CMC AND THE CONNECTION BETWEEN VIRTUAL UTOPIAS AND ACTUAL REALITIES

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Abstract

People are often ambivalent about the potential future roles of new technologies (and the Internet specifically) and their possible effects on human society. There has been a tendency for polarisation between attitudes or perceptions of naive enthusiasm and cynical resistance towards the use of computers and digital networks, and for such related concepts as "the information superhighway," "cyberspace" and "virtual communities." The projection of such ambivalent perceptions into naively utopian (or even ironically dystopian) images and narratives might be seen as the latest and uniquely global permutation of a basic function of human culture — that is, to imagine "a better future" or represent "an ideal past." This article considers the extent to which the kinds of virtual utopias made possible by computer-mediated communication are "connected" to the actual individual and social realities of human participants. In other words, should a distinction be made between the use of virtual utopias (and utopian representations in any culture) as merely escapist, self-indulgent fantasy on the one hand, and as a useful, transformative media for reinventing the human condition on the other?

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Emerging Utopian vs. Dystopian Images of Cyberspace

In contrast to dominant perceptions of global computer networks as basically an "information technology," an alternative focus on the Internet as new or extended media of human communication and, indeed, of human community has been ambivalent at best. Perhaps because the pioneering programs of synchronous or real-time Internet chat (MUDS and IRC) were based around "mere" adventure games and social chat, the development of computer-mediated communication (CMC) was often seen as a frivolous off-shoot to the main focus on the Internet as an "information superhighway." Rheingold's (1994) popular book *The Virtual Community*, which celebrated the utopian potential of cyberspace in the tradition of the 1960s counter-culture movement, did help to change the way people perceived the new technology. However, there was an immediate "dystopian" backlash to such a vision as the innocence of early network communities gave way to a recognition of the Internet being open to use and abuse, and thus a focus for issues of control and regulation. For instance, Clifford Stoll's *Silicon Snake Oil* (1995) challenged a view perceived to be gaining currency in the popular media — the information superhighway as a "computer utopia … said to educate, entertain and inform" (cf. Nieuwenhuizen 1997).

Rheingold's vision of a virtual community was not the only utopian view of a cyberspace based on CMC. Reflecting the emerging commercial interest in the Internet as programs become more sophisticated and potential applications more obvious, consumer-focused models of virtual spaces and communities have been developed to allow paying customers to temporarily "escape" their every-day lives and situations (e.g., Stefik 1996). In contrast to the text-based format for the virtual communities, which inspired Rheingold, a "theme park" model of virtual utopia is exemplified by the kinds of graphics-based virtual reality worlds developed by the Worlds Chat project (cf. http://www.worlds.net/) where participants take on virtual bodies or "avatars" as a focus of interaction. In short, there has long been an ambivalent tension between romantic and rationalist versions of a virtual utopia. Indeed, an opposition between a grassroots, community-focused cyberspace on one hand, and the designed virtual spaces commissioned by corporate and other institutional interests on the other, was anticipated by the mid-80s project leader of the Lucasfilms Habitat project (Morningstar 1991).

Such emerging perceptions of cyberspace were, of course, influenced as well as anticipated by a dystopian science fiction genre which has become perhaps the emblematic sub-culture of the Internet — cyberpunk (e.g., Dery 1995). Although basically a marginal literary genre, the stories of authors typically associated with the cyberpunk genre (in particular, Bruce Sterling and William Gibson) have generally connected with key themes and issues of the often disaffected popular youth sub-cultures — as well as with cutting edge uses and visions of new technologies. Many of the Hollywood movies, which have integrated notions of cyberspace, have reflected some of the key themes and plots of this genre (e.g., *Bladerunner, The Lawnmower Man, The Terminator, Total Recall*) — the film *Johnny Mnemonic* being directly based on a William Gibson short story. Typically, cyberpunk images and stories pessimistically depict a futuristic social landscape of alienated individuals oppressed by systems of control and authority maintained by a range of new technological means. However, the genre also typically reflects a secret fascination with these electronic media, and a latent,

ambivalent belief that such technologies might still be used to resist and subvert the dominant order. Just as Clifford Stoll freely admitted his own personal ambivalence when challenging both the virtual community and theme park models of virtual utopia, so too the typical subcultures of the Internet tend to be ironic about the relation between cyberspace and normal everyday personal, social and cultural realities — as similarly reflected in the writings of the self-styled ethnographers of global electronic culture, such as Douglas Rushkoff (1994), Howard Rheingold (1994), and Mark Dery (1995).

