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Virtual reality on the stage.

Performing community at a LAN-Party.

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Introduction

The early 1990s provided us with a variety of fantasies and fictions about how life in virtual reality could or would be going to take place in the near future. Inspired by William Gibson's well-known novel "Neuromancer", cyberspace was thought of as a perfect illusion and complete immersion, achieved either by heavy and clumsy prosthetic apparatus or, more elegantly, by neuro-elektronic interfaces, directly stimulating the Cyberspace Traveller's brain. All these science fictions performed a certain vision of a virtual *existence* sui generis, and at the same time pointed at a flaw which real-life cyberspace-experience suffers from: the absence of a certain kind of ‚reality'. From "Tron" to "Matrix", the vast majority of cyberspace fictions have been based on the idea of an immersive machinery which affects the health and life of the person connected to it, and does not allow that person to disconnect from the apparatus without risking their life. In the 1990s, the visions and concerns uttered in the public and scientific discussions about cyberspace and internet use all pointed in a similar direction. Whereas an increasing amout of users engaged in internet activities appreciated the unlimited freedom made possible by the absence of, for instan-

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ce, bodily identity markers (Turkle 1995; Danet 1998, Funken 1999), complains about an increasing "flight from reality" and its impact on socialization and people's ability to cope with the challenges of everyday life entered the public discussion (Steurer 1996; Becker/Paetau 1997; Stengel 1997; Guggenberger 1999; Urban/Engelhardt 2000; von Hentig 2001).

Nowadays, after a decade saturated with various forms of "cyberhype" (Maresch/Rötzer 2001), we are experiencing that what Wolfgang Welsch addressed as the "intertwinement" of the virtual and the real (Welsch 2000:35), is to become an *overt* part of everyday life. Of course, according to Welsch, reality is "virtual to begin with", which means virtuality is not a mere achievement of a high tech civilization but something inherent within every conceivable form of reality. But it is the changes caused by the development of new media which has brought a kind of *concrete* experience of virtuality into everyday life, offering and forcing people to handle and explore the possibilities and applicabilities of the new spaces opened up by computer technology.

So, rather than repeating discussions about how terms like reality, real life, virtuality or virtual reality should be defined, I want to point out the *social use* which is made of those different versions or layers of reality. With this purpose in mind, I would like to present the recent phenomenon of a LAN-Party as a rich and complex field of investigation.[1]

What is a LAN-Party?

LAN-Parties are, to put it simply, conventions of predominantly young men of mostly somewhere between eighteen to twenty-five years old; the parties range in size from twenty to a thousand (or even more) participants, who meet for a weekend, lugging their computer equipment to a rented location to play computer games through a locally installed network ("LAN", or Local Area Network). Typically scheduled to take place for a whole weekend, many players travel great distances at considerable

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[1] The empirical observation which partly provides the basis for my following remarks is part of a project called "The Emergence of the Social in Rituals and Ritualisation", which itself is currently being carried out within an interdisciplinary research project in Berlin entitled "Kulturen des Performativen" (cultures of the performative, see www.sfb-performativ.de). Our material is based on participant observations at two LAN-parties as well as several interviews and group discussions with participants of those parties.

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cost to come and join these usally noncommercial events. One of the LAN-Parties we observed, involved about threehundred players, and required more than fourty organizers who worked up to several weeks free of charge.

At a LAN-Party, it's all about game-playing. The parties we observed had no defined starting point, no intermediate events (except for gaming-tournaments of course) and no defined ending. There was no other particular attraction within the parties which could have made participation especially exciting, except for game-playing itself. The curious thing about this is that the games and tournaments can be played just as well over the internet, like it normally takes place, which is much more convenient and also cheaper. This begs the question: how could LAN-parties have become such a common phenomenon? To understand this, one has to consider the particular characteristics of gaming-culture and the symbolic content of the games played.

