encouraged to solve those self-reliantly and cooperatively. The second purely virtual phase, put US-German groups into work. Students were now asked to write two joint papers in English on given topics and with supplied reading. [3]

3. Evaluative Research

3.1 Selected results of quantitative analyses

On the German participants in focus here, evaluative data were gathered three times during the seminar. Data on educational motivation and motivation to take the class, media competence, identification with the seminar and own nationality, style of learning and on mutual impression formation was gathered at the beginning of the seminar, before the purely virtual phase and at the end of the semester. For the US participants data are not sufficient for an evaluative analysis. Results have been reported in a detailed manner elsewhere (JONAS, BOOS & WALTHER, 1999), and thus only those results are summarized here, that are relevant for the qualitative analysis. Measured by the subjective judgment of their media competence, participants knowledge of software usage and communication abilities could have been trained continuously (starting at $M=2.64$, $SD=.71$ to $M=4.45$, $SD=.61$ at the end of the seminars, on a six-increment scale ranging from 1=does not apply to 6=does fully apply). This had positive consequences on the message frequency and the level of content. Additionally the use of communication tools shifted from predominantly asynchronous to mixed synchronous/asynchronous communication. At the beginning only technically versed students used the chat on a regular basis and mostly for leisurely communication. Newbies and the unexperienced had to undergo certain rites of passage, to be accepted as equal communication partners. The following analysis is based on a sequence of the chat during the preparation phase of the seminar. During this conversation the topics were oscillating a lot between private conversations and questions related to technical problems or tasks of the seminar. The purely virtual phase brought a shift towards task-oriented communication, however private, off-topic conversation with the US-students was still taking place. Then, only students who had had sufficient knowledge anyway or had made positive experiences in the chat in the preparation phase or who had developed a safe place in the hierarchy were using the chat. As it will be shown in the analysis the latter was a difficult task and was combined with a high frustration potential. Students with high media competence dominated the chat and left only sparse room for newcomers. [4]

3.2 Qualitative analysis of a chat-sequence

In the following analysis an interaction-sequence¹ of 831 messages will be analyzed as an exemplar using the conversation-analytical approach (BERGMANN, 1981). The sequence is typical for the first phase of the seminar, but comparatively long. It stems from the final days of the preparation phase and took place in the afternoon hours. Two male students with high media competence are the main actors. They are interacting sequentially first with a female student and then with another male student. [5]

The chat shows elements which are generally characteristic for communication protocols of chats, such as initial greeting, good-byes, server-information on log-in and log-out of participants etc. (DÖRING, 1998). But the elements occur with a lesser frequency due to the reduced amount of only five active users in the chat. [6]

Actor names are anonymous, one student chose himself the anonymous log-in "DerTobi". The second main actor in the chat received the altered nickname "Tom", the female student "Anja" and the third male "Martin". [7]

4. Space/Location

The log-in nicks and server information reveals that the two computer-versed students *DerTobi* and *Tom* are acting from the same room of a CIP-pool of the University of Goettingen. But they are not sitting right by each other (terminals 100 and 93). Thus right at the moment where *Anja* enters the virtual chat-room, both can detect that she must be sitting in the same physical space (terminal 99). It seems, that this coincidence was only recognized by *DerTobi* at first. But they don't reveal their identity. *Tom* asks *Anja* explicitly later on where she is. [8]

The evidence of two locations, on the one hand the CIP-pool of the University and on the other the chat-room, is a source for plays. Both main actors partially are operating several chat-windows at a time (370). Participation in several chats is a usual thing and is called "channel-hopping"; yet it is considered inpolite among "chatters" (DÖRING, 1998). *Tom* takes his conversation partner *DerTobi* on a short trip through other chat-rooms. The aim is to chase a "cute thing" and he is giving accurate "geographic" hints, so that *DerTobi* is able to follow him (274-351).

244. *Tom*: Right beside me is a cute thing, she is doing the Yahoo-Chat.

(244. *Tom*: Hier neben mir sitzt ein nettes Wesen, das im Yahoo-Chat mitmisch.)