It should be clear by now that it is not as easy as it may appear to distinguish between the use of virtual utopias (or dystopias) to cater for escapist human fantasies on one hand, and the facilitating of personal or social liberation on the other. This paper proposes to consider ways of approaching the connection between virtual and actual realities of human experience and existence in terms of how emergent notions of virtual utopia are related to the utopian function in human cultures generally. In such a context the discussion below will address two related questions. Firstly, are the individual voices of cyberspace — the invented and intrinsically plural identities — that participate in CMC somehow still "embodied," and thus connected to physical as well as social and cultural realities? Secondly, is it possible to avoid characterising cyberspace as some kind of postmodernist simulacrum (or a separate symbolic order of human representation) which is detached from every-day individual and social realities — for instance, a domain in which participants are perpetually engaged in closed games of simulation and seduction (Baudrillard 1983)?

New World Frontiers and the Utopian Tradition

Rheingold's personal involvement with the WELL (Whole Earth 'Lectronic Link) virtual community — an electronic conferencing group associated with the Whole Earth Catalog — provided a direct connection between a 1960s Californian countercultural ethos and the "democratising" possibilities of cyberspace. Others (e.g., Kling and Lamb 1996) have gone further to suggest that this utopian model of cyberspace might usefully be seen as part of a local utopian tradition of alternative communities going back to the nineteenth century. But it is possible to go back even further to view the Californian model as part of greater utopian traditions, including those associated locally with the American "frontier" mythology and more widely with post-Enlightenment, western projections of a New World order outside Europe.

Utopian uses of a frontier rhetoric traditionally delineated between the "here and now" of a safe, familiar and domesticated suburban world and the wild, exotic, and ambivalent possibilities on "the other" side of the frontier as a New World paradise or a place of migrant exile (Richards 1996). Such representations tended to merge both physical landscape and cultural or imaginary perceptions, and also function as a temporal metaphor of past or future ideal societies as well as a spatial metaphor for projected European notions of elsewhere and otherness. Indeed, Rheingold's (1994) account of the formation of the Electronic Frontier Foundation makes plenty of suggestive, even if mostly ironic, allusions to a pioneering American frontier rhetoric (including a "Wild West" ethos). As well as a distinction between external and internal utopian spaces, the frontier rhetoric of cyberspace incorporates both a "forward" view to an ideal future technological society and a "backward" reference to the model of organic and grassroots rural communities.

Although related to traditional mythical representations of heaven and hell imagery (e.g., Eliade 1963), post-Enlightenment models have thus tended to be polarised in terms of a basic distinction between *romantic* and *rationalist* representations of utopia. Many of the classic utopian writers used the genre primarily to parody or critique their immediate societies (Thomas More, Jonathan Swift, etc.), as others did to either invent an ideal society for a privileged literary audience or to entertain a popular audience with myths of a better life elsewhere. However, the distinct subgenre of "dystopian" writing in the twentieth century (e.g., Orwell's *1984* and Huxley's *Brave New World*) has tended to oppose both the authoritarian utopias of the nineteenth century and technological utopias of early modernism (e.g., Berneri 1950). In short, there is a significant link between the romantic visions of an organic "grassroots" utopia and individualistic credos of dystopia, which similarly oppose utopian models of technological progress linked to an imposed social order. Similar forces would seem to be at work in the utopian projections of cyberspace discussed earlier. As Morely and Robins (1995, 5) suggest, "the burden of catering for various forms of "nostalgia" — for a sense of community, tradition, identity and belonging" has indeed transferred to electronic media.

For the present discussion, the particular relevance of a distinction between *romantic* and *rationalist* utopias lies in how both views similarly project a battle between humans (or even nature) and machines in the modern age, a conflict reflected in a whole host of related oppositions such as *emotion vs. reason*, and *nature vs. culture*. Related to this is Morningstar's (1991) distinction, referred to earlier, between a top-down "creation" and a bottom-up "settlement" of virtual worlds through the use of CMC. The top-down approach to designing a virtual utopia proceeds as if a community is the sum of its individual parts — like a machine that can be engineered. As Morningstar puts it, "while each part of it is designed and organised by somebody, the totality is not." In other words, the identifiable virtual communities of the Internet have emerged more as a gradual and organic settlement, even when designed or engineered.

