Communicating across Cultures in Cyberspace

A Bibliographical Review of Intercultural Communication Online

Edited by Jörg Roche and Leah P. Macfadyen

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Introduction

What happens when people from different cultural backgrounds try to communicate via the Internet? What challenges do they face? How do the special challenges of intercultural communication in online environments affect online teaching and learning?

Are there theoretical approaches to, or understandings of, 'culture' that are most useful when considering online intercultural communication? How might online environments (and especially online learning environments), be better designed to facilitate human communications in this new space/place? How is online intercultural communication driving social, political and cultural change? Do cyberculture and online communication represent opportunities or threats to human cultures?

A critical first stage of our work in this newly evolving field of study has been to survey the current literature on culture and communication in online environments ('cyberspace'). We have carried out an extensive survey of research and theory from different disciplines (cultural studies, intercultural studies, linguistics, sociology, education, human-computer interaction, distance learning, learning technologies, philosophy and others). We have organized existing literature into six major (and overlapping) thematic areas:

- The Culture(s) of the Internet
- The Language of Cyberspace
- Intercultural Communication on the Internet
- Identity and Community in Cyberspace
- Culture and Education in Cyberspace
- The Impact of the Internet on Culture(s)

We offer here an overview of current research and

theoretical contributions identified in each area, while the contributions themselves are elaborated in an extensive annotated bibliography that includes abstracts or summaries of each. We have attempted, here, to highlight theoretical models, oppositions and conflicts, and the most-studied areas of research thus far. Moreover, we have identified some of the most pressing questions in the field, and we have highlighted gaps in knowledge and understanding where further theoretical and research work is needed.

It is almost inevitable that we will have missed relevant work in the undertaking of this survey. It is our hope, however, that this current gathering together of the literature will function as a growing and critical resource for others interested in the field, and that future (and online) iterations will allow colleagues in the field to add and comment on additional contributions.

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Survey Methodology

As Raymond Williams points out, "Culture is one of the two or three most complicated words in the English language"¹. It is now used to represent distinct and important concepts in different intellectual disciplines and systems of thought. Meanwhile, (communicative) encounters between groups and individuals from different cultures are variously described as cross-cultural, intercultural, multicultural or even transcultural. The vocabulary of modern technology is no less varied, with different authors using terms such as the Internet, the World Wide Web, cyberspace, and virtual (learning) environments (VLE) to denote overlapping though slightly different perspectives on "the online world". Others mention CMC (computer-mediated communication) technologies, ICTs (Internet and communication technologies), HCI (human computer interaction) or CHI (computer-human interaction) in explorations of technologies at the communicative interface.

This literature survey was carried out using the University of British Columbia Library Catalogue, the SilverPlatter Social Sciences *WebSPIRS* Database Collection accessed via the University of British Columbia Library, and the *Elektra* Database Collection of the Staatsbibliothek, Munich. Databases searched by SilverPlatter include:

Bibliography of Native North Americans Sociological Abstracts (International) Canadian Education Directory The ERIC Database (Educational Resources Information Centre)

The Education Index
LLBA (Linguistics and
Language Behaviour
Abstracts) Database
MLA Bibliography
(International Linguistics,
Language and Literature)
The Philosopher's Index

¹ Williams, R. (1983). *Keywords: A Vocabulary of Culture and Society*. Glasgow: William Collins & Sons.

Databases searched by Elektra include:

BSB-OPAC 1501-1840, 1953-

2002

Universitätsbibliothek (LMU) Universitätsbibliothek (TU)

Library of Congress

Bibliotheksverbund Bayern

Gemeinsamer

Bibliotheksverbund

Südwestdt.

Bibliotheksverbund RLG Union Catalogue Anthropological Index ACS Publications

JSTOR

LINK (Springer)

Science Direct (Elsevier)

SwetsnetNavigator

In addition, the following Web-based journals were surveyed:

Arachnet Electronic Journal

on Virtual Culture

Australian Journal of

Educational Technology

Current Awareness Program The Edge: The E-Journal of Intercultural Relations

EduCom

Electronic Journal of

Communication

Electronic Journal of

Sociology.

Electronic Journal on Virtual

Culture

Electronic Technology in

Education ePhilosopher

European Journal of Open

and Distance Learning

First Monday

Internet TESL Journal

Interpersonal Computing and

Technology Journal Journal of Asynchronous

Learning Networks

Journal of Computer-Mediated

Communication

Journal of Distance Education

(Canada)

Journal of Instructional

Science and Technology

Journal of Interactive Learning

Research

Journal of Interactive Media in

Education

Journal of Technology in

Education

Language Learning &

Technology

Mediated Learning Review

Online Chronicle of Distance

education

Online Journal of Distance

Learning Administration

Open Learning Update

Reading Online

Technological Horizons in

Education

The Technology Source

The following search pattern was employed, where KW = words searched in all fields, TI = words searched in titles only; where *and*, *or* are used as Boolean operators.

(intercultural[KW] or cross-cultural[KW]) and communication [KW] and internet [KW] cyberculture[KW] (culture[KW] or anthropology[KW]) and cyberspace [KW] (communication[TI] or discourse[TI]) and (online [TI] or internet[TI]) (culture*[TI] or anthropology[TI]) and (online[TI] or internet[TI]) intercultur*[TI] and (online[TI] or internet[TI])

Additional relevant work was recommended by colleagues, encountered in bibliographies of related work, discovered via searching of the World Wide Web using the Google search engine, and located in the *Proceedings* of recent conferences coordinated by CATaC ('Cultural Attitudes Towards Technology and Communication';

http://www.it.murdoch.edu.au/catac/home.html) and UNESCO.

This search strategy uncovered references to several hundred journal articles, reviews and books published in the past decade. The majority are in English, but the search also located articles originally published in French, German, Spanish, Portuguese, Italian, Estonian, Russian and Chinese.

Where available, the authors' original A_{BSTRACT} is provided in the annotated bibliography. Where article abstracts were not available or were particularly brief, extracts from the article $I_{\text{NTRODUCTION}}$ and/or $C_{\text{ONCLUSION}}$

are occasionally included. In some cases, reviews of books by publishers or reviewers are offered, and appropriately cited. All other summaries or annotations are the work of the survey authors.

Thematic Summary of the Literature

1 The Culture(s) of the Internet

Does the Internet have a culture? What are its features? Do some ethnic or national cultural value systems dominate the Internet? This section includes a range of largely theoretical papers, books and essays that attempt to describe and trace the origins of the/a cyberculture. Also included are papers that examine the interplay of and influence of cultures (ethnic, religious, national, gender and others) on the culture(s) of cyberspace, and that build relevant theoretical frameworks.

Perhaps the most striking feature of the collection of current literature on Internet culture is the polarization of debate on almost every issue. A few authors consider these emerging paradoxes directly. Fisher & Wright (2001) and Poster (2001) explicitly compare and contrast the competing utopian and dystopian predictions in discourse surrounding the Internet. Benson & Standing (2000) emphasize the reciprocal relationship of culture and technology, pointing out that "culture is defined by technology, which in turn redefines culture". Lévy (2001a), Poster (2000) and Jordan (1999) go as far as to suggest that the very nature of the Internet itself is paradoxical, being universalizing but non-totalizing, liberating and dominating, empowering and fragmenting, constant only in its changeability. Most writers thus far have tended, however, to theorize for one side or the other within polarized debates, as will become evident, below.

Utopia or Dystopia?

While not explicitly espousing technological instrumentalism (an assumption that technology is 'culture neutral'), a number of writers offer utopian visions for the so-called Information superhighway that seem to ignore the encultured reality of cyberspace. Such theorists predict that the emancipatory potential of Internet communications will help to bring about new forms of democracy and new synergies of collective intelligence within the Global Village of cyberspace (Ess, 1998; Lévy, 2001a, 2001b; Morse, 1997).

Their detractors argue that these writers ignore the reality that culture and cultural values are inextricably linked to both the medium and to language (Anderson, 1995; Benson & Standing, 2000; Chase et. al, 2002; Gibbs & Krause, 1998; Pargman, 1998; Wilson et al., 1998) and that cyberculture "originates in a well-known social and cultural matrix" (Escobar, 1994). More commonly, theorists offer dystopian visions cyberspace: where money-oriented entrepreneurial culture dominates (Castells, 2001), which reflects and extends existing hierarchies of social and economic inequality (Castells, 2001; Escobar, 1994; Jordan, 1999, Keniston & Hall, 1998; Kolko et al., 2000; Luke, 1997; Wilson et al., 1998), and which promotes and privileges American/Western and technomeritocratic cultural values (Anderson, 1995; Castells, 2001; Howe, 1998; Keniston & Hall, 1998; Luke, 1997; Wilson et al., 1998).

These and other thematically polarized arguments about Internet culture (such as "Internet as locus of corporate control" versus "Internet as new social space" (Lévy, 2001a) or 'Internet as cultural context' versus 'Internet as a cultural artifact'²) are also evident in the

http://www.com.washington.edu/rccs/bookinfo.asp?Reviewl

² Mactaggart, J. (2001)

philosophical arguments underlying work listed in other sections of this survey.

Modern or Postmodern?

A second major division in theoretical discussions of the nature and culture of the Internet is the question of whether the Internet (and its associated technologies) is a 'modern' or postmodern' phenomenon.

Numerous writers frame the development of Internet technologies, and the new communicative space made possible by them, as simply the contemporary technical manifestation of "modern ideals, firmly situated in the revolutionary and republican ideals of liberty, equality and fraternity" (Lévy, 2001a). Emphasizing the coherence of current technologies with ongoing cultural evolution(s), Escobar (1994) discusses the cultural foundations of technological development, and Gunkel & Gunkel (1997) theorize that the logic of cyberspace is simply an expansion of colonial European expansionism. Castells (2001) sees cyberculture as emerging from an existing culture of scientific and technological excellence "enlisted on a mission of world domination". Orvell (1998) pointedly argues that "debates about postmodernity have evinced a kind of amnesia about the past" and claims that cyberspace and virtual reality technologies continuous with the Romantic imagination as it developed in the 1830s and 40s. Disembodiment, he argues, is not a new product of the modern age, but was the "triumph of the Romantic imagination".

More recently, other writers have begun to envision the cultural sphere of cyberspace as radically new, postmodern, and signifying a drastic break with cultural patterns of community, identity and communication. For

D=125&BookID=109

example, Webb (1998) suggests that the 'frontier' metaphors of cyberspace symbolize a postmodern shift "from the human to the nonhuman computer-mediated environment". Poster (2000) claims that Internet technologies have actually brought into being a "second order of culture, one apart from the synchronous exchange of symbols and sounds between people in territorial space". He predicts that the cultural consequences of this innovation must be "devastation for the modern", and (2001) reformulates the ideas of postmodern thinkers (Foucault, Heidegger, Deleuze, Baudrillard and Derrida) to account for and illuminate this New World.

Cybercultural Values

Are the values of cyberculture simply the imported values of existing 'non-virtual' cultures? Or does cyberculture represent a newly evolving cultural milieu? Various authors speculate about the nature and origins of cybercultural values. Anderson (1997) argues that cyberculture values are "speed, reach, openness, quick response". Castells (2001) believes that 'hacker culture' is foundational to cyberculture, and carries with it meritocratic values, an early notion of 'cybercommunity', and the enshrinement of individual freedom. Jordan (1999) contends that power is "that which structures culture, politics and economics" and theorizes the existence of 'technopower' as the power of the Internet élite that shapes the normative order of cyberculture. Later (2001), he elaborates on the Anglo-American language and culture bias of cyberspace, which he argues is founded on competition and informational forms of libertarian and anarchist ideologies. Knupfer (1997) and Morse (1997) explore the gendered (masculine) nature of cyberculture, while Kolko et al. (2000) theorize that (the predominantly AngloAmerican) participants in new virtual communities bring with them the (predominantly American) values of their home cultures. As a result, as Star (1995) had already pointed out, "there is no guarantee that interaction over the net will not simply replicate the inequities of gender, race and class we know in other forms of communication". Essays in Shields' (1996) edited collection examine features of cybercultural values and practice such as attitudes to censorship, social interaction, politics of domination and gendered practices of networking.

Others, however, speculate that cyberspace is the site of creation of an entirely new culture. Lévy (2001a), for example, argues that cyberculture expresses the rise of "a *new* universal, different from the cultural forms that preceded it, because it is constructed from the indeterminateness of global meaning". In Porter's 1997 collection, Healy characterizes the Internet as a 'middle landscape' between civilization and wilderness, where new cultural directions and choices can be selected. Waters (1997) draws parallels between spiritualism and cyberculture, characterizing cyberspace as a place where human consciousness is "raised to a higher level".

Subcultures of/in Cyberspace

Are subcultures identifiable within the cultural milieu of cyberspace? A number of papers cited here discuss the online cultures of specific subgroups. For example, Castells (2001) discusses the 'hacker culture' in detail, Leonardi (2002) investigates the online culture and website designs of US Hispanics, and Gibbs & Krause (2000) explore the metaphors used by different Internet subcultures (hackers, cyberpunks).

Rather than simply itemizing and describing

cyberspace subcultures, however, a growing number of studies are exploring the marginalization in or lack of access to cyberspace of some cultural groups. Howe (1998) argues that radical differences in cultural values make cyberspace inhospitable for Native Americans. Keniston & Hall (1998) offer statistics on the English language and Western dominance of the Internet and in particular discuss the reality that 95% of the population of the world's largest democracy – India – are excluded from computer use as a result. Anderson (1995) suggests that the "liberal humanist traditions of Islamic and Arab high culture" are absent from the world of cyberspace, not because they do not translate to new media, but because they are literally drowned out by the cultural values attached to the dominant language and culture of cyberspace as it is currently configured. Similarly, Ferris (1996), Morse (1997) and Knupfer (1997) suggest that the gendered culture of cyberspace has tended to exclude women from this virtual world. Interestingly, Dahan (2003) reports on the limited online "public sphere" available to Palestinian Israelis relative to the Jewish majority population in Israel. Rather that being the result of Anglo-American cultural domination of the Internet, this author convincingly argues that this imbalance demonstrates that "existing political and social disenfranchisement" in Israeli society is simply mirrored in cyberspace. More generally, Davis (2000) reports on the potential for disenfranchisement from the "global technoculture" depending on their different manifestations of "a diversity of human affinities and values".

Stald & Tufte (2002) meanwhile present a series of reports on cyberspace activities of a number of discrete and identifiable minority communities: rural black African males in a South African university, South Asian families in London, women in India, Iranian

immigrants in London and young immigrant Danes.