Counterstrike and the genre of First-Person-Shooters

Since the middle of the 1990s at the latest, computer games have become a usual part of youth culture. With regard to the issue of LAN parties, the genre of so-called first person shooters is of major importance. In early 1990s, the infamous game *Doom* and its successor *Quake* hit the market, being the first three-dimensional games that also provided a simple network option. Further versions and new game developments, such as *Duke Nukem* and *Unreal*, soon followed. These games mainly differed from each other in their technical developments and improved graphics, while the frameworks remained all quite similar, containing a marginal narrative framing of little importance to the game itself, which essentially consisted in running through environments, killing aliens, monsters, mutants or zombies by means of chainsaws, axes or futurist laser weapons. In 1998, a further First-Person-Shooter called *Half-Life* came out. This one was different to its predecessors insofar as the ac-

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tual game was embedded into a narrative structure. The game involved leading an ironically broken protagonist of a science fiction story through various adventures and, of course, killing all enemies. *Half-Life* showed far less splatter effects than previous First-Person-Shooters.

This, one could say, was the beginning of a very particular online-gaming-culture. Three passionate computer game players, who were unsatisfied with commercial shooter-games, programmed the game *Counterstrike* as a modification based on the graphic engine of *Half-Life*. The story as well as the original setting and the single-player-option were removed. A pure multiplayer-game remained, which inherited the possible movements of the avatars, the possible architectures and landscapes and also *Half-Life*'s rather reductive style of performing fight scenes. The creators of *Counterstrike* removed anything that would prevent the game from being a fast, straightforward multiplayer-shooter. Even the first beta-version of *Counterstrike*, which is available as freeware, found world-wide resonance and distribution. Because Counterstrike is designed for Teamplay and can hardly be won without the collaborative interaction of the team members, this game, like none of its predecessors gave rise to dedicated online-gamer-communites, which began to meet regularly as a permanent team. So-called *Clans* are the smallest social units of about ten to fifty members. Exchange in or between the various clans is mediated by servers dedicated to coordinating community activities as well as providing a public common place for discussions. The Counterstrike-Community is a dense, complex conjunction of players based on social organisations and interactions taking place on the clan-level.

Clans

Clans show various, mostly democratic, forms of self-organization, but all Clans we got to know had given themselves explicit statutes. There are clan leaders, deputy leaders, treasurers, squad leaders, full members, junior members and trial members.

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Clan members usually live in different regions, and the odds are that they have never met all together at the same time face-to-face. Clan members usually meet online where they join the clan's own (rented) server at fixed training times, and talk through a voice chat system. Strategies and tactics are practised, and player skills and internal organizational issues are discussed. After training, or even when there is no training scheduled, clan members often join together, to "simply chat" about everyday problems, as if they were in a local pub. For reasons that have yet to be portrayed, social relationships within one clan are often charaterized by solidarity and even emotional ties. It is intriguing to observe how clan members who have hardly ever met face to face (or at least only very seldom) welcome each other at a LAN-Party with friendly and warm gestures, signalizing a high degree of closeness.

Although there are several levels of ambition a clan may aspire to, from "just-for-fun"-clans to "pro-gaming", that is, clans that reach a professional level, sponsored by firms and taking part in international CS-gaming championships, even the less ambitious clans measure themselves up regularly against other clans either in so-called "fun-wars", or in organized, official tournaments. This allows for closer contacts between clans that may result in further social activities, such as hosting a LAN-Party together. The use of online-tournaments facilitates an extremely widespread social network without which the substantial cohesion of the *Counterstrike*-community, which in Germany consists of tens of thousands of clans and more than 250.000 clan members, would be unthinkable. The players who participated in our group discussions told us that they knew or could recognize at least a hundred clantags (abbreviated clan names) and that they could remember particular online-encounters even after years. This underlines the importance of role names within this subculture.

