

Virtualism and the stability of cyberspace¹

by Alexander Knorr

Abstract

The lack of a suitable understanding of reality experienced by human beings hampers the discourse on social and cultural phenomena produced by information and communication technologies (ICT). This lack generates misunderstandings which accumulate in 'Virtualism' – the notion of ICT-induced realms as a 'Gegenwelt', either in the form of an utopia or dystopia. In consequence the majority of the studies so far on the subject suffer from an utter lack of clarity of the discourse's ever-resurfacing core-concepts "virtual reality", "cyberspace", and "virtual community". In fact, throughout the literature a shared understanding of these concepts does not exist.

From a cultural anthropological background this article provides a new model of the experience of reality, which is based upon the works of William James and Alfred Schütz, and thereby bridges the divide between positivism/materialism and constructivism. By combining this pragmatic model with the history of the above-mentioned concepts, a sound basis for research on ICT-induced phenomena is generated.

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Introduction

„I'm not a techie. I don't know how these things work. But I like what they do, and the new human processes that they generate.“ (Gibson & Salza 1994)

WILLIAM GIBSON

Since the beginning of the 1990s social and cultural phenomena based on computer-mediated communication (CMC) have become more and more the focus of scientific examination and reflection. (For an overview see Hine 2000:14-40) Principally, sociologists, media-, and communications-scientists cope with this issue, but economists (Castronova 2001) and lawyers (Lastowka and Hunter 2003) also participate in the discussion and add research material to it. Social and Cultural anthropological publications have just begun to surface in this context, (Helmets 1994, Hakken 1999, Miller & Slater 2000) but the trend points upwards, reacting to the explicit demand. (Escobar 1994, Hakken 1996, Wittel 2000)

The internet and other ICTs not only provide the social/cultural anthropologist with a range of new research tools, (Schwimmer 1996, Stone 1997) but also societal changes which are attributed to the introduction of recent ICTs have caused quite some interest in the discipline of 'traditional' anthropology. (Pfaffenberger 1992) On-line interaction, especially, is apt to constitute a new field of research.

The latter's vicinity is often labeled by terms such as "cyberspace" or "virtual reality". The notion that "*virtual reality is primarily an imaginative rather than a sensory experience*" (Rheingold 1993:46), has had some impact on the related research, (e.g. Reid 1994 and 1995, Markham 1998) and definitely is a step ahead in the understanding of "virtual reality". Simultaneously it means striding on a slippery path, because this notion implies that there is an objectivizable difference between imaginative and sensory experiences. But constructivism and experimental psychology have shown, (Segal 1986, Watzlawick 1976, 1984) that every experience is a construction accomplished by the mind – including the ones triggered by sensorial input. (Crick 1994, Noë 2002) In the context of the internet the "problem of reality" (Schütz 1945, 1953) has become virulent anew. Most of the studies done on the experience of the internet suffer from the absence of a solution to this problem: there seems to be no practicable model of reality as experienced by human beings. The helplessness in this issue is manifested in the all-too-often used dichotomy reality vs. virtual reality. (see e.g. Bricken 1990, Chesher 1994, Reid 1996, Paccagnella 1997, Markham 1998, Weijdom 1998, Wellman and Gulia 1998, Sjøby 1998)

But does it make sense to label environments as either “virtual” or “real”? “*The origin of all reality is subjective, whatever excites and stimulates our interest is real. To call a thing real means that this thing stands in a certain relation to ourselves.*” (Schütz 1945:207) – The vital question is: Can it be *experienced* and if so, what degree of stability does it have?

A pragmatic concept of reality

To be able to understand what people experience and call reality, we have to start from the most basic assumption possible: **Every single individual has the impression of „being in the world“**. This implies that any individual is conscious of himself/herself and has the impression that there exists a world outside of this Self. (compare Reid 1998) This outer world commonly is felt and described as the world of physical things, which is experienced as the three dimensions of space plus time as a fourth dimension. Most of the time humans take this outer world as existent and hence call it “reality”.

Nevertheless the Self has no direct access to the outer world. All that is experienced comes to the Self as information. The Self only envisions the outer physical world, because information about it streams to the Self, seemingly via the sensorial channels. The Self only knows from the body it feels to be attached to, because information about it – like pain, a bad stomach, an orgasm etc. – streams to the Self.²

In the light of this we come to the compelling conclusion: the outer world is a hypothesis. But then why is it, that by the overwhelming majority of human beings “reality” is so completely embraced and undoubted? In fact, it is accepted without reflection, that this outer world has ultimate ontological status.

The essential criterium whereby the hypothesis of the outer world is believed without reservation, is its *stability*. This stability consists of two aspects:

1. The outer world seems to function by laws. That means, we can conduct the same action as often as we want and, *ceteris paribus*, will always get the same feedback. (In fact this is the basis for the method of natural science which demands reproducibility of an effect to be able to call it “real”.)

