(Dis-)integrative Effects of MUD-Usage as Seen by the Players

Susanne Keuneke

In a study that was carried out in 2004 on behalf of the games producer Electronic Arts 54% of the Germans asked (n=1355) were of the opinion that computer and video games led to increasing loneliness (cf. Lorber, 2005, p. 17). From a scientific point of view this prejudice is far too sweeping, and was long ago considered disproved, particularly with regard to the so-called MUDs (Multiuser Dungeons; alternatively: Multiuser Dimensions or Multiuser Domains). At first, these multiplayer games, which are played via telnet, seem to be particularly suited to alienate their users from *real life* (RL) as they make a *virtual life* (VL) more consistently possible than most other environments. In a text-based world, the players set up a virtual parallel existence, earn money, acquire useful or prestigious things, make friends, build houses, get married and if necessary get divorced again. Such a parallel existence is time-consuming, according to Utz (1995, p. 28) mudders invest on average 12.3 hours per week into their games. Here the image of a socially deprived online player who loses himself in the endless spheres of cyberspace seems compelling (cf. e. g. Young, 1999, p 149). Relevant studies, however, point into another direction: Not only do the virtual communities of the MUDs have real social functions, a large proportion of mudders even succeed in enlarging their networks in the real world through playing. Since a comparison of the studies is impossible for several reasons – the quantity of samples differs from study to study; and in addition, definitions of 'friendship' vary or do not exist at all – the following list can merely give a general survey: Of the roughly 103 mudders who Utz interviewed (1995), approx. 70% had made RL-friendships with other users. In the studies done by Schildmann, Wirausky and Zielke (1995) 87% of the MUD players (n=62) had met their online-friends in RL, studies by Parks and Roberts show 38% (n=155). Götzenbrucker (2001) interviewed 40 'mudders', who on average had met 17 other players personally whereby five of them were classified as friends according to objective criteria [1]. Although no synopsis can be found from these studies, their tendency is clear: By playing the game a large proportion of MUD players shows the tendency to make and maintain friendships also in RL.

However, Götzenbrucker's study also shows opposite trends, e. g. some players "regarded their relationships to their partners or families as problematic if these do not take part in the MUDs" (same, p. 173). In Utz (1995, p. 38), several players reported that they had neglected existing friendships due to mudding.[2] Therefore the question arises as to whether or not mudding enlarges the social network, damages it or even erodes it, particularly when those concerned do not play themselves. The question may also arise: Can using a MUD trigger off not only integrative but also disintegrative processes?

In addition to this, the state of research leaves the question open as to how important such processes can become for the players. Nicola Döring (1994) has shown that loneliness – even in the context of computer-based communication – is based on subjective interpretations. In an argumentum e contrario this should also apply to security, support and social benefit etc. In order to be able to really understand which social bonus or malus is caused by using a MUD (or respectively, if any qualitative change can be seen at all), the players' subjective patterns of interpretation need to be taken into account.

To answer this question I have carried out multi-method research into the German MUD 'Avalon' (http://avalon.mud.de). Due to its explorative character, the focus was on qualitative procedures. A quantitative investigatory step served to gain an overview of the social phenomena and to recruit test persons for problem-centred interviews.

As there are several studies about MUDs and social relations, it seems to be reasonable to supplement the state of research by investigating the same field. The results of such an investigation, however, go far beyond the horizon of relatively rarely frequented MUDs. It was the success of the Massively Multiplayer Online Role Playing Game (MMORPG) 'World of Warcraft', which is closely connected with MUDs [3], that a game genre achieved worldwide popularity. Although MMORPGs have a graphic surface, in contrast to MUDs, the playing structures are in principle the same. Thus, conclusions can be drawn from the present study about social processes in MMORPGs, even though a direct transfer is not possible, not least due to the various sizes of the populations.

The Avalon study

'Avalon', with an estimated (regular) active population of 100-150 players [4] is one of the largest German speaking MUDs. It should be counted among the Adventure-MUDs (cf. Götzenbrucker, 2001, p. 13). Based on J.R.R. Tolkien's novels, the game combines medieval and fantasy elements. Beside the game-related aims of 'solving mysteries' and 'fighting monsters', 'Avalon' offers many opportunities to set up a virtual existence, which are frequently used by the players.

In its first phase, the investigation aimed at gaining an internal perspective of the Avalonian game world by means of covert participation and observation. By '*going native*' I became a member of the game community with a female avatar, discovered the environment, solved most adventures and got into contact with other players. This phase was longer than expected. After roughly nine months I had discovered the size and complexity of the Avalonian world and could follow the conversations which are marked by insider topics and terminologies. The methodological price for this insight was – as in any participating observance – the loss of distance to the field of research. I countered this problem by drastically shortening my presence in 'Avalon' a few weeks before the interviews.

On the other hand, the knowledge of the community of players proved to be useful for the online-interviews, which were carried out in two steps. First, a questionnaire with eleven question complexes was implemented into a website. I referred to it on the notice board of the MUD and in personal online talks with other Avalon-players. Indeed, a large proportion of (regular) players filled in the questionnaire (N=50). With 20 of them – none of whom I had previously been familiar with in VL or RL – I afterwards carried out qualitative online interviews.

