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Social Transformation Through Spatial Transformation: From Geospaces to Cyberspaces?

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Abstract

In recent years there has been a global growth in cyberspatial technologies accompanied by increasing speculation from academia and the media concerning their effect on social activities and relations. This article considers the role of cyberspace upon conventional Cartesian notions of space-time relations and evaluates its potential as a new social space. As such, the contention that cyberspace is radically transforming and restructuring social, cultural, political and economic aspects of contemporary, western society is critically reviewed. In particular, the changing nature of identity and community is explored. It is suggested that many of cyberspace's effects on social relations can be understood within the context of spatial transformations. However, much current analysis is over-hyped and utopian, and needs to be re-situated within the 'real'. In effect, the implications of cyberspace have to placed within the context of broader social and economic processes taking place in the world today.

Introduction

THERE HAS BEEN increasing recognition in the social sciences of the role space and place in transforming and maintaining social relations (Soja 1989; Harvey 1989; Gregory 1994). It is generally argued that space is important at two levels. At the first level, space-time relations are being transformed, producing the effect of a 'shrinking globe' - communication, travel and transport times and costs are drastically reduced altering social, political and economic relations. At a second level, space is increasingly being recognised as being socially produced. Here, it is argued that it is within space that we interact with each other

and play out our lives. However, some spaces are more socially accessible to us than others. Within the city, for example, it is possible to identify distinct social spaces where people of different classes, races, gender and sexuality are accepted and excluded. Space is therefore something which is produced and contested and which directly and explicitly impinges upon our everyday social activities.

Cyberspace provides an interesting context to acknowledge the role of space in social relations because it has been suggested that it fundamentally alters space-time relations and also provides a new social space of interaction, devoid of physicality. As such, it can be argued that the changing nature of social relations both in `real' space and cyberspace is largely due to the way in which the accepted modernist, Cartesian notions of space are being challenged by cyberspatial technologies: social transformations are the results of spatial transformations. Here, cyberspace is taken as the "world in the wires" (Shields 1996: 6), incorporating Internet interactions such as e-mail, World-Wide-Web, bulletin boards, chat facilities and file transfers, and virtual reality and electronically simulated environments such as MUDs (Multi-User Domains).

In this paper, the extent to which cyberspatial technologies are transforming social relations and the role of space in this transformation is examined. Much of the discussion is framed within a postmodern context, from which many of the arguments concerning the role of space, spatiality and identity have emerged. However, in the last section, many of the postmodern ideas considered will be challenged and an argument developed to recontextualize writings about cyberspace within the `real'. My contention is, that although appealing, many of the postmodern ideas are vacuous, lack substance and are based more upon wishful thinking than the realities of everyday life. It is alternatively argued, while cyberspace does provide a social space where identity can become more fluid and where new communities can form, we are neglecting to place cyberspace within the broader social and economic contexts within which we live.

From Geospaces to Cyberspaces: Space-Time Relations

Postmodern theorists argue that in a number of fundamental modernist societies and the relations that underlie them are changing breaking down. We are moving into a more unstable age; an age w individuals are not rational, autonomous, centered and stable but unst multiple and diffuse (Poster 1995a; Poster 1995b). For many, postmodern culture emerging is closely tied to technology (McCa 1991) with theorists envisaging technology as an agent of cha technology is helping to break down the modern and is producing forms of relations, expressions and society (Schroeder 1994). T changes have led social critics, such as Poster (1995a), to argue that w on the verge of massive cultural re-organization as we enter what he t the `second media age'. To Thu Nguyen and Alexander (1996), example, network-generated operations, such as cybersp fundamentally undermine the political discourse of modernity and s practices such as agency, action, territorialisation, progress development. These they argue are being replaced by usership, opera non-linearity, recursivity and chaos. Quoting Emberley (1988: 50) claim:

> The old economy of production, of industrial policy, of state initiative, of discrete and singular actors and audiences, of centers and margins, form and contents, in brief, the great order of referential finalities where the world was compartmentalized, taxonomically ordered, and prescriptive - all this over.

For them the turn to postmodernity is a necessity not just a choice.