2. These laws seem to exist independently from ourselves, which means they can't be altered by our Self through acts of will. That does not mean that the outer world

² This argument is valid for the cartesian stance, as well as for the paradigm of the *body-subject* (Merleau-Ponty 2002[1945]).

cannot be altered – it obviously can. We sense ourselves not as mere spectators, but as integral parts of the outer world. As such we are able to act and our actions cause alterations. But our actions are limited by the outer world's laws, which themselves cannot be altered, only discovered and put to use.

A stunning aspect of human beings is the fact that we are able to perceive other worlds besides the one I called "the outer world." We are even able to regard ourselves to "be in" these worlds. There are the worlds of stories (novels, theatre, cinema), of daydreams and phantasies, of computer games, of nighttime dreams, and so on.

When, while reading a novel, we are grasped by the story, the outer world fades from our consciousness. Instead our mind becomes/is filled with vivid contents from the book: places, things, plants, animals, people. We have stepped away from the impression of the outer world into a reality which our mind constructs out of the information provided by the author and coded in the script of the book. „*You know, we open up the newspaper in the morning and we focus our eyes on these little inert bits of ink on the page, and we immediately hear voices and we see visions and we experience conversations happening in other places and times.*“ (Abram & London 1999, Abram 1996)

Despite of this astounding effect, the worlds of stories are far less stable than the outer world, since they lack interactivity. That means, the criteria of stability cannot be tested, as an individual can't "gear into" (Schütz 1945:209) this world, bring alterations about and see if the feedback is stable. Computer games for instance possess this feature and therefore are much easier to confuse with the outer world.

These realities which are separate from the outer world can be labeled *subjective realities* since they denote the constructions of a specific Self that are not necessarily shared with other individuals.

As I have started to talk about more than one reality – and already have described some of them – the definition of reality in the context of this discussion has to be specified. Obviously it is no longer acceptable to take the "experience of the outer world" as synonymous with the term "reality". Because of that I define: *A reality is a set of potential consciousness-contents able to give a Self the impression of being in a world.*

All that raises the question of what happens if, for instance, an individual walks around in the outer world but tries to behave according to the rules of a computer-game-world. Nothing will happen until a game-rule contradicts an outer-world-rule. In this case the outer world will prevail.

Let us posit an individual who has played a computer game intensively and for a long time. His/Her Self is so accustomed to what it can do in the game-world that it has completely embraced these abilities. If the individual now tries to jump from an outer-world sixth-floor balcony, the functioning of the outer world's rules will result in serious injury – irrespective of how hard the Self believes in the game-world's rules.

It seems that the rules inside the reality of the outer world are paramount to those of subjective realities. Humans base their actions upon what they *think* to be information and rules objectively stemming from the outer world. To put it in another way: upon the *paramount reality*. (James 1890, vol. 2:300-307) The paramount reality is sensed to be of the highest possible stability and is thought to be shared by all possible Selves equally. Only knowledge that has been gained by strict application of the method of natural science (Popper 1935, Miller 1999) seems to qualify as knowledge about the paramount reality, because this is the most suitable tool to discover stable phenomena and thereby generate reliable knowledge.³ Knowledge about the paramount reality can be called reliable, if, and only if, actions based on it generate the anticipated consequences in the outer world – completely independent from whatever culture the acting individual is stemming.⁴ (Redfield 1962 [1957], Tambiah 1990: 111-139)

But the idea of the paramount reality contains at least two problems:

1. Even if the outer world exists as an ontological absolutum, as materialistic philosophy suggests, no single Self can have direct access to it. (see e.g. von Foerster 1999, Watzlawick 1976, and 1984, Crick 1994, Baudrillard 1991) Therefore “paramount reality” remains a hypothesis – a perfectly sensible one to be embraced, if

³ That does *not* mean, that only natural science is able to generate reliable knowledge. But only quests for knowledge which are based on a *rational stance* (Agassi 1977, Agassi & Jarvie 1987) towards experience and ideas do so.

⁴ All this may sound like positivism, but certainly is not as I am speaking of knowledge about the paramount reality, and not of knowledge inside and/or about e.g. culturally shared subjective realities. Knowledge inside a culturally determined subjective reality is gained by means of the specific culture's knowledge-gaining system; knowledge about this culture is gained by means of the humanities and social science. None of these emic sciences (the humanities included) compellingly adopt natural science's method. But in their contexts they produce reliable knowledge, however not necessarily about paramount reality.

one exclusively wants to do research on the non-human outer world, but not on the conduct of humans' lives.⁵

But if we want to scrutinize human behavior and actions, cultural, social, and psychological phenomena, we have to bear in mind that the paramount reality is a hypothesis because:

2. No human individual lives in a world constituted by the paramount reality only. (Tambiah 1990: 84-110) Most individuals unreflectedly *think*, that they do so, but that's utterly impossible, as every Self's mind is a product of its individual and cultural experiences. Therefore every Self feels itself to be in a world which is constituted by its very own *subjective paramount reality*.