In Search of Utopia: Cultural Impact and Technology Design

If we accept cyberculture as a value system that embodies free speech, individual control, and a breaking down of the barrier of distance, does this imply that existing (or perceived) inequalities can be 'corrected' in pursuit of this utopia? Keniston & Hall (1998) attempt to detail issues that must be faced in such efforts: attention to nationalist reactions to English- speaking élites, development of standardized forms for vernacular languages, and the "real and imagined" challenges faced by North American software firms when dealing with South Asian languages. Benson & Standing (2000) consider the role that policy plays in the preservation of cultural values, and present a new evaluation framework assessing the impact of technology communication infrastructure on culture. Wilson et al. (1998) propose that a framework based on Chomsky's 1988 analysis of mass media can help determine the extent to which American corporations and institutions dominate the Internet. These authors go on to make concrete suggestions regarding the design of web-based courses – for example, "include links to sites in a variety of countries", "annotate links with country information", and "publicize local search engines" - in an attempt to counteract cultural imbalances in web-based courses. Turk (2000) continues this discussion by summarizing recent attempts to establish relationships between the culture of users and their preferences for particular user interfaces and WWW site designs, while Leonardi (2002) reports on a study of the manifestation of "Hispanic cultural qualities" in website design, and makes design recommendations for this community.

Towards a Unifying Theory of Cyberculture?

Some recent contributions propose approaches to development and understanding the nature cyberculture(s). Abdelnour-Nocera (2002b) argues that examination of "cultural construction from inside the Net" is critical, and proposes a framework that combines ethnographic studies and interpretative strategies based on Gadamer's hermeneutical approach³. As discussed below, Hongladarom (1998) argues that one should apply Walzer's conceptions of 'thick' and 'thin' cultures to better understand cyberculture. On the other hand, Benson & Standing (2000) propose an entirely new "systems theory" of culture that emphasizes culture as an indivisible system rather than as a set of categories. Postmodern theorists such as Poster (2001) meanwhile argue that the Internet demands a social and cultural theory all its own. As discussed in the conclusion, development of a theory of 'culture' that can better illuminate the interplay between culture and computer-mediated communications remains a key challenge in this field.

2 The Language of Cyberspace

Cicognani (1998) suggests that critical examination of language is the most important strategy for investigation of the nature of virtual environments, because cyberspace can only be defined in terms of linguistic characteristics. Who 'speaks' online, and how? Is online language 'text' or 'speech'? How does culture affect the language of cyberspace? The wide range of topics covered by authors whose papers are included in this section illustrates the range of meanings ascribed to the word 'language'. Research and

³ Gadamer, H.-G. (1975). *Truth and Method*. Berkeley: University of California Press.

theoretical contributions cited below consider everything from 'language as text' to 'language as discourse' to 'language as medium for culture', and variously examine the text, the social contexts of cyberlanguage, and the social and cultural implications of English as Internet *lingua franca*.

Studying Cyberlanguage

At the theoretical level, several contributors offer analytical frameworks for examining online language. Collot & Belmore (1996) develop a framework for assessing computerized corpora of written and spoken English, using six dimensions (informativity, narrativity, explicitness, persuasion, abstraction and elaboration). December (1996) proposes an approach to defining units of analysis for Internet communication: media space, media class, media object and media instance, and offers examples. Mar (2000) uses 'register theory' to analyse linguistic patterns of chat in terms of "field, tenor and mode", while Yates (1996) uses a Hallidayian approach to assess "textual, interpersonal and ideational functions of language". Richards (1998) argues that Ricoeur's reader-response theory may be a more useful framework for helping us to understand the new communicative possibilities of cyberspace. Douglas (2000) describes determinist as well as constructivist approaches to analysis of hypertexts, and Negretti (1999) argues for a 'conversation analysis' research approach "since it investigates the machinery and the structure of social action in language, avoiding preformulated theoretic categories". Sotillo (2000) meanwhile employs a discourse analysis approach to

⁴ Ricoeur, P. (1976). *Interpretation Theory: Discourse and the Surplus of Meaning*. Fort Worth: Texas Christian University Press.

examining behavior in electronic discourse, and investigates 'syntactic complexity': "the ability to produce writing that shows how ideas and large chunks of information are represented with the use of subordination and embedded subordinate clauses".

Cyberlanguage as Digital Text

Perhaps belying their perception of Internet communications as primarily 'written' communication (a perspective contested by some (Malone, 1995; Collot & Belmore, 1996)) a number of authors have focussed on the features of digital text (and their impact on readers) as approach to investigating the 'language cyberspace'. One of the first authors to focus on hypertext was Kaplan (1995), who described how it "offer readers multiple trajectories through the textual domain". Kaplan suggests that "each choice of direction a reader makes in her encounter with the emerging text, in effect, produces that text", and points out that while some hypertexts are "printable", many new forms are "native" only to cyberspace, and have no printable equivalents. Later, Burbules (1997) highlights the 'link' as the key feature of hypertexts, and explores some of the different roles links may play beyond their simple technical role as 'shortcut': interpretive symbol for readers, bearer of the author's implicit ideational connections, indicator of new juxtapositions of ideas. Building on such ideas, Douglas (2000) discusses how hypertext may offer readers greater or lesser autonomy than paper-based texts. Indeed, Harpold (2000) argues that digital texts are "empirically fragile and ontologically inconsistent" and considers that this limits their poetic capacity. By contrast, Roche (2004) stresses the poetic and pedagogical values of hyperfiction in language acquisition, by pointing to the bi-directional structure of hypertexts: the horizontal level recurrent/associative

elements and the hierarchical integration of concepts, references, themes and other semantic clues.

Cyberlanguage as Semiotic System

A large proportion of current studies of Internet language report on semiotics: the detailed and sometimes mechanistic features, 'signs and symbols', of the linguistic systems elaborated by users in a range of cyberspace venues such as email (Williams & Meredith, 1996), asynchronous discussion boards (Herring, 1996; Sotillo, 2000), computer conferencing (Yates, 1996) and synchronous 'chat' platforms (Mar, 2000; Negretti, 1999; Sotillo, 2000).

Within the area of semiotics, many papers discuss 'evolving conventions' of online communications: features, grammar, lexicography (Abdullah, 1998; Crystal, 2001; Durscheid, 1999; Mar, 2000; Jacobson, 1996; Malone, 1995; Werry, 1996). Most compare and contrast communications in different venues and/or with written or spoken language (almost always English). They generally conclude that online communication is an intermediate stage between oral and written modalities, and some studies (Collot & Belmore, 1996) differentiate further between features of synchronous (online) and asynchronous (offline) digital communications.

A number of studies examine in particular the textual and graphical systems (such as emoticons) that users employ within online communications to 'add back' some of the contextual features that are lost in electronic communications (Crystal, 2001; Jacobson, 1996; Kinnaly, 1997; Kramarae, 1999; Malone, 1995; Takahashi, 1996; Werry, 1996).

Cyberlanguage as Discourse

At the next level, a number of works included here begin to address not simply the component features of cyberlanguage, but elements of discourse: tone, style, patterning and manner of exchange. Collot & Belmore (1996) investigate elements such as informativity, narrativity and elaboration. Condon & Cech (1996) examine decision-making schemata, and interactional functions such as metalanguage and repetition, while Yetim (2001) focusses on the importance of metacommunication in resolving online miscommunications. Crystal (2001) discusses "novel genres" of Internet communications. Herring (1996) compares the styles of men's and women's online communications. Mar (2000) investigates the language employed in synchronous computer-mediated interactions, while Lapadat (2002) examines the nature of online interactions within synchronous and asynchronous conferences, and argues that the "nature of online interactive writing" actually facilitates social and cognitive construction of meaning for communicators. Runkehl et al. (1998) survey the various stylistic mixes of Internet communications, while Voiskounsky (1998) reports on a discourse analysis of CMC, and also discusses 'hypertext browsing' techniques.

New Literacies?

Do people need to learn new literacy skills in order to communicate effectively online? In its most well understood form, 'literacy' can be defined as the ability to read, write and communicate in a print-text-based environment. Cyberspace is as yet a largely text-based print environment – but this text exists in an electronic environment, it is "more plastic and malleable", sequence and structure are noticeably different, and there is a requirement for "constant engagement with interfaces and...code" (Kaplan, 2001). A large body of

literature describing empirical and theoretical approaches to 'new literacy' and 'electronic literacy' already exists, with important contributions made by authors such as Warschauer (1999), Street⁵, Jones et al.⁶, Snyder⁷ and Richards (2000). Hewling (2002) offers a detailed review of debates in this field. Below, a sampling of recent papers demonstrates that here, too, arguments tend to be polarized, positing electronic literacies either as continuous with other human communication practices or radically new and postmodern.

Logically building on suggestions that Internetmediated communications represent an entirely new of research modality. one group contributions concentrates on the new literacies required of users for communicative success in this arena which, according to Thurstun (2002) consists of "entirely new skills and habits of thought". Gibbs (2000) extends this to suggest that new forms of communication are actually constructing "new forms of thinking, perceiving and recording". Kramarae (1999) discusses the new "visual literacy" required of Internet communicators, while Abdullah (1998) focusses on the differences in style and tone between electronic discourse and traditional academic prose.

On the other hand, writers such as Richards (2000) argue that dominant hypermedia models of electronic literacy are too limited, and rely too heavily on postmodern theories of representation and

⁵ Street, B. (1984). *Literacy in Theory and Practice*. Cambridge: Cambridge University Press.

⁶ Jones, C., Turner, J. & Street, B. (1999). Students Writing in the University: Cultural and Epistemological Issues. Amsterdam: John Benjamins.

⁷ Snyder, I. (Ed.). (1998). *Page to Screen.* London: Routledge.

poststructuralist models of communication such as those of Derrida which characterize writing and separate communication systems. Burbules (1997) similarly counters suggestions that the reading ("hyperreading") practices required for hypertexts represent a postmodern break with old literacy traditions, reminding us that "there must be some continuity between this emergent practice and other, related practices with which we are familiar – it is reading, after all". Murray (2000) explores claims of technologically induced sociocultural paradigm shifts in greater detail, arguing that technology does not impose new literacy practices and communities, but merely facilitates social and cultural changes including changes in literacy practices – that have already begun. Burbules (1997) meanwhile emphasizes the importance of the contexts and social relations in which reading takes place and agrees that "significant differences in those contexts and relations mean a change in [reading] practice" - though a change characterized more as evolution than revolution.

Further highlighting the connections between language, literacy and sociocultural context, Warschauer (1999) points to the inutility of such simple binary models of "old" versus "new" literacies, arguing that the roots of mainstream literacy lie in the "mastery of processes that are deemed valuable in particular societies, cultures and contexts". For this reason, he suggests, there will be no one electronic literacy, just as there is no one print literacy, and indeed, a number of studies point to the growing diversity of literacies, new and hybrid. For example, Cranny-Francis (2000) argues that users need a "complex of literacies" – old and new

to critically negotiate Internet communication.
 Dudfield (1999) agrees that students are increasingly engaging in what she calls "hybrid forms of literate

behaviour", while Schlickau (2003) specifically examines prerequisite literacies that learners need in order to make effective use of hypertext learning resources. Essays in Gibson & Oviedo's 2000 anthology offer a range of perspectives on "the ways in which literacy is shifting in relation to new technologies". Thurstun (2000) examines "perceptual difficulties posed by the new technology" and, together with Harpold (2000) discusses challenges of reading electronic texts. Williams & Meredith (1996) report on their attempt to track development of electronic literacy in new Internet users.

Together, the findings of these qualitative studies highlight the skill sets that communicators may need in order to communicate effectively online. Supporting these observation, Chen (2001) reports from a quantitative study of a web-based course that 'extent of interaction' and 'skill level with the Internet' were the two significant factors influencing adult students' perception 'transactional distance' (the psychological communications space between communicators). In other words, skill and practice in online communication influences perceptions of and satisfaction with online communication.

Context and Community: Cyberlanguage as a Communicative Tool

A number of works in this section touch on the history and evolution of cyberlanguage, and, in particular, the influence of the cyberspace context on Internet-mediated communications. Lea's 1992 collection discusses social influences on online processes and outcomes, and varieties of use of computer-mediated communication.

Online

communication is, according to Lea "radically context-

dependent". Galvin (1995) samples and explores what he calls the "discourse of technoculture", and attempts to locate it in various social and political contexts. Richards (1998) philosophical paper tries to assess computer-mediated communication in relation to utopian and dystopian theories of cyberculture. Gibbs (2000) considers the influences that have shaped Internet style and content, and the social implications of the phenomenon of cyberlanguage. Jacobson (1996) investigates the structure of contexts and the dynamics of contextualizing communication and interaction in cyberspace, while Gibbs & Krause (2000) and Duncker (2002) investigate the range of metaphors in use in the virtual world, and their cultural roots.

Is cyberlanguage shaped by the relationships of the communicators? Does the identity of the communicators affect the online language they employ? Important contributions in this field investigate the social and emotional organization of communication and interaction in cyberspace, concentrating for example on social relations in cyberspace (Jacobson, 1996) or the extension of normative standards of behavior in online interactions (Bellamy & Hanewicz, 1999). Reporting on a qualitative and quantitative analysis of logfiles of Internet Relay Chat interaction, Paolillo (1999) describes a highly structured relationship between participants' social positions and the linguistic variants they use. This author therefore suggests that such fine- grained sociolinguistic analysis of online interaction may offer unique contributions to the study of language variation and change. Other papers analyze crucial issues like the effects of emotion management, gender and social factors on hostile types of communication within electronic chat room settings (Bellamy & Hanewicz, 1999) or compare the male-female schematic organization of electronic messages posted

on academic mailing lists (Herring 1996). De Oliveira (2003) analyzes "politeness violations" in a Portuguese discussion list, concluding that in this context male communicators assert their traditional gender roles as "adjudicators politeness". Conversely, of Panyametheekul & Herring (2003) conclude from a study of gender and turn allocation in a web-based Thai chatroom that Thai women are relatively empowered in this context. Liu (2002) considers task-oriented and socialemotional-oriented aspects of computer-mediated communication, while Dery's 1994 anthology includes essays examining the communications of different cvberspace subcultures (hackers, technopagans) and the nature and function of cyberspace.

Internet Language and Culture

A final group of contributions to this section explore the connections between the culture(s) and language(s) of cyberspace, and consider the impact of English as Internet *lingua franca*.

Kinnaly's (1997) didactic essay on 'netiquette' is included here as an example of the ways in which 'the rules' of Internet culture (including language and behaviour) are normalized, maintained and manifested via specific communicative practices. Wang & Hong (1996) examine the phenomenon of 'flaming' in online communications and argue that this behaviour serves to reinforce cyberculture norms, as well as to encourage "clear writing and no-nonsense communication". In the world of online education, Conrad (2002) reports on a "code of etiquette" that learners valued and constructed; these communally constructed "ways of being nice" contributed to group harmony and community, she argues. Other explorations of the connections between culture and Internet language include Gibbs & Krause's

(2000) and Duncker's (2002) examination of Internet metaphors and the cultural values underlying them, and Voiskounsky's (1998) analysis of the ways in which culturally determined factors (status, position, rank) impact "holding the floor and turn-taking rules" in CMC. In addition, Schlickau (2003) offers a detailed analysis of differences in text type and "patterns of action" in webbased hypertext advertising created by British and German companies.