To the postmodernists, changes seem to be occurring at levels. At the first level, economic and political systems have b evolving, with a global movement away from the local, accompanied a vast restructuring. We are living in times of fragmentation, decenter disorientation and disenchantment. Here the postmodernists emphasis on the nature and experience of the new spatiality" caused by increa globalization (Morley and Robins 1995: 74). The transformation of sp and time are seen to lie at the heart of these changes; social transforma is occurring through spatial transformation. Indeed Soja (1989: 1

argues that space (and place) are central today's postmodern society contending that "the contemporary period of restructuring has been accompanied by an accentuated visibility and consciousness of spatiality and spatialisation, regionalisation and regionalism". Harvey (1989) argues that there has been a collapse of spatial and temporal boundaries, with cyberspace and telecommunication technologies leading to a radical space-time compression. Whereas innovations such as the Railway reduced communication times substantially, telecommunications makes them near instantaneous. Not only has the effects of spatial separation been negated but expenditure on delivery substantially reduced in real terms. The increasing efficiency of communication is translating into greater and more efficient productivity. The 'wiring of the world' is leading to a corporate, decentralized globalization. This has led some commentators, such as Benedikt (1991: 10) to question the "significance of geographical location at all scales". For Benedikt, "We are turned into nomads ... who are always in touch" with the "spatial dynamics of the whole world collaps[ing] to those of a pinhead" (Robins and Hepworth 1988: 155). Gillepsie and Williams (1988), however, warn that it is misleading to think of near-instantaneous telecommunication technologies as mere "distance shrinkers". For them, telecommunication technologies, including cyberspatial technologies, challenge fundamentally classic economic geographies based upon the ideas of 'friction of distance':

> The idea of telecommunications as 'distance shrinking' makes it analogous to other transport and communications improvements. However, in so doing the idea fails to capture the essential essence of advanced telecommunications, which is not to reduce the 'friction of distance' but to render it entirely meaningless. When the time taken to communicate over 10,000 miles is indistinguishable from the time to communicate over 1 mile, then 'time-space' convergence has taken place at a profound scale. Because all geographical relationships are based, implicitly or explicitly on the existence of the friction imposed by distance, then it follows that the denial of any such friction brings into question the very basis of geography that we take for granted.

Here, Cartesian notions of space based upon the ideas of fixity : absolute positioning are challenged as the spatial and social relationsl between places become folded and contorted. As such, the transformat of space is explicitly seen as the catalyst for social transformations.

However, while cyberspace does alter space-time relations must be remembered that "space and place cannot be annihilat (Morley and Robins 1995: 30). Cyberspace does depend on real wc spatial fixity - the points of access, the physicality and materiality of wi There is a world outside of the wires in the form of other infrastructu and local and global markets. Location is not going to become irrelev because cyberspace does not annihilate all the other determinates commercial location. Ironically, evidence so far indicates that far fr eliminating differences between places, cyberspatial technologies actu permit the exploitation of differences between places by capitalizing cheap wages, reduced standards of work conditions and cheaper locatic While there are decentralizing tendencies allowing back-offices to m to new areas, the concentration of advanced telecommunication into l cities means that any process of decentralization of certain activities accompanied by a centralization of others into areas which act as k network nodes (Castells 1988). In essence, we are currently witness the playing out of urban fixity against electronic mobility (Graham Marvin 1996), as real-space is overlain by a virtual space in a symbi fashion (Mulgan 1991). It is increasingly becoming clear, drawing fr studies of employment and urban-regional restructuring as a result cyberspatial technologies, that geography remains and will continue remain of importance (see Alles *et al.* 1994, Daniels 1995, Warf 199 Although space-time relations are undoubtedly being altered they are being radically reconfigured through some process of annihilation. such, it can be argued that cyberspatial technologies reinforce importance of space in understanding social relations. On the one han is leading to radical space-time compression and on the other it reinforcing and accentuating traditional geographies of difference.

From Geospaces to Cyberspaces: Social Spaces

At the second level, postmodernist discourse tends to focus on the local, and how traditional modernist notions are being challenged and reconceptualized. Here postmodern theorists focus upon the conceptualizations and meanings of identity, the body, community and place, and the blurring of boundaries between reality and virtuality, and nature and culture. Cyberspace and virtual reality in particular, are highly relevant to the arguments being forwarded. At the heart of these changes, as with the first level, is the concept of space and spatiality. Cyberspace, as well as collapsing traditional space-time relations, is providing a new social space (Tomas 1991); a place where people can meet and interact. As suggested, geographers (e.g. Harvey 1989; Gregory 1994; Soja 1996; Thrift 1996) have been arguing that real-world spaces are not just Cartesian spaces, absolutely defined and understood with Euclidean geometry, but are also socially constructed. Here, it is argued that our access to certain spaces is strongly regulated through social and cultural practices and beliefs. In effect, certain spaces are socialized by certain homogeneous groups who regulate and exclude `unwelcome' visitors. Social spaces, as found in any city, are thus contested through processes of domination and resistance. We can thus identify social spaces that are constructed through identity politics relating to gender, race, ethnicity, disability and sexuality.

