

Making sense of cyberspace

– a question of being-with information technology –

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Abstract

The various ways in which people speak about and use information and communication technologies indicates that these technologies puzzle and amaze. People are trying to make sense of a new and unfamiliar technology and forms of communicating and being with others. At the same time they are forming new ways of community and life.

This paper is related to people's relationships with information and communication technologies (ICTs) and how these relationships are understood. As information technology increasingly extend various horizons in our lives, it is necessary for new and diverse understandings of the relationship between humans and information technology.

The central notion in this paper is that people's experiences of information technology are of great importance for how the technology is understood, used, evaluated and designed. Of particular importance is the emotional and diverse meanings attributed in relation to information technology.

One example is the contemporary understandings of Virtual Communities that are established through people's experiences with, in or through information and communication technologies. Virtual communities may or may not be connected to the physical world and exists within a continuum of interaction from tools for computing, writing, designing and communicating to various life forms. That is, new context of signification and affective circulation that structure individual and cultural life. As such, people's perceptions and experiences of computer-mediated communication shift and change depending on what they are doing or why they are interacting at a given time.

The question is therefore not how to determine or evaluate various technologies usefulness or implication but how to establish relevant knowledge that can be valid for the determination of future directions in the process of cultural creation.

By an experiential understanding of information technology I hold it possible to attain the necessary sensibility for the complexities arising from peoples various interpretations of information and communication technologies. Through peoples experiences with ICTs researchers become challenged with new dimensions of intellectual engagement in our contemporary life.

1. Introduction

Technological artefacts are today partaking in almost all area of our lives. This is especially true for information and communication technologies (ICTs), which in profound ways have changed the way we conduct our lives – at work and in our homes.

Until recently, our use of ICTs evolved around work-oriented tasks in a pattern roughly described as purposeful, work-oriented, performed by workers, delineated from other work tasks and restricted to working hours (Monteiro, 1999). But with the emergence of the global communication network known as Cyberspace, ICTs are now being interwoven within the myriad of social fabrics as they are being swept into our everyday lives.

In the middle of the 90's Sherry Turkle claimed that we are moving to a new era of computer use. An era where information technology in addition to that of a useful tool is providing people with ways of exploring aspects of reality and self, not possible without the technology.

“Along with the movement from a culture of calculation toward a culture of simulation come changes in what computers do *for* us and in what they do *to* us – to our relationships and our ways of thinking about ourselves.” (Sherry Turkle 1995:22.)

Today information and communication technologies, such as E-mail, IRC, BBS's, MUDs and Virtual Worlds engage us in diverse ways at a number of conceptual levels. Every new technology make us ask the question what or who determine how that technology is to be used and how it will further develop. There is no one answer to this question – maybe that is what makes the technological field so intriguing.

Researchers are trying to elaborate ways of framing human relationships with technology in order to make sense of the technological effects in society. This article explores some of these attempts in relation to the notion of virtual communities. Of particular interest is the way in which people's relationship with information technology is understood.

Further the article argues that the sensuous, experiential and emotional aspects in people's relationship with information technology can be regarded as a ubiquitous dimension of significant importance in the practice of ICT.

2. Sense-making in cyberspace

Researchers, that studies the impact of information and communication technologies, often consider these technologies *as tools* to help us communicate with people or retrieving information from around the globe. Studies within these field utilise a variety of theories about how we process and make sense of stimulus in our communicative worlds and explores information technology, including social presence, media richness, social cues and information processing (Sproull et. al 1991, Baym 1995 and Herring 1996). In these studies organisations, institutions, communities, and cultures are often regarded as bounded containers for work, play, learning and living. In some of the cases research is concerned with communication in organisations in which order has been imposed by an external force, which offers little insight into the emergence of new social structures created by information technology. Others are assuming that the boundaries of computer networks are equal to the social networks, and that electronic mail, bulletin board systems, news groups etc., substitutes and/or constrains parts or all of human companionships, social support, information and sense of belonging.

In contrast to the tool perspective, there are more and more users and researchers that conceptualise computer-mediated communication itself as the organising process. Most researchers within this perspective argue that information technologies are very influential mediators and moderators of human experiences. For scholars such as Benedikt (1991), Featherstone & Burrows (1995), Jones (1995), Laurel (1993), Markham (1998a), Rheingold (1994), Stone (1995), Turkle (1995), and Ågren (1998) online communication not only structure relations, *it is the structure* within which the relation occurs.