Also included are a number of articles considering the implications of English domination of cyberspace and cyberculture, although this particular aspect of Internet language is also examined from numerous perspectives in work included in other sections of this survey. A small number of papers address 'language barriers' on the Internet: the particular linguistic challenges for Internet users whose first language is not English (Davis & Johnson, 2002; Kramarae, 1999; Takahashi, 1996; Voiskounsky, 1998). Davis & Johnson (2002) specifically examine "the multiple layers of cultural values and ambiguities embedded in the structure of global English used in technologically mediated environments" and question whether it will therefore be truly possible to "universal meaning" using communication create technologies. Similarly, Fraim (2002) argues that "words both create and communicate worldviews" and examines the relationship between American Internet words and American cultural products. Kramarae (1999) questions whether English is an adequate lingua franca for the Internet and examines whether English on the Internet broadcasts a particular dominant culture along with the language. This author also considers possible future options for Internet language, such as Esperanto. Finally, Voiskounsky (1998) points to a complex interplay of Internet communications and English

language use, emphasizing also how English itself is being altered through its online use by non-native speakers.

Importantly, Danet & Herring (2003) remind us that even though non-English speakers now comprise some two thirds of all Internet users, most research literature on computer-mediated communication has so far focussed exclusively on "emergent practices in English" and has neglected parallel or divergent developments and practices within groups communicating online in other languages. These authors present a special issue of the Journal of Computer-Mediated Communication devoted entirely to analysis of communications on the "multilingual" Internet". Contributions to this special issues examine: the ways that "linguistic, technological and social factors" are shaping new "ASCII-ized" forms of Arabic (Palfreyman & al Khalil, 2003); the creation of Latinized and unique forms of online Japanese by young people using bulletin boards (Nishimura, 2003); playful and creative Chinesecharacter renderings of English and Taiwanese terms by Taiwanese College students (Su, 2003); trends in and attitudes towards the use of Latinized Greek - 'Greeklish' – in computer- mediated communications (Koutsogiannis & Mitsikopolou, 2003); selection of English as common language by students in a multilingual nation-state (Switzerland) (Durham, 2003); and sociopolitical tensions impacting the choice of common language - Catalan or Spanish? – in Catalonia and the potential that machine translation could offer an alternative (Climent et al., 2003). Finally, Ho (2003) describes a methodology that is proposed to facilitate multilingual email communication.

3 Intercultural Communication on the Internet

How successful is intercultural communication in When culturally diverse individuals cvberspace? communicate in the cultured spaces of the Internet, there great potential for misunderstanding, miscommunication and mismatch of values and expectations. What does research tells us about the influence and impact of cyberculture(s) and other cultures on intercultural communications online? Work cited in this section offers research findings and theoretical influence and impact perspectives on the cyberculture(s) and other cultures on communications in cyberspace, and, in particular, the potential for successful intercultural communication via the Internet.

Current Research on Online Intercultural Communication

A significant proportion of these papers report research studies that explore online intercultural communications between and within selected populations. Research methodologies reported here include qualitative approaches such as case studies (e.g. Belz, 2003; Grotenhuis, 2000; Thorne, 2003), ethnographies (Strickland, 1998; Warschauer, 1999), and surveys and interviews (Chen, 1998; Gunawardena et al., 2001, 2002; Onibere et al., 2001; Witmer & Taweesuk, 1998). Others have employed quantitative approaches to investigate specific cultural differences in attitudes to technology and use of technologies (Van Belle & Stander, 2002; Buragga, 2002; Gill, 1998) communication patterns and frequency (Choi & Danowski, 2002; Freiermuth, 2000; Macfadyen et al., 2003), communication style (Cakir et al., 2003; Hewling, 2003; Hongladarom, 1998) or content (Herring, 1996; Kim & Bonk, 2002; Savicki et al., 2002; Sussman &

Tyson, 2000).

Many of the studies cited investigate (and some of the theoretical papers discuss) intercultural communications using one particular communication technology, with examinations of email communications predominating (Chen, 1998; Gill, 1998; Grotenhuis,

2000; Herring, 1996; Inglis, 1998; O'Dowd, 2003; Rev, 1998). Other studies investigate intercultural communication in asynchronous forums and discussion boards (Hewling, 2003; Savicki et al., 2002), in group conferencing platforms (Abdat & Pervan, 2000; Bourges-Waldegg & Scrivener, 1998; Grotenhuis, 2000; Heaton, 1998a, 1998b; Kim & Bonk, 2002; Rev. 1998) in newsgroups (Choi & Danowski, 2002; Hongladarom, communications 1998). and via synchronous technologies such as 'chat' (Freiermuth, 2000; Kötter, 2003). A smaller number discuss cultural implications for other human-Internet interfaces such as Web sites and graphics (Evers, 1998; Marcus & Gould, 2000; Stander, 1998; Witmer & Taweesuk, 1998).

Other studies (and especially those using qualitative approaches) focus less on the technology and more on cultural influences on interpersonal or intragroup processes, dynamics and communications cyberspace. For example, Chase et al. (2002) describe nine thematic clusters of miscommunications that occurred between culturally diverse communicators in a web-based discussion forum (examples include 'identity creation', 'participant expectations' and 'attitudes to time'). Davis (1997) offers an overview of research and theory the degree to which computer-mediated on communications can support community development and communications. The 2001 and 2002 studies by Gunawardena et al. use focus groups to investigate individual perceptions of 'online group process and development' and 'negotiation of 'face' online. Heaton

(1998) considers organizational and group cultures in her study of computer-mediated cooperative work. Kim & Bonk (2002) report on cultural differences in online collaborative behaviours, and Rahmati (2000) and Thanasankit & Corbitt (2000) examine cultural values referred to in decision-making processes by online groups.

Intercultural Communication Theory, Old and New

While a majority of the research and theory papers in this section implicitly define culture as 'ethnic or national culture', and examine online communication patterns among and between members of specific ethnic or linguistic groups, a few are careful to broaden the concept of culture. In particular, Heaton (1998b) notes, "organizational and professional cultures are also vital elements in the mix" and defines culture as "a dynamic national/geographic. organizational professional or disciplinary variables". Some authors gender-culture differences investigate online communications (van Belle & Stander, 2002; de Oliveira, 2003; Herring, 1996; Panyametheekul & Herring, 2003; Sampaio & Aragon, 1997; Savicki et al. 2002; Sussman & Tyson, 2000), while others note the complicating influences of 'linquistic culture' and linguistic ability (Freiermuth, 2000; Kötter, 2003; Onibere at al., 2001; Rey, 1998), 'epistemological type' (Gammack, 2000), technical skill (Gunawardena et al., 2001) literacy, class, religion and age (Mobley & Wilson, 1998; Stander, 1998).

A number of the studies listed here use Hofstede's dimensions of (national) culture⁸ either to develop testable hypotheses about the impact of culture on

⁸ Hofstede, G. (1991). Cultures and Organizations: Software of the Mind. London UK: McGraw-Hill.

Internet-mediated intercultural communications, or to interpret data post hoc (Abdat & Pervan, 2000; Gunawardena et al., 2001; Maitland, 1998; Marcus & Gould, 2000; Tully, 1998). Also referenced frequently is the high/low context communications theory developed by Edward Hall⁹ (Buragga, 2002; Heaton, 1998a; Maitland, 1998). Other investigators make use of other perhaps lesser-known intercultural communications theory in their research design and analysis. Van Belle & Stander (2002) refer to Gefen & Straub's 1997¹⁰ extension of Davis' 'technology acceptance model' (TAM)¹¹. Belz (2003) brings a Hallidayian linguistic approach ('appraisal theory') to her evaluation of intercultural email communications. Choi & Danowski (2002) base their research on theories of social networks in their research design, and discuss their findings with reference to core-periphery theories of network communication. Gunawardena et al. (2002) explore negotiation of 'face' online, building on 'face' theory' developed by theorists such as Ting-Toomey¹². Heaton (1998a) draws on Bijker & Law's notion of 'technological frame'13 to explain how Japanese

⁹ Hall, E. (1966). *The Hidden Dimension*. New York: Doubleday & Company.

¹⁰ Gefen, D. & Straub, D. W. (1997). Gender Differences in the Perception and Use of Email: An Extension to the Technology Acceptance Model. *MIS Quarterly*, 21(4), 389-400.

¹¹ Davis, F. D. (1989). Perceived Usefulness, Perceived Ease-of-Use, and User Acceptance of Information Technology. MIS Quarterly, 13, 318-339.

¹² Ting-Toomey, S. (1988) Intercultural Conflict Style: A Face-Negotiation Theory. In Y. Y. Kim & W. B. Gudykunst, (Eds.), *Theories in Intercultural Communication*, Newbury Park, CA: Sage Publications.

¹³ Bijker, W. E. & Law, J. (Eds.). (1992). *Shaping Technology/ Building Society: Studies in Sociotechnical Change.*

designers invoke elements of Japanese culture in justifying technical decisions. Hongladarom suggests that Walzer's differentiation of 'thick' and 'thin' cultures¹⁴ may be useful in assessing online intercultural communication. Maitland (1998) invokes Herbig's theoretical work on culture and innovation¹⁵. O'Dowd (2003) builds upon Byram's intercultural competence theory 16. Sampaio & Aragon (1997) offer an overview of competing theoretical perspectives on new technologies, especially post structural and postmodernist theories on language, and variant strands of feminist theory. Reeder et al. (2003) interpret intercultural patterns of online communication in light of cross-disciplinary theories sociolinguistics, applied linguistics, genre and literacy theory and aboriginal education. Interestingly, Witmer & Taweesuk (1998) rely on Csikszentmihalyi's notion of 'flow'¹⁷ – a psychological theory of 'optimal experience' not commonly encountered in cultural studies communications literature.

Echoing Benson & Standing (2000), Abdelnour-Nocera (2002a) discusses the risks of using "ready made cultural models" such as Hofstede's, arguing that one may miss "qualitative specific dimensions that don't

Cambridge, MA: MIT Press.

¹⁴ Walzer, M. (1994). Thick and Thin: Moral Argument at Home and Abroad. Notre Dame, IN: University of Notre Dame Press.

¹⁵ Herbig, P. A. (1994). The Innovation Matrix: Culture and Structure Prerequisites to Innovation. Westport, CT: Quorum Books

¹⁶ Byram, M. (1997). *Teaching and Assessing Intercultural Communicative Competence*. Clevedon, England: Multilingual Matters.

¹⁷ Csikszentmihalyi, M. (1990). *Flow: The Psychology of Optimal Experience*. New York: Harper and Row.

fit certain pre-established parameters". Indeed, even while reiterating that cultural context influences attitudes towards and use of computer based information systems, Buragga's detailed analysis (2002) found no correlation between 'context' (as defined by Hall) and usage of technology when comparing Saudi and US groups. Instead, Abdelnour-Nocera (2002a) proposes that hermeneutics¹⁸, situated action theory¹⁹, semiotics (Bourges-Waldegg & Scrivener, 1998), and activity theory²⁰ have more to offer the careful examination of "the role of context and the situation of interfaces with computers as mediating 'culturally meaningful tools' in our interaction with the world". Roche (2001) also offers an indepth discussion of current theoretical approaches to intercultural communication.

A few recent writers here develop new theoretical perspectives on online intercultural communication. Bucher (2002) suggests that a more meaningful approach to understanding the relationship between Internet and communication and culture needs to shift the focus away from the communicator and onto the 'power of the (2000)audience'. Gammack suggests 'epistemological type' is "prior to and transcendent of, nationality and culture" and suggests that investigation of differences in epistemological type may be a more fruitful approach to understanding intercultural communication. He goes as far as to suggest that such an understanding would permit the development of 'transcultural environments' online, in

¹⁸ Winograd, T. & Flores, F. (1986). *Understanding Computers and Cognition*. New Jersey: Ablex Publishing.

¹⁹ Suchmann, L. (1987). *Plans and Situated Actions*. Cambridge: Cambridge University Press.

²⁰ Nardi, B. (Ed.) (1996). Context and Consciousness: Activity Theory and Human-Computer Interaction. Cambridge, MA: MIT Press.

which codes extend from epistemological types rather than cultural norms. Thorne (2003) develops another new conceptual framework that draws together "discursive orientation, communicative modality, communicative activity and emergent interpersonal dynamics".

Culture and Technology Design: Practical Recommendations

Although research and theory in the field of online intercultural communication is still in the early stages, a few investigators have undertaken studies with the aim of identifying elements of technology and interface design that facilitate successful intercultural communication in online environments. Approaches can be roughly divided into two major groupings: design formats specifically designed 'for' one or other cultural group or to facilitate interaction between particular groups (what Bourges-Waldegg & Scrivener call "culturisation"), and design recommendations intended to make human-computer interfaces more generally inclusive.

Examples of the 'culturisation' approach include Abdat & Pervan's (2000) recommendations for design elements that minimize the communicative challenges of 'high power distance' in Indonesian groups, Heaton's (1998b) commentary on technology and design preferences of Japanese and Scandinavian users, Onibere et al.'s (2001) attempt to identify localized interface design elements more attractive to Botswana users, Turk & Trees (1998) methodology for designing culturally appropriate communication technologies for indigenous Australian populations and Evers' (1998) 'portfolio' of culturally appropriate metaphors for human-computer interface design. Woodman (2003) also offers

a design concept based on findings from pragmatics, neurolinguistics, intercultural communication, business psychology, TEFL and information science as well as empirical research, for a computer-based training program to improve communication between German-speaking and English-speaking employees in the same company.

Foremost among the 'inclusive design' approach are Bourges-Waldegg & Scrivener (1998, 2000) who have developed, and report here on tests of, an approach they call "meaning in mediated action" (MIMA). Rather than attempting to design for individual cultures, they feel that this approach helps designers understand context, representations and meaning and design inclusive interfaces. Yetim (2001) takes a "language action perspective" when proposing models for designing online venues for intercultural communication, focussing on the importance of meta-communication as the site of clarification of meaning. Design theories and approaches specifically related to multicultural online learning environments are discussed further below.

4 Identity and Community in Cyberspace

A good deal of formal and informal debate about Internet technologies still centres on perceptions of problematic issues relating to 'virtual identity' and 'virtual community'. Can individuals create a 'real' identity online, and if so, how? Is the possibility of deception a problem? Can 'real' interpersonal relationships be created between 'virtual people'? Are virtual communities possible and meaningful? Are they 'as good as' 'real' communities? Literature included in this section offers a variety of answers to these and related questions. As in other thematic areas in this work, these predominantly theoretical papers tend to offer

either optimistic (e.g. Lévy, 2001a, 2001b; Michaelson, 1996; Rheingold, 2000; Sy, 2000) or pessimistic (e.g. Bauer, 2000; Blanco, 1999; Miah, 2000) perspectives on the ways that the Internet shapes or changes identity, community and culture. Interestingly, Guedon (1997) takes care to show how this polarized pattern of responses to technology has been repeated, historically, with the successive appearances of new communications technologies (such as the telephone). Essays in the collection edited by Holmes (1998) also examine technologies that have prefigured cyberspace, and social responses to them.