As such, it is argued that cyberspace is providing new, less formalizing and formal, disembodied spaces where identities can be constructed and contested. Cyberspace is providing a new locale for communities, uprooted from the traditional boundaries of place; cyberspace is providing explicit spaces of artificial realities. Cyberspaces are spaces that are socially constructed; they do form social spaces where people interact. It is precisely because cyberspace is a social space, but a space without physical presence, that it is attracting so much attention from social scientists. Cyberspace is a social space free of the constraints of the body; you are accepted on the basis of your written words, not what you look or sound like. Cyberspaces are "social spaces in which people still meet face-to-face, but under new definitions of both `meet' and `face'" (Stone 1991: 85). Gibson (McCaffery 1991: 272) remarks that "everyone

I know who works with computers seems to develop a belief that there's some kind of *actual space* behind the screen, someplace you can't see but you know it is there". In many respects the actual space Gibson identifies is a consensual social space devoid of any of the qualities of formal, real-world space. Indeed Mitchell (1995: 8) describes cyberspace as:

> profoundly *antispatial* ... You cannot say where it is or describe its memorable shape and proportions or tell a stranger how to get there. But you can find things in it without knowing where they are. The Net is ambient - nowhere in particular but everywhere at once. You do not go *to* it; you log *in* from wherever you physically happen to be. [original emphasis]

In addition, because cyberspace has no physical spatial properties, and is fully the product of human intention it is also said to replace or blu reality with virtuality (Lajoie 1996). For example, Benedikt (1991: 23) argues that cyberspace causes "a warpage, tunnelling and lesioning of the fabric of reality". Cyberspace rapidly increases the blurring of reality and virtuality first started with the printed word, and further developed by radio, television and film. Each of these media provide us with a representation of the real; a copy of the original (McCaffery 1991). For Slouka (1996) the danger is that many of us are now willing to accept the copy as original, and put our trust in those that re-represent the world to us. We are to willing to except the virtual for real. To many, this replacement of reality with virtuality means that cyberspaces are spaces where we can explore and recontest our identities without materia consequence.

For many then, cyberspatial technologies represent a catalyst for a broad and extensive change in culture (Squire 1996). At both the individual and collective levels, cyberspace is facilitating the deep restructuring of society, challenging traditional notions of identity and community. The key question is what forms of cultural articulation is cyberspace going to promote and discourage? (Poster 1995a). Poste (1995b) suggests that cyberspace technologies do enrich existing forms o consumer culture, but also depart from traditional mass media and cultur industries in a number of ways. Firstly, cyberspace is not a broadcas medium with few producers and many consumers, but rather

decentralized communication system where individuals are both the consumers and producers. Secondly, cyberspace is interactive; users can choose what information they receive and send. Thirdly, cyberspatial technologies provide extensions of biological abilities allowing machines to do what the body once did (Thu Nguyen and Alexander 1996). It is these factors which facilitates the challenge to the tradition notions of identity and community by providing new social spaces of interchange and cultural transmission. Indeed, Thu Nguyen and Alexander (1996) argue, that combined, these three factors produce cultural mutation and considerable cultural promise (Tomas 1991). Similarly, Schroeder (1994) envisages the emergence of a society in which cyberspatial communications become all-important; where technology and science transform the structure and meaning of society and culture. Escobar (1994) terms the resultant emerging culture as `cyberculture', and Jones (1995a) names its associated society as `Cybersociety'. As suggested, spatial transformations should be seen as central to any understanding or explanation of cyberculture and Cybersociety because at the heart of these new social relations is the formation of new social spaces and places. This can be illustrated by examining current arguments concerning cyberspace's effect upon identity and community.