Virtual communities, virtual worlds and social arenas are concepts formed to describe some of the new social “life forms” we are starting to see in Cyberspace.

One of the most famous and investigated virtual communities is The Whole Earth ‘Lectronic Link, The Well. Established in 1985 as a social experiment The Well used information technologies to reach out and attract people with an interest in discussing contemporary society and culture (Hafner 1997).

Since the establishment of The Well, a common understanding of virtual communities has been a group of people based on a shared interest using information technology as mean. The participants of virtual communities are like members of a village or a densely knit urban neighbourhood linked together by a common interest or a common place.

Rheingold (1994), defines virtual communities as:

"Social aggregations that emerge from the Net when enough people carry on those public discussions long enough, with sufficient human feeling, to form webs of personal relationships in cyberspace." (Howard Rheingold, 1994:5.)

Often virtual communities are described as the pubs, cafes and squares of cybersocieties, with connotation of a “great good place” – a concept framed by Ray Oldenburg 1989. Oldenburg (ibid) regard places like coffee-shops, bars and other public gathering places to be “core settings” in informal public life. As such, *third place virtual communities* are forms of virtual communities with the primary purpose to offer a space for individuals to meet and socialise without the restrictions of reality. (Turkle 1996, Rheingold 1993, Oldenburg 1989).

Other forms of virtual community have emerged over the years, which in some sense differ from this traditional understanding and meaning, for example *interest based* or *professional virtual communities*. In these communities an important part of the community is to generate and share knowledge and information in order to better perform and/or develop a professional skill. In these communities cyberspace is used as a forum for discussion and knowledge sharing, collective memory and information storage/provider (Croon & Ågren 1998, Valtersson 1996).

The potential in using information technology to support collective action has also led members of real-world cities and villages to create *Community Networks* where members in certain villages can participate in issues related to the residential and regional domain and get information and services through Internet. This form of virtual community has as explicit goal to increase public and democratic participation and the purpose is to strengthen the existing geographic community, using information technology as mean (Schuler 1996 and Ågren 1998).

It has thus become a commonly held view that people partake in virtual communities in order to achieve common ends or for sharing mutual interest. This view have similarities with formal organisations where the goals and interests are explicit and that telling who is ‘part of’ one and who is not, often is clear and straightforward.

There are also other emerging virtual communities, such as *personal or private network communities* (Croon 1997, Hamman 1999, Nyman 1999 and Wellman et al. 1999 and Wellman 1999). Within these communities it is the individual’s network of relationships with friends and relatives that constitutes the community. This way of understanding virtual community acknowledges the fact that people by using ICTs develop a way to keep in touch with members of the family and friends, when separated by time and distance. It is also suggested that this form of virtual community contribute to the development where a sense of community is found with in more private settings. As such, communities emerging in cyberspace seem to develop towards a privatisation at the same time as it is performed and extended globally (Wellman (1999) conceptualises this trend as glocalisation.).

In a continuum of ideas, observations and experiments in and around virtual communities and cyberspace it has been possible to elaborate concepts and theories that help to distinguish the virtual from the real and vice versa. Also, research within virtual communities contribute to understand and analyse ICTs consequences and impacts within traditional societal subjects, such as democracy, power struggles, economical, cultural and ethical consequences (Dibbell, 1999, Donath 1999, Herring 1995, Reid 1998, Robins 1998, Slouka 1995 and Winner 1998).

3. Being-with Information Technology

The growing emergences of ICTs in people's everyday life do however *in itself create new contexts of signification and affective circulation* that structure individual and cultural life. This is not yet so well captured or elaborated by the above, mentioned research in virtual communities.

In a recently published book, Anette Markham's (1998a), describes how people create, negotiate, and make sense of their social experiences in computer-mediated contexts. She has, by using ethnographical methods, tried to understand what it feels like and what it means to spend substantial portions of one's everyday life in chat rooms, support groups and virtual communities in cyberspace. In her work she raises questions of what it *means to be* – in spaces online.