A few works included here (Davis, 1997; Michaelson, 1996; Poster, 2001; Rutter & Smith, 1998) attempt to compare and contrast optimistic and pessimistic perspectives on virtual identity and community. Some (Burbules, 2000; Davis, 1997; Lévy, 2001a; Miah, 2000; Porter, 1997; Smith & Kollock, 1998) caution against the notion of "simple substitution" of virtual relationships for physical relationships, and undertake a comparison of 'real' and 'virtual' communities and relationships.

Virtual Identity, Virtual Ethnicity and Disembodiment

Does the reality of 'disembodied being' in cyberspace present a challenge to construction of identity? Contributors to *Virtual Politics: Identity and Community in Cyberspace* (Holmes, 1998) suggest that disembodied consumerism on the Internet has resulted in a loss of *political* identity and agency. Like Orvell (1998), Miah (2000) suggests that virtual reality is simply a further "sophistication of virtualness that has

always reflected the human, embodied experience". This author goes on to argue that virtuality nevertheless poses a challenge to identity construction in cyberspace, an argument supported by other contributors here (Fernanda Zambrano, 1998; Bauer, 2000). Rutter & Smith (1998) offer a case study of identity creation in an online setting. and conclude more ambivalently that "CMC technologies both fray and preserve real-life cultural identities". Arguing against this modernist notion of Self and identity, Turkle (1995) posits instead a more postmodern view of fragmented (decentred) Selves that may be more useful for understanding virtual identity, using theoretical perspectives on identity from psychology, sociology, psychoanalysis, philosophy, aesthetics. artificial intelligence, and virtuality.

A few studies examine *how* individuals construct identity or 'personae' online (Burbules, 2000; Smith & Kollock, 1998). Rutter & Smith (1998) discuss how online communicators present themselves, and how they address each other. Jones (1997) focusses on how individuals select their online personae, and Jordan (1999) discusses elements of progressive identity construction: online names, online bios and self-descriptions.

Interestingly, a number of authors focus explicitly on the notion of 'virtual ethnicity': how individuals represent cultural identity or membership in cyberspace. Foremost among these is Poster (1998, 2001) who theorizes about "the fate of ethnicity in an age of virtual presence". He asks whether ethnicity requires bodies inscribed with rituals, customs, traditions and hierarchies for true representation. Wong (2000) meanwhile reports on ways that disembodied individuals use language in the process of cultural identity formation on the Internet, and similarly, Reeder et al.

(2003) attempt to analyze and record cultural differences in self-presentation in an online setting. In a related discussion, contributors to the collection edited by Smith & Kollock (1998) offer counter-arguments to the suggestion that as a site of disembodied identity, cyberspace may eliminate consideration of racial identity; instead, they suggest that cyberindividuals may simply develop new "nonvisual criteria" for people to judge (or misjudge) the races of others.

Online identities may be multiple, fluid, manipulated and/or may have little to do with the 'real selves' of the persons behind them (Fernanda Zambrano, 1998; Jones, 1997; Jordan, 1999; Rheingold, 2000; Wong, 2000). Is 'identity deception' a special problem on the Internet? Some theorists believe so. Jones (1997) examines in detail the way that "assumed identities" can lead to "virtual crime", while Jordan suggests that identity fluidity can lead to harassment and deception in cyberspace. Lévy (2001a) on the other hand, argues that deception is no more likely in cyberspace than via any other medium, and even suggests that the cultures of virtual communities actively discourage the irresponsibility of anonymity.

Virtual Community, Virtual Culture and Deterritorialization

Are *all* communities – online and offline – virtual to some degree? In his classic text *Imagined Communities*²¹, Benedict Anderson argues that most national and ethnic communities are *imagined* because members "will never know most of their fellow- members, meet them, or even hear them, yet in the minds of each lives the image of their communion".

²¹ Anderson, B. (1991). *Imagined Communities* (2nd Edn.). New York: Verso.

Ribeiro (1995) extends Anderson's model to argue that cyberculture, computer English and "electronic capitalism" are necessary internal characteristics of a developing virtual transnational community. Burbules (2000) moreover cautions us to remember that 'imagined' communities are nevertheless 'real', and undertakes a careful analysis of the notion of 'community' that ultimately situates virtual communities as 'actual'.

In the same way that virtual identities are disembodied, virtual communities are (usually) deterritorialized – a feature highlighted by a number of contributors (Blanco, 1999; Sudweeks, 1998). Interestingly, Poster (2001) draws parallels between online virtual communities and other ethnicities that have survived in the absence of 'a grounded space' – such as Jewishness.

What, then, are the defining features of virtual communities? A number of theorists posit that virtual communities can best be described as a constantly evolvina 'collective intelligence' or 'collective consciousness' that has been actualized by Internet technologies (Guedon, 1997; Lévy, 2001b; Poster, 2001; Abdelnour-Nocera, 2002b). Sudweeks (1998) proposes criteria (derived from her research findings) for determining the presence of such a group consciousness, and makes predictive hypotheses about the emergence of collaborative (and potentially transcultural) group consciousness.

More common, however, are theoretical discussions of the construction of a group *culture* – and of shared identity and meaning – as a feature of virtual community (Abdelnour-Nocera, 2002a; Baym, 1998; Blanco, 1999; Lévy, 2001a; Porter, 1997; Walz, 2000). Poster (2001), for example, argues that "identity (and thus ethnicity) is

a temporary fluid link to a process of creation". Essays contained in the collection edited by Shields (1996) examine the "socio-cultural complexities...of virtual reality" and "Identity, Belonging and Consciousness in Virtual Worlds". Abdelnour-Nocera (1998) suggests that Geertz's idea of culture as a "web of meaning that he (man) himself has spun" is most useful when considering the construction of shared meaning in a community where language is the main "expressive and interpretative resource"; later (2002b) he proposes Gadamer's system of hermeneutics²² as the most effective tool for interpreting the process of cultural construction in virtual communities.

Virtual communities share a number of other common internal features, including: use and development of specific language (Abdelnour-Nocera, 2002b); style, group purpose and participant characteristics (Baym, 1998); "privacy, property, protection and privilege" (Jones, 1998); forms of communication (Jordan, 1999); customary laws (e.g. reciprocity), social morality, freedom of speech, opposition to censorship, frequent conflicts, flaming as 'punishment' for rule-breaking, formation of strong affinities and friendships (Lévy, 2001a); unique forms of immediacy, asynchronicity and anonymity (Michaelson, 1996); and internal structure and dynamics (Smith & Kollock, 1998).

Strikingly absent from most discussions of the creation and nature of online communities is any mention of the role of the language of communication, and most contributions apparently assume that English is *the* language of cyberspace. If, as Adam et al.

²² Gadamer, H. (1975). *Truth and Method* (trans. D. E. Linge). Berkeley: University of California Press.

(1998)²³ argue, "language policy goes beyond issues of communication to questions of collective identity", we might expect to see more careful examination of the choice of language that different users and communities make, and how this contributes to the sense of community online. Only very recently in a special issue of the Journal of Computer-Mediated Communication have research reports on the "multilingual internet" and discussions of online language and community begun to appear (see Danet & Herring (2003) and references therein).

The Promises of Cybertechnology for Identity and Community: Hopes and Fears

Papers assembled in the recent edited collection of Stald & Tufte (2002) present a diverse selection of developing engagements of cultural groups in what Hjarvard characterizes as the 'global metropolis' of the Internet. Contributing authors report on media use by young Danes, by rural black African males in a South African university, by South Asian families in London, by women in Indian communities, by Iranian immigrants in London and by young immigrant Danes. In particular, these contributions focus on the ways that these minority groups and communities understand themselves vis-à-vis a majority culture, and the different ways that these groups utilize Internet technologies in the construction of complex identities.

Does technology *limit* virtual identity and virtual community? Reeder et al. (2003) point to ways that (culturally biased) technological design of the spaces of virtual encounters implicitly shape the nature of the

²³ Adam, H., Van Zyl Slabbert, F. & Moodley, K. (1998). *Comrades in Business*. Utrecht: International Books. p. 107.

communications that occur there. Poster (1998) examines the technological barriers to portrayal of ethnicity in different online settings, and Rheingold (2000) discusses how technology affects our social constructs. Blanco (1999) similarly argues that virtual communities are "rooted in the sociotechnological configuration that the Internet provides" but suggests that social innovations are in fact altering technology design. At the conscious level, Davis (1997) makes recommendations about technological limitations that educators should consider when setting up listservs or other platforms for online communication.

In addition to the worry that Internet technologies may change the nature of social interactions, a number of contributors raise other fears. Blanco (1999) worries that "communication is becoming an end in itself instead of a tool for political, social and cultural action". Jones (1998) concludes that "efforts to recapture lost community online" only partly successful, cybercommunities bring with them new and distinctive difficulties. Miah (2000) argues that the claimed emancipatory functions of cyberspace are over-stated and counter-balanced by the challenges to identity construction. Michaelson (1997)worries "participation in online groups has the potential to diminish commitment to local communities", and also that the technological and cultural resources required for such new forms of community may contribute to new forms of stratification. Poster (2001) reports on angst about cyberspace as a "destructive mass market" that can potentially remove ownership of culture from ethnic groups. (Interestingly, LaFargue (2002) pursues this same question, asking "does the commodification of a cultural product, such as an exotic handicraft, safeguard social conventions within the communities of their producers?" This author does not, however, explicitly

view technologically-driven cultural change as a cause for concern, but rather develops a theoretical argument relating microeconomic engagement of handicraft producers with mass markets to ongoing negotiation of individual and cultural identity.)

On the other hand, optimists look to the potential of online community as a uniting force. Sy (2000) describes how new Filipino virtual communities represent a form of resistance to "Western heaemonic encroachment". Bickel (2003) reports how the Internet has allowed the voices of otherwise silenced Afghan women to be heard, and the new leadership identities for women that this has brought about. Michaelson (1996) agrees that for some, virtual communities offer "opportunities for greater participation in public life". Lévy (2001b) is enthusiastic about the nonhierarchical and free nature of "deterritorialized human relationships" and Rheingold offers a number of examples of positive social action and developments that have emerged from the establishment of virtual communities.

5 Culture and Education in Cyberspace

How do cultural differences affect online education? If creation of shared meaning is challenging for culturally diverse communicators in online environments, can the Internet truly offer a venue for successful online education for culturally diverse *learners*? To paraphrase Burbules (2000), "does the Internet constitute a global educational community?" It is evident from the literature that these and related questions regarding the potential for ICT use in international and intercultural education has sparked a large and diverse field of inquiry. While there is significant overlap of themes of interest with other

sections of this survey, contributions included here all offer theoretical and empirical perspectives on cultural and intercultural challenges in online *educational* settings.

Internet Technology and the Culture(s) of Education

Are internet and communication technologies changing local *educational* cultures? One group of studies cited here deals with practical issues in the delivery of 'global education' across international borders, as well as the broader consequences of these developments, for example the powerful impact of the World Wide Web on current educational practice (Mason, 1998). The ways that new information and communication technologies may fit into and change school and university cultures are explored theoretically and/or empirically by various contributors (Doff et al., 2002; Garner & Gillingham, 1996; Gay, 1999; Joo, 1999; Lévy, 1998; Russell & Russell, 1999; Thompson, 2002).

A number of contributions report on ways that Internet technologies are changing cultures of teaching and learning, either by creating new opportunities for intercultural learning, or by demanding new cultural awareness. Richter (1998), for example, explores new possibilities offered by the WWW for incorporating intercultural learning into foreign language teaching, while Smith (1997) discussed the use of 'virtual realia' as a means of raising multicultural awareness in the EFL classroom and as a contribution to the authenticity of EFL-teaching (Smith, 1997). Leh (1999) and Ho (2000) describe new possibilities for foreign language learning, development of student confidence and creativity, awareness of intercultural concerns and membership of a dynamic, international, global

community via email-based collaborative online projects. Brown (1997) describes and analyzes I*EARN (the International Education and Resource Network), a network created by educators using the Internet with K-12 students. Meanwhile, writers such as Ziegahn (2001) focus on the need for awareness of sensitive cultural topics in asynchronous online class environments, McLoughlin & Oliver (2000) discuss ways of creating cultural inclusivity in online learning and Cena (2000) examines the role of awareness and critical thinking in online intercultural collaborative projects.

Some theorists go as far as to suggest that cyberculture is changing traditional relationships between *education* and *knowledge* (Lévy, 1998; Thompson, 2002) while Russell & Russell (1999) stress that educators must continue to track students' changing perceptions of educational cyberspace, as they (students) continue to immerse themselves in both educational and recreational use of the Internet.

Intercultural Challenges for Online Educators

The teacher-student relationship has been a central feature of face-to-face educational cultures, and a number of studies examine the impact of Internet technologies on this relationship. Stacey et al. (1996) report on the changing role of the teacher in a qualitative study of a transatlantic online collaborative learning and teaching project with high school age students. Enstrom & Fedderson (1995) report similar findings at the university level, and also note that cyberspace discussion allowed students to express of a new level of "intellectual dissent" that changed the culture of the classroom.

Is the culture of online learning environments not as

interactive as we might assume? Enstrom & Fedderson (1995) question the popular notion that cyberspace discussion is "truly dialogic", noting that many contributions to online discussions are actually ignored. In support of their findings, Macfadyen et al. (2003) offer data showing that much less student-student interaction than expected took place in an online course offered to a group of culturally diverse adult learners.

The potential for cultural factors to impact online student-student and student-teacher interactions is another challenge facing online educators. Several authors (Brown, 1997; Joo, 1999; LeBaron et al., 2000; Williams et al., 2001) discuss the issues and challenges experienced by educators facilitating cross-cultural group discussion activities online. They variously propose strategies for effective facilitation of cross-cultural group discussions, ways of facilitating the creating of intercultural online learning communities, and best practices for teachers, researchers, course designers and program developers.

Intercultural Challenges and Opportunities for Online Learners

Is online education a threat or an opportunity for students from different cultural backgrounds? Some contributors point out the reality of differential access to online learning opportunities, which both skews the cultural demographic of online learning communities, and disadvantages learners from particular groups (Joo, 1999). For example, Korgen et al. (2001), discuss the differences by race/ethnicity in the use of the Internet among students at Internet-accessible colleges and universities.

At the same time, some researchers point out that the Internet can offer access to education to disadvantaged groups. Haughey (2001) argues for addressing Aboriginal learning needs through the use of learning technologies and Facey (2001) and Voyageur (2001) make suggestions for development of successful Internetbased distributed learning opportunities disadvantaged groups, specifically First Nations living in rural and remote locations in Canada. Macfadyen (2003) offers six case studies of new international online educational projects that offer previously unthinkable educational intercultural and encounters opportunities to post-secondary students in rural and impoverished regions.

But do online learners face special challenges when joining multicultural online learning communities? A larger number of studies examine cultural differences that may affect learner success online. Wilson (2001) points out cultural 'discontinuities' that can affect learning effectiveness and discusses the implications for online instruction. Postma (2000) reports on a study of African learners' traditional orientation to information in precomputerized learning environments, and from this makes recommendations for online education design that might "facilitate conscientization and empowerment" of such learners.