274. *Tom*: let us look for the chick in Yahoo

(274. *Tom*: laß uns die Schnecke im Yahoo chat ausfindig machen) [9]

1 The chat-protocol in German is linked from the homepage of the department of social-psychology and communication studies of the University of Goettingen under the following: <http://www.psych.uni-goettingen.de/abt/6/chat.html> [Broken link, FQS, August 2005]. Numbers in brackets refer to the line in the protocol. All names were altered to ensure anonymity.

5. Anonymity and Identity

Both *Tom* and *DerTobi* have not obeyed to a class nickname rule. *Tom* chose for his nick an English equivalent of his German name and is comparatively easy recognizable. *DerTobi* wants to remain anonymous with his nick and is thus only recognizable for *Tom* who can decipher the allusion to the music scene. *DerTobi* calls *Tom* for example *Bo*, when they are chatting with *Anja* (114). In reality *Tobi* and *Bo* are musicians of a Hamburg HipHop band "5 Sterne deluxe". Moreover *DerTobi* and *Tom* are playing with the evolution of names of the band "Der Tobi und das Bo" to "5 Sterne deluxe" ("Der Tobi und das Bo" was the predecessor of "5 Sterne deluxe"). The two main actors thus can use and play with the confusion of the other participants. During the interaction sequence with *Martin* he is immediately able to identify *Tom* and to join the anglicization game with his name, too. *Martin* himself adheres to the nickname rule of the class. He cannot identify *DerTobi* thus he tries to uncover his true identity by direct questions. *DerTobi* refuses to let himself become identifiable. It is the aim of the two main actors to stay as anonymous as possible, to keep a "white vest" (221). For this reason, to get a clean screen, they are logging in and out in short intervals to erase their otherwise documented conversation.:

216. *Tom* (XWRE93.WiSo.Uni-Goettingen.de) left
217. *DerTobi*: ok, let's go again
(217. *DerTobi*: na dann, auf zu neuen ufern)
218. *Tom* joined from XWRE93.WiSo.Uni-Goettingen.de
219. *Tom*: So – who joins now, cant see what we wrote
(219. *Tom*: So – wer hier reinkommt, sieht nich was wir jeschrieben haben)
220. *DerTobi*: hello Tom! Who are you? I dont know you!
(220. *DerTobi*: hallo Tom! Wer bist du denn? Ich kenn dich nicht!)
221. *Tom*: white vest, so to speak
(221. *Tom*: Blütenreine Weste sozusagen) [10]

Associated with anonymity is "lurking". This refers to a log-in in a chat, without an active participation and just to read what others are writing. Active participants despise such a behavior and if discovered, due to a small number of people in a chat-room for example, lurkers are more or less aggressively asked to join or leave.

- 7.*** MIRKO joined from xxxx.stud.uni-goettingen.de
8.Tom: I had no idea that you would reveal my new identity!
(8.Tom: Ich hatte keine Ahnung, daß Du meine neue Identität aufdecken würdest!)
9.Tom: Mirko, show yourself!
(9.Tom: Mirko, gib Dich zu erkennen!)
10.*** MIRKO (xxxx.stud.uni-goettingen.de) left [11]

Firstly, lurking is considered to be parasitical and secondly it is interfering with an assumed level of equity of all participants. Lurkers are only known by their nicknames and are not further identifiable by utterances, i.e. messages. [12]

6. Word Games and Rhymes

DerTobi and Tom developed an elaborated chat-code. This includes rules on the length and frequency of messages (71), which they use as loopholes against their communication partners (640), and on rhyming, that is built upon a mutually shared frame of reference (the rhymes of the following chat section cannot be translated):

19. Tom: ein alter Hacker und Fuchs
20. DerTobi: Fuchs? der, der die hits bringt?
21. DerTobi: und die auf den Schleudersitz zwingt
22. Tom: nein, der der nur mitsingt
23. DerTobi: was soll ich dazu sagen?
24. Tom: gib mir neue aufgaben [13]