One of her conclusions is that people, for most part, have diverse kinds of relationships with information technology. As such the relationship vary and change, depending on what people are doing and on various situations. In order to capture this dynamic she elaborates a framework for understanding people's relationships with information technology – from tool, and place, to a way of organising and a way of being – each with it's own distinctiveness and meaning. Depending on the kind of relationship people hold to be significant, various rationales and meanings are attributed. (Markham 1998b).

There is, however, some significant aspects that are commonly shared within these four different relationship to technology; *The dynamic, active, intense and vivid practice of technology*. In Markham's work this becomes explicit, since she in order to frame an understanding based on ethnography, herself had to work into such a mode of usage (Markham 1998:23ff).

“It is crucial to emphasize this point: To be present in cyberspace is to learn how to be embodied there. To be embodied there is to participate. To participate is to know enough about the rules for interaction and movement so that movement and interaction with and within this space is possible.” (Anette Markham (1998:23-24.)

Markham's understanding destabilises the distinction between actual and virtual realities and recognises that computer-mediated communication, for most part, *is extending the horizons of human experience in new and unfamiliar ways*. Also, by attributing importance to the many ways in which we as individuals are creating meaning in their encounters with information technology, Markham forms an understanding that are similar to others, who regard information technology as experiential and sensuous (Heim 1998, Laurel 1993, Davies 1998 and Waterworth 1997). An important and significant aspect of this understanding is that information technology is regarded as a provider of new and different experiences of reality – experiences not possible without the technology.

4. The sublime and the beauty of cyberspace

”When you're writing, you phrase things more beautifully. And you can say things that you never have the opportunity to reveal in person. I was able to go on at length about things that were inside me, without being interrupted.” (Margo Kaufman, 1996:526.)

The sensuous and experiential aspects of people's relationships with ICTs have since the emergence of cyberspace been made explicit and discussed in various ways. But it has so far not been treated as an important aspect for understanding the widely accepted use of information technology in people's everyday life.

Howard Rheingold often frame his experiences with ICTs with reference to emotional and intimate feelings:

”The idea of a community accessible only via my computer screen sounded cold to me at first, but I learned quickly that people can feel passionately about email...” (Howard Rheingold, 1993.)

Also, in Markham (1998), one of the respondents expressed that she in text-based MUDs had an opportunity to extend and progress herself beyond the limits of her body. In her own word she was language and text in this text-based MUD, and as such able to live more beautiful and free.

“I choose to exist as myself in language online...I think myself in language is more communicative of who I am... and because I’m a good writer. Eloquence make me beautiful online.” (Sherie in Markham 1998:202-3.)

One of the more early and explicit discussions of experiential and sensuous aspect of people’s relationship with information technology is a description how sex-workers make sense of their work (Stone 1995:20). For these workers the telephone was used to express and exchange a practice that otherwise demands the involvement of as many senses as possible – sex. What was transmitted back and forward over the telephone line was not only information, but bodies. Stone (ibid) interpreted the sex-workers to be within an experimental area where passion and images were very important dimensions. Passions and images were created and represented through telephone conversations.

Drawing from the experiences with sex-workers, Stone (ibid) criticises traditional understandings of human-computer relationships that regard the relationship as goal and purpose activities closely related to work practice. She instead hold most of people’s relationships with information technology to be related to play and other aesthetic forms of expressions where emotions like pain and passion plays a vital part (Stone 1995:165).

Thus it seems to be something about the technologies of information and communication that attracts and make people want to spend a substantial part with it. How can this be further elaborated?

The beauty of virtual being

David Nye (1994) has written about the sublime experiences that people have when confronted with powerful technologies. Sublime experiences are according to Nye (1994:9), emotional configurations emerging from new social and technological conditions.

“the sublime is the pleasurable experience in representation of that which would be painful or terrifying in reality, leading to a realisation of the limits of the human and of the powers of nature” (Nicholas Mirzoeff 1998:9.)

For Nye (ibid), sublime experiences are not merely a matter of vision. He holds all senses to be engaged. For each event of the sublime, the human subject feels that the familiar envelope of sensory experiences has been rent asunder, for instance city sounds, sizes of crowds and the smell of books, all belonging to the range of sublime experiences of technology and culture (Nye 1994:284-85).