Identity

Poster (1995a) argues that cyberspace promotes the individual as a unstable identity, an individual bound within a continuous process of multiple identity formation: "the self is reconstituted as a fluid and polymorphous entity" (Robins 1995: 138). Here, "the boundaries of the self are defined less by the skin than by the feedback loops" (Hayles 1993: 72). Thus, for Poster (1995b) cyberspace alters the conditions under which self-identity is formed. This is the result of two main factors: the transcendental and liberating effects of cyberspace as the nature of social spaces change; and the merging, or blurring, of nature with technology.

As noted in the previous section, for many, cyberspaces form a new social space where reality and virtuality merge, where the physical and material is transcended. Arguments here center on the ideas of disembodiment and transcendence. Many of the contentions are extremely

utopian, centering on post-human life and the migration into the machine In this scenario, embodiment is often represented as an unfortunate barri to interactions; for serious cyberspace enthusiasts "an organic body ju gets in the way" (Morse 1994: 86). Here, the body is often referred to a `meat' (Lupton 1995) or `data trash' (Kroker and Weinstein 1994) and "th dream ... is to leave the `meat' behind and to become distilled in a clea pure, uncontaminated relationship with computer technology" (Lupto 1995: 100). Free of the our bodies we can transcend our own mortali and discover true understanding and new philosophies.

At a less utopian level, although still centering on the ideas disembodiment, cyberspaces are seen to form protective spaces free of th constraints of the body. Here you are accepted for what you say and d rather than your physicality, status or material wealth. Rheingold (199 61) explains that:

> we reduce and encode our identities as words on a screen, decode and unpack the identities of others. The way we use these words, ... is what determines our identities in cyberspace ... The physical world ... is a place where identity and position of the people you communicate with are well known, fixed, and highly visual. In cyberspace, everybody is in the dark. We can only exchange words with each other - no glances or shrugs or ironic smiles. Even the nuances of voice and intonation are stripped away.

In cyberspace, nobody need know your race, disability, or gender. Yo can hide behind, and view the same situations, using different masks Your body is irrelevant and invisible (Stone 1991). Cyberspati interaction, it seems, provides an unrestricted freedom of expression that far less hierarchical and formal than real world interaction (Ehime 1991) Here, personality becomes fluid, ephemeral and empowering becau people can choose how they are represented (Lemmas 1996). Indee there are a number of well documented cases of people experimentir with gender. In one example, a middle aged, male psychiatrist pretende to be a compassionate disabled, older woman who tapped out h messages using a heartsick (Stone 1991). Using this persona, th psychiatrist developed several, deeply personal relationships mainly wi

women. Other women shared their deepest troubles and he (Julia) gave advice. In another example, Slouka (1996) describes how Avram had been conversing with Janie using a chat facility. They had fallen in love and had been conducting an cyberspatial affair including talking each other through masturbation. There was one catch, Avram was pretending to be Allison, a persona he had created.

For Thu Nguyen and Alexander (1996), the appeal of cyberspace is based upon anonymity and escapism. It is anonymity that creates the opportunities to invent alternative identities and to engage with untried forms of interaction (Baym 1995). Correll (1995) furthers, that cyberspace gives the user more time to carefully construct their personae, delicately crafting emotions and appearances and giving a control not experienced in face-to-face conversations. In addition, interactions in cyberspaces carry less responsibility, and Aycock and Buchignani (1995) suggest, no more personal consequence than reading a book. For Lanier (1989: 8) these factors "give us a sense of being able to be who we are without limitation". Thu Nguyen and Alexander (1996) argue that cyberspace appeals to the young because it represents an escape from a world that does not, and does not want to, understand or provide for them. On-line they can explore their feelings and identity, and communicate with like-minded individuals. This they argue is part of a growing trend, with millions of people regularly spending an increasing proportion of their time on-line experimenting with their personal identities. These notions of anonymity, escapism and freedom are the direct result of the changing nature of social spaces and the ways in which space is being socially produced. This is not to say that space is the dominant determinant of social relations.