This subjective paramount reality consists of different provinces resulting from the different types of experience. The individual shares some of these provinces – at least parts of them – with other individuals, like the realms of sensorial perception and culturally- and group-determined contents of the consciousness. There are no strict borders between the provinces, they may touch, overlap, and intersect, and certain contents may even shift from one to another.

As long as the attention⁶ of a Self is inside the borders of the subjective paramount reality, the Self *has the impression* of being in the outer world and acting according to the rules of the paramount reality. Two individuals can only successfully interact – given the intentionality of actions – in the outer world, as long as attention rests inside the intersection of both of their subjective paramount realities. (Figure 1)

If attention leaves the subjective paramount reality, the Self will dwell in a subjective reality. When a Self's attention is completely focused on the consciousness-contents forming a subjective reality, the Self is totally immersed in this subjective reality and is not able to simultaneously reflect upon this circumstance. Reflection of this kind is a faculty of the subjective paramount reality and immediately destroys the immersion – the Self falls back into its subjective paramount reality.⁷ *“Each world whilst*

⁵ This is not completely true, because in order to evaluate the reliability of scientific findings about the non-human outer world one has to look at how it was gained. And scientists actually are culturally determined humans, too. (See Kuhn 1962, Knorr-Cetina 1980).

⁶ As human attention only has limited resources, only a certain group of consciousness-contents can be actively aware to the Self. For this discussion the metaphor of “attention functioning like a search-light” is appropriate. (additionally Roessler 2000).

⁷ This can be verified by introspection. Take a crime thriller from the shelf and start to read. If the novel is written on a high level of the writer's craft, the information streaming to your Self will take you to the described places, experience the atmosphere, characters and so on. Just like in the David-Abram-quote above. In the very moment in which you think „I am among those characters“ you are not anymore. They are gone and you are sitting there holding a book and think about what uncanny things text can do to your cognition. While reflecting you can *remember* that you were in the story, but you can't evoke the feeling to be there. Vice versa, while immersed in the story you can by no means at the same time be aware that you are reading a book.

it is attended to is real after its own fashion; only the reality lapses with the attention.”

(James 1890, vol. 2:293)

Of course subjective realities can be shared, too. In order to successfully play together in a multi-player computer game, the attention of the players has to be inside the shared subjective reality of the game.