The survey

The questionnaire covered the following aspects [5]:

- length of participation in the game
- participation in other MUDs
- frequency of 'Avalon'-use
- most frequented/favoured occupation in the game
- favoured playing mode, alone or in the group
- knowing other players in RL
- context of RL-meetings
- type of newly formed RL-relationships
- consequences of the playing on RL-relationships (among other things damaging/loss of existing relations)
- overall estimate: consequences of playing on RL-relations
- sociodemographic data: age, sex, school qualifications, status (pupil, student, profession if applicable)

First of all, it can be said that the sociodemography of the 'Avalon'-players corresponds with that of other MUD-communities (cf. Götzenbrucker, 2001, pp. 54-55; Schildmann, Wirausky, and Zielke, 1995, p. 4; Utz, 1999, pp. 27-29): Most of the interviewees are male (n=35), usually 20 and 29 years old (n=40), have all got a high level of education (German A-level-exam intended or passed: n=40) and the majority go to university and usually study technical subjects. Once more it can be confirmed that MUD-players are a very homogeneous group, which in its ideal form can be described as male, young, educated and technically interested.

Almost all interviewees (n=47) have met other players in RL, mostly at private meetings (n=44), but also at regional, regular meetings (n=35) or superregional MUD-meetings (n=35). This contact appears to have lasting effects. Only four

interviewees stated that the RL-meetings had not influenced their social lives. By contrast, 34 players formed contacts ("people to whom I regularly talk at meetings") and in 31 cases friendships were made ("people whom I meet privately"). Friendships with persons of the opposite sex were made surprisingly often. 12 people report that the RL-contacts had lead to short-time "affairs", 22 interviewees even said they had found a steady partner. [6]

18 interviewees replied to the question which consequences the time spent in the MUD had had on their RL-relationships that they had not observed any consequences. However, almost half the players (n=23) agree with the item "I have (at least temporarily) neglected contacts with RL-friends because I preferred to play MUDs". This statement corresponds with the details about the frequency of use: 24 interviewees daily immerse themselves in the world of 'Avalon'. Almost all of the other 26 interviewees (n=22) stated that they had done so for at least a while.

Broken partnerships as a result of intensive MUD-use have still not been reported. The loss of a friendship is mentioned once, but it can only indirectly be regarded as a consequence of mudding.[7]

Another item was: "I have learned through online contacts to make friends with others and am now better at this, also in RL". This refers to Turkle's approach (1999, pp. 338-339), according to which positive self-experiences, which players have gained with their virtual personae, can under favourable circumstances be transferred to real persons and be integrated into the RL-personality. [8] 13 of those interviewed agreed with the statement.

Finally, the interviewees were asked to assess the consequences of MUD-participation on their RL-relationships in a scale from –4 (highly negative) via 0 (neutral) to +4 (highly positive). Two players made double assessments (positive and negative). All in all, the result of the interviewees tends to be positive, as the following chart indicates.

-4	-3	-2	-1	0	+1	+2	+3	+4
---	3	1	6	8	15	6	8	5

Ten of the 52 statements are negative and eight are neutral, while 34 are positive. There is a clear focus on +1 with 15 statements. However, it should not be overlooked that no less than a fifth of the interviewees considers the effects of using a MUD to be (also) negative on their RL-social lives.

The question arises as to what these assessments are based on. The qualitative interviews served as a contextualisation for this. The secondary sample group (N=20) shows roughly the same pattern of distribution as the primary. It is formed of 14 men and 6 women, two of who are under 20, seven between 20 and 24, ten between 25 and 29 and one is over 30 years old. The distribution of negative/neutral/positive assessments of MUD-effects on the RL-social life is also reflected as far as possible.[9] Additionally, test subjects were preferred who had stated that they had

neglected their RL-relationships due to MUD-playing, as this aspect was in the focus of my research interests.

The qualitative interviews

Qualitative online interviews do not mean the direct transfer of their offline form in *computer mediated communication* (CMC), but are a "genuinely new method of investigation" (Döring, 1999, p. 188). Therefore, a short methodological discussion shall ensure that the quality of the published data can intersubjectively be understood.

Qualitative research aims to analyse subjective patterns of interpretation on the side of the interviewees (cf. Heinze, 2001, p. 154; Froschauer, and Lueger, 2003, p. 16). In order to form a basis of data that is appropriate for this purpose, the principles of qualitative social research must be adhered to during the investigation: openness, communicativity, processivity, reflexivity, explication and flexibility (cf. Lamnek, 1995, pp. 22-30). In online interviews these principles seem to be partly under threat.

- According to the principle of openness, the interviewee should have the opportunity to speak as awkwardly and in as great detail as seems to be appropriate to him /her (cf. Froschauer, and Lueger, 2003, p 34). To ensure this, the researcher takes over the role of an active listener in large parts of the interview and keeps up the interviewee's flow of speech without pushing him/her into a specific direction. Common techniques of active listening are nodding one's head, smiling or 'mhms' that are put in (cf. Hermanns, 1995, p. 184). They require the use of auditive and visual channels, which is not possible in CMC.
- The principle of reflexivity requires to take into account also non-verbal utterances of the interviewee, as they can be considered to be an "index of a comprehensive set of rules" (Lamnek, 1995, p. 25), just like verbal utterances. This is why non-verbal elements like pauses, intonation, laughter etc. are included in the analysis (cf. Froschauer, and Lueger, 2003, p. 35). These too cannot be recorded in online-interviews.
- Communicativity refers to the fact that in all qualitative interviews a situation close to everyday conversation should be created, e.g. by doing the interview in an environment that is natural for the interviewee. A virtual environment, however, could be regarded as artificial.