For others, cyberspace represents the continued merging of technology and nature. Here, identity is being recontested as the divisions which we have traditionally used to structure our understanding of the world dissolve and blur. Theorists such as Haraway (1991) and Plant (1993) argue that, at present, the boundaries between people, their bodies and the outside world are being significantly reconfigured (Featherstone and Burrows 1995). Balsamo (1995) suggests that boundary between nature and culture serves several ideological purposes. Most importantly it affirms a proper order and installs a hierarchical relationship between

nature and culture. Balsamo argues that this hierarchy serves to reinforce the belief that through technology humans will prevail over thei encounters with nature. However, to many, the boundaries betwee technology, nature and culture are blurring with the strict hierarchie crumbling and merging through a deep restructuring process. For Ston (1991), cyberspatial technologies are at the heart of this blurring process breaking down the barriers between the social and technological biological and mechanical, natural and artificial, with the resultant merger forming the keystones for the new social space. In turn, this process i leading some theorists to hypothesize that we are becoming nations o cyborgs. Here, human and machine merge, with the machine replacing o supplementing the flesh. We are being reconfigured in new ways tha challenge traditional identities.

Proponents of this theory suggest that it is increasingly difficult t separate nature from technology and support their claims through th development of a cyborg discourse. "Nature and culture are reworked; th one can no longer be the resource for appropriation or incorporation fo the other" (Haraway 1991: 151). A cyborg is a human-machine hybri where technology replaces or supplements flesh (Featherstone an Burrows 1995). The idea of a cyborg body has been popularized in muc science fiction writing and in films such as *Star Wars* (e.g. Darth Vader *Robocop* and *Terminator*. At present, technologies such as cosmeti surgery, biotechnology, genetic engineering and cyberspatial systems, ar increasingly making us cyborg entities. Whilst the first three of thes technologies all physically alter our bodies, cyberspatial technologie (particularly virtual reality) completely immerse the body withi technology and also provides new extensions to our bodies throug features such as datagloves, and headsets, with visionists such as Laur (1993) predicting some future merging between virtual realit technologies and humans. This theme is well developed in the scienc fiction writings of authors such as William Gibson (1984). The characte in his novels are predominantly cyborgs, frequently living lives immerse in technology with bodies which combine flesh with technology.

Cyborg discourse, is predominantly post-structuralist in natur denying any reality to the body that is not constructed through cultu (Lupton 1995), and hence language. Here, the exchange of flesh fo

machine produces "rewritings of the body's social and cultural form that are directly related to the reconstitution of social identities" (Tomas 1989: 115). As such, theorists are interested in how these technologies do and will affect the `self', human-ness and identity (Downey *et al.* 1995; Holland 1995). For some, the cyborg body, as with cyberspace's transcendental qualities, represents "liberation from the confines of gender and other stereotypes, by rendering cultural categories indeterminate and fluid" (Lupton 1995: 101). As such, the cyborg body represents new opportunities for women and feminist politics. In particular, Haraway (1985, 1991) has argued that we are all cyborgs; chimeras - the "fabricated hybrids of machine and organism" (1991: 150). As cyborgs, she suggests that women have an opportunity to reappropriate, contest and enforce new social relations through the recoding of the self and the body. Until recently, she contends, "female embodiment seemed to be given, organic, necessary" (Haraway 1991: 180), geared towards mothering and its extensions. However, as a cyborg, embodiment is fluid, partial and dynamic, not given but waiting to be ascribed meaning. Here, the dominant dualisms that underlie and structure our society can be challenged.

Community

Just as there are changes relating to identity, some academics argue that cyberspace is fostering new forms of community. Researchers suggest that cyberspace allows the formation of `virtual (on-line) communities' that are free of the constraints of place and based upon new modes of interaction and new forms of social relationships (Rheingold 1994; Featherstone and Burrows 1995). Indeed, Poster (1995b) contends that the Internet's ability to simulate communities far outstrips, in importance, its other functions as a marketing, advertising and information dissemination device. The Internet through its interactivity and relative speed offers users a freedom of expression and personal contact allowing a sharing of ideas and thoughts regardless of geographical distance and time zones (Heim 1991; Jones 1995b). Through the Internet, we will be able to form new forms of communities based upon our interests and affinity, rather than coincidence of location (Robins 1995). Here, individuals will

be able to shape their own community through real choices in who t interact with; "we will be able to forge our own places from among many that exist, not by creating new places but by simply choosing f the menu of those available" (Jones 1995b: 11). Again, as the langu used suggests (distance, location, place), it can be argued that the chan nature of social space is at the heart of the changing social relation communities.