Many people find it difficult to view computers and their applications in any other way than in terms of the industrial age metaphor of the machine. This tendency is reflected in a fear of computers taking over and humans becoming more passive in their thinking and doing (Postman 1992; Roszak 1994). However, electronic computer networks work more in terms of wholes, patterns and relationships than isolated parts or linear connections. Digital literacy therefore probably has more in common with an immediate oral literacy than a print literacy reliant for its mediation on the spatial decoding of language forms (Ong 1986; Lanham 1993). A related problem is an influential perception that, as the function of a network of computers, the Internet is a kind of machine or artificial media which humans interact with. Ironically, as users of computers start to move from a "culture of calculation" to what Sherry Turkle calls a "culture of simulation", things only seem to get more complicated. As Turkle (1997a, ch.1) argues, increasing numbers of adults as well as a generation of computer literate children are tending to think of computers as more like an organism than a machine, and also increasingly thinking of some human characteristics (i.e., the functions of the brain) as machine-like.

One reason that computers have become emblematic of what Turkle sees as a large cultural paradigm shift is the development of a graphical interface which "hides" the computer and facilitates interaction through the use of visual metaphors (e.g., Disney

characters on a multimedia program). Like a good story, designers hope that they can construct an interface that gets users to suspend their disbelief and interact more effectively with a particular program, game or even web site. Likewise, Turkle also discusses in her book *Life on the Screen: Identity in the Age of the Internet* (1997a) how the use of nicknames and characters in CMC media reinforce a notion of fragmentary selves and plural identities that challenge traditional senses of an unchanging, unitary self (cf. Poster 1995, 31-36; Bolter and Gusin 1999, 230-266). What Turkle is implicitly suggesting is that all media of human interaction and communication are kinds of "mirrors" and that, by being developed in terms of a "culture of simulation," the computer interface similarly functions as a cultural mirror to an intrinsic flux in and diversity of human identity. However, by avoiding the question of whether such diversity and flexibility are still linked to an embodied self in the real world, Turkle (1997b) also seems to avoid considering further how a computer interface might function as a media or "mirror" of human communication. She appears to remain content to merely describe cyberspace as a playful postmodern tool with no particular purpose except to seduce its users (Turkle 1997a, 26).

Computer Mediated Communication: What Kind of Media?

When attacking the notion of cyberspace in terms of how "computer networks … isolate us from one another and cheapen the meaning of actual experience," Stoll (1995, 3) took the view that a machine-mediated media is an artificial substitute which inevitably opposes face-to-face communication. Indeed, as even Rheingold (1994, 182) concedes, some users of synchronous CMC do become addicted to Internet chat and socially reclusive. However, as Turkle also argues, CMC can also productively augment human identity and community. Like any form of human interaction, the online media of CMC are open to use and abuse. However, also at issue here is a question of the connection between *virtual* and *actual* aspects in human experience. In other words, any challenge to Stoll's perception needs to be able to argue a case that CMC is related to, but goes beyond, traditional media of communication in human cultural history.

There is a useful connection between changing notions of utopia in human culture and, for instance, Levinson's (1990) conception of three historical ages in the evolution of human media as a context for "placing" the use of the CMC. The first communication age is defined in terms of the *immediate* "here and now" interaction of primarily oral cultures. This age corresponds to the traditional and medieval cultural functions of representing utopia as a *mythical* time and place — typically a transcendent reality of heavens or paradises opposed by demonic hells. Similarly, the second age described by Levinson is that of *mediated* communication which is distant in either time or space — as exemplified by the use of both the written word and printed texts. This age corresponds to the post-Enlightenment notions of utopia as either an obviously *imaginary* society and invented place, or a distinct literal and *historical* possibility waiting to be discovered and even colonised. Synchronous CMC is emblematic of a third age to the extent that it embraces aspects of both mediated and immediate communication. Perhaps this stage corresponds with a notion that a distinction might be made between escapist models of virtual utopia and those linked to human actuality.