Although these considerations at first sight seem to speak against doing computer aided qualitative interviews, a closer view makes it clear that there are only *gradual* differences between personal communication and CMC, even in the context of qualitative research. Thus the restrictions of *openness* and *reflexivity* become relative if the theory of social information processing is taken into account. According to this theory, channel-caused deficits of CMC can be compensated by online-specific communicative techniques (smileys, words of action etc.) (cf. Döring, 2002, p. 362). These techniques simulate non-verbal elements and contextualise the conversation – careful listening, irony, agreeing, hesitation, disagreeing etc. can be expressed

without forcing the participants to use artificial verbalisations ("I'm listening carefully."). This however is based on the proposition that all participants are familiar with en- and de- coding these non-verbal elements. Therefore, in a qualitative online-interview the researcher as well as the interviewees should be familiar with them. At least they should know commonplaces of chat-communication, ideally they should also know the specific code of the individual environments. In fact, the use of non-verbal signs may differ significantly between a web-, an IRC-chat and an online-game. In game subcultures in particular individual non-verbal communication styles emerge. [10] It is true that these interviews with players could be moved to neutral environments, e. g. to a messenger or to a chatroom designed for this purpose, in order to give the conversation a more general frame, but this would mean a reduction in *communicativity* as the familiar environment of the game is contrary to a subjectively felt artificiality of the interview situation.

In the present study the principles of qualitative social research have been realised to a satisfactory extent, as the interviewer as well as the interviewees had previously spent a lot of time in the environment researched.

The quality of the interviews varied however, as can be seen from the length, which fluctuated greatly between half an hour and two hours. [11]

The interviews focused on a comprehensive assessment of the social effects (see above). The standard question was, "How did you arrive at this assessment?" In addition, the variables 'Neglect of RL-network' and 'increase in ability to make contacts' were discussed if applicable. The interviews were opened with an assessment of MUD-social life.

The interviews were recorded via the log-function of the MUD-clients and evaluated according to the method of content structuring (cf. Mayring, 2003, p 89). A system of categories developed to accompany the conversation themes was applied to the data and extended successively until it contained all relevant parts of the text. The overview thus gained (To which aspect have the interviewees responded in which way?) was the basis for a quantifying analysis. The central dimensions *neglect of RL-networks* and *overall assessment of the social effects* will be explained below.

To emphasise the real strength of qualitative studies – the analysis of correlations, the structured analysis was supplemented by a further step. Two interview-texts which describe disintegrative or integrative effects particularly strikingly were analysed in their contexts (case studies *Ulrike* and *Julia*). Paraphrased statements from interviewees were related to each other (e. g. disappointments in RL – exaggerated expectations of VL – retreat from RL – disappointments in VL – de-compensation in RL) in order to understand each case in the entirety of the interacting factors.

Neglect of RL-network

Eleven of the 20 interviewees [12] had stated in the quantitative interviews that they neglected their RL-friendships "at least over a period of time". Seven of them have

ended this phase since then. None of these episodes is/was without importance, in fact the interviewees report a length of half a year to one year. As symptoms some of them mention a *loss of initiative* (Anja, 25 years: "I used to go out more often and to pop in on friends, or whatever, but I hardly do that any more."; Ralf, 26 years: "I used to have the reputation for turning up spontaneously, but even that has reduced"), without exception however they mention *a retreat from joint activities*, up to *completely spending their spare time on playing the games*.

Thus some interviewees spent "every free minute on the computer" (Bernd, 29) during their main period of playing, which (temporarily) lead them into *self-isolation*, such as Ulrike ("in my peak period I (had) hardly had contacts with anyone") or Holger (27) ("contacts become rarer and rarer or there's no one there"). It can be especially difficult after having moved, when new friendships should be made. Two interviewees fled from this task into the virtual world of 'Avalon' and concentrated entirely on their online relationships, which even accelerated the erosion of the old networks. "one tends (through mudding) very easily not to take on the effort of making new friends – at least not (...) so the friendships slowly die out" (Georg, 18) (cf. also the case study of Ulrike).