In this context, community is seen as a network of social relat and not necessarily a concept that is tied to place. In traditi conceptions of community, place is considered of importance along common ties and social interaction (Correll 1995). *The commu* however, is characterized by such factors such as personal intimacy, m commitment, and social cohesion. For commentators such as Rheing cyberspace does allow the development of *the community* without locale; people can form into strong, cohesive and supportive groupi Indeed, Rheingold's grand vision is a `global civil society' with a sh consciousness: community will no longer be local but global.

There is a growing body of empirical work that has starte examine ideas pertaining to community formation and regulation. McLaughlin *et al.* (1995) the fact that there are commonly ag protocols and the advent of distinctive referent language (abbreviat jargon, symbols) and the formation of strong social networks, sug that on-line communities, in one form or another, do exist. Baym (1! Correll (1995) and Reid (1995) all provide evidence of well formec line communities. Baym (1995) has interviewed and documentec interchanges of users participating in the rec.arts.tv.soaps (r.a.t.s.) U newsgroup. She contends that the people who participate in this g have created a dynamic and rich community. Just like real-v communities there are behavioral norms, differing personalities, sl significance and allegiances. For her the Internet fosters the grow distinct cultures grounded in communicative practice.

Correll (1995) details an ethnographic study of an on-line le cafe. She suggests that her findings challenge the traditional noti community by demonstrating that a community can be create alternative spaces. Correll used a three way methodology to study a line community and the processes at play. First she observed the

traffic between cafe patrons, occasionally asking patrons to explain various actions or conversations. Next she interviewed twelve patrons using a semi-structured interviews via private e-mail. Last, she met in person with eight of the patrons who had decided to meet face-to-face, interviewing these individuals in two groups of four. Correll (1995) describes how patrons have constructed an elaborate virtual cafe in which to contextualize their interactions. She suggests that this shared setting creates a common sense of reality constructed purely through verbal descriptions. In essence, the locale needed for community has moved from the real to the virtual, but place and setting is still of importance. For Correll (1995), the transference of the locale into the virtual is the secret to the community working. Without the shared reality of the bar, she suggests that the community itself might have dissolved. The locale constructed and maintained, however, was safer than the real bar scene "where the games are for real" (Correll 1995: 281). The glass screen of the computer was providing a window into a world where the patrons could explore their ideas and thoughts without fear of physical or mental retribution; true identities were hidden and patrons could participate without being visible members. Correll explains that one of the primary roles of the lesbian cafe is to act as a surrogate community for those who tend to marginalized from traditional communities while providing many of the same functions.

Reid (1995) rather than concentrating on mailing list groups, documents the formation of communities in MUD environments. Here interaction takes place within a textual, virtual environment described by the computer and created by a programmer or by individual participants (in contrast to Correll's study where the concept of a cafe environment was created by mutual consent). Interaction is based within the context of the imaginary setting and not rooted in the context of a specific subject (e.g. soap operas). MUDs and MOOs provide artificial places and it is commonly observed that users treat these places as if they were real. Just like real-world encounters conversations are normally based within the context of the environment they are spoken in. For Reid (1995: 183) these virtual environments "binds users into a common culture whose specialized meanings allow the sharing of imagined realities". Argyle (1996) discovered that the mailing lists she subscribed to did hold

immense social meaning. Only when a list member died, however, did sh begin to realize the depth of these meanings and how the group supporte each other and grieved as a community. Bromberg (1996) suggests tha MUDs besides just being `a game' or another form of communicatio serves four social functions. On one level, MUDs offer an antidote t loneliness providing solace through communication. Secondly, MUD allow users to experiment with identities and personae. Thirdly, MUD allow users to explore their erotic sides and virtual reality in particular ha been championed as a new site for sexual encounters. Lastly, MUD allow users to become the masters and controllers of their environment.

While it is argued that cyberspace is fostering the formation new subcultures and communities on-line, it also been suggested that performing the same off-line. Schroeder (1994) and Rushkoff (1994) bo describe a Cyberpunk movement within youth culture based arou futuristic ideas of computing and communication and associated wi cybercafes, nightclubs, smart or designer drugs, science fiction writing a calls for cultural and political change. The merging of the cyber, t technical, with punk immediately conjures an alternative, a challenge the norm, self-marginalization from the mainstream and social resistan (Fitting 1991). Indeed, the term Cyberpunk has its roots in the scien fiction literature of writers such as Gibson and Sterling, who portray despotic future of post-human life-forms and a society formed arou cyberspatial technologies, massive urbanization and militariz corporations (Edwards 1995). For certain sections of today's youth the images of the future hold resonance and they structure their lifestyles i a particular subculture which aims to live out and bring about selec aspects of cyberspaces promise (Featherstone and Burrows 1995) However, Fitting (1991: 297) suggests that these groups are at b images-of-punk, "a fashion emptied of any oppositional content". present, these groups are fairly small and based around major cities su as San Francisco and London (notably these cities were most influentia the sixties drug culture - a culture which also focused upon transcendence and philosophical insights).