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Clantags, Reputation and the Taboo of Cheating

Within the *Counterstrike*-Communities, names serve the purpose of performing/presenting an image of a clan or a person. Depending on the ambition of the clan, ironical and martial clan-names are to be found as well as names referring to particular movies, or names emphasizing the sporting aspect of the game. The clanmembers either choose their nicknames themselves, or they take on names that relate to the clan's theme. So, for instance, if a clan called itself "Join the Matrix", the Members would be named "Neo" etc. The abbreviated clanname is used as a prefix of the player's name ("[JtM]Neo"), which makes it possible to immediately identify any player as a member of his clan. This kind of name-giving serves an essential function within *Counterstrike*-onlinegaming. Clans usually take special care that their members do not affect the clan's reputation in a negative way. This refers, first, to appropriate manners: members who for instance show verbal disbehaviour get warned by their fellows. But a clan's reputation relies above all on its members not cheating.

Cheating-Tools are small pieces of software that allow a player to look through walls, never to miss an enemy, never to loose, or to loose less than a normal amount of "health points" when injured, and so on. The development of cheating tools and the corresponding anti-cheating-software resembles a continuous arms race, which demonstrates that cheating is obviously a common phenomenon which seems to serve the needs of a certain part of *Counterstrike*-players. Of course cheaters are never liked, regardless of the game. But in this

case we found this to be a highly emotionalized issue, raising strong rejections. Cheating in the Counterstrike community is literally a taboo. In respect to the constitution of the *Counterstrike*-community, it takes the place of the untouchable, the *sacer* (which can mean both, sancity and its opposite). One administrator of a clan server,

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whose tasks included being aquainted with available cheating tools, stated that under no circumstance would he install cheating tools on any of his computers. He acquired his knowledge of the cheats by studying videos which demonstrated several cheating tools. In this way, he could remain totally untouched by the taboo.

Whoever gets caught using cheating tools must expect to be banned from the game servers, to be expelled from his clan, and to lose his whole online-existence. Someone who cheats thus touches the untouchable, so to speak, and is literally sacrified as a scapegoat. An anti-cheating-trailer, which is available over the internet[2] and highly appreciated by the players we interviewed (who of course were aware that this was an enacted scene), stages the sacrificing of a cheater, and demonstrates clearly the amount of mimetic violence involved in the act of exclusion (to follow Girard's (1972) concept), as well as the union of the community as a community of non-cheaters.

What makes cheating such a taboo? Cheating discourages the efforts of the other players. Furthermore, whoever cheats takes on a god-like power that no single indivdual is entitled to within this game culture. Like in every team-based game, players achieve the power of their team by handing over the power of their own actions to the collaborative demands of the team as a whole. It is this experience of emergence, of becoming a part of a whole, of entering into a flow of integration into the team coordination, which defines the appeal of *Counterstrike* for the vast majority of players. Cheating is a direct assault upon this sense, upon the community itself and the integration of the individual into this greater whole.

Companions in distress

The *Counterstrike*-Scene presents itself as a community guided by common values. And to me, although I have not been able to verify this by contrastive analyses, it seemed that the social relations within a clan are marked by a much higher degree of

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[2] http://www.cs.4players.de/download_file.php3?DOWNLOADID=1132 [20.6.2003]

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emotional involvement and willingness to act in solidarity as is likely in, say, sports clubs. Although I have made some remarks on *Counterstrike*, a closer look at this game is required. *Counterstrike* constitutes the main content of the everyday-life of online-gaming and is the central component of lanparties. It is thus a very important conjoining element between those two different forms of social encounter, and as such it is of central importance for our understanding of these issues.

Because computer games rely essentially on images, - albeit virtually three-dimensional, moving, interactive images - the analysis of computer games is based on their visible contents. I do not mean to throw up the question of how to analyze these kinds of images that are constituted by the actions of several people at any one time and in which, the algorithmic dimension of the game software and the pragmatic dimension of people's actions and reactions form an indispensible conjunction. Suffice to say that we consider the performative dimension of the game, or the execution of playing the game, as an essential element for the interpretation of a computer game's iconologic contents.[3]

The representation of body, death and space are key aspects for understanding the iconological contents of the game. Because of limited space, I will only mention these aspects very briefly.