Anja and *Martin* cannot understand and decipher those word games that develop up to certain "joke-chains" (cf. HERRING, 1999; example 424-429). It generates an exclusive atmosphere, that among other reasons convinces *Martin* to leave the chat-room. [14]

7. Change of Topics

Interaction topics of *DerTobi* and *Tom* are based on a mutually shared frame of reference. Without knowing current Hip-Hop and Pop-bands in Germany and their members, many remarks and allusions are not comprehensive, most of all the identity of *DerTobi* (cf. above). For example the quick switch from a conversation about the Hip-Hop-Band "5 Sterne deluxe" and its (financial) success to a discussion about stocks (both actors are day-trading at various German stock-exchanges) happens without further discourse markers of coherence, i.e. terms and words that are indicating a thematic change or loop back, and does not irritate the flow in any way. The frame of reference "music" is still maintained in the background because *DerTobi* attributes his stock speculation success to the feeling of a "visionary ground fog" in Hamburg (70), even though he is located in Goettingen. Hamburg is currently the center of gravity of the German Hip-Hop scene. [15]

8. Sexuality

Sexuality and allusions to it are a generally wide-spread topic of the Internet (DÖRING, 1998). Thus it is not surprising to find this phenomenon in this chat as well. Remarkable indeed is the relentlessness with which the topic is maintained and treated. *Anja* is being prowled around by *DerTobi* and *Tom* (80ff.). Both actors join a competitive game to attract her attention and they eliminate rivals and assumed rivals, such as one of the lecturers, to whom *Anja* lives close to. They are counting on the fact that both are having an affair (230. *DerTobi*: yes, but only until she has slept with k. / ja aber nur solange, bis sie mit k. geschlafen hat). *Anja*, who has entered the chat with the purpose of getting a technical hint (90), is not being taken seriously and is being played with (95. *Tom*: What are

your notes about, if they are so important for the others / Was hast du denn für notizen, die für die anderen so wichtig sind?). *Anja* remains stubborn and task-oriented and finally leaves the chat after she has recognized that no one will answer her question. As a result *DerTobi* and *Tom* are spending some time with pseudo-sad and erotic remarks (205. *DerTobi*: well, she was a cutie, thank God there is kleenex / ja nett war sie. zu glück gibt es ja die großen taschentücher) before they are on the search again for a new victim (212. *Tom*: let's look for a professional chat and drive someone crazy there / laß uns einen professionellen chat suchen und jemand auf die ketten gehen). [16]

9. Hierarchies of Dominance

The interaction between *DerTobi*, *Tom* and *Martin* reveals that the newcomer *Martin* has to prove his abilities. He is only accepted as an equal, if he masters the same fluidity and cleverness as the other two and if he introduces new and playful topics into the chat (379ff.). He is not able to do so at first and thus a homosexually loaded game of dominance develops (e.g. 708ff.). Only once he is in this situation, is *Martin* able to weaken the hierarchy and turn it around (741, 744). [17]

But *Martin*, too, is not able to gain on-topic class information from the others (682. *Martin*: What are you writing for Monday / Was schreibt ihr für Mo?) or to make them play by the seminar rules for the chat (701. *Martin*: only seminar participants should be in this chat / in diesem Chat sollten nur Seminarteilnehmer sein; 711. *Martin*: only user-names are allowed / es hieß nur Nutzernamen). On the contrary, he is being made ridiculous for his adherence to the rules (716. *Tom*: *Martin* get's his kicks from rules / *Martin* steht voll auf regeln; 720. *Tom*: he does what he is being told / hält sich an das, was ihm gesagt wird) and as a result gives up. [18]