Re-finding the "Real"

While many of these arguments seem well reasoned on closer examination they are revealed to be loose and easily deconstructed. Cyberspace, because of it's lack of physicality, does provide an interesting environment to study identity and community but many of the arguments are not fully placed within the broader social and economic structures and processes that regulate our lives. For example, in relation to the ideas of disembodiment, Sobchack (1995) reminds us that we do not just have bodies, but that we are our bodies. Bodies cannot be transcended but rather they are a fundamental constituent of us, of being. Cyberspaces are spaces that are entered and interacted within from the site of the body: it is the fingers that type or move a joy stick, it is the whole body that enters a virtual reality space not just the eyes and the brain. The ideas of disembodiment are misnomers, they are just a convenient conceptualization for exploring a number of ideas relating to identity. As Woodward (1994: 51) suggests "the possibility of an invulnerable and thus immortal body is our greatest technological illusion - that is to say, *delusion*". The body is always present when we interact, whether it be face-to-face, or via the computer. It does not disappear or relax into coma. As Stone (1991: 113) expresses:

> It is important to remember that virtual community originates in, and must return to, the physical. No reconfigured virtual body, no matter how beautiful, will slow the death of a Cyberpunk with AIDS. Even in the age of the technosocial subject, life is lived through bodies.

There is no denying that cyberspace makes an interesting arena to study identity, but the medium does not fundamentally challenge how self-identity is constructed - we still use the same rules of engagement, the same consensual protocols that we use in everyday life. Cyberspace does provide a more protective space to 'play' with our fantasies, our othernesses (e.g. gender), but it is only a protective space; we can 'play' these fantasies by cross-dressing, by inhabiting the different social spaces that make up the social fabric of communities. We can and do experiment with our representations to others in the real world. When we turn the

screen on/off we are still the same people. Cyberspace does not *fundamentally* reconstitute our personae, or our identities, any more than any other real-world experiences. It just adds to our many experiences, it is another form of social interaction. As such, going on-line does not 'flatline' a person, immobilizing the body and suspending everyday consciousness as argued by Thu Nguyen and Alexander 1996). You do not suddenly shed your primary identity and become somebody else when you are on-line, rather your primary identity becomes accentuated, explored and expanded.

Similarly, while not denying that we are increasingly becoming cyborgs, in many cases machines and humans are merging and meshing, the machine does not fully render the primary identity dead and forgotten. Indeed, Sobchack (1995) argues that whilst she in undeniably a cyborg (she uses a prosthetic leg), that she has not forgotten that her identity is grounded in her lived-in body, a body she has no intention of trying to escape from. This is not to suggest that body alterations or disability does not affect identity, but rather that the (re)contestation of identity is historically grounded. Furthermore Haraway's (1991) ideas are extremely short on practical politics for women wanting to embrace the cyborg ideology and change things at the grass-roots level in the real world, away from the niceties of the written page. Indeed, cyborg-rendering technologies open a whole can of ethical worms and it can be easily argued that rather than challenging the dominant patriarchal, philosophical ideas concerning the body, as Haraway, Balsamo and Plant envisage, cyberspatial technologies are helping to reinforce existing viewpoints. Here, rather than the technologies being reappropriated for feminis politics they are being used to fortify the ideas of body beautiful (re touching digital photos), body loathing (dieting, cosmetic surgery), wome as objects of beauty, desire and passivity (nearly all women in games an cyberspace are thin, beautiful and passive) and women as cheap, semi skilled workers (clerical, data entry, component assemblers) (Dery 1996). Rather than freeing women, it further enslaves them into stereotypic roles and means little to women who are already 'man-made' in mind an body. As such, cyberspace far from being liberating and a place to explo identity takes on the values that underpin current real world interactions.