However, (complete) *self-isolation* seems to be rare. The other nine interviewees said that they had kept up their RL-relationships alongside their playing. This is also true – when applicable – for partnerships, which however can be noticeably damaged. Several interviewees spoke of *partnership conflicts* with aggression originating from the partner ("my girlfriend complains when I'm hanging around in Ava and she's there", Holger) as well as the player ("I'm just cross when i'm sitting on the computer and someone comes and wants something from me", Anja). Anja ("I don't know if I'm mudding because I've retreated or if I'm retreating because of the mudding") says explicitly what others indicate implicitly: The reason for neglecting the RL-network is not the MUD alone, in fact an interplay usually starts here between a social and/or psychological problem and the apparent temptations of the virtual world. This interplay is inscrutable for the interviewees and can therefore acquire a dynamism of its own (cf. the case-study of Ulrike). A network which is stable before the beginning of playing, however, contributes significantly to keeping social damage to a minimum – not least because the RL-friends were the main reason for all players concerned to rearrange the priorities of their spare time activities. Some have found out that online-relationships cannot qualitatively compete with RL-relationships ("I'm also a person who needs to go out, and a mud cannot replace that completely", Ralf), or the erosion of their RL-network has woken them up ("the worst thing was that from the beginning I wasn't asked about meetings at the weekend because I was going to be mudding anyway and wouldn't join. That was the event which led to my principle of putting RL before VL", Enno, 18). In other cases the closer environment took over the function of a guardian, as in Clara's (27) case ("it all has become normal again – I neglected my RL-friends for a while and got quite a kick up my backside for that") or Dirk (29) ("my ex-girlfriend gave me a talking to, and so did the person who brought me here and a good friend"). As MUD-users usually have rather large networks (cf. Götzenbrucker, 2001, p 189), it can be expected that normally the phases of social neglect – despite their length and worrying symptoms – do not lead to a permanent disintegration of the players.

It should also not be overlooked that the temporary neglect of RL-contacts is merely *one* aspect of the social effects. For instance three of the eleven interviewees state that their ability to make contacts (also with regard to RL-encounters) has increased, seven of them have made new acquaintances, six have made new friends over the MUD and three had met their present partner via the game. But it needs to be said that using a MUD can with unfavourable predispositions contribute to processes of social disintegration and even psychological illnesses.

The interplay of social retreat and psychological de-compensation: The case of Ulrike

Ulrike's personal and social background is problematic. She indicates conflicts in her family that may be the reasons for her illness (asthma, allergies), which she describes as psychosomatic. A crisis arises when Ulrike leaves home and starts her first job. [13] During this period she starts playing 'Avalon' and quickly develops traces of addiction. "everything was alright while I was living at home but I moved out and then I had a few months where I switched the computer on after work and mudded then until I went to bed and did the same the next day..." Ulrike uses 'Avalon' as a retreat in which she hopes - while allowing the contact with the few RL-friends she has to die - to eventually find fulfilling relationships. Following her "wish ... to once trust", she puts down her "natural armour". Ulrike has always been distrustful and reserved towards others in order not to get hurt again. In the (seemingly) protected virtual world however, she loses all inhibitions. "but I did exactly the wrong thing, instead of becoming a bit more open in rl, I was naive enough to just follow my dreams and only saw what I wanted to see here." Ulrike created the persona of "little elf", through which she played out parts of her personality that she had otherwise hidden ("I often behaved like a little girl"). [14] She is very much aware that her RL-personality is not identical with her avatar – but the men she meets online are not. She also does not consider that real expectations might be hidden behind the male players' virtual declarations of love. When she is confronted with them, she feels she is being put under pressure and flees into virtual suicide (deletion of the avatar), "men who tell you after one week that they cannot/don't want to live without you any more, who impose themselves on you ... scared me so quickly that i didn't want to play any more." However, after a short time Ulrike returns to 'Avalon' with a new avatar and again thrusts herself into romantic online-relationships. She is obviously lacking alternatives at this time because she has tied herself completely to MUD, socially and emotionally.

She now increasingly mixes the real world and virtual world and agrees to RL meetings. They are – after Ulrike has projected her yearnings on the online-relationships – disillusioning. The negative climax is a visit to another player, who puts her under enormous pressure. "he wore me down psychologically ... I even slept with him because I'm scared that he will harm me while I'm there." Caught between such hurtful experiences and the social-emotional dependence on the MUD, Ulrike's situation becomes worse and worse. "I was sick of everything ... I think I spent 3-4 months in front of the computer, crying every day and there was nobody who I could speak to about this, except in the mud, and that tied me to the mud even further".

After a super-regional MUD-meeting her illness escalates. "I just didn't feel well because asthma was more severe than ever before, allergies were severer, I had bronchitis every 2 weeks and had a temperature all the time." Ulrike is examined in hospital and is told a diagnosis that surprises her: "physically I'm completely alright, I'm suffering from kind of (blabla dystonia ... don't remember what it's called) a kind of youth depression ... I'm absolutely convinced that it was due to the mud."

Eventually, Ulrike finds new stability in a number of "real" friendships which she has made via 'Avalon' but mainly in her partnership with another player. Ulrike stresses that this relationship did not start in 'Avalon' but during the MUD-meeting, "I really insist that I fell in love with my boyfriend in rl, that is very important for me. for all emotions which take place here (in the MUD, the author) are only illusions for me..." As a consequence of the hurt she experienced, Ulrike transferred her "armour" from real life to virtual life. "I didn't have an ideal life but I had never felt so humiliated before as by these two incidents, that's why I can't trust anyone into whose eyes I haven't looked."

Ulrike herself considers her playing to be the cause of her depression and the self-isolation connected with it. However, when one looks at her personal history the interpretation seems reasonable that the *cause of* the destructive processes was her family and the *trigger* was the change-crisis after she had left home. Using the MUD simply *affirmed* it. The same crisis was connected with Ulrike's biographical/psychological problems. Wishing to flee from the pressure of RL she set up the illusion of an ideal persona in an ideal game-world that maintains ideal relationships. Against this background the collision with reality meant a breakdown, especially as transfer processes ("to become more open in rl") were not possible due to the gap between the two worlds and personalities. It was only the retreat from the world of illusions she had set up that allowed Ulrike to come to terms with her life and to form constructive relationships over the MUD.