Even if, at first sight, the action of killing appears to be predominant, analysis of the body model and the presentation of dying and death as they appear throughout the course of the game shows that it is rather a kind of „suspended death": properties of real mortality like vulnerability, bodily malfunctions, indefinability of dying as a state somewhere between life and death, and the finality of death are nearly completely missing within the pictorial presentation. The representation of death and dying is withdrawn, for the benefit of the concentration on the gameplay, but it is still sufficient to stage the body of a hero who sacrifices himself for the victory of his team, now collapsing in death with a masculine moaning. *Counterstrike*

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performs the suspension of death by means of the survival of the Team.

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[3]   For   a   demonstration   of   the   *Counterstrike*-Gameplay,   look   here: http://www.cs.4players.de/download_file.php3?DOWNLOADID=1269 [20.6.2003].

Clarity, strategy and control are further properties of the virtual environment of *Counterstrike*. Despite their vast number, the maps remain aesthetically interchangeable. Yet the term „maps" already signifies the reduced perception of the various landscapes and arrangements. The strategic possibilities a map offers are all that counts. The point of this teamplay-shooter is that the maps are completely known by the players. The environment of *Counterstrike* is, as turned out in the group discussions, a strategic space that allows for a smooth coordination of the team, which ideally acts as *one body*. *Counterstrike*, as the players stated, takes place in „the mind", on a map internalized by all team members; in a hidden, virtual room, only inhabited by the community of the players and their team spirit.

The rationality, emotional disengagement, clarity and controllability of *Counterstrike*'s models of body and space leave aside contingency, it presents a suspended death, divorced of existential connotations. *Counterstrike* enables a performance of the teams as companions in distress which share a common fate and act in solidarity until their very end. It is an existential experience made regularly within the community – or rather the simulation of such, but a simulation that is tied to the „real" flow-experience of being a part of a team, so that everyone knows without reflecting who he is and what place he has to take within the commonly shared maps of the game.

Online-communities and identity

Before I come to talk about the phenomenon of lanparties, I would like to take a further look at the nature of the social relationships of a clan-community. Wellman and Gulia (1999) suggest one to consider online-communities as social networks, containing weaker as well as stronger ties. To assess the possibility of strong, intimate ties in online-communities, they apply the following criteria:

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- a sense of relationship being intimate and special, a voluntary investment in the tie, a desire for companionship with the tie partner

- an interest in being together as frequently as possible, in multiple social contexts, over a long period of time

- a sense of mutuality in the relationship, with the partner's needs known and supported

- intimacy often bolstered by shared social characteristics such as gender, status, stage in life, and lifestyle.

Most of those items seem to apply more or less to the clans we got to know. But it's not only the emotional ties that make a community, nor the mere fact of altruistic behaviour. Communities are entities based on inclusion and exclusion, or identification and distinction. To call a social entity a "community" requires, in my opinion, that community members are able to gain an identity within this social space. As I have mentioned above, names and tags play an important role within the *Counterstrike*-community, signifying particular player-identities (in fact, one will rarely come across a real name at a LAN-Party or on a *Teamspeak*-server).

Identity, however, is based on mutual acts of recognition, following the most important point George Herbert Mead took over from Hegel. It follows a complex logic of desire (of recognition), where not only symbolic aspects are relevant, but also imaginative processes, as well as unforeseeable, unfiltered impulsive elements people bring into interaction (which, for instance, Mead marked as the phase of action, the "I").

So if one asks, as Wellman/Gulia (1999:85) do, whether virtual communities are 'real' communities, the possibilities and limitations of acts of mutual recognition in computer mediated communication have to be taken into account. With regard to the "classical" communication devices the internet provides, from which the *Counterstrike*-online playing differs in some aspects, the possibility of gaining an identity which is truly recognized by others is quite restricted, as I tried to show elsewhere

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(Jörissen 2003). Therefore, I argue that on the one hand, due to the necessity of 'translating' one's actions into symbols suitable to be transferred over the net, the persons transform themselves into *personae* (Krämer 2000), so that, on the other hand, the imaginary constructions of the other are missing a corrective because of the reductions of complexity, the moment of self-censorship and other known effects like increased friendliness and disinhibition (Ma 1996) occuring in computer mediated communication.