If students participation in online discussions is impacted by cultural background, as many researchers suggest (Goodfellow, et al., 2001; Haulmark, 2002; Hewling, 2003; Macfadyen et al., 2003; McLoughlin & Oliver, 2000; Reeder et al., 2003), can online educators in fairness assess student achievement on the basis of their online communicative behaviour? Bates (2001) and Pincas (2001) discuss the difficulties of applying common (Western) assessment criteria to students from different cultures and pedagogical heritages.

Designing for Intercultural Cybereducation

Can virtual learning environments be designed to accommodate the needs of culturally diverse learners? A small number of researchers have begun to address this question. Collis (1999) discusses ways that aspects of culture affect instructors' and students' reactions to webbased course sites, and offers guidelines for adapting courses to better accommodate different cultural expectations and preferences of learners. Chen et al. (1999) relate cultural issues and online course design to "learning goals such as thoughtfulness vs. memorization, whole tasks vs. component skills tasks, breadth vs. depth of knowledge, diverse VS. uniform expertise. understanding vs. access, cognitive vs. physical fidelity", as well as issues of "authentic vs. abstract problem multi-directional and and multimedia communication vs. direct one-way communication". McLoughlin & Oliver (2000) argue for the "cultural localisation" of online learning environments for specific groups of learners. McLoughlin (1999) later discusses the challenges of "designing for multiple cultures" and proposes a "multiple cultures model of design which is suggested to be "not culturally exclusive". This model attempts to address both "micro and macro-cultural levels" of design" and the author describes its application to course design for indigenous Australian students.

Perhaps even more critically, Pincas (2001) argues for re-examination of fundamental presumptions and of Western higher education (criticality, 'standard English') when designing course concepts and learning/teaching materials for multicultural students coming from different pedagogic and linguistic cultures. Also important is the perspective taken by Mavor & Trayner (2003), who focus on interactions between different 'cultures of

learning' and who propose first steps in the development of a pedagogy for "international online learning communities". Taking a social constructivist approach to learning, these authors argue that creation of such communities calls for proactive creation of online opportunities for "social interaction, processes of identity formation and negotiation of meaning".

Cybereducation and Cultural Imperialism? Future Prospects for Multicultural Cybereducation

Currently, Western and English-speaking countries and institutions dominate the world of online learning. Is this simply another way in which the Internet is facilitating the dissemination of 'Western' cultural values? Some important contributions in this area address the potentially problematic nature of Western dominance Cybereducation. Van den Branden & Lambert (1999) consider the European origins of 'open learning', and the way that its technological rendering shapes and is shaped by European cultural and institutional realities. Gayol (1996) analyzes cultural issues that need to be shared. changed or retained in order to overcome barriers to educational cooperation, and investigates cultural misperceptions in North America that make cross-cultural openness and educational cooperation difficult. Gayol & Schied (1997) extend this analysis to consider ethical and cultural implications of the unquestioned implementation of Western empiricist epistemologies in (international) distance education program design. Moore (1996) deals with consequences of participating in international programs for Western distance educators who export values along with educational content. Power (1995) discusses methods for improving international in online collaboration and facilitation learning environments and stresses the responsibilities of

Western countries and the role of UNESCO in these processes.

A final group of studies concentrate on future perspectives for ICT use in international and intercultural education. Contributors to Burbules & Torres' (2000) collection *Globalization and Education: Critical Perspectives* offer important insights into the impact of globalization (and ideas of 'globalized education') on educational policy around the world. Looking to the future, Lemke (1993) explores possible new directions for education and related social and cultural changes from the viewpoint of post-modern perspectives on learning and information technologies, and proposes new models of education in cyberspace (rather than in classrooms).

6 The Impact of the Internet on Culture

How is online intercultural communication driving social, political and cultural change? Do cyberculture and online communication represent opportunities or threats to human cultures?

While many papers surveyed in this study conclude with discussion of the impact of the Internet on culture, contributions grouped together in this final section have made the question of technologically-driven sociocultural change central to their research investigations or theoretical projections. Between them, they question the ways that a range of 'features of cyberculture' may influence global cultures: the cultural values carried by technology, the language and discourse of the internet, the pressures and challenges of online intercultural communications, the formation of virtual communities and identities, and the potential for spread of dominant values via online intercultural education projects.

ICTs as Agents of Cultural Change?

Only a small number of reports actually document specific instances of cultural (ethnic and/or social) change brought about by Internet technologies. For example, Dahan (2003) reports on the role of ICTs as "catalysts in advancing social, cultural and political change" among the Jewish population of Israel, and also discusses how ICTs have facilitated the creation of a "regional public sphere" for Palestinians in the Middle East. Piecowye (2002) reports on the impact of computer-mediated communication on the culture of the United Arab Emirates, via a study of female university students. Ruhleder (1995) explores the ways that digitization of and internet access to classic texts is changing the culture of classical scholarship, while Williams & Gunatunge (2000) discuss different approaches to investigating the impact of information systems development in Malaysia. Brown (1998) examines instances in which corporations have used Internet technologies to "appropriate and profit from" the cultural knowledge of indigenous peoples. Zhang & Xiaoming (1999) meanwhile explore the role of the Internet in promoting ethnic communication in China, and suggest that this medium may actually fortify cultural traits of ethnic immigrants, while at the same time assisting their assimilation into the mainstream.

Technological Determinism and Cultural Homogenization

A much larger number of writers offer pessimistic theoretical predictions of technologically-driven cultural revolution or homogenization. Many of these predications appear to rest on the philosophic assumption that Ess (2000) refers to as "technological determinism": "the notion that once technologies are

made available, they will inevitably shape the world – including diverse peoples and cultures – in alignment with the ostensibly valid values of democratic governance, free speech, etc." Ghasarian (1996), for example, warns that "technology is developing according to a logic of its own faster than regulations to control it".

Many of these determinist predictions are dire. Anderson (1995) suggests that liberal humanist values of "Islamic and Arab high culture" will fall victim to the Western values of cyberspace absorbed by a 'Diaspora' of Middle Eastern students and carried back into their home societies. Döbel (1999) argues that the Western values of "speed and efficiency" are increasingly idolized and distributed via cyberculture. Although Ess & Sudweeks (2003), and Ess (1998) offer contrasting optimistic and pessimistic visions for computer-mediated communications in the Middle East, they point out that CMC technologies can be easily appropriated by the powerful...to mirror and reinforce prevailing patterns of power and advantage" and can "expand rather than resolve cultural conflicts". Moeller (2002) argues that in spite of claims of its "emancipatory potential", the Internet is simply another facet of "mass communication" that actually highlights people's "inability to speak at all". Sy (2002) meanwhile argues that the Internet facilitates colonization. and that it simultaneously paradoxically) undermines ethnicity while inducing "reactive" (and destructive) ethnic identification that can fragment society.

A related set of dire predictions focus on the potential for ICTs to bring about the demise of nation states (Hale, 1996), accelerate globalization (Hassan, 1999; Lovink, 2002) and bring about cultural destabilization and homogenization (Gladney, 1996). Others focus on the potential role of ICTs in the

reinforcement of conventional power hierarchies of race, class and gender (Herman & Swiss, 2000), and the constructions of a dystopic new "world order" (Kiesler, 1997). A number suggest that the truly destructive force of cyberspace is not carried by its ethnocultural values so much as by its role in facilitating corporate takeover of civil society (Lovink, 2002; Willis, 2000). Even Lévy (2001b) – more commonly characterize as a cyberoptimist – warns of the sociocultural risks of cyberspace: cognitive isolation, dependence, reinforcement of power structures, exploitation and "collective stupidity".

Resisting Cybercultural Imperialism

Given the degree of pessimist writing about the paradoxically anarchic and stratified future that technology is creating, it is perhaps natural that various authors make or document specific recommendations for strategies of resistance. Several discuss 'protectionist' strategies. For example, Brown (1998) describes current attempts by legal scholars, anthropologists and native activists to create "legal regimes" to defend (indigenous) cultures by expanding the notion of copyright to include "cultural ideas" (although this author is skeptical, characterizing such claims as informed by "romantic assumptions that ignore the broader crisis of intellectual property"). Others promote 'cyberactivism' as a response to corporitization and censorship of cyberspace. Lovink (2002), for example, investigates strategies of Internet activists and stresses the importance of intercultural collaborations in Internet activism. Finally, some authors make suggestions for state or societal 'regulation' of cyberspace as an attempt to both shape cyberculture and mitigate its potentially negative impact on ethnic cultures. For example, Sy (2002) proposes

"the wiring of 'civil society'" in domains where "non-instrumental, identity-affirming utilization and signification of information technology outweighs its deployment for purely systemic and economic goals" – in other words, the social promotion of culture-positive uses of technology that have no corporate goals. Walterman & Machill (2000) also offer a series of reports and contributions that make recommendations for the protection of minors and freedom of speech on the Internet.

Hybridization, not Homogenization?

A second group of contributors to this section offer more balanced analyses of the promises and risks of technology for culture. Ess (2000) is careful to point out that "technological instrumentalism" - "the notion that technologies are culturally and morally neutral" underlies some predictions about technology and culture. and characterizes this as an equally unhelpful philosophical assumption. He warns against uncritical acceptance of idealistic notions of an "electronic global village" that "will enjoy seamless and transparent communication...[bringing] greater freedom expression, greater democratic governance and affiliated rights, and...greater economic prosperity". Similarly, in his review of Herman & Swiss (2000) collection of essays The World Wide Web and Contemporary Cultural Theory, Rowe (2002) describes how contributors are critical of the "hype of technical innovation, rhetoric of hyperbole and claims of universality" made by "zealous promoters of the Web", while accepting the "importance of the Web in our economic, social and personal relations". Both of these texts, however, make clear that simplistic binary perspectives on the impact of technology on culture are not useful. Ess (2000) contrasts "global village" hopes

with fears of CMC technologies as agents of globalization and cultural homogenization, but points out that if we examine what actually happens when CMC technologies are introduced into diverse cultural contexts, "neither the claims of technological instrumentalism nor technological determinism are borne out in practice". Instead, he argues, CMC technologies are taken up in ways that allow for global connectivity and the enhancement of local cultural values and communicative preferences. Kim (1998) supports this perspective, arguing against coreperiphery theories of information control and pointing out that the Internet and globalization promote two-way information and technology flow. Consumer behavior should not be equated with culture, he argues - "an assumption that denies the complexities of cultural development". Similarly, contributions to the edited collection of Stald & Tufte (2002) make clear the diverse and complex ways that a range of minority cultural groups are creating online communities and identities, while LaFargue (2002) emphasizes the fluid and evolving nature of 'culture' and 'identity'; these will naturally evolve in online intercultural dialectics between producers and consumers, he claims. Instead, Ess & Sudweeks (2003) conclude from recent studies that CMC technologies may occupy important kinds of middle grounds in diverse culture contexts: operating "less as the vehicles for intractable homogenization and more as catalysts for significant processes of [cultural] hybridization". It is these new hybrid culture(s) - "the interface...between the user and the collective imagination of the vast virtual audience" - that Porter (1997) explores in *Internet Culture*.

Conclusion: Suggestions for Future Work

Our survey of current literature at the intersection of culture, Internet technologies and communication has contributed to the delineation of the extent and boundaries of this newly emerging field. While important early contributions have been made to the development of theory and to empirical investigation, it is evident that further study is needed in at least four major areas: the development of appropriate theories of culture, the development of useful theories of intercultural communication, continued investigation of the impact of language and culture on online intercultural communication, and continued development and testing of inclusive online (and online learning) environments.

At the level of theory, a continuing challenge is perceived to be the lack of an adequate theory of culture that would allow analysis of the complexities of virtual cultures and virtual communities (Ess, 1998; Roche, 2001), and that could guide more 'culturally appropriate' technology and interface design. These shortcomings are best illustrated by paraphrasing questions posed by Ess (1998): Do existing definitions, enumerations, and observations of 'culture' give us an understanding of culture that allow us to effectively examine and make predictions about the complex interactions between culture and technology? Can we have an adequate theory about 'culture' and computer- mediated communication without considering religiously- shaped components of culture and worldview

 a perspective striking in its absence from current literature? Do computer-mediated communication technologies necessarily result in the importation of specific cultural values? Are postmodern perspectives on communication theory useful for understanding the interplay between culture and computer-mediated communication?

Building on theory, it is critical that we continue to pursue careful detailed studies of "the discourses and practices generated around/by technology and the new forms of social reality created by technology" and employ ethnographic approaches to "cyberculture practices, cultural foundations shaping new technologies [and] the political economy of cyberculture" (Escobar, 1994).

Annotated Bibliography

Where available, the authors' original $A_{BSTRACT}$ is provided and indicated. Where article abstracts were not available or were particularly brief, extracts from the article $I_{NTRODUCTION}$ and/or $C_{ONCLUSION}$ are occasionally included, and indicated. In some cases, reviews of books by publishers or reviewers are offered, with citation. All other summaries or annotations are the work of the survey authors.

Abdat, S. & Pervan, G. P. (2000). Reducing the Negative Effects of Power Distance During Asynchronous Pre-Meeting Without Using Anonymity in Indonesian Culture. In F. Sudweeks &C. Ess (Eds.). *Proceedings, Cultural Attitudes Towards Technology and Communication, 2000.* (pp. 209-215). Australia: Murdoch University.

ABSTRACT: Research about Group Support Systems and the design of these group support technologies is mainly based on western culture and takes little explicit account of other cultures. While the research reveals promising results on the effectiveness of these technologies, the research results, and the technologies themselves may be less effective when applied directly to different cultures or cross-cultural situations. These cultures may require different forms or styles of group support. Indonesian culture has a relatively high power distance, low individualism, and weak uncertainty avoidance. Anonymity as one of the GSS capabilities has been used to reduce power distance effects. However, in some cultures the use of anonymity might have negative impacts. This paper presents another GSS capability to avoid the use of anonymity and

reducing the negative effects of high power distance during asynchronous pre-meeting.

Abdelnour-Nocera, J. (1998). Virtual Environments as Spaces of Symbolic Construction and Cultural Identity: Latin American Virtual Communities. In C. Ess & F. Sudweeks (Eds.), *Proceedings, Cultural Attitudes Towards Communication and Technology,* 1998 (pp. 193-195). Australia: University of Sydney. http://www.it.murdoch.edu.au/catac/catac98/pdf/15 nocera.pdf

A_{BSTRACT}: The aim of this work is to understand the sociopsychological and cultural realities of virtual communities as live spaces of meeting and high interaction framed within the Latin American context. The study will consist of a comparative ethnographic study of several Latin communities, using the tools of participant observation and focussed interviews.