When asked for an overall assessment, Ulrike weighs her positive and negative experiences of relationships and comes to a neutral assessment (0). Other players refer to far fewer hard facts. The number and reliability of the newly formed relationships in particular are less consistently used as a criterion than would have been expected.

The following paragraph aims first to give an overview of such effects and then to explain them in greater detail with the help of another case study.

Overall assessment of social effects

To explain positive assessments the interviewees surprisingly often mention abstract aspects (*enlargement of social horizon*, *gaining of experience* etc.), as Bruckmann (1992) and Utz (1995) reported out about the social benefit of MUD-participation. Negative assessments, in contrast, are usually attributed to the concrete consequences on RL relationships. The following table gives an overview of the assessments.

Codename	Age	Assessment	Reason
Holger	27	-2	damaging of RL social-network
Anja	25	-1	damaging of RL social-network, conflicts in partnership
Kai	21	-1	conflicts in partnership
Ralf	26	(-3) 0	conflicts in partnership that were settled
Lars	22	0	preference of RL-experiences
Ulrike	20	0	finding a partner, impeded by negative experiences
Niels	24	+1	enlargement of social horizon, gained friendships, increase in ability to express oneself
Patrick	25	+1	finding a partner, gained friendships, preference of RL-experiences
Sven	24	+1	gained friendship
Timo	29	+1	increase in ability to make contacts, gain in friendship
Georg	18	+1/-1	enlargement of social horizon, damaging of RL social-network
Clara	27	+2	gained friendship, clearer awareness for relationships
Enno	18	+2	gained friendship and experience
Ines	25	+2	enlargement of social horizon, gained friendship, finding a partner, conflicts in partnership
Marco	22	+2	finding a partner, gained friendship
Olivia	20	+2	gained experience, increase in ability to make contacts
Bernd	29	+3	gained experience, finding a partner
Dirk	29	+3	finding a partner, increase in ability to make contacts, gained friendships
Julia	35	+3	increase in ability to make contacts, gained friendship
Frank	27	+3/-3	finding a partner, loss of partner

Two of four negative assessments are explained by *damages to the social RL-network*. Holger expresses this most clearly, "A I spend a lot of time on the PC, i. e. in ava ;), B I rarely go out, C I rarely meet people, D other activities? what's that?" Furthermore, *partnership conflicts* play an important role. Anja and Kai may have made several friendships (some of them close friendships) in the MUD but focus in their assessments only on the problems with their partners who do not play (both: -1). The same applies to Ralf. In the quantitative interview he replied with –3 because the extent of his playing had lead to conflicts with his partner. Since then Ralf has reduced the time he spends in the MUD and regards the social effects literally as neutral (0). He does not consider the two close friends he has met in 'Avalon' in his assessment.

The fact that changes on the partnership-levels are usually considered to be more important than processes of general (dis-)integration can be seen from the comparatively good assessments. Frank also refers to experiences with women in order to give reasons for his ambivalent assessment, "+3, because i met a very exciting woman there at the same time". Those interviewees who found a partner, like Ines (+2), Bernd (+3), Frank (+3) and Marco (+3), generally classify themselves at the top end of the scale. (Earlier) conflicts with partners (Ines) or damage to the social network (Bernd, Frank) fade into the background or are not taken into account at all. Only Patrick's assessment (+1) is rather cautious, "well, I got to know (partner's MUD-name) here, but after we formed a real partnership, avalon faded into the background". Lars also indicates such a *preference of RL-experiences*. It is true that he has made new, occasionally close relationships but he regards these effects as neutral, "if I had made more friendships in avalon than I make previously or otherwise, I would have given it a +, if I had formed fewer friendships, or had lost friends, then a -. the 0 merely expresses for me that avalon is as communicative as anything else I do." Marco too assesses the social effects in relation to his previous social life. He has classified them e. g. as +3 because he has met "a very good (female) friend ... and a few good friends" in 'Avalon', "not a +4 because I had a good social life beforehand". This shows that the *gain in friendships* is assessed differently by the interviewees – while neither the quantity nor the quality of the new relationships are at the centre, but rather the quality of the difference which the new relationships make to the established standard (cf. the case study of Julia).

Concrete changes in the network, in the sense of newly made relationships, also play a minor role in the categories *increase in ability to express oneself, sharpening of awareness for relationships, increase in ability to make contacts, gain in experience* and *broadening of horizon*. The first two categories are based on single observations. Niels mentions as a reason for his positive assessment (+1) that he has learned from the MUD-communication to use E-mail and SMS services more effectively to maintain his friendships.[15] Clara (+2) says that "actually only my absence from my rl-friends and people's reactions made clear to me .. what good friends I've really got". Four interviewees refer to the *increase in ability to make contacts* (Timo +1, Olivia +2, Dirk +3, Julia +3), but none of them mentions an enlargement of the RL-network as an immediate consequence. Enno (+2), Olivia (+2) and Bernd (+3) argue similarly with regard to relationships to partners. Although no steady partnerships have developed from their romantic contacts with other players, they consider the encounters to be "also a great experience" (Enno). Others have found out a *general enlargement of the social horizon* in their personalities. Ines (+2) has made contacts

with people "who I would never have got to know more closely in rl (because they come from a different area, different society or because of differences in their appearance). here one takes more care of what someone says than of what he is, what he looks like. that's positive because it also sets different standards for relationships".