Like Mark Poster's (1995) model of two electronic ages of communication — a model which compares the linear sequence of "broadcasting" with the "two-way, decentralised communication" of the digital interface — Levinson's model also implicitly rec-

ognises the central importance of the reader or user in the process of mediated communication. However, Levinson goes further than Poster to provide a framework for focusing on the problem of the connection between the virtual and actual in human experience in terms of a similar relation between the rhetorical and actual (i.e., immediate) aspects of any human media.

In similar fashion to Turkle, Poster adopts a postmodernist model for interpreting the use of digital media (and especially hypertext) in terms of readers or users being the central focus of any communication as producers or constructors of their own meaning and identity. The problem with this model is that it suggests that an author's or designers' strategy of meaning — as distinct from literal intention — is merely contingent and accidental in the overall scheme of things. It does not distinguish between the *literal meaning* (or retrospective intention) of an author or designer and a *rhetorical strategy* which frames and elicits the response of readers or users. Moreover, it does not distinguish between the use of a media of communication as a function of *translation* on one hand, and one of *transformation* on the other. Referring to Derrida for support, Poster (1995, 71-2) argues that his model subverts that of a linear and hierarchical relation between senders and receivers (also, producers and consumers) of communication. But, in many ways, it merely reverses and ultimately reinforces the very model it opposes. The collective as well as individual reader or user effectively replaces the writer or designer as a locally contingent, rather than objectively literal, constructor of meaning and the transformer of a particular media.

As Ong (1982, 176) suggested when discussing the "secondary orality" of technologically-mediated communication, the key difference between immediate communication and strictly mediated kinds of communication such as print texts is that participants are more obviously senders and receivers at the same time and engaged in a process of dialogue (even, as Ong further stresses, when individuals interact "with themselves"). In other words, a linear model of communication viewing media as either a transparent window or a postmodernist mirror tends to ignore how the production of meaning through any media of communication is ever a process of dialogical interaction (Bahktin 1986; Taranhao 1990).

The work of Paul Ricoeur (1976, 1986, 1991) develops a similar insight as a basis for not only viewing a possible convergence between the virtual and actual in human experience, but — as will be discussed below — also a distinction between the use and abuse of a utopian rhetoric. Going beyond Derrida's "postmodernist" delineation between writing and speaking as separate systems of communication, Ricoeur's theory of interpretation treats all human media as if they were a "here and now" interaction and any act of communication — either a face-to-face interaction or the reception of a written text — in terms of various aspects of non-local mediation. On the one hand, this perspective recognises that the oral discourse of face-to-face interaction is just as much expressed through a linguistic and cultural filter of preconceptions and stereotypical prejudices as any other text. On the other hand, Ricoeur's particular use of reception theory focuses on how a reader embodies and activates the "immediate" dimension of a printed or distantly-mediated text in such rhetorical terms as the linguistic uses of tenses (past, future, subjunctive, etc.) — and not simply a merely subjective response to the surface content of any media.

In other words, Ricoeur tells us that we should treat all human communication as if it were a virtual process linked to actual human realities. If we read a book or even a

set of web pages, for instance, we should imagine ourselves engaged in dialogue with a persona or mask of the writer and designer, a rhetorical identity with a particular strategic purpose of communication (as distinct from literal intentions). In this way, a "reader" might avoid confusing a biographical and literal, as distinct from metaphorical, connection between the virtual and actual identities of a particular writer or designer of texts. In contrast to both the humanists and postmodernists, Ricoeur recognises a potentially transformative (but still causal) rather than objectively fixed or subjectively contingent link between an organising sense of self and the multiple selves or personas which people often take on — as well as between "senders" and "receivers" of communication. Such advice that human meaning is ever an interaction rather than something either fixed or indeterminate has useful application to CMC. It provides a model for challenging the notion that online interactions are trapped within an endless process and simulacrum of what Bolter and Grusin (1999, 18) refer to as "remediation" — the perpetual oscillation of new digital media between immediacy and hypermediacy.

Stoll (1995) typifies the view of many critics — but often those who have never or rarely interacted in this way — that CMC is inevitably superficial, impersonal, and relies on an artificial and disembodied media of communication. Such a view is partly related to the fact there is clearly a lack of the kinds of contextual and non-verbal cues which characterise face-to-face communication (facial expression, tone of voice, etc.). If CMC is viewed as just a matter of *human-machine* interaction then the playful, informal and often intimate language-use and dialogue which typically characterise Internet chat might be conveniently dismissed as a pale imitation of "real" human relationships — notwithstanding how virtual friendships often translate into physical relationships and even occasionally marriage. But a view of humans interacting with other humans using a computer network media — especially in terms of partially collapsing the distinction between immediate and mediated communication — provides a context for several arguments against this latter view.