In Nye’s view people traditionally have incorporated every new technology into their life-world in a way that that fostered a sense of human control and domination (Nye 1997:290). This domination and control has, especially for Americans fostered a sense of technological sublime he conceptualises as *the consumer’s sublime* (Nye 1994:281pp).

“In search for [this] positive pleasure, a ‘consumer sublime’ has emerged as Americans shop for new sensations of empowerment. Icons of the natural sublime, such as the Grand Canyon, are subjected to this process, ...But increasingly they are appreciated not as signs of nature’s immeasurable power and sublimity but as contrasts to a

civilization that threatens to overwhelm them.” (David Nye 1994:287.)

This notion of the sublime stand in contrast to later romanticists (Wordsworth, Coleridge, Schiller) for which the sublime was evoked by the extremes of nature – the grandeur, power and horror (Gergen 1996:137). However with larger and more complex technologies and cultural artifacts it is more often the technology and the technological systems that give rise to feelings of the sublime.

Rafael Ramirez (1991) contends that it is through aesthetics that some substantial knowledge for understanding sensuous, experiential and existential aspects of reality can be attained and understood. Based on this assumption he develops a theory in order to understand how some people make sense of being part of an organisation.

Ramirez (ibid) regards a vital form of life, that of belonging to, or being a part of a whole. Forming part of a whole is vital and intrinsic to being a rational human being (Ramirez 1991:31). The kind of wholes he investigates are those made up by people in which individuals belong, so called movements, networks, families, and formal and informal associations and organisations.

In his work he distinguishes two very different ways of being part of a whole– *distinct from* and *belonging to*. The distinct from can be understood as a way of framing our partaking in networks and organisations as a part of, but something else than the network, organisation and so forth. With regards to human relationship with technology it can be understood as our commonly held conception that we are distinct from the technology – the technology is separate from us humans, but as such we form a whole. This way of relating to information technology then calls for an understanding of a relationship as either a tool or a medium. As such ICTs are regarded as tools for information retrieval, experience booster or a medium that gives us interpretations and understandings an underlying reality.

In addition to this understanding of being a part of a whole Ramirez (ibid.) provides an understanding of being a part of a whole, which includes aspects which that relates to *feelings of wonder, inspiration, moving, touching, striking, emotive and vividness* (Ramirez 1991:28). He frames, this way of being part of the whole, *belonging to*. Affects and emotions, thus, pertain to the belonging to sense of a part of. Ramirez (ibid) hold Western thought to have underestimated the importance of understanding the aspect of belonging to in society and social organisation.

“It is through aesthetics that such ‘belonging to’ may in certain situations frame (define or dominate) an ‘a-part-of’ consciousness in our understanding of our being.” (Rafael Ramirez 1991:26.)

Ramirez hold aesthetics to be responsiveness to the pattern that connects and the possibility of the mind to aesthetically apprehending a given form. Aesthetic consists of a symbolisation process in which, what is symbolised as beauty or expressive form is *‘felt life’*. *It’s an expressive form that has an organic character*. In other words it is the *aliveness* that felt life offers which is thus symbolised (Ramirez 1991:66).

5. Concluding remarks

“We must learn to think sensuously and physically and look at what transpires in people when being enter virtual worlds.” (Michael Heim 1999:159.)

Appreciation of the fact that people, when appropriating technology in their everyday life, subjectively and individually partake in forming and understanding ICTs, are increasingly taking form. This appreciation are, for example, expressed in some recent theories framing technological development as information ecologies, collective intelligence and actor-networks, which are more sensitive to the various ways in which ICT is entering our lives (Feenberg 1999, Latour 1993, Lévy 1998 and Nardi et al. 1999,). For example, that instead of

understanding ICT as quite homogenous, or defined along a single dimension, ICT can be regarded as a part of, an information ecology that are different from one another and as such part of an evolution or in constant change (Nardi et. al. 1999:56).

In this respect it seems like the notion of the sublime and the beautiful in people's relationship with technology is a dimension that can be further elaborated. The sublime and beautiful dimension provides notions and concepts that can be used in order to frame and ICTs as an expressive form with an organic character. While keeping with the belief that the entanglements of cyberspace are better understood when using many, diverse, points of view, the sublime and the beautiful might contribute to understanding important aspects of the way people are being-with information technology.

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