Georg (+1), Olivia (+2) and Niels (+1) say roughly the same, "I've met a lot of people here who I otherwise would never have met – and I think it helped me to gain different perspectives, which I wouldn't otherwise have had." [16]

Thus the MUD offers specific chances for *a change in relationship standards*, which from the point of view of the interviewees is the decisive social effect. People come together via the same hobby and gain their first impression of each other simply through their behaviour while playing. Anyone who acts in a friendly, helpful or witty and amusing way will probably find virtual friends. At real encounters such a friendship can be transfered to RL, although under different circumstances the participants would have remained strangers due to their looks or differences in personalities. These possibilities will be explained in another case study.

Overcoming isolation through playing: The case of Julia

Like Ulrike, Julia is also in a deep crisis when she starts playing. Her marriage has failed and her social network – which mainly consisted of her husband's friends and acquaintances – has almost fallen apart. She lacks the self-esteem to form new relationships ("in rl I'm so full of complexes"). At the time when Julia starts playing, she has almost completely stopped her RL-activities.

Because of this, Julia, in contrast to the majority of interviewees, explores the MUD without being introduced by friends – "a lucky coincidence", as she calls it. The contacts she makes online surprise her positively, "I had drawn back quite a lot and didn't believe in the good in people any more – and suddenly I meet people who don't care what I look like or what I do otherwise." [17] However, in contrast to Ulrike, Julia does not try to be someone else in the MUD, but she opens herself to other players with her problems and finds understanding and support. "now I know that I'm not alone with this – and that things could be worse." Julia even goes so far as to attribute a quasi-therapeutic effect to her MUD-communication, [18] "I've found out through it that in principle all my problems can be traced back to one basic problem (...) that is something which some people cannot understand in rl – they think I need professional help, and I say i'm curing myself at the moment." Julia prefers the online-communication to a real therapy, not despite but because of its restricted modalities. In the MUD it is "much easier than in rl" for her to talk about her problems "because I'm too insecure in conversations – for lack of self-esteem". This does not mean, however, that Julia discussed her intimate problems with strangers. She only discusses personal matters with other players to whom she has already set up a relation in RL – then however she prefers to do it online. [19]

Maybe it is exactly this mixture of self-revelation and –restriction which makes Julia regard her MUD-relationships as satisfying also in RL. She assumes that she has met more than 100 Avalonians personally and has made closer contacts with 30 of them. However, Julia regards "not more than 5" players as her friends with

geographic distance preventing her from making closer contacts, "I occasionally visit one at the weekend."

Measured by objective criteria, the social benefit which the use of the MUD means to Julia is therefore quite marginal. The increase in *ability to make contacts* she mentions has hitherto not worked any miracles either, "rl I still don't go out very much – but if I do, I now make contacts here much faster." Despite these restrictions Julia has assessed the social benefits of her MUD-participation with +3. In her interpretation the seemingly minimal changes in her social life are the important breakthrough, "I just consider it very positive that I now travel much more because of the mudding than I used to and have met many more people – normally I didn't make friends so easily."

On the basis of the same MUD-specific structures (social contacts with relative anonymity), over which Ulrike stumbled, Julia has changed her life positively – at least from a subjective point of view. This apparent paradox disappears when the ways the two women use the MUD are compared. Ulrike separated her RL- and VL-personalities from each other and thus prevented constructive processes of transfer. Julia on the other hand regards her on- and offline personalities as "largely the same" and can link them to each other. In addition, Ulrike – following the illusion of a 'better world' – put down her "armour" abruptly, while Julia opens herself in both worlds only when she has collected valid indications that her partners are trustworthy. The differences in their actions are caused by different psycho-social resources, which in themselves can be explained by different biographies. Therefore Sherry Turkle (1999, p 331) seems to be right, "Life in cyberspace (she means MUDs, the author), just like life in general, does not offer equal opportunities for everybody."

Conclusion

The Avalon-study has an *explorative character*, i. e. its results are not quantitatively guaranteed but may indicate impulses for further research. This applies not least – as suggested initially – for the field of MMORPGs.

The central findings of the exploration can be described as follows:

The results of previous studies, according to which mudders often set up relationships with other players, are once more confirmed. The *high percentage of partnerships* is significant. In future research more attention should therefore be paid to the *finding of partners* via MUDs or MMORPGs, particularly so as they are considered highly important by the interviewees themselves. In addition, it would be interesting to research cross-sections of game-mediated friendships and partnerships. Studies about newsgroup-users (cf. Mc Kenna, Green, and Leason, 2002) as well as my own observations give rise to the suspicion that these relationships may indeed be stable.

However, besides the integrative effects, disintegrative effects of participation in such games are also evident. They mainly show themselves in a *neglect of the social RL-network* and can even lead to *self-isolation*. A *loss of RL-relationships* on the other hand was not found out in the present study. [20] The danger is mitigated by the fact that social neglect is usually a phase, the length and course of which are influenced by individual predispositions. This phenomenon also requires further research, in which people's personal situations should be taken into account.