INTRODUCTION: This work assumes technology not as a determinant of on-line life, but a prerequisite for the occurrence of the virtual community social phenomena. Virtual environments offer a unique space for the creation and recreation of group cultures, showing all the meaning and valorization processes involved in sociopsychological interaction. The main objective is not to focus on the community members' intraconscious life. but on the interconscious "space" of the communities. We see the virtual community as a whole sociopsychological phenomenon created by the interaction of its members, who belong and make their own intersubjective dimension. The principle notion of culture assumed is that of Geertz, who describes it as "webs of significance he (man) himself has spun". This shared symbolic and meaning delineation also explains our notion of group identity.

We can say that the major part of this research is of an exploratory nature, because its main objective is to describe and to understand the virtual communities phenomenon. The implicit tasks are: the description and recognition of common and proper expressive resources (culture) of the communities under study; and to discover the codes, norms and meaning structures that shape and valorize the members' acts.

Abdelnour-Nocera, J. (2002a) Context and Culture in Human Computer Interaction: 'Usable' Does Not Mean 'Senseful'. In F. Sudweeks & C. Ess (Eds.). Proceedings, Cultural Attitudes Towards Technology and Communication, 2002, Université de Montréal, Canada. (pp. 505-524). Australia: Murdoch University.

ABSTRACT: Computers and its interfaces are part of the spaces from which social reality emerges. They are indicators of direct and indirect cultural negotiations between the networks of production and consumption of those technologies. Technology is then conceived not only as a product, but also as part of a cultural process of encodings and decodings. This implies a new concept of the Human-Computer relationship that breaks the underlying idea of symmetry between humans and computers as abstract information processing entities, i.e. re-humanize users as persons and re-locate computers and its interfaces as tools in real sociocultural settings. This paper gives a brief presentation and discussion of the main theoretical strands that study the shaping of computer systems design and use by context and culture. These are Situated Action, the Semiotic perspective, Scenario- based design, Activity Theory and the Systems- Management Approach. Furthermore, the role of

ethnography, qualitative methods and intercultural studies are discussed as important contributors to a better understanding of the significance of context and culture in computer use and design. The hermeneutic approach of Gadamer and Winograd, and the idea of technology as interpretatively flexible text shaped by specific genres and tastes, serve as the main cornerstone of this discussion. A starting theoretical framework composed of three cultural dimensions (workplace, tool-related and personal background) is proposed for researching the role of culture in systems and interface use and design. The main reflection from this discussion is that the question "Does this technology make sense for them?" is rarely made in pursuit of successful systems design.

Abdelnour-Nocera, J. (2002b). Ethnography and Hermeneutics in Cybercultural Research. Accessing IRC Virtual Communities. *Journal of Computer-Mediated Communication*,7(2) http://www.ascusc.org/jcmc/vol7/issue2/nocera.html

This article suggests a qualitative A_{BSTRACT}: methodological framework and a holistic-historicistic epistemological perspective that balances sociopsychological and cultural dimensions of IRC Virtual Communities. CMC cultural research should not be focused on intercultural collision phenomena alone, but also on cultural construction from inside the Net. An ethnographic strategy discovering cybercultures together with Gadamer's hermeneutics for the interpretation of systems of meanings are the proposed tools for understanding "virtual" life and cultural production within the Net.

I_{NTRODUCTION}: Computer-mediated communication (CMC) is an interdisciplinary field of study which

conceives new information technologies not only as data channels and banks, but also as spaces for meeting and interaction (Dutton, 1998). Therefore, we are met with the opening of virtual spaces in which people can construct new social and cultural realities without even being physically there (Abdelnour, 1998). This situation accentuates the symbolic and cultural dimension along which humans differ from the rest of the organisms in the world (Mead, 1927). It is important not to forget Rheingold's definition (2000) presented in his book The Virtual Community: Homesteading on the Electronic Frontier. According to Rheingold "virtual communities are social aggregates 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." It is obvious that this concept provides a cultural and sociopsychological vision. These webs of Rheinghold are very much like those webs of meaning of Geertz (1973) when he refers to culture. Marvin (1996) proposes virtual communities as cultural groups that construct their own culture through the use of a set of expressive and interpretative resources (in which language plays the main role).

In these virtual settlements (Jones, 1997), groups of users establish networks of relationships through the use and development of a specific language, which preserves the identity of the community's members. This notion of an identity shared by the virtual community is vital, for it helps to support the cohesion and the sense of the group's life. As a result, this leads to a cyberculture that is inherent to the group and is also constructed collectively in "webs of meaning" that the group has spun (Geertz, 1973). In these webs, humans live and construct their cultural, social and psychological realities.

Approaching these virtual symbolic spaces, where users build their own way of life by means of a language, requires a methodology and an epistemology that best fit the notion of a multiple-face, a non-physical person who is able to create as many personalities as "worlds" he or she accesses. Therefore, if for psychology's classic epistemology the unit of study is overt behavior, for the social psychology applied in this work the unit of study is the symbol, its meanings and experiences; of course, all this being extracted from the community's textual social discourse.

Abdullah, M. H. (1998). Electronic Discourse: Evolving **Conventions** in Online Academic Environments. Bloomington, Indiana: **ERIC** Clearinghouse Reading, English, on and Communication.

ABSTRACT: Based on the premise that computer networks are changing the way people think and interact, this Digest discusses some features of electronic discourse as a relatively new form of discourse and examines the current research on computer-mediated communication text. The Digest suggests further research on how other features of electronic discourse resemble those of oral and written language and research which compares the construction of reasoning and argument in electronic discourse and conventional writing. It also considers how electronic discourse has brought about new conventions in the use of graphic features and notes that the informal, conversational tone of electronic discourse is quite different from that of traditional academic prose. The Digest points out that as online interaction becomes more widely used in formal academic situations, language educators may have to

consider how to respond to the unconventional language use and structuring of ideas.

Anderson, J. (1995). 'Cybarites', Knowledge Workers and New Creoles on the Superhighway. *Anthropology Today*, 11(4), 13-15.

Anderson asks 'what is the social structure of cyberspace and the world order it forms?' he outlines what he calls the 'familiar dichotomies in advocacy and critique of industrial society, extending back through Marshall McLuhan', contrasting futuristic visions for the 'Information superhighway' with darker predictions of 'cybertribes...threaded together instantaneously, specifically, globally, sometimes obsessively – eager not just to reinforce each other but to reinforce real events'.

'The social organization of this world is rooted in the worlds which gave rise to the Internet as a tool of scientists and engineers seeking quick and open access to others like themselves' argues Anderson. 'It embodies their values on speed, reach, openness, quick response and the emergence that they seek in the research they communicate'. There is also, he suggests a broad migration of 'scientific' modes of framing arguments, interpretations and claims to authority into social and, importantly, into religious or broadly 'cultural' issues.

Anderson relates his ideas to those of Benedict Anderson who 'identified Creoles – the overseas Europeans of early modern empires, as the genitors of nations and nationalism...[whose] means was print capitalism' and by way of illustration describes the ways that the 'Diaspora' of Middle Eastern graduate students bring cyberspace and thus Western values 'home' with them on their return. 'Among the first casualties in the extensions of cyberspace among Middle Easterners

may be liberal humanist traditions of Islamic and Arab high culture – not because those do not translate to the new medium [but because] these traditions and their social metamessages about what is 'cultural' are tied to the media of print and literary culture that are simply bypassed in new media and by new people with new skills and claims to authority.'

Bates, T. (2001). International Distance Education: Cultural and Ethical Issues. *Distance Education*, 22 (1), 122-136.

A_{BSTRACT}: This paper describes an international online program run by the University of British Columbia (UBC) in Canada in association with Monterrey Institute of Technology in Mexico. It highlights the problems of online collaboration and assessment criteria for students from different cultures and pedagogical heritages. It also raises a range of issues faced by the initiating university (UBC) in developing and hosting a global online course.

Baym, N. (1998). The Emergence of On-line Community. In S. Jones (Ed.) *CyberSociety 2.0: Revisiting Computer-Mediated Communication and Community* (pp. 35-68). Newbury Park, CA: Sage.

Baym's creative essay probes not if online groups are communities, but why these groups perceive themselves to be so. She frames her analysis with two questions: "does on-line community really serve as a substitute for off-line community" and "what occurs on- line that leads some people to experience them as communities"? She claims that there exists a "style" to online community, characterized by "a range of preexisting structures, including external contexts, temporal structure, system infrastructure, group

purposes, and participant characteristics". The resulting effect is a set of shared meanings that allows users to believe that they are a community. (From an online summary by T. S. Frobish http://acjournal.org/holdings/vol2/lss3/reviews/frobish.htm).

Bellamy, A. & Hanewicz, C. (1999). Social Psychological Dimensions of Electronic Communication. *Electronic Journal of Sociology*, 4 (1).

http://www.sociology.org/content/vol004.001/bellamy.html

A_{BSTRACT}: This study assessed the degree to which emotion management factors constrain hostile types of communication within electronic chat room settings. It further revealed that gender and social psychological variables such as sociability and locus of control moderate the sending of such messages. Since understanding how users define this virtual social landscape is pertinent to analyzing online communication, the study also investigated whether users believe that normative standards of behavior extend to online interactions.

Belz, J. A. (2003). Linguistic Perspectives on the Development of Intercultural Competence in Telecollaboration. *Language Learning & Technology*, 7(2), 68-117.

http://llt.msu.edu/vol7num2/belz/

A_{BSTRACT}: It is widely reported that the goals of telecollaborative language study are the development of foreign language (FL) linguistic competence and the facilitation of intercultural competence. Whereas evaluations of the impact of telecollaboration on FL

linguistic competence have been based on structural descriptions of learner discourse from the earliest days of research in this field, discussions of intercultural competence in the same configuration have been characterized primarily in alinguistic terms. These have included analyst-sensitive content analyses of learner interaction in telecollaboration, post-semester interviews with learners who have participated in telecollaborative projects, and attitudinal surveys of these same learners. In general, the fields of foreign language learning and teaching (FLL&T) have neither advocated nor presented linguistically critical interpretations of the development of intercultural competence in telecollaboration. In this paper, I present a detailed case study of the development of intercultural competence (or lack thereof) in a German-American e-mail partnership by examining the electronic interaction produced in this exchange within the framework of appraisal theory, a Hallidayian-inspired linguistic approach to the investigation of evaluative language.

Benson, S. & Standing, C. (2000). A Consideration of Culture in National IT and e-Commerce Plans. In F. Sudweeks & C. Ess (Eds.). *Proceedings, Cultural Attitudes Towards Technology and Communication,* 2000. (pp. 105-124). Australia: Murdoch University.

These authors offer their argument that prevailing views of 'culture' have limited usefulness for anything except 'categorization' and suggest that 'the dynamic aspects of culture are better considered in the light of systems theory so that the nature and behaviour of cultures becomes clearer'. They explain 'it is not appropriate to consider one part of a system in total isolation', and characterize existing efforts to do so as 'static and restrictive'. Instead, each component is

'defined in terms of its interaction with other systems components'.

They continue: 'in order to develop a conceptually useful model of culture, we turned to classical cybernetics (theories of self-regulating systems). In doing so, we realised that communication (language) is the agent of culture and that culture is defined by technology, which in turn redefines culture. This confirmed the validity of our systemic perspective. Regarding cultures as self-sustaining systems allowed us to see how they manage to survive and protect themselves from the threat of other cultures and technologies.'

Finally, these authors consider the role that policy plays in the preservation of cultural values, and they present a new evaluation framework that allows technology and communication infrastructure to be assessed in terms of cultural impact.

Bickel, B. (2003). Weapons of Magic: Afghan Women Asserting Voice via the Net. *Journal of Computer-Mediated Communication*, 8 (2). http://www.ascusc.org/jcmc/vol8/issue2/bickel.html

A_{BSTRACT}: In the global struggle over discourse and knowledge after 9/11, the voices of otherwise silenced women in Afghanistan were significantly amplified on the Internet. RAWA.org demonstrates how a Web site contended with discourses of fundamentalism and war while envisioning democracy and constructing new leadership identities for women.

[...] In this paper I examine the Web site RAWA.org, in particular its Guest Book, in the context of competing post-September 11 discourses. RAWA.org is employed as an example to show how a Web site can be used to construct and broadcast new discourses and cultural

identities. I speculate about how the Web site supports new learning and nurtures the development of oppositional knowledge and discourse in the context of a global war on terrorism. Issues which emerged include the problem of creating "virtual" discourse communities of resistance on the ever-changing Net without benefit of safe or stable institutional presence in the physical world. There is a further challenge in specifying the nature of the contribution of a Web site like RAWA.org, compared to traditional media, in contributing to new global understanding of and support for democracy and women's rights in Afghanistan.

Blanco, J. R. (1999). About Virtual Subjects and Digital Worlds: The Case of Virtual Communities. *Politica y Sociedad*, 30, 193-211

ABSTRACT: The Internet, as a privileged place of social experimentation, and its virtual communities are examined from a sociological perspective. Virtual communities may be geographically dispersed. anonymous or pseudoanonymous, with their own sets of norms. The principal contact between community members is discussion and interaction online. The communities are thus rooted in the sociotechnological configuration that the Internet provides, and it is contended that social innovations are altering the models for producing technology, not vice versa. The hybrid nature of cyberspace and its actors are discussed. It is observed that communication is becoming an end in itself, instead of a tool for political, social, and cultural action. To compare real and virtual communities, the virtual communities and even their designs need to reflect the real sociocultural diversity.

Bourges-Waldegg, P. & Scrivener, S. A. R. (1998). Meaning, the Central Issue in Cross-Cultural HCl Design. *Interacting with Computers*, 9(3), 287-309.

A_{BSTRACT}: In this paper, we focus on the design of systems intended to be shared by culturally heterogeneous users (e.g., users of Computer-Supported Co-operative Work (CSCW) and Internet applications). We discuss the limitations of current approaches to designing interfaces for culturally diverse users – such as internationalisation and localisation – before describing a study conducted to elicit and understand culturally determined usability problems, in which a World-Wide Web (WWW) system was evaluated.

It is concluded that culturally determined usability problems converge in the understanding of representations, the meanings of which are rooted in culturally specific contexts. We explain why existing approaches are inadequate for dealing with this issue. In conclusion, we outline an HCI approach, called Meaning in Mediated Action (MIMA), designed to tackle this problem.

Bourges-Waldegg, P. & Scrivener, S. A. R. (2000). Applying and Testing an Approach to Design for Culturally Diverse User Groups. *Interacting with Computers*, 13(2), 111-126.

A_{BSTRACT}: This paper intends to illustrate how user interface designers can apply the Meaning in Mediated Action (MIMA) approach (P. Bourges-Waldegg & A.R. Scrivener, Meaning; the central issue is cross-cultural HCI design, Interacting with Computers, 9 (3) (1998) 287–310, special issue on "Shared Values and Shared Interfaces") to design for culturally diverse user groups. After outlining its theoretical foundation, we describe

how the MIMA stages—observation, evaluation, analysis and design—were carried out to redesign a WWW system.