One argument made is that users of text-based CMC programs have developed ways of using verbal cues providing context and representing typical non-verbal cues (e.g., as reflected in the vocabulary of shorthand expressions that have built up around Internet chat, including the use of so-called "emoticons;" Argyle and Shields 1996). Others support the view that Internet chat often encourages a less inhibited, more democratic and even, paradoxically, a typically more personal and creative form of human interaction and language-use than is generally the case in the normal everyday conversations that take place in modern, suburban societies (Bromberg 1996). Indeed, a number of substantial studies have been made of how CMC can empower marginalised or disadvantaged individuals and various groups, and promote collaborative learning practices and global perspectives in educational contexts especially (Lea 1992; Herring 1996).

In general, CMC represents a specific media that uniquely converges the functions of language and technology as symbolic and physical media (or tools of both the mind and body) respectively for human interaction with the world. The product of this convergence — so-called cyberspace — thus needs to be appreciated as a rhetorical locus of symbolic action that links the cultural or imaginary and physical, material dimensions of human reality. The question remains whether such links can be sustained by the kind of postmodernist culture of simulation described by Sherry Turkle.

Rediscovering the Virtual Dimension of Human Actuality and Vice Versa

One key implication of the discussion so far is that, as Turkle suggests, CMC provides a useful basis for recognising that all human experience, knowledge and communication are somehow represented and mediated as functions of language and culture — and therefore filtered through a mixture of both individual and collective preconceptions and expectations. Turkle's ambivalence about a computer culture of simulation would seem to be also reflected in her uncertainty about how to interpret what she sees as a gradual erosion of the human capacity to distinguish between virtual and actual realities. Nevertheless, Turkle (1997a) views the Internet culture as representative of an emerging global postmodernist culture.

Such a view is perhaps consistent with Baudrillard's (1983) notion that individuals and societies in the contemporary age have become enmeshed in an electronic media of communication that can only simulate reality (i.e., a simulacrum). For Baudrillard, people today are increasingly and inevitably living in the kind of global mass media culture in which the words and images of others (especially commercial advertisers) have become detached not only from their physical referents, but also even from conventional meanings. People are increasingly discovering that identities and objects that appear to be fixed and certain often dissipate and transform upon closer inspection. If cyberspace also represents a merely seductive and distortional semblance or simulation of the world, then CMC participants are indeed similarly "trapped" in the kind of postmodernist simulacrum which many critics believe rules the conventional mass media and, thus, both individuals and societies in the contemporary age.

The culture of simulation described by Turkle refers to the ability of computer applications to provide substitutes for reality across a range of human activities. This includes the learning of skills and knowledge safely in a simulated situation before actual practice or tests (e.g., learning to fly an Air Force jet using a simulator). A central focus of her own work is on the use of CMC to simulate human identity and social interaction. Just as it may be asked whether a culture of simulation provides an effective basis for learning real-life skills and knowledge, so too one might query whether it is possible for people to get beyond virtual role-playing with multiple identities to connect with or develop an enduring and transformed sense of self acting in and upon the world.

Put another way, is it possible to tell when people are deceiving others in Internet chat, to "hear" an authorising voice behind the various roles, characters and avatars? An exemplary instance of this issue is when participating characters have indeterminate or even "suspicious" identity. As any regular user of Internet chat will be aware, there is always the possibility that other characters have engaged in virtual "gender-swapping" or some other pretence (they may even be a programmed "bot"). As several commentators have observed (Reid 1996; Herring 1996), it is difficult for anyone to sustain the illusion of the opposite gender since there are always subtle verbal indicators and cues of how gender inflects the manner and expression of online writing. But there is also the additional factor that CMC is a medium that encourages immediate intimacy, especially in one-on-one interactions. The very fact that people knowingly engage in reciprocating role-play, and that there is a relative absence of obvious contextual and non-verbal cues (which are often contradictory and confusing), tends

to "expose" the organising or convergent voice behind the mask of virtual bodies. Describing virtual reality as an inherently erotic mode of communication, Stone (1993, 1995) suggests that people even extend and transform themselves into metaphorical "virtual bodies" that actually transform human identity.