Despite the negative consequences mentioned, the players' assessments of the social effects tend to be positive. The reasons for this are not always concrete changes in the social network, in the sense of gain in or damage of relationships, but more often *indirect effects* (gain in experience, increase in ability to make contacts, broadening of social horizon) are mentioned. The central issue of the assessments is the *change in relationship standards*. As aspects such as the players' outward appearance and their social background cannot be realised online, the mutual assessment is at first based exclusively on one's behaviour in the game. It is possible that this criterion is even more valid than the mainly verbal self-detection among users of chats and newsgroups (cf. Mc Kenna, Green, and Gleason, 2002, p. 11), for what is important for the interaction during the game is often not the words but the actions in which a game-partner's character becomes obvious in the situation. [21] This phenomenon could also be a fertile ground for research.

All in all the MUD with its specific structures offers *opportunities as well risks* with regard to social life. Which of them are realised depends –as in the case of successful or unsuccessful identity processes (cf. Turkle, 1995) – on the individual resources of the player.

Generalisations about the (dis)integrational potential of multiplayer-games like MUDs are therefor not possible from this perspective.

Works Cited

Bruckman, A. (1992) Identity workshops. Emergent social and psychological phenomena in text-based virtual reality, <ftp://parcftp.xerox.com/pub/Moo/papers/identity-workshop.rtf> [Accessed 15 Aug 2005]

Beißwenger, M. (2002) Das Knistern zwischen den Zeilen. Inszenierungspotenziale in der schriftbasierten Chat-Kommunikation, <www.dichtung-digital.com/2002/modemfieber/beisswenger.htm> [Accessed 15 Aug. 2005]

Döring, N. (1994) *Einsam am Computer? Sozialpsychologische Aspekte der Usenet Community*, <http://www.nicola-doering.de/publications/doering_94.txt> [Accessed 15 Jul. 2005].

Froschauer, U., and Lueger, M. (2003) *Das qualitative Interview*. Vienna: WUV-Universitätsverlag.

Götzenbrucker, G. (2001) Soziale Netzwerke und Internet-Spielewelten. Eine empirische Analyse der Transformation virtueller in realweltliche Gemeinschaften am Beispiel von MUDs (Multi User Dimensions). Wiesbaden: Westdeutscher Verlag.

Heinze, T. (2001) *Qualitative Sozialforschung. Einführung, Methodologie und Forschungspraxis*. Munich/Vienna: Oldenbourg.

Herrmanns, H. (1995) Narratives Interview. In Flick, U./v. Kardorff, E./Keupp, H./v. Rosenstiel, L. and Wolff, St. (eds). *Handbuch Qualitative Sozialforschung. Grundlagen, Konzepte, Methoden und Anwendungen*. Weinheim: Beltz, Psychologie Verlags Union, p. 182-186.

Lorber, M. (ed.) (2005) Computer- und Videospiele – Einstellungen und Nutzungsverhalten in Deutschland, Frankreich und Großbritannien. *EA-Studien Vol. 1*, 2005. <http://publish.electronic-arts.de/publish/page203287545117747.php3> [Accessed 15 Aug. 2005]

Mc Kenna, K. Y. A., Green, A. S., and Gleason, M. E. J. (2002) Relationship Formation on the Internet: What's the Big Attraction? *Journal of Social Sciences*, 2002 (1), p. 9-31.

Mayring, Ph. (2003) *Qualitative Inhaltsanalyse. Grundlagen und Techniken*. 8th edition. Weinheim; Basel: Beltz.

Parks, M. R. , and Robert, L. D. (1997) ‚Making MOOsic': The Development of Personal Relationships On-line and a Comparison to their Off-line Counterparts. <http://www.fragment.nl/mirror/various/Parks_et_al.1997.Making_moosic.htm> [28 Aug. 2005].

Schildmann, I., Wirausky, H., and Zielke, A. (1995) *Spiel- und Sozialverhalten im Morgengrauen*, <http://www.mud.de/Forschung/verhalten.html> [Accessed 3 Aug. 2005].

Sempsey, J. III (1998) The Therapeutic Potentials of Text-Based Virtual Reality. <http://www.brandeis.edu/pubs/jove/HTML/v3/sempsey.html> [Accessed 13 Jul. 2005].

‚Soleil'. MUDs as Social Learning Environments, 1999.
<http://www.medievia.com/mudslinger/solpaper.html> [Accessed 13 Jul. 2005].

Sonneck, G. (2000) *Krisenintervention und Suizidverhütung*. Vienna: Facultas

Turkle, Sh. (1999) *Leben im Netz. Identität in Zeiten des Internet*. Reinbek near
Hamburg: Rowohlt.

Utz, S. (1995) *Kommunikationsstrukturen und Persönlichkeitsaspekte bei MUD-
Nutzern,* 13 Jul. 2005, <http://www.tu-
chemnitz.de/phil/psych/professuren/sozpsy/Mitarbeiter/Utz/Diplom1.htm>.

Young, K. S. (1999) *Caught in the Net. Suchtgefahr Internet*. Munich: Kösel.

Notes

1 Götzenbrucker (2001, p. 188) uses the Fischer names generator in order to check
the quality of the realtions made or maintained over the MUD.

2 Their exact number cannot be given as Utz aggregates the data with the variables
'Neglect of studies/work' and 'Loss of realtion to RL'. However it remains to be said
that 47 out of 103 interviewees discussed such developments.