Interculturally shared systems are Conclusion: becoming ever more popular around the world and yet there are very few ways of dealing with the culturally determined usability problems that can occur when using them. MIMA is an attempt to help designers resolve these kinds of problems, based on including rather than excluding potential users on the basis of cultural differences. As it was illustrated, it provides a general framework capable of uncovering the particular culturally determined usability problems affecting specific design cases, and helps designers to understand how their representations mediate the users' actions. In this way, MIMA also relieves the designer of the task of consulting and assessing culturalisation guidelines and does not require specialised expertise, other than having a clear understanding of the concepts here described, i.e. context, representations, and meaning.

Other more general advantages of this approach are that it can be used along with a general HCl approach, to ensure that culturally determined usability problems are addressed within the more general framework of HCl, and that it is likely to be cost effective in comparison with culturalisation as, for example, it does not require extensive study of "target cultures", or the production of several culturally specific versions of an interface.

Brown, K. (1995). Creating Global Learning Communities. *Proceedings, Internet Society Conference, June 27-30 1995, Honolulu, Hawai'i* http://www.isoc.org/HMP/PAPER/220/txt/paper.txt

A_{BSTRACT}: In the face of more and more warnings, educators are asking how they will provide young people with the skills, tools and mindset required to handle the enormous problems they will inherit in the 21st century. Educators in many parts of the world are locked in debate about alternatives for reforming educational systems our societies have outgrown. Through I*EARN (the International Education and Resource Network) which is described in this paper, educators respond to the challenges faced by schools by using the Internet with K-12 students to create global learning communities and develop more effective pedagogical practices.

Brown, M. F. (1998). Can Culture be Copyrighted? *Current Anthropology*, 39 (2), 193-222.

A_{BSTRACT}: The digital revolution has dramatically increased the ability of individuals and corporations to appropriate and profit from the cultural knowledge of indigenous peoples, which is largely unprotected by existing intellectual property law. In response, legal scholars, anthropologists, and native activists now propose new legal regimes designed to defend indigenous cultures by radically expanding the notion of copyright. Unfortunately, these proposals are often informed by romantic assumptions that ignore the broader crisis of intellectual property, and the already imperilled status of the public domain. This essays offers a skeptical assessment of legal schemes to control cultural appropriation – in particular, proposals that indigenous peoples should be permitted to

copyright ideas rather than their tangible expression and that such protections should exist in perpetuity. Also examined is the pronounced tendency of intellectual property debate to preempt urgently needed reflection on the political viability of special rights regimes in pluralistic democracies and on the appropriateness of using copyright law to enforce respect for other cultures.

Bucher, H.-J. (2002). The Power of the Audience: Interculturality, Interactivity and Trust in Internet-Communication – Theory, Research Design and Empirical Results. In F. Sudweeks & C. Ess (Eds.). Proceedings, Cultural Attitudes Towards Technology and Communication, 2002, Université de Montréal, Canada. (pp. 3-14). Australia: Murdoch University.

ABSTRACT: The question of power of the net is investigated in this paper from the perspective of the audience. One cannot fully understand Internet communication without taking into account the role of an interactive audience. To clarify the relationship between Internet communication and culture therefore, the is paper proceeds in three steps: First, I argue for a paradigm shift from the power of the communicator to the power of the audience. Second, I characterize Internet communication in respect to three basic concepts: interactivity, intercultural communication and trust. And third, I present a research design and some empirical results on how the power of the audience could be verified.

Buragga, K. A. (2002). An Investigation of the Relationship Between Cultural Context and the Use of Computer-Based Information Systems. In F. Sudweeks & C. Ess (Eds.). *Proceedings, Cultural Attitudes Towards Technology and Communication, 2002, Université de Montréal, Canada.* (pp. 467-483). Australia: Murdoch University.

A_{BSTRACT}: Culture can create a climate for or against the use of Computer-Based Information Systems (CBIS) in an organization or even a country. Some scholars assert that design, development, implementation and management of information systems and the degree to which they accommodate cultural differences are key issues. When the design and development processes do not take cultural differences into account, under- utilized or even failed systems are likely to result.

My paper assumed that cultural context influences the use of CBIS. The differences in value priorities may be expected to influence the way in which individuals of a particular culture accept and use Computer-Based Information Systems in performing their tasks. Therefore, this research examined cultural context and its relationship to the use of Computer-Based information Systems in the work environment.

The findings support the research hypothesis that concerns cultural differences between the research samples. However, the findings do not support the research hypothesis that relates cultural context to the use of CBIS. Even with the unexpected findings that cultural context has no relationship to CBIS usage, the research offers a starting point of reference for understanding the basic aspects of CBIS implementation. Such an understanding has many practical applications. The research also discusses several possible directions for future research.

Burbules, N. (1997). Rhetorics of the Web: Hyperreading and Critical Literacy. In I. Snyder (Ed.). From Page to Screen: Taking Literacy into the Electronic Age. New South Wales: Allen and Unwin. http://faculty.ed.uiuc.edu/burbules/ncb/papers/rhetorics.html

A_{BSTRACT}: One of the perennial questions about reading on the Internet, particularly in reading hypertexts, is whether this mode of reading is something new, or whether it is the same reading, involving the usual skills and strategies, simply being exercised in a new medium – whether, indeed, hypertext itself is even something new, or simply an application in the digital domain of attempts to deconstruct linear narrative that have existed in literature for centuries.

This way of framing the question, as a choice between "new" reading or "the same" reading, is unhelpful from the start. Reading is a practice, and as such it partakes of the contexts and social relations in which it takes place; significant differences in those contexts and relations mean a change in the practice. The act of reading on a computer screen is not the same as reading out of a book; the pragmatics of reading — the speed of our reading, when we pause, how long we can concentrate, how often we skip over material or jump back and reread what we have read before, and so forth — are clearly going to be different, and these differences will have an effect on the ways that we interpret, understand, and remember what we read.

At the same time, there must be some continuity between this emergent practice and other, related practices with which we are familiar – it is reading, after all. Hence questions about whether it is "new" or "the

same" miss the point, which is to analyze at the concrete level the ways in which familiar elements of reading have a role to play in "hyperreading", and the ways in which they need to be reinterpreted in light of the changing pragmatics of reading in hypertext environments such as the World Wide Web. The volume of information that can be accessed, the speed with which it can be accessed, the structure of the Web as a series of interlinked textual points between which one moves with the click of a "link," are not the same (despite our use of familiar metaphors, like "pages," to describe them) as with other texts.

[...] The key element in this hypertextual structure is the link. In this essay I consider some of the different things that a link can be; I explore some of the ways in which a linked textual environment works, within the practice of hyperreading; and I claim that hyperreading can promote a significant kind of critical literacy, once the apparently neutral character of a "link" has been problematized. My hope is to invert the order of how we normally think about links and information points, nodes, or texts: usually we see the points as primary, and the links as mere connectives; here I suggest that we think more centrally about links – as associative relations that change, redefine, and provide enhanced or restricted access to the information they comprise.

Burbules, N. & Torres, C. (Eds.). (2000). *Globalization and Education: Critical Perspectives.* London: Routledge

This book brings together an outstanding group of international authors to discuss the topic of how globalization is affecting educational policy in nation-states around the world [...] [G]lobal changes in culture deeply affect educational policies, practices, and

institutions. Particularly in advanced industrial societies. for instance, the question of "multiculturalism" takes on a special meaning in a global context. How does the discourse of liberal pluralism, which has been the dominant framework for multicultural education in developed societies - to learn about different others as a way of living with them and coordinating social activity with them within a compact of mutual tolerance and respect - extend to a global order in which the gulf of differences becomes wider, the sense interdependence and common interest more attenuated, and the grounding of affiliation more abstract and indirect (if it exists at all)? With the growing global pressures on local cultures, is it education's job to help preserve them? How should education prepare students to deal with the terms of local, regional, national, and transnational conflict, as cultures and traditions whose histories of antagonism may have been held partly in suspension by strong, overarching nation-states break loose as those institutions lose some of their power and legitimacy? To the degree that education can help support the evolving construction of the self and, at a more general level, the constitution of identities, how can multiculturalism as a social movement, as citizenship education, and as an antiracist philosophy in curriculum intervene in the dynamics of social conflict emerging between global transformations and local responses?

[...] [T]he global context presents a fundamentally different sort of challenge to education than in the Enlightenment framework. Whereas previously education was more focused on the needs and development of the individual, with an eye toward helping the person fit into a community defined by relative proximity, homogeneity, and familiarity, education for life in a global world broadens the outlines

of "community" beyond the family, the region, or the nation. Today the communities of potential affiliation are multiple, dislocated, provisional, and ever-changing. Family, work, and citizenship, the main sources of identification in Enlightenment education, remain important, certainly, but are becoming more ephemeral, compromised by mobility (whether voluntary or diasporic) and competition with other sources of affiliation, including the full range of what can be termed, in Benedict Anderson's phrase, "imagined communities." Whereas schools or (before that) tutors acted in loco parentis, preparing learners for a relatively predictable of future opportunities and challenges. schools today confront a series of conflicting, and changing, ad hoc expectations, directed to unpredictable alternative paths of development and to constantly shifting reference points of identification. As a result, educational aims that have more to do with flexibility and adaptability (for instance, in responding to rapidly changing work demands and opportunities), with learning how to coexist with others in diverse (and hence often conflict-riven) public spaces, and with helping to form and support a sense of identity that can remain viable within multiple contexts of affiliation, all emerge as new imperatives. (From an extensive online introduction summary by the authors, http://faculty.ed.uiuc.edu/burbules/ncb/papers/global.ht ml)

Burbules, N. C. (2000). Does the Internet Constitute a Global Educational Community? In N.C. Burbules & C. A. Torres (Eds.). *Globalization and Education: Critical Perspectives*. (pp. 323-356). New York: Routledge.

Burbules begins this essay by discussing different theoretical perspectives on 'community' – from Dewey's notion of community resting on commonality, to Arendt's vision of public space as fundamentally identified with plurality (and *not* commonality). Burbules also invokes Anderson's argument that communities (particularly at the national level) are "imagined, not given", but cautions us that the use of the word 'imagined' does not imply "ephemeral". "Even 'imagined' communities are 'real' in their effects on people", he notes. Within this context, and in response to contemporary debate about the Internet as *virtual community*, Burbules asks "What do these notions mean: 'virtual community' or 'global community?'".

Burbules develops an analytical framework containing three sets of conditions that create and identify a community: mediating conditions, political conditions, and conditions of space and place. He characterizes 'mediating conditions' as comprising the medium of interaction, the forms of interaction and the social practices governing interaction. (In particular, Burbules focusses here on what he calls 'identity practices' - the "moves that social actors make as a way of forming, expressing and defending their identities"). Political (and historical) conditions, he explains, shape and constrain the possibilities of community. Conditions of space and place meanwhile shape the conditions for activity and interaction, and thus the formation and development of communities (examples include the ways that space can force

privacy or publicity, enclosure or exclusion).

Burbules uses this analytical framework to assess the nature of "online communities". These 'imagined communities' are mediated via the Internet - which can both facilitate and inhibit community formation and identity practices. Language, text, graphics and other modes through which people relate, also mediate the nature of online communities, but Burbules points out that "whenever critics identify a barrier that makes online interaction 'not like real interaction', new developments begin to blur that distinction". He also considers Internet English as a further factor mediating online community formation. Politically and historically, Burbules highlights the reality of political and moral dimensions to online interactions. The Internet is *not* politically neutral. With regards to "space and place" he examines what kind of 'place' the Internet is.

The author reaches two important conclusions: that the Internet as a whole is too diffuse and disparate to be considered a single community; but that many communities can and do exist within the 'metacommunity' of the Internet. In closing Burbules examines the potential for educational communities to form on the Internet, and situates online communities within the broader collection of 'actual communities' (that may or may not rely on proximity, homogeneity and familiarity) tow which human beings belong.

Cakir, H., Bichelmeyer, B. A. & Cagiltay, K. (2002). Effects of Cultural Differences on E-Mail Communication in Multicultural Environments. In F. Sudweeks & C. Ess (Eds.). *Proceedings, Cultural Attitudes Towards Technology and Communication, 2002, Université de Montréal, Canada.* (pp. 29-50). Australia: Murdoch University.

A_{BSTRACT}: The values and assumptions of our culture of origin form our beliefs and behaviour and thus we see the world through the lenses of our cultural values, mostly without being consciously aware of those values. Because of the availability of new information and communication technologies, recently people from different cultures have started to communicate and work together through computer networks. This type of multicultural communication is completely new for human beings and issues related to it need to be explored. In this study, the researchers explored the cultural dimensions of e-mail communication in a multicultural environment.

Castells, M. (2001). The Culture of the Internet. In M. Castells, *The Internet Galaxy. Reflections on the Internet, Business and Society.* Oxford: Oxford University Press.

At the top of our cultural construct that led to the creation of Internet is the techno-meritocratic culture of scientific and technological excellence, emerging essentially from big science and the academic world. This techno-meritocracy was enlisted on a mission of world domination (or counter-domination) by the power of knowledge, but kept its autonomy, and relied on a community of peers as the source of its self-defined legitimacy.

The hacker culture specified meritocracy by strengthening the inner boundaries of the community of the technologically initiated, and making it independent of the powers that be. Only hackers can judge hackers. Only the capacity to create technology (coming from any context) and to share it with the community, are respected values. For hackers, freedom is a fundamental value, particularly freedom to access their technology, and use it as they see fit.

The appropriation of networking capacity by social networks of all sorts led the formation of on-line communes that reinvented society and, in the process, dramatically expanded computer networking, in its reach and in its uses.

Rather than retrenching in the communes built around the Internet technology, they would take over the world by using the power that came with this technology. In our kind of world, this means, essentially, to have money, more money than anyone else. Thus, the money-oriented entrepreneurial culture went on to conquer the world, and, in the process, they made the Internet into backbone of our lives.

The culture of the Internet is a culture made up of a technocratic belief in the progress of humans through technology, enacted by communities of hackers thriving on free and open technological creativity, embedded in virtual networks aimed at reinventing society, and materialized by money-driven entrepreneurs into the workings of the new economy. (Adapted from the text.)

Cena, J. E. (2000). Bridging Gaps between Cultures, Classrooms and Schools: A Close Look at Online Collaborative Learning. *Educational Technology and Society*, 3(3).

http://ifets.ieee.org/periodical/vol_3_2000/d01.pdf

The author discusses classroom techniques and specific Internet projects that were completed by her students. She provides examples of how the students hereby broadened their awareness and increased their critical thinking as a result of the use of the Internet and their work in collaborative projects. She claims that online collaborative projects can develop a sense of community on an international, local and school wide level by drawing on local and global resources and allowing for a dialogue to take place between teachers and students around the world.