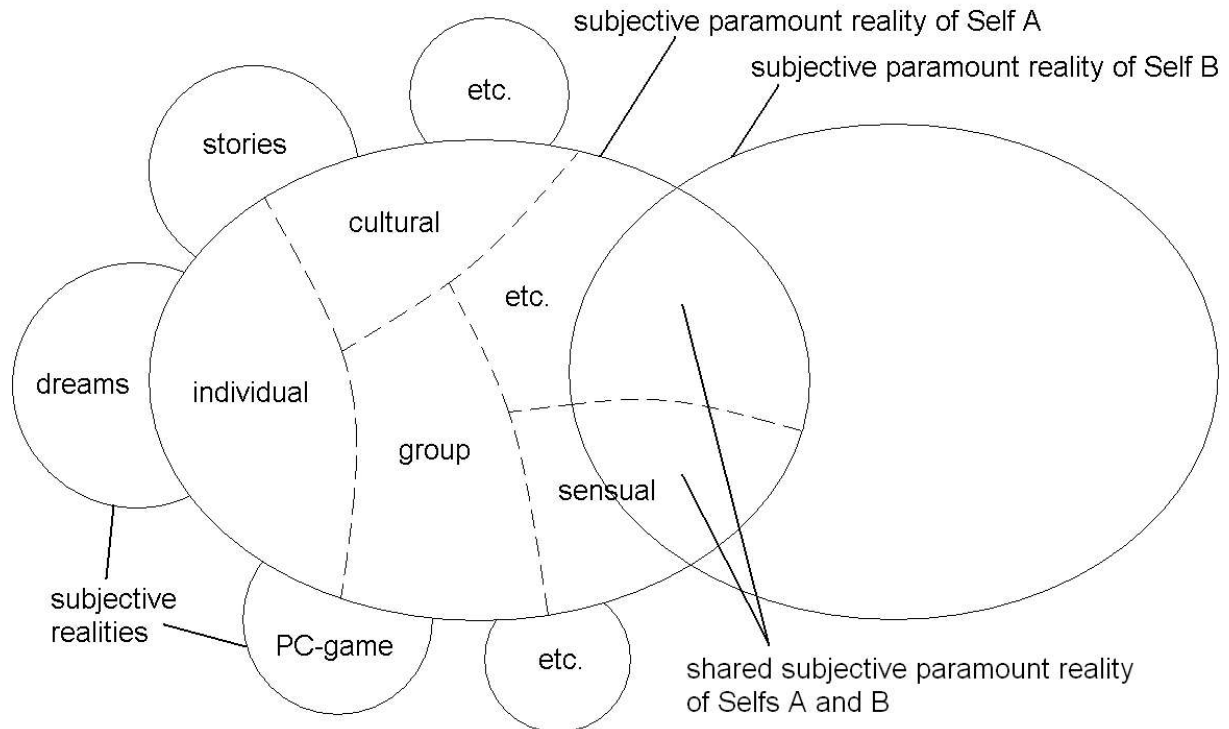


Figure 1: The two ellipses represent the subjective paramount realities of two individual Selves. The intersection of the ellipses represents the reality shared by this two Selves. That means, if both Selves' attention rests inside the intersection, the individuals can successfully interact in the outer world. If we raise the number of ellipses to the number of all Selves past, present, and future, I assume that there still is an area which is part of all ellipses. The contents of this area represent paramount reality as discovered by humankind – for they have the highest experientable stability and are shared by all Selves equally. (Inside there should be for instance the experience of gravity.)

Accordingly and with respect to the observation and analysis of human action and interaction “something is existent” means “it can be experienced”, because everything which can be experienced by a human individual can become a basis for decisions regarding further actions. The consequences of this actions will be experienced by other individuals and provoke their reactions, and so on. (Basically that's how social and cultural phenomena emerge.) In addition everything existent that is experienced as stable has to be named “real”.

Oddly enough an outside observer can be aware of both facts at the same time. When he sees you reading he can think: „Ah, he is sitting in his chair, reads a book and is completely immersed into that story.“

The stability of cyberspace

The model I have described provides us with solutions to some of the puzzles researchers have encountered in the digital realm: *“I contend that technical definitions of VR [virtual reality] beg the question of what it is about such systems that sustains the illusion of reality in the mind of the user. A list of technical components does not explain why it is that users are prepared to accept a simulated world as a valid site for emotional and social response.”* (Reid 1994: Introduction: Virtual Reality – Imagined Space) The individual is accustomed to showing emotions and acting socially in the outer world. Stability makes the ICT-induced world similar enough to the outer world, to feel safe acting similarly there .

On the basis of these considerations the labels “virtual” and “non-virtual” (= “real”) have lost their meaning because they become interchangeable. The world of material things is equally “virtual”, because it is constructed out of an information-flow through the channels of our senses – just as “virtual reality” is. If we call Siberia real, so too must we call Cyberia real – or call both virtual. This seems senseless. Therefore there is a need for a new criterion of differentiation.

Castells came to the same conclusion as above: *“Thus reality, as experienced, has always been virtual [...]”* But by stating that *“there is no separation between “reality” and symbolic representation”* (Castells 1996:403), he implies that there is no difference between subjective realities and the paramount reality. Here he misses the substantial differences in the degree of stability.

Nevertheless, everything which has an impact on an individual’s decisions – and therefore on his actions in the outer world – has to be taken for real. That means it is a part of an individual's subjective paramount reality.

The project of cultural anthropology is to understand the subjective paramount reality shared by a given set of individuals. In other words: To understand ‘culture’. (Brumann 1999) A multitude of problems arises when the shared subjective paramount reality of the Others fundamentally contradicts that of the ethnographer. This has happened particularly in the vicinity of ‘religion’ and ‘magic’ and has led to the so-called rationality-debate. (Tambiah 1990) Durkheim’s opinion that religious beliefs and consequent religious systems are based on human need and cannot be brushed aside as irrational or even as mere illusions (Durkheim 1912), had an impact on this debate. As a consequence, the stance of “as-if” as an intellectual tool of perception for the fieldworker was developed. If the ethnographer – staying amongst the Others

– encounters human concepts of reality that collide with the concepts forming his paramount reality, he should accept the foreign concepts *as if* they were reality – at least for the time being.

But the term “as-if” already implies that the subjective reality of the “Others” is *not* taken for real, because it isn’t granted the same status as his or her own subjective paramount reality. By adopting the stance of as-if, an escape hatch is forcefully held open. This hatch leads to the supposedly safe provinces of the ethnographer's own subjective paramount reality. When returning to his desk and starting to reflect upon the gathered information, the ethnographer takes the escape route and ceases, more or less, to take the subjective realities of his informants for real anymore. One could argue that the ethnographer has no other choice, because he has to return to his home-country, to the rules of his culture-of-origin, and that he wants to communicate his findings and reflections in an environment for which the same is true. Furthermore he has done his duty by complying to as-if while in the field and afterwards will describe the others’ concepts “as-if”.

However, the escape hatch exists in a synchronic context, too. This is because during his sojourn in the field the ethnographer is constantly aware of the escape hatch and the familiar reality behind it. Because of that and in the light of my model, the stance of as-if has to be transcended.