10. Discussion

From the point of view of a didactic analysis of the results it is necessary to underline, that the whole discussion took place in a quasi-public seminar-room with a limited number of actors. It seems hardly possible that such a conversation would have taken place within a classic seminar or the preceding or following discussion in a cafeteria. If so, it would not have been left socially unsanctioned. The degree of disinhibition and the resulting interpersonal dynamics have to be interpreted as an effect of the medium and result in the necessity for a conscious and controlled behavior within virtual instruction projects. In cases where instructors and the students are not totally aware of the possibility of psycho-emotional endangering of others, such as slander and libel, exclusion, defamation, sexual harassment, these will happen. Furthermore students are to be made aware of the dangers in advance. If it still happens, consequences of such experiences for the victimized person may be a preliminary involuntarily drop-out, low participation rates and evaluation apprehension and for an actually positively rated form of instruction a loss of success. [19]

Tracing the behavior of *DerTobi* and *Tom* through the whole sequence, the comparison with behavior alluding to archaic phenomena seems feasible. At the same time it makes one think of game-like behavior. Both actors are dominating their space in the chat. Serious, potentially harmful communication is not taking place, every interaction sequence is a smooth, fluid gliding. If this gliding is interrupted or not being taken over by new playing partners, they are changing the topic, hardly traceable and without the need for coordination. They are generally interested in female visitors on their terrain, but they are not rated as equal partners but more as sexually interesting players. The intrusion of a potential rival, male or female, results in an immediate ensuring of their dominance. However they are not interested in fixed roles, but try to encourage newcomers to challenge them. Are these exemplar behaviors useful for a general description of CMC media usage? Some of the reported phenomena are in favor of a generalization of initially mentioned, partly doubted (lab-)findings, e.g. flaming. It is desirable for a profound description, for the communication of media competence, but also for a workable prevention of communication excesses to the detriment of others, to develop a sound framework and an integrative explanation model on communication styles and behavior of synchronous and asynchronous CMC. [20]

References

- Bergmann, J. R. (1981). Ethnomethodologische Konversationsanalyse. In Schröder, P. (Ed.). *Dialogforschung* (pp.9-51). Düsseldorf: Schwann.
- Black, S.D.; Levine, J.A.; Mehan, H. & Quinn, C.N. (1983). Real and non-real time interaction: Unraveling multiple threads of discourse. *Discourse Processes*, 6, 59-75.
- Bowers, J. & Churcher, J. (1988). Local and global structuring of computer mediated communications: Developing linguistic perspectives on CMC in COSMOS. *Proceedings of the 1988 Conference on CSCW* (pp.125-139). New York, NY: ACM.
- Cornelius, C. & Boos, M. (1999). Es lohnt sich, kohärent zu sein! In U.-D. Reips, B. Batinic, W. Bandilla, M. Bosnjak, L. Gräf, K. Moser, & A. Werner (Eds.), *Current Internet science—trends, techniques, results. Aktuelle Online Forschung—Trends, Techniken, Ergebnisse*. Zürich: Online Press.
- Döring, N. (1998). *Sozialpsychologie des Internets*. Göttingen: Hogrefe.
- GMD-FIT (1999). *BSCW 3.3*. St Augustin: GMD.
- Herring, S. (1999). Interactional coherence in CMC. *Journal of Computer Mediated Communication*, 4. (WWW-Dokument), <http://www.ascusc.org/jcmc/vol4/issue4/herring.html> [Broken link, FQS, August 2005].
- Hesse, F.W. & Giovis, C. (1997). Struktur und Verlauf aktiver und passiver Partizipation beim netzbasierten Lernen in virtuellen Seminaren. *Unterrichtswissenschaft*, 1, 34-55.
- Hiltz, S. R.; Turoff, M. & Johnson, K. (1989). Experiments in group decision making, 3: Disinhibition deindividuation and group process in PEN name and real name computer conferences. *Decision Support Systems*, 5, 217-232.
- Jonas, K.J.; Boos, M. & Walther, J. (1999). Motivation und Medienkompetenz als zentrale Erfolgsfaktoren für virtuelle Seminare. In U.-D. Reips, B. Batinic, W. Bandilla, M. Bosnjak, L. Gräf, K. Moser, & A. Werner (Eds.), *Current Internet science—trends, techniques, results. Aktuelle Online Forschung—Trends, Techniken, Ergebnisse*. Zürich: Online Press.
- Lea, M.; O'Shea, T.; Fung, P. & Spears, R. (1992). "Flaming" in computer-mediated communication. Observations, explanations, implications. In M. Lea (Ed.), *Contexts of computer-mediated communication* (pp.89-112). New York, NY: Harvester Wheatsheaf.