As Robins (1995) suggests, the use of the Internet does not mean that we will able to recover the meaning and the experience of community which commentators, such as the optimist Howard Rheingold, feel are dissolving in real space. It is a misnomer to directly equate communication into communion and community (Robin 1995). Whilst some virtual communities seem to have rules and protocols very similar to real communities, they do not possess the same kinds of responsibility. How deep and bonding are virtual relationships in comparison to real world relationships? What is the nature of the commitment and how strong is the sense of responsibility? (Jones 1995c). Rheingold (1994) himself questions whether relationships and commitments as we know them are even possible in a place where identities are fluid?. In communities in 'real space', community members must, and do, live together. It is not simply a case of logging on and when we feel like it logging off. Whereas the Internet allows interaction where we can disengage with little or no consequence - if you do not like what the neighbors have got to say you can just turn the machine off, or uproot and connect to somewhere else, or enter a 'slaging match' where the fear of physical reprisal is minimal. Whereas personal conflict is often dealt with with diplomacy in real places, flame wars are not uncommon in cyberspace - the screen depersonalizes contact. For McLaughlin *et al.* (1995) virtual communities are at best pseudocommunities. Dialogue is specific to few and yet read by a larger unknown set of participants who may or may not be considered community members; conversations are less inhibited, nonconforming and relatively free of personal consequences; and despite exchanges, the correspondence is predominantly between virtual strangers - when the machine is turned off the only things known are those given, those written, the person essentially remains a stranger.

For Robins (1995: 150) "there is an invocation of community, but not the production of society". Cyberspatial technologies are not going to provide a quick technological fix to the communities that we live in on a daily basis. Providing alternative communities does not negate the problems of the one's we do actually live in, in fact they are likely to add to their further demise. Cyberspace in this light is seen as providing an escape hatch; if you do not like reality, just try to ignore it by logging on.

Rather than placing our efforts into trying to escape our problems v should be channeling our efforts into finding solutions to the erosion community spirit and cohesion in the western world (remember this is predominantly western problem). Heim (1991) also fears that as numbe of users rise that the spirit of community will diminish as relationshi become between many and are no longer purely personal. Brown (199 further suggests that communities based upon interests and not locati reduces diversity and narrows the spheres of influence. This he fears w weaken communities in real space, as like will only be communicati with like. As Davis (1993) explains the danger is that society will beco even more polarized and segmented than at present with furt 'ghettoisation', the breakdown of placed-based community groups a actions, the narrowing of attitudes, and a 'closing' of social spaces.

Much of what has been written about cyberspace is over-hyp and overly-utopian. While it clear, that cyberspace is altering space-ti relations and does provide a new social space we must be careful ground our analysis within the 'real'. We must accept that we do live i real world, and despite of the problems each of us struggle with everyd "there is not some perfect world of cyberspace" (Robins 1995: 137) t we will be able to migrate to. He suggests that it is time to "reloc virtual culture in the real world" and "de-mytholise virtual culture if are to assess the serious implications it has for our personal and collec lives" (p. 153). This is not to deny that cyberspace is going to h cultural repercussions as radio and television before it but rather that acknowledge that cyberspace is an extension of the real world, nc completely separate, new world. At the center of this process contextualising the implications of cyberspace within the real w should be the recognition that it is the transformations of sp relationships that underlie many of the transformations in social relatio

Conclusions

The concept of space is undoubtedly important in understan how cyberspatial technologies are already, and are going to, affect cu and society. Cyberspatial technologies and telecommunications ha

significant effect upon space-time relations, drastically altering communication, travel and transport times and costs. Preliminary evidence suggests that as a result, a significant restructuring of employment patterns, organizational structures and urban-regional infrastructure is already underway, radically altering the global economy. Cyberspace also provides a new social space, devoid of physicality, where people are accepted on the basis of what they say rather than on how they look and sound. This social space is providing a space where people can explore their identit(y/ies) and become members of new 'virtual' communities. However, the changes that cyberspace is predicted to bring about must be placed within the broader context of the social and political upheaval that is taking place in the world today. The over-hype and promises of post-organic life-forms and post-industrial salvation are the pipe dreams of the intoxicated and are, at present, completely divorced from the realities facing much of the worlds' population. Cyberspace has fallen victim of the hype which surrounds many new technologies. While cyberspace is going to have significant impact upon our lives it will not be the panacea for all the worlds' problems. In our analysis, we must recognize the significance of the spatial and endeavor to re-find the 'real'.

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