As long as the subjective reality (or parts of it) of an individual do not collide with a more stable reality, we have to accept it to be real. To take the stance of as-if-it-was-real is not enough, because it reflects the unquestioned belief in the superiority of one's own subjective reality.

Money is an example for a belief-system that for the overwhelming majority of all human beings currently living on the Earth has gained the status of a reality in the outer world. This is because it is stable. Everytime an individual hands money over to another one, the projected effect takes place. Something is given in exchange for the money. For that, the idea of money is taken to be “real”. But it is only real, as long as it doesn’t collide with something paramount like e.g. hunger and scarcity in a large enough geographical setting after a war or a natural catastrophe. In such scenarios everything seems to boil down to Malinowski’s functional theory of basic human needs. (Malinowski 1926, Radcliffe-Brown 1949, Redfield 1962 [1957])

But despite that, it wouldn’t make sense to advise an accountant clerk, a financial analyst or a scholar of economics to stop believing in the reality of money. The belief-system of money and economics is real to humans as long as it maintains its sta-

bility. When doubt in the latter arises, the reality called money shatters to pieces and the individual crashes through and down to the next level of stability, the layer of reality below – in the aforementioned scenarios, the more stable reality of basic human needs onto which the money-reality-level is built. Money remains stable only as long as the interactions between itself and the supporting level are working.

The channels of interaction between layers of reality serve as pipes through which the underlying level of paramount reality fuels the built-upon realities with stability. With stability thus granted, the constructed reality in turn can support another level.

To further illustrate the point, let's have a look at an example "from the field" which Andrew Phelps gained by means of informal online participant-observation in and around "EverQuest" – a so-called massive multiplayer online role-playing game (MMORPG) by Sony Online Entertainment. On Sony's San-Diego-based server "Stormhammer" more than 430,000 individuals are playing together in the same shared computer-constructed and -mediated gameworld:

"The names here are removed to protect the innocent, and most of the threads I read this on have now been deleted which is why I (almost) think it's ok to talk about. It seems that one of the "guilds" on the Stormhammer server has recently had a moment of crises with it's guild leadership. The group of RL (real life) friends that formed the guild apparently had a very different purpose than those intended by Verant and Sony Online Entertainment. After months of leading the guild on several high-end raids and gaining all kinds of in-game items and loot, this group of friends took those items from the guild vault and sold them on Ebay, and then vanished from the server.

Online identity and trust issues abound. But before you dismiss this as 'oh, well, who really cares about some gold pieces and magic swords that are really just numbers in a database', take a good look at what's happening in online communities of this size. One economic study by California State University at Northridge Professor Edward Castronova placed Norrath (the virtual world of EverQuest) as the 77th richest world economy, based on the value of the items in the world adjusted to their value in then-current Ebay auctions. [Castronova 2001] This was reported in WIRED and several other sources. So the folks that perpetrated this virtual heist won out with what could have amounted to thousands of dollars in US currency." (Phelps 2003) Castronova started to play EverQuest in early 2001 and after about four days the "reality of the economy in it" struck him. He saw the line between "real" and "fake" economy beginning to disappear and concluded: "From an economist's stand-

point what's happening in these games is real. You've got a distinct territory with specialization of labor, gains from trade, a floating exchange rate – real economies are happening." (Dibbell 2003)

When Pierre-Simon marquis de Laplace (1749-1827) had explained his investigations into the stability of the solar system to Napoléon Bonaparte (1769-1821), the emperor asked him for the role of God in this model. Laplace gave the famous answer: *"Sir, I do not need this hypothesis."* (Büchner 1885:60) With this he had freed the natural sciences from the bonds of christian theology. This was overdue – those bonds still had a strong grip on Sir Isaac Newton (1642-1727) – and perfectly sensible regarding the part of human experience Laplace was doing research on: the physical world of material things. But in the aftermath of constructivism we discover a stunning aspect in Laplace's way of thinking. There's a completely unquestioned and strong hypothesis in it: The physical world of material things has absolute ontological status. If Napoléon would ask me today: *"But what role has the objective world in your model of the stability of realities?"*, I would have to give the same answer Laplace once gave.

Cyberspace, Virtual Reality, and Virtual Communities

"Today, 'Virtual Reality' [VR] is used in a variety of ways and often in a confusing and misleading manner. Originally, the term referred to 'Immersive Virtual Reality.' In immersive VR, the user becomes fully immersed in an artificial, three-dimensional world that is completely generated by a computer." (Beier 2001)

KLAUS-PETER BEIER

In order to clarify the concepts "cyberspace", "virtual reality", and "virtual community", the pragmatic model of reality is not enough. A bit of the history of those concepts is needed, too.