The image of the other is thus based on the image the other offers me to see (as a persona), without my being able to correct this image by means of the real presence of the other, which potentially brakes the smooth surface of the image we give to see of ourselves.

This affects my identity, which is structurally based on mutual acts of recognition, insofar as in CMC, it is totally based on images and imaginative processes. Identity remains a piece of fantasy, or rather, in case one forgets its state as a fantasy, it becomes a phantasma. This is the source of the freedom online-identities provide, but it also bears the threat that this identity

collapses in case the circle of the imannence of the imaginative it is based on stops functioning for some reason. Thus, I argue that CMC and online-communities are able to initiate a broad variety of social encounters, but that the real experience of the other and his bodily otherness are essential if one really wants to be what he experienced as a possibility of oneself in online-communication. CMC and online-communities are appetizers which arouse a desire of the other, maybe even an enjoyment of being different, but they alone cannot keep their promise.

The precarious constitution of the *Counterstrike*-Community

The following aspects are of central importance in defining the counterstrike community:

1) Fairplay, that is, not cheating – one of the essential criteria for inclusion or exclusion.

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2) Community (that is, a community of shared values, team spirit) that is brought out in teamplay but reaches beyond the game into a social network (involving social duties, solidarity).

3) Clan identity of the members that binds them to their social obligations and lets each individual share in the clan's reputation.

4) The fact that the every day activity of online-game playing takes place in a virtual environment (defined here as an environment to which one can only have access through a computer that it connected to the internet).

Each one of these constitutive aspects is – more or less – fragile or precarious:

1) It is difficult to establish with certainty whether a player is cheating or not. In fact it often occurs that players are banned from servers because they have played so well that they have been suspected of cheating. One of the main criteria for belonging to a community is thus without guarantee; the boundaries of the community are thus constantly endangered.

2) The community within a clan conceives and presents itself as a group of fighters thrown together by fate who are willing to sacrifice their lives for each other. We presume (but this is only speculation) that this simulated existential experience creates a certain strength in the the group cohesion, which goes beyond the game situation –

the immanent ludic character of the game itself, and the mere virtuality of the place of play.

3) If a player's identity is important to him, insofar as it is understood as his social position within a clan and within the further social network of the counterstrike community, this identity is an unsure, inconstant and unreliable one.

4) The virtual space as the place in which the game takes place and as the quasi „life Space" of online communities is a fragemented space, especially in the case of multiplayer first person shooters. It is a hidden space, only fragments of which

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can be seen on each individual's screen. It is in principal a half-public space but one that cannot be seen by a wide society. This is only confirmed by the misleading and misinformed portrayals of the game in the press. Two important aspects are relevant here: firstly, the virtual space of the game is one that is withdrawn from the society at large; it is a place of various liberties (of self enactment, of social position, of acting out aggressive and violent impulses); it is a space practically only accessible by insiders, which itself becomes used as the distinctive property of a group of mostly adolescent young men which define themselves as not-yet-adult. The virtual place thus stands for the whole of community experience, for experienced liberties and for a demarcation against immature computer kids on the one hand and non-playful, priggish adults on the other. Secondly, this withdrawal implies the problematics of recognition in respect to the public society (social environment, media, politics), which is a challenge to the existence of the community within the social world.

Lanparties as social rituals

In the context of our research project, our workgroup tries to conceive Lanparties as a new, playful form of social ritual, being aware of using a rather broad concept of ritual, taken as a heuristic tool, so that a transformation of rituals would be regarded by the research approach. Rituals would thus be described by the following items:

- demarcation from everyday-life
    - transgression of thresholds
    - cyclic structure of time, iteration
- mis en scene of the symbolic order of the society

- o   scenic arrangement

- o   bodily, performative inclusion of the participants (who have to be provided with a practical 'ritual knowedge')

- o   use of media (taken in a broad sense) as voice, writing or image

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- o   principal possibility of failure (or a mere performance of this possbility. The success of a ritual depends on the awareness of its possible failure)

Rituals are thus essentially understood as a social performance, in which the social order of a community becomes staged as well as renewed by the participation of the community's members. In the case of classic rituals, the elements of the sacred, otherworldly, otherness (alterity) and the taboo play an important role.