3 In fact, the early MMORPGs, the most popular of which is 'Ultima Online' were first
regarded as "graphic MUDs" not only by players but also by scientists (cf.
Götzenbrucker 2001, p 46). Only with the success of 'World of Warcraft' has the
expression MMORPG become generally accepted.

4 As on the one hand not all avatars saved are (regularly) used and on the other
hand single players use several avatars, their exact number cannot be assessed.
The figure is based on my own observations and the estimates of the administrator.

5 Selected results shown below.

6 These data do not indicate 22 couples, as occasionally both partners filled in the
questionnaire. However, partnerships are formed surprisingly frequently over the
MUD and may prove to be quite sustainable. In connection with the observations,
twelve couples were found during the period of research whose relations had been
made via Avalon and had remained stable for more than a year. Real marriages and
births can also be counted among the indirect consequences of participation in
Avalon (cf. Parks, Roberts, 1997, p. 11). In an investigation of newsgroup-users Mc

Kenna, Green and Gleason (2002, pp. 21-22) have proved in interviews of two steps that 71% of the romantic relationships made over the internet still existed after two years. That way they even proved to be slightly more stable than pure RL-relationships in comparable studies. It seems as if comparable effects could be seen for MUDs.

7 It was found out in a qualitative interview that two friends, both Avalon players, had quarreled over their different uses of the MUD and also due to the new partner who one of the women had met over Avalon. Since then their friendship has been renewed.

8 This result can be referred to the studies by Mc Kenna, Green, and Gleason (2002, p 23) about newsgroup-users, according to which social anxiety significantly decreased between the two periods of investigation.

9 Three of the 50 participants did not want to be interviewed, another six were excluded as I knew them quite well in VL and/or RL.

10 This applies particularly to MUDs and MMORPGs, where the players can make their avatars carry out gestures via *emote*-commands. MUDs offer the most opportunities to express oneself non-verbally as they are the most text-based. Firstly, the players can replenish the pre-programmed *emotes* individually (e. g. the input "nod to x understandingly" becomes "Y is nodding understandingly to you."), secondly the so-called ME-command permits the simulation of any gesture ("ME finds your answer interesting." becomes "Y finds your answer interesting.").

11 The time for an interview does not necessarily correspond with the success of an interview but in this case the reasons for shorter interviews were mainly the short and therefore unrewarding answers, which were answered only superficially even when asked again. The reason may be that the interviewees had different levels of motivation. As communication costs are much higher in internet-based interviews than in a face-to-face situation, a strong motivation of the interviewee is essential for the success of the interview.

12 For the analysis, the MUD nicknames of the interviewees were replaced by codenames. Excerpts from the interviews are quoted literally – but without spelling and typing mistakes for better readability.

13 Leaving home is considered to be a typical cause for a so-called change-crisis (cf. Sonneck, 2000, p 17), the genesis of which depends among other things on the "extent of social integration and earlier learning experiences." "There is no doubt that e. g. psychological illnesses or undigested earlier crises drastically increase the proneness to crises." (same, 18).

14 cf.: Turkle (1995, especially pp. 285-339)

15 In an interview with other players which 'Soleil' (1999) carried out in the MUD 'Medieva' people repeatedly mentioned a gain in competence in the fields of reading, writing, typing and expression.

16 In the study carried out by Utz (1995, p. 38), 12 of the 103 interviewees also mentioned as positive consequence of MUD-use that they had broadened their horizon and overcome prejudices. Obviously, this is an important category for all users. Amy Bruckman (1992, quoted according to Utz, 1995, p. 21) remarks: "That world is first and foremost social. One cannot fail to develop a greater understanding of social phenomena through living within it."

17 Mc Kenna, Green, and Gleason (2002, p 28) have proved that two factors are particularly important for developing close and lasting relationships over the internet: Firstly, supported by anonymity people seem to be more willing to reveal themselves to others. Secondly, certain gating features are dropped due to the reduction of channels, especially the feature of physical (un-)attractiveness, which under certain circumstances prevent relationships from being taken up in RL. Relationships made on the internet can be transferred to RL-relationships, by avoiding the gating features so to say. This agrees with Julia's opinion, according to which the "understanding" between her MUD-friends continues also in RL.

18 Sempsey (1998) mentions a number of studies that prove that MUD-use can have therapeutic effects. "These reports typically centre around the themes of members having attained a heightened sense of self-actualization". In his opinion these game environments could even be used for forms of professional therapy, as e. g. the psychodrama.

19 This seemingly paradox behaviour has been reported several times, e. g. Kai's best friend talks to him about sexual matters only on the MUD. For these players, the 'anonymity' of the online communication does not function as a mask behind which they hide, but rather as a shelter in which they can *reveal their true self* (cf. Mc Kenna, Green, and Gleason, 2002).

20 However, the scale of the sample group as well as the partly self-selective sampling do not allow general statements. Therefore a check on a representative basis is still missing.

21 One player is even of the opinion that one could find out a person's character more easily in the gameworld than in RL because often 'existential questions' are dealt with here. As an example he mentions the situation "when one dies and loses all one's possessions and a mud-partner who you know finds them by chance and waits till you're back again, and then asks you, is worried about you etc. In rl you can't return any more".