In 1981 the writer William Ford Gibson, oftentimes regarded as the father of the literary genre and/or movement called "cyberpunk", *"began to work with the concept of cyberspace"* (Gibson 1992) – the word itself appeared for the first time in print in 1982 (Gibson 1987 [1982]:186). Two years later the novel "Neuromancer" was published, wherein Gibson publicly defined the meaning of the word he had coined: "Cy-

berspace. A consensual hallucination experienced daily by billions of legitimate operators, in every nation, by children being taught mathematical concepts ... A graphic representation of data abstracted from the banks of every computer in the human system. Unthinkable complexity. Lines of light ranged in the nonspace of the mind, clusters and constellations of data. Like city lights, receding ..." (Gibson 1984:51) At about the same time artist/musician/technology-enthusiast Jaron Lanier coined the term "virtual reality" (Lanier and Heilbrun 1988).⁸

With the publication of "Cyberspace: First steps" (Benedikt 1991) the term "cyberspace" was "*introduced to intellectual, artistic, and academic circles.*" (Escobar 1994:216). In the same year Rheingold published his book "Virtual Reality" (Rheingold 1991). In those years the ever growing flood of publications concerned with these issues started. Because of the impact it had – and still has – on the humanities and social science, Rheingold's "Virtual Community" (1993) is an outstanding example. It hammered into the minds of many, the notion, that there is a fundamental dichotomy between "*computer-mediated social groups known as virtual communities*" (Rheingold 1993:Introduction) and "real life". With this all the misunderstandings we still struggle with, the mixing-up and fuzziness of the concepts in question began.

Just as the development of the internet is indivisibly associated with military research (Naughton 1999, Gillies and Caillau 2000), the concept of "virtual reality" is closely connected to the history of airplane-technology. Less than ten years after the flight of Wilbur and Orville Wright in 1903 there appeared two machines in England, which were able to simulate the basic movements of an airplane in the three spatial dimensions. In 1929 Edwin A. Link presented the first applicable flight simulator which actually could be used for training pilots to fly, without letting them fly in the outer world of physical things – a fraction of the experience of this world had been substituted by a simulation of it, which was achieved by technological means.

Commercial airlines began to use the 'Link Trainer', and in 1934 the U.S. government started to buy the device, the demand for which grew dramatically as World War II approached. During the war electronics advanced substantially and by the 1950s it became possible to use analog computers for enhancing the performance of flight simulators. The next decade saw the introduction of digital and hybrid computers which caused a revolution of the simulation-technology.

Around the beginning of the 1970s the know-how about computerized simulation began to leak out of military circles and inspired intellectual and academic ones. In

⁸ Lanier was the first to commercially sell "virtual reality devices" in the form of "Head-Mounted-Displays" and "Data-Gloves".

1973, while writing his doctoral thesis (published as Krueger 1983), Myron W. Krueger coined the term “artificial reality”. Thereby he not only described the experiential worlds created by the new technology as being man-made, but gave a hint to the artistic potential he saw in computerized interactive simulation.

The massive joint resources of the U.S. military and NASA led to the next technological step, as new systems of interactive computer-generated imagery were developed in the 1980s. A huge leap was made in 1991, when the U.S. Department of Defense merged the technologies of flight simulation and network computing. Simnet (simulator network) was launched, which allowed military personnel to practice complex combat operations in a real-time interactive environment created by computers. The climax of this development is CAVE,⁹ built by the Electronic Visualization Laboratory at the University of Chicago and first presented in 1992. Basically CAVE is a huge cube into which a human being can enter. A computer generates a three-dimensional, moving, and interactive picture of an environment and projects it onto the six sides of the cube. All this happens in real time and is augmented with surround-sound. Obviously this allows an almost perfect immersion into a simulated space, into a virtual reality.

Although the term “virtual reality” itself doesn’t appear in Gibson’s work until 1993 (Gibson 1993:312), in 1988 he already used the term “virtual world” and was quite conscious of the historic context related above: *“There’s no there, there. They taught that to children explaining cyberspace. She remembered a smiling tutor’s lecture in the arcology’s executive crèche, images shifting on a screen: pilots in enormous helmets and clumsy looking gloves, the neuroelectronically primitive “virtual world” technology linking them more effectively with their planes, pairs of miniature video terminals pumping them a computer-generated flood of combat data, the vibrotactile feedback gloves providing a touch-world of studs and triggers.”* (Gibson 1988:48-49)

When Gibson shaped the concept of cyberspace¹⁰ for his metaphorical literary fiction, he had in mind a *“conceptual space where words, human relationships, data, wealth, and power are manifested by people using CMC technology”* (Rheingold 1993:Introduction), which is completely represented as an immersive virtual reality and therefore possessing a spatial quality. Using the words “cyberspace” and “the matrix” as synonyms, he defined this very clearly: *“The matrix is an abstract representation of the relationships between data systems. Legitimate programmers jack*

⁹ Cave Automatic Virtual Environment – of course an allusion to Platon.