Taken as a form of rituals, one object of Lanparties would be the performance of the social order the *Counterstrike*-community is defined by. Or, in other words, Lanparties are the place of truth of the community as well as of its members. I would like to sketch out the plausibility of this stance in respect to the 4 constitutive items mentioned above:

1) Lanparties are performances of fairplay in the sense of not cheating. The immaculate state of the players is shown symbolically, so that they prove themselves as worthy members of their community, as well as really, insofar as at a LAN-Party, cheaters are more easily exposed. The anti-cheater-trailer as I mentioned above verifies this impressively by staging quite explicitly and dramatically violence against the cheater, a kind of „sacred violence" indeed, which restores the sacral room. Lanparties thus serve an essential function with respect to the online-gaming everyday-life, which is latently contaminated, by repeatedly performing the purity of the *Counterstrike*-Community itself.

2) By fighting the wars and tournament in bodily co-presence against other clans, clan member become a perceptible union. The squad members fighting side by side – or rather seat by seat – are the visible evidence of their companionship. Moreover, this companionship is reinforced by familiar gestures and manners, the clans own *habitus* so to speak (in the sense of Bourdieu), which would appear to exist, but has not been

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verified yet. As a further point, the acts in solidarity, like the financial support of a clan member who needed a hotel bed because of a back injury are emphasized explicitly: this and other performances demonstrating the reality of the clan's solidarity could be observed.

3) By meeting face-to-face, the identity developed within online-gaming everyday-life is confirmed, for instance by calling each player by his player's name, never by his real name. Here, the possibility is given of positive or negative revisions of the assigned identities. Players get to know each other in a very different manner than online, so they are able to assess the others on the basis of a face-to-face-experience, which again validates their own player-identity.

4) The withdrawn virtual community space is performed in multiple respects:

- Virtual reality is literally lugged into the social space of real life; the material aspect of the computers at a LAN-Party thus plays a considerable role. On the ocean of computerscreens, the virtual reality of the game as well of the act of game-playing normally fragmented and banned into the private homes of the players, becomes fictituously experiencable.

- In the same way, at bigger lanparties where a beamer and a videoshow is affordable the clips shown on the screen perform the unity of the game by showing live-cutted tournaments which put the fragments together, framing them by a narrative form. As a special issue, on one of the lanparties we observed how a video-trailer had been cut out of recordings from the same party and transmitted almost in real-time.[4] In this trailer, the penetration of virtual reality – the space of the game – and real life – the bodily-social space – is expressed. With that, the real life's opening to the liberties and community of the virtual reality is put on the screen, and vice versa the grounding of the virtual reality of the game within the material reality of ‚real life'. The merging of these two layers of reality achieved by the filmic depiction transmitted

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at the LAN-Party itself can be interpreted as an aesthetic increase which proves the interpenetration of both worlds by showing it as the center, the most important moment of this event.

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[4] http://81.2.183.22/inzzide.de/index.php?site=downloads&dlid=1 [20.6.2003]

- Finally, a LAN-Party creates a public visibility. It potentially provokes reactions of the public or the media, so that the concerns and matters of the community can be brought into society. In doing so, a further connection of the virtual common space is achieved by gaining public awareness.

Conclusion: the performative use of realities

While it is still an open question as to how the 'intertwinement of the virtual and the real', as Welsch conceived it, actually does or will take place, it takes a particular shape in the phenomenon of online-game playing and the lanparties related to it.

Both in the every day life of online game-playing, but much more clearly in the case of the LAN-Party, we could observe what may be called the ‚performative use of realities', that is, the utilization of different layers of reality to aims of performance. The virtuality of the real as well as the reality of the virtual are performed, by which, one might say, a particular politics of reality is pursued.