Chase, M., Macfadyen, L. P., Reeder, K. and Roche, J. (2002). Intercultural Challenges in Networked Learning: Hard Technologies Meet Soft Skills. *First Monday*, 7(8)

http://firstmonday.org/issues/issue7_8/chase/index.html

A_{BSTRACT}: This paper gives an account of themes that emerged from a preliminary analysis of a large corpus of electronic communications in an online, mediated course for intercultural learners. The goals were to test assumptions that electronic communication is internationally standardized, to identify any problematic aspects of such communications, and to construct a framework for the analysis of electronic communications using constructs from intercultural communications theory. We found that cyberspace itself has a culture(s), and is not culture-free. Cultural gaps can exist between individuals, as well as between

individuals and the dominant cyberculture, increasing the chances of miscommunication. The lack of elements inherent in face-to-face communication further problematizes intercultural communications online by limiting opportunities to give and save face, and to intuit meaning from non-verbal cues. We conclude that electronic communication across cultures presents distinctive challenges, as well as opportunities to course planners.

Chen, A.-Y., Mashhadi, A., Ang, D. & Harkrider, N. (1999). Cultural Issues in the Design of Technology-Enhanced Learning Systems. *British Journal of Educational Technology*, 30(3), 217-230.

Abstract: The pervasive influence of culture should be regarded as a significant concern in the design of technology-enhanced learning systems. In fact, it has been included as one of the five essential foundations of effective student-centred learning environments (Chen and Mashhadi, 1998). The other foundations are psychological, pedagogical, technological. pragmatic. This article will focus mainly on the cultural and pedagogical considerations in the design of studentcentred learning systems with particular reference to three cases in Singapore. The experiences will illustrate some of the challenges and problems in designing and implementing learning systems in three different contexts: local-institutional, trans-institutional, and global. Some of the instructional design issues include those articulated by Collins (1997) in his consideration for building a constructivist learning environment. They are related to learning goals such as thoughtfulness vs. memorization, whole tasks vs. component skills tasks, breadth vs. depth uniform knowledge, diverse VS. expertise, understanding vs. access,

cognitive vs. physical fidelity. Two other issues also merit consideration, namely authentic vs. abstract problem solving, and multi-directional and multimedia communication vs. direct one-way communication.

In the design of three Singapore-based learning systems, the cultural assumptions of prevailing beliefs about education, the values of Singaporean multicultural society, and the role of individuals in society were considered. Two of the systems were designed for student teachers and the third was meant for students collaborating on projects across schools and nations. Lessons learned from the three experiences will be discussed with a view to making recommendations to other educators, instructional designers and policy makers in their decisions regarding their use of technology-enhanced learning systems to nurture a more independent, thoughtful, resourceful, creative and responsible generation of citizens.

Chen, M. C. (1998). Intercultural Communication via E-mail Debate. *The Edge: The E-Journal of Intercultural Relations*, 1(4). http://www.interculturalrelations.com/v1i4Fall1998/f 98chen.htm

A_{BSTRACT}: This article reports the results of international e-mail exchanges between students in the United States and their counterparts in Denmark, France, Germany, Hong Kong and Turkey. The intercultural e-mail exchanges took place in a debate format. The American students took pre- and post-tests to measure their intercultural sensitivity. Although the results do not show a significant improvement in intercultural sensitivity among the participants on Likert scale questions, most participants do give positive responses in the open-ended questions. Plausible

reasons for the results and suggestions for future studies of international e-mail exchanges are also discussed.

Conclusion: The discussion clearly indicated that culture plays an important role in the international e-mail project. The differences of thinking patterns and expressions styles dictate the way participants perceive and utilize e-mail communication. Applied to our project, because it was designed as a highly structured debate form for e-mail communication, the format immediately causes orientation problems for some of the participants. "Debate" itself is a product of low-context culture that requires a direct expression of one's argument by using logical reasoning. American, Danish and German students participating in the project did not show any difficulty in conducting the e-mail debate, while students in France, Hong Kong and Turkey were confused by the format. This confusion led to two outcomes. First they resisted or were reluctant to conduct the communication. Second, when they were required to conduct the e-mail debate, they tried to match the American counterparts by abandoning their own expression styles. These problems were demonstrated by those representatives from France and Hong Kong in the first conference.

Chen, Y.-J. (2001). Transactional Distance in World Wide Web Learning Environments. *Innovations in Education and Teaching International*, 38(4), 327-338.

A_{BSTRACT}: The principal aim of this study was to measure the impact of two categories of variable (individual and instructional) on learners 'perceived transactional distance in a World Wide Web learning environment. The effects of four variables (learner's skill

level with the Internet, previous experience in taking distance education courses, extent of interaction and types of learner support) on the transactional distance that learners perceive in a web-based course have been investigated. Seventy-one students enrolled in adult education or agriculture extension programmes in four national Taiwanese universities participated in this study. Previous experience with distance education and in-class learner support (either via face-to-face tutoring or through videoconferencing) did not have an impact transactional distance. However, it was found that both the learner's skill level with the Internet and the extent of the interaction that occurred (between instructor and learners and among learners) did have a significantly negative transactional distance. effect on implications of the research findings are discussed and suggestions for further research and practice are made.

Choi, J. H. & Danowski, J. (2002). Making a Global Community on the Net – Global Village or Global Metropolis? A Network Analysis of Usenet Newsgroups. *Journal of Computer-Mediated Communication*, 7(3). http://www.ascusc.org/jcmc/vol7/issue3/choi.html

A_{BSTRACT}: This study examined the global structure of intercultural communication on a computer-mediated communication network. Extracted from a total of 232,479 discussion messages, a matrix of crossposted messages among 133 online newsgroups over a year on the Usenet was analyzed to investigate structural patterns of communication flow. This research found, unlike earlier research, that a simple structure of core- periphery relations does not fit the pattern of cross- cultural postings in Usenet discussion groups. Bonacich's centrality, cluster analysis, and

multidimensional scaling analysis were conducted using UCINET V software. Results identified a multi-cored structure with decentralized and diversified patterns of information distribution in cyberspace.

Cicognani, A. (1998). On the Linguistic Nature of Cyberspace and Virtual Communities. *Virtual Reality:* Research, Development and Application, 3 (1), 16-24. http://www.arch.usyd.edu.au/~anna/papers/language.pdf

ABSTRACT: This paper presents an hypothesis for a linguistic explanation of the nature of Virtual Communities. Virtual Communities develop and grow in the electronic space, which can be considered an instance of space. Some authors (Benedikt, Meyrowitz, Mitchell) have presented hypotheses on the nature of the electronic space; other authors, e.g. Lefebvre, Popper, Peter Lamborn Wilson, a.k.a. Hakim Bey, Kuhn, have given approaches to the understanding of the nature of space, although not directly related to electronic space which are helpful to support my hypothesis. From the works of these authors, the paper presents a perspective of how electronic space (or cyberspace) can be considered language based. The author argues that a definition of electronic space cannot be given beyond its linguistic characteristics, which underlie and sustain it. The author's belief is that the more we understand the relationship between language and cyberspace, the more we are able to use specific metaphors for dwelling and inhabiting it. In particular, MUDs/MOOs and the Web are interesting places for testing and observing social behaviours and dynamics.

Climent, S., Moré, J., Oliver, A., Salvatierra, M., Taulé, M. & Vallmanya, L. (2003). Bilingual Newsgroups in Catalonia: A Challenge for Machine Translation. *Journal of Computer-Mediated Communication*, 9(1). http://www.ascusc.org/jcmc/vol9/issue1/climent.htm

ABSTRACT: This paper presents a linguistic analysis of a corpus of messages written in Catalan and Spanish. which come from several informal newsgroups on the Universitat Oberta de Catalunya (Open University of Catalonia; henceforth, UOC) Virtual Campus. The surrounding environment is one of extensive bilingualism and contact between Spanish and Catalan. The study was carried out as part of the INTERLINGUA project conducted by the UOC's Internet Interdisciplinary Institute (IN3). Its main goal is to ascertain the linguistic characteristics of the e-mail register in the newsgroups in order to assess their implications for the creation of an online machine translation environment. The results shed empirical light on the relevance of characteristics of the email register, the impact of language contact and interference, and their implications for the use of machine translation for CMC data in order to facilitate crosslinguistic communication on the Internet.

Collis, B. (1999). Designing for Differences: Cultural Issues in the Design of WWW-Based Course-Support Sites. *British Journal of Educational Technology*, 30(3),201-215.

A_{BSTRACT}: Culture is a critical influence on the acceptance, use of, and impact of learning resources. WWW-based course-support sites are becoming an increasingly familiar type of learning resource in higher

education. How might different aspects of culture be predicted to affect the institution's, instructor's, and student's reactions to WWW-based course-support sites? How can such sites be designed to adapt to different expectations and learner preferences, especially those related to culture? This article analyses various of these cultural aspects, and argues that WWW-based coursesupport sites should be designed to be adaptable to different types of cultural differences through the application of a set of ten design guidelines. An example illustrating the design guidelines, the TeleTOP Method from the University of Twente, is described and evaluated relative to the design guidelines. Important considerations related to feasibility as well as to conceptual and strategic choices are included in the scope of the guidelines; the instructor's cultural ecology requires particular attention. But WWW sites and guidelines in themselves are not enough for cultural flexibility; sensitivity and appropriate responsiveness remain human activities.

Collot, M. & Belmore, N. (1996). Electronic Language: A New Variety of English. In S. C. Herring, (Ed.), Computer-Mediated Communication: Linguistic, Social and Cross-Cultural Perspectives. (pp. 13-28). Amsterdam: John Benjamin.

A_{BSTRACT}: The authors analyse lexical and grammatical features of al large corpus of computer-mediated messages sent to an electronic bulletin board system in Canada. They apply a certain system of factor analysis to their corpus, comparing the electronic corpus with computerized corpora of written and spoken English. On this basis they identify two types of Electronic Language – on-line and off-line – and situate them along six dimensions (informativity, narrativity,

explicitness, persuasion, abstraction and elaboration). The result is a more exact characterization of electronic language than would be possible by simply contrasting it with "spoken" and "written" modalities.

Condon, S. L. & Cech, C.G. (1996). Functional Comparisons of Face-to-Face and Computer-Mediated Decision Making Interactions. In S. C. Herring, (Ed.), Computer-Mediated Communication: Linguistic, Social and Cross-Cultural Perspectives. (pp. 65-80). Amsterdam: John Benjamin.

A_{BSTRACT}: This experimental study compares face- to-face and synchronous computer-mediated interaction. Pairs of subjects, some face-to-face and others connected via microcomputers, were asked to complete four decision-making tasks involving planning social events. The authors found that all subjects followed a general decision-making schema, but that subjects under the two experimental conditions differed in their frequency of use of interactional functions such as metalanguage, repetition and discourse markers. Overall, the CMC interactions were found to be more efficient, while the face-to-face interactions produced more detailed plans.

Conrad, D. (2002). Inhibition, Integrity and Etiquette Among Online Learners: The Art of Niceness. Distance Education, 23 (2), 197-212.

A_{BSTRACT}: Recent research on online learning has explored the dense fabric of social presence giving us a better understanding of the rhythms of the teaching-learning exchange. Quantitative studies, especially, have concluded with calls for deeper, more intensive explorations into what happens in online learning environments. In this paper, the results of an

interpretive study conducted among mature university learners engaged in online study reveal learners' strong affinity to a code of online etiquette. On the demanding front lines of online learning, these learners values and constructed ways of "being nice" to their fellow learners, creating tolerable levels of harmony and community within which to complete their studies successfully.

Cranny-Francis, A. (2000). Connexions. In D. Gibbs &. K.-L. Krause (Eds.) *Cyberlines. Languages and Cultures of the Internet.* (pp. 123-148) Albert Park, Australia: James Nicholas Publishers.

Based on an exploration of the literacies demanded of users of cyberspace texts the author defines the role (s) of the user in the electronic context from a theoretical angle. She identifies many of the literacy skills required by Internet users by analysing a contemporary institutional website. In her opinion, these demands are highly conventionalised and rule- governed; some of them are generated out of familiar literacies (verbal, visual, aural) and based in our readings of familiar media (e.g. TV, books) and others arise specifically from the nature of this new medium (particularly its focus on design, its use of default settings and its use of hypertext links). Her central argument is that a complex of literacies is needed to enable the user to "negotiate a site critically, and to generate, creatively, a response to the site.

Crystal, D. (2001). Language and the Internet. Port Chester, NY: Cambridge University Press.

Crystal, a prolific linguist who has authored numerous scholarly and reference texts on a variety of language related topics, turns his attention in this volume to the language practices visibly mediated by the Internet. In a personal preface to the volume, he mentions that as a prominent linguist, he has often been asked about what effect the Internet has had on language, a question for which he did not have a clear answer. This prompted him to explore a variety of what he terms "Internet situations," each of which comes to form a chapter in this 272-page volume.

Crystal's linguist-eye perspective is just what language educators need in order to understand the broader implications of the complex relations governing language-based communication and the Internet as a set of distinctive modalities. Crystal convincingly describes language use and language change within "Internet such as e-mail. synchronous asynchronous "chat groups" (his term), virtual worlds (MUDs and MOOs), and the World Wide Web. Within each Internet situation, he discusses and where possible explicates the development of new graphic conventions such as emoticons and abbreviations, the emergence of novel genres. Internet-derived neologisms, and features of communicative activity that could only have emerged through electronic media (e.g. forms of interaction in synchronous chat, and "message intercalation" in e-mail). (From a review by Steven L. Thorne, Language Learning & Technology 7(2), 24-27

http://llt.msu.edu/vol7num2/review1/)

Dahan, M. (2003). Between a Rock and a Hard Place: The Changing Public Sphere of Palestinian Israelis. Journal of Computer-Mediated Communication, 8 (2). http://www.ascusc.org/jcmc/vol8/issue2/dahan.html

A_{BSTRACT}: According to some researchers, particularly political economists, cyberspace serves to reproduce the political and social relations of capitalism

and while we may very well be moving towards a postindustrial phase, the balance of power remains and will continue to remain the same (Kitchin, 1998). In the past I have shown that the use of computer-mediated communication (CMC) may serve as a catalyst in advancing social, cultural and political change, as well as enhancing the public sphere (Dahan 1999, 2000, 2001; Dahan & Sheffer, 2001). While CMC and information and communication technologies (ICTs) have had positive catalytic affects among the majority Jewish population of Israel, there have been distinct changes in the use of CMC and ICTs among the Palestinian Israeli minority in Israel which serve to maintain the existing political and social disenfranchisement of this group within the larger Israeli society. In addition, this paper discusses the resulting creation of a regional public sphere, beyond the boundaries of the Israeli State, in part as a result of the violent conflict of the past two years. This regional public sphere, unique to Palestinian Israelis, serves to further distance the Palestinian Israeli minority from mainstream discourse and influence within Israel.

Danet, B. & Herring, S. C. (2003). Introduction: The Multilingual Internet. *Journal of Computer-Mediated Communication*, 9(1). http://www.ascusc.org/jcmc/vol9/issue1/intro.html

In today's multilingual, global world people are communicating on the Internet not only in its established *lingua franca*, English, but also in a multitude of other languages. Since the Internet began expanding globally in the 1990s, the number of non- English speaking users has grown to 470 million, or roughly two-thirds of all Internet users (CyberAtlas, 2003). To date, however, the research literature in

English on computer-mediated communication has focused almost exclusively on emergent practices in English, neglecting developments within populations communicating online in other