Paradoxically, then, it may be sometimes easier in Internet chat than in face-to-face interaction to tell whether a person is being sincere and genuine or not. In the relatively safe context of CMC simulation, people are often ready to share private worlds or secret hopes and fears — to reveal vulnerable aspects of self and a general organising sense of self. Such a self need not be reduced to either actual biography or virtual persona but, rather, might be seen as a dialogical interplay of unity and multiplicity. In contrast with postmodern emphases on fragmented, decentered, and multiple representations of self, Ricoeur (1991) describes a model of self linked to an actual agency in the world that works to organise and make coherent the virtual play of diverse and plural identities in every cultural context — a model well suited to describe the rhetorical play of unity and multiplicity in CMC environments.

The problem with simulation is not when people view this *as if* reality, but when they treat reality *as if* a simulation (e.g., a novice jet fighter pilot obviously does not get a second chance to avoid crashing in a real flight). On the other hand, it is clear that if people suspend their disbelief or simply embody an attitude of participation, then simulation or virtual activity involving the use of imagination can be a powerful tool for learning and applying actual skills and knowledge — that is, for extending one's "comfort zone" of familiarity. It would seem to be important, then, to recognise that cyberspace is primarily or ultimately also a function of human culture and imagination. In other words, there are pragmatic as well as symbolic reasons for replacing a *human-machine* interface model with a view that the Internet might be most productively interpreted as a case of humans interacting with actual worlds and other humans using computer networks as a transformative and interactive media of virtual communication.

In contrast to Baudrillard's quite pessimistic and dystopian perspective, Turkle's more ambivalent conception of a postmodernist culture of simulation implicitly reflects a different view of human media of communication. Baudrillard represents a particular postmodernist view that derives from the Marxist notion that ideologies which inevitably distort and manipulate people are the pre-condition of any social condition and human interaction. Other poststructuralist Marxists taking a similar starting point (e.g., Althusser) began to realise in the 1960s that ideologies not only work at the informal and personal level as well as in the public and institutional domains of discourse, but also are open to use and abuse as an unavoidable basis of human communication. In short, there is another stream of postmodernism, typified by Turkle's view of the Internet, which simply takes a non-committal, ambivalent strategic position — about the personal, social and cultural functions of utopian rhetoric, as well as that of ideology (e.g., Kollack and Smith 1999, 3-25; Wellman and Gulia 1999, 167-194).

By recognising that metaphor, narrative and virtual imagination generally are constitutive or central aspects of human thought and language-use, the dialogical framework of Paul Ricoeur is perhaps more usefully situated to critically distinguish the connection between virtual and actual realities in human experience. In terms of an overriding distinction between "ideology as a symbolic confirmation of the past, and

utopia as a symbolic opening towards the future," Ricoeur (1986) makes a crucial delineation between merely escapist and unachievable uses of virtual or imagined utopias which project onto distant "other" locations of time and space, and transformative, achievable uses that are "grounded" in the here and now of overlapping physical, social and cultural realities. Such a distinction might also be applied to the distinction between romantic and rationalist utopias discussed earlier. Naïvely romantic versions of a utopian rhetoric conceived in a vacuum are just as escapist as those more sophisticated and engineered visions of a technological society free of crime, poverty and disease. However, as suggested by the example of pioneering virtual communities, a "grassroots" utopian vision which connects with an effective "top-down" framework or design may well provide a model for distinguishing escapist notions of utopia and recognising effective connections between virtual or imagined and actual, achievable utopias.

According to Ricoeur, both the imagined and lived stories, images and experiences of all humans contribute to individual and collective memory of the past as a basis for recognising future possibilities and potentials. As a process of *transformation* rather than merely of *translation*, simulations of self, society and reality are both virtually and actually linked to acting bodies, local communities, and cultural worlds. One reason many people are attracted to the virtual cyberspace and networked society of the Internet is to seek out a sense of community or connection missing from the closed worlds of much contemporary suburban life (Jones 1995; Castells 1996). This should remind us that the very notion of community has never been located merely in terms of the physical proximity of people — but has always been connected to the cultural (and therefore virtual) mediations and networks of human communications.

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