¹⁰ The prefix “cyber-“ Gibson had lent from Norbert Wiener’s (1894-1964) definition of “cybernetics” (Gibson 1987 [1982]:169) as the science of control and communications in the animal and the machine. (Wiener 1948, 1964)

into their employers' sector of the matrix and find themselves surrounded by bright geometries representing the corporate data. Towers and fields of it ranged in the colorless non-space of the simulation matrix, the electronic consensus-hallucination that facilitates the handling and exchange of massive quantities of data." (Gibson 1987 [1982]:169-170) And: *"[...] the matrix's illusion of infinite space."* (Gibson 1987 [1982]: 177) Those Gibsonian fantasies aren't experiencable yet: bandwidth and computing capacity simply do not allow it to date. (If the technological realization of those fictions is desirable or will ever happen is a different question.)

Therefore the Gibsonian concept cyberspace had to be completely stripped of its immersive-virtual-reality aspect when it was introduced to the debate on non-fictional CMC and its empirical exploration. For this debate the immersive-VR aspect was substituted by the notion of a conceptual space for human interaction: *„A science fiction writer coined the useful term "cyberspace" in 1982. But the territory in question, the electronic frontier, is about a hundred and thirty years old. Cyberspace is the "place" where a telephone conversation appears to occur. Not inside your actual phone, the plastic device on your desk. Not inside the other person's phone, in some other city. THE PLACE BETWEEN the phones. The indefinite place OUT THERE, where the two of you, two human beings, actually meet and communicate.*" (Sterling 1992: Introduction) Despite of this historical and ontological insights, Bruce Sterling still has a problem with the reality of cyberspace: *"Although it is not exactly "real," "cyberspace" is a genuine place. Things happen there that have very genuine consequences. This "place" is not "real," but it is serious, it is earnest. Tens of thousands of people have dedicated their lives to it, to the public service of public communication by wire and electronics.*" (Sterling 1992: Introduction, see as well Watzlawick, Beavin, and Jackson 1967) The stability of the experience of cyberspace makes it real in the terms of my model. Cyberspace, "The place between the phones", shapes itself inside the heads of its users and is manifested in their observable expressions – just like every form of human culture. (Brumann 1999) Social/Cultural Anthropology is not so much concerned with what things "are", but with how they are used and imagined, how they are referred to and what is ascribed to them. If all of this is shared by a group of human individuals, it is quite likely that the terms culture and community are used for this group. But if the members of the group in question almost exclusively interact by CMC, the term "virtual community" is heard and the conceptual problems rise anew.

"When you think of a title for a book, you are forced to think of something short and evocative, like, well, 'The Virtual Community,' even though a more accurate title might be: 'People who use computers to communicate, form friendships that sometimes form the basis of communities, but you have to be careful to not mistake the tool for the task and think that just writing words on a screen is the same thing as real community.'" (Rheingold 1993:Introduction) The simulation technology described above strives to generate an experientiable model of a fraction of the outer world of physical things. Ideally an individual experiencing this simulation is forced to forget, that the stimuli he/she receives – and out of which his/her consciousness constructs the impression of being in a world – doesn't stem from the world experienced in this way, but from a computer calculating everything in real-time. In this context of simulation, it makes perfect sense to speak of this simulated world as a virtual reality. Just like it makes sense to speak of a "virtual server": It seems like a physical server, behaves like one, but isn't. This implies that there are means to undermine the stability of the reality of the things virtual. I can step outside of a flight-simulator or the CAVE and verify that it exists in the outer world as a device which in particular circumstances has the ability to create an experientiable world. In this respects "virtual" is legitimately used as a descriptive term. But, in contrast, if people group themselves by means of CMC they do not just "seem" to group, they actually do. Online-communities only exist as such, there is nothing "virtual" about such communities.

Quite to the contrary, in certain respects a so called „virtual community“ is „more real“ than e.g. the Azande – just to name a classical example of social anthropology. The overwhelming majority of the recipients of Evans-Pritchard's famous book (Evans-Pritchard 1937) only have knowledge of the Azande's existence by means of printed matter, by means of representations. Only very few have actually visited the Azande as Evans-Pritchard did. In theory they could be a fabrication, just like Castaneda's don Juan Matus. (Castaneda 1968) Taken for granted – because of so much material on the Azande, generated by different people, they have attained a high degree of stability, so we still believe in Evans-Pritchard's word's (concerning the outer-world-existence of the Azande) and no more in Carlos Castaneda's ... concerning the outer-world-existence of 'his' Yaqui-sorcerer don Juan Matus. (de Mille 1980)

New technologies always pose new challenges to existing terminologies. Since the times of the invention of the printing press, and especially since Andy Warhol's (1928-1987) silk-screen-printing, the art-market has the problem of "the original" and "the copy". This became even more virulent with the advent of digital art. Concerning

digital art their exist neither “originals” nor “copies” in the traditional understanding of the words. Everytime I load a picture which has been digitally created on the screen of my computer, I am viewing the (or an) original ... and everyone with internet access can have a look on the “original” of a so called “virtual community”, not just on a representation of it – because in this context the representation is the only available original. Therefore I advise to discard the term “virtual community” and to use the term “online community” instead of it. “Online” and “offline” do not misleadingly describe a status of reality, but the way in which experiences are mediated.