- McKenna, K.Y.A. & Bargh, J.A. (1998). Coming out in the age of the Internet: Identity "demarginalization" through virtual group participation. *Journal of Personality and Social Psychology*, 75(3), 681-694.
- McKinlay, A.; Procter, R.; Masting, O.; Woodburn, R. & Arnott, J. (1994). Studies of turn-taking in computer-mediated communications. *Interacting with Computers*, 6(2), 151-171.
- Meier, C. (1997). *Arbeitsbesprechungen*. Opladen: Westdeutscher Verlag.
- Nistor, N. & Mandl, H. (1995). *Lernen in Computernetzwerken. Erfahrungen mit einem virtuellen Seminar*. Universität München, Institut für Pädagogische Psychologie und Empirische Pädagogik, München, Forschungsbericht Nr. 64.
- Schumann, M. (1999). Einsatz multimedialer Informations- und Kommunikationssysteme in der universitären Ausbildung. *Georgia Augusta*, 70, 17-31.
- Reimann, P. (1998). Unterstützung kollaborativer Arbeitsformen in Teleteaching-Szenarien (WWW-Dokument), <http://paeps.psi.uni-heidelberg.de/reimann/Learntec98/learntec.htm>.
- Turkle, S. (1995). *Life on the screen: Identity in the age of the Internet*. New York, NY: Simon and Schuster.
- Utz, S. & Sassenberg, K. (1999). Bindung an ein virtuelles Seminar – die Rolle von Erfahrungen. In U.-D. Reips, B. Batinic, W. Bandilla, M. Bosnjak, L. Gräf, K. Moser, & A. Werner (Eds.), *Current Internet science—trends, techniques, results. Aktuelle Online Forschung—Trends, Techniken, Ergebnisse*. Zürich: Online Press.
- Walther, J.B. (1992). Interpersonal Effects in Computer-Mediated Interaction: A Relational Perspective. *Communication Research*, 19, 52-90.
- Walther, J.B. (1996). Computer-mediated communication: Impersonal, interpersonal and hyperpersonal interaction. *Human Communication Research*, 23, 1-43.

Authors

Kai J. JONAS

born 1972, Dipl.-Sozialwirt (1998, University of Goettingen), since 1998 pre-doctoral lecturer at the Georg-Elias-Mueller-Institute for Psychology of the University of Goettingen. Studies at the Universitat de València and at the University of California at Irvine. Research Interests: stereotype-development, computer-mediated communication, social networks.

Contact:

Kai J. Jonas
Georg-Elias-Mueller-Institute for Psychology
Georg-August-University Goettingen
Gosslersstraße 14
37073 Goettingen, Germany
Phone: +49 / 551 / 39 – 7949
E-mail: kjonas@gwdg.de
URL: <http://www.psych.uni-goettingen.de/abt/6/index.shtml>

Margarete BOOS

born 1954, a major in social sciences and mathematics at the University of Bonn, since 1995 professor for social psychology and communication studies at the University of Goettingen. Research Interests: computer-mediated communication, small groups, methods of interaction and communication analysis.

Contact:

Margarete Boos
Georg-Elias-Mueller-Institute für Psychologie
Georg-August-University Goettingen
Gosslersstraße 14
37073 Goettingen, Germany
Phone: +49 / 551 / 39 – 4705
E-mail: mboos@gwdg.de
URL: <http://www.psych.uni-goettingen.de/abt/6/index.shtml>

Citation

Jonas, Kai J. & Boos, Margarete (2000). Archaic Elements of Computer-mediated Communication [20 paragraphs]. *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research*, 1(1), Art. 27, <http://nbn-resolving.de/urn:nbn:de:0114-fqs0001278>.

Revised 7/2008