We are thus beginning to observe a social form of play with reality, which locates itself beyond the opposition of „the real" and „the virtual", and shows a practical awareness of this circumstance, which demands recognition.

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References:

Becker, Barbara/Paetau, Michael (1997): *Virtualisierung des Sozialen. Die Informationsgesellschaft zwischen Fragmentierung und Globalisierung.* Verlag Campus, Frankfurt, 1997

Danet, Brenda (1998): Text as Mask: Gender, Play, and Performance on the Internet. In Steven G. Jones (Ed.): *Cybersociety 2.0. Revisiting Computer-Mediated-Communication and Community* (pp. 129-158). Thousand Oakes: Sage

Funken, Christiane (2000): Körpertext oder Textkörper – Zur vermeintlichen Neutralisierung geschlechtlicher Körperinszenierungen im elektronischen Netz. In Barbara Becker/Irmela Schneider (Ed.): *Was vom Körper übrig bleibt. Körperlichkeit – Identität – Medien* (pp.103-129). Frankfurt/Main: Campus

Girard, René (1972): La violence et le sacré. Paris

Guggenberger, Bernd (1999): *Das digitale Nirwana. Vom Verlust der Wirklichkeit in der schöänen neuen Online-Welt.* Reinbek b. Hamburg: Rowohlt

Jörissen, Benjamin (2003): Who's online? Anthropological remarks on the construction of self and other in computer-mediated communication. In Birgitta Qvarsell/Christoph Wulf (Eds.): *Culture and Education* (pp. 122-134). Münster/New York: Waxmann

Krämer, Sybille (2000): Subjektivität und neue Medien. Ein Kommentar zur Interaktivität. In Mike Sandbothe/Winfried Marotzki (Eds.): *Subjektivität und Öffentlichkeit. Kulturwissenschaftliche Grundlagenprobleme virtueller Welten* (pp. 102-116). Köln: Herbert von Halem

Ma, Ringo (1996): Computer-mediated conversations as a new dimension of intercultural communication between East Asian and North American college students. In Susan C. Herring (Ed.): *Computer-Mediated Communication. Linguistic, Social and Cross-Cultural Perspectives* (pp. 173-185). Amsterdam/Philadelphia: John Benjamins Publishing Co.

Maresch, Rudolf/Rötzer, Florian (Eds.) (2001): *Cyberhypes. Möglichkeiten und Grenzen des Internet.* Frankfurt/Main: Suhrkamp

Stengel, Martin (1997): Primäre Sozialisation in virtueller Realität: Sieg des Scheins über das Sein? In Bernd Flessner (Ed.): *Die Welt im Bild* (pp. 271-296). Freiburg im Breisgau: Rombach

[40]

Steurer, Siegfried (1996): Schöne neue Wirklichkeiten. Die Herausforderung der virtuellen Realität. Wien: WUV

Turkle, Sherry (1995): *Life on the Screen: Identity in the Age of the Internet.* New York: Simon & Schuster

Urban, Claus/Engelhardt, Joachim (Eds.): *Wirklichkeit im Zeitalter ihres Verschwindens.* Münster: LIT Verlag

von Hentig, Hartmut (2002): *Der technischen Zivilisation gewachsen bleiben. Nachdenken über die Neuen Medien und das gar nicht mehr allmähliche Verschwinden der Wirklichkeit.* Weinheim: Beltz

Wellman, Barry/Gulia, Milena (1999): Virtual communities as communities: Net surfers don't ride alone. In Marc A. Smith/Peter Kollock (Eds.): *Communities in Cyberspace* (pp. 167-194). London: Routledge

Welsch, Wolfgang (2000): Virtual to Begin with? In Sandbothe/Winfried Marotzki (Eds.): *Subjektivität und Öffentlichkeit. Kulturwissenschaftliche Grundlagenprobleme virtueller Welten* (pp. 25-60). Köln: Herbert von Halem