One question still remains: Why is it, that the mixing-up of “cyberspace” and “virtual reality” – and subsequently the unreflected use of the adjective “virtual” in respect to communities, teams and so on – is so common today? In my understanding this has to do with a mentality, which is very similar to what the late Edward Said (1935-2003) called “Orientalism”.

Virtualism

According to Said Orientalism is the notion, that “[...] *as much as the West itself, the Orient is an idea that has a history and a tradition of thought, imagery, and vocabulary that have given it reality and presence in and for the West.*” (Said 1978:5) For this condition he blamed a distinctive body of academic work which rose under the shield and by the force of nineteenth-century colonial domination, and didn’t vanish with the formal structures of colonial rule but continues to reflect the ongoing interests of the West in the East. This academic work, still according to Said, stereotypes the ‘Orient’ and the ‘Orientals’, denies history and agency. (Clifford 1988, Spencer 1996:407) In a nutshell: the ‘Orient’ is constructed as a negative pendant to the ‘Occident’ unto which every fear and notion of evil is projected – amazingly enough sometimes phantasies of paradise, too.

On the one hand there’s much talk about the internet as an incredible chance to humankind: A democratic space where information can be traded freely without censorship, a possibility for the not-so-well-off nations to participate in the ‘first world’ and even to catch up with it, a system which stores all the knowledge of the world and grants access to it to everyone, a means of communication which bridges cultural, political, and economic divides, and so on.

On the other hand each group seems to find its haunting nemesis, its individual phantom menace, inside the conceptual space generated by CMC, too: For US-american puritan moral-guards its the place where porn is uncontrollably exchanged, for German authorities the Neo-Nazis organize themselves there, for the People's Republic of China the critics of the government, separatists and Falun Gong dwell there, for the music industry its the realm of the bootleggers, for the economists' establishment its the dungeon out of which evil hackers threaten there infrastructure, for Microsoft its the network of the Open Source community, and for the latter its the system through which Microsoft strives for world domination, and so on. On a more abstract level it is seen as the technology which's usage quickly can develop into pathologic patterns (Young 1998, Davis 1999) – a threat to the human individual itself. Those notions are examples of manifest Virtualism, as the concept already has led to words and actions.

It does not matter if 'cyberspace' is stylized as an utopia or as a dystopia. In both cases it is brandished as a 'Gegenwelt', as a reality decidedly distinguished from the 'real one'. Unfortunately science gives support to this construction when it labels it to be 'virtual'. By the sheer use of this label in connection with CMC, science has become guilty of latent Virtualism, the unconscious, untouchable certainty about what the CMC-mediated realms are. They are seen as separate, eccentric, and silently different. Their change and value are always judged in terms of, and in comparison to, the familiar offline-world. In consequence cyberspace always remains the inferior, the malleable and conquerable, the Other.

Above it has been shown that from a phenomenological point of view the dichotomy real-virtual can't be upheld anymore when speaking about CMC. We have to accept that CMC does not constitute another world. Like every other means of communication it is an augmentation of the possibilities to make experience. Granted, the internet makes new social phenomena possible, which have not been seen before, and even new cultures may emerge which on first glance are completely alien to us. But when we do research on these new cultures, from the start on we have to be very careful about the terms we use, or sooner or later we will have to face the same accusation with which Said confronted the western scholars of 'oriental' cultures. To be careful in this respect means to discard the prefix 'virtual' when speaking about CMC, as it forcefully constructs distance and otherness and implies a fundamental homogeneity of all experiences made online. Just as an orientalist stance brings forth the notion of a monolithic 'cultural area' called Orient.

By definition all experiences made online are mediated by technology, happen in Sterling's "place between the phones" – of course. Analogously correct is the banal observation that the geographical region called Orient is situated in physical space. But physical space houses an enormous social and cultural diversity. Accordingly: "What characterizes the new system of communication, based in the digitized, networked integration of multiple communication modes, is its inclusiveness and comprehensiveness of all cultural expressions." (Castells 1996:405) Castells overdoes it, hence, what he postulates is still to prove. In my opinion the project of proof and subsequent research is worthwhile, but we can not do it on the basis of a virtualistic panoramic view of whole cyberspace, but rather with differentiating methods and concepts that allow space for the dynamic variety of human experience. A fragmentation of the experience of reality combined with a subsequent judgement of the resulting parts in terms of value does not serve the cause of research on CMC. Just as it didn't serve western science and philosophy when it was introduced into those by christian theology. (Baigent and Leigh 1997)

If the rejection of Orientalism is an erasure of the line between 'the West' and 'the Other', as Said concludes, the rejection of Virtualism is the erasure of the boundary between real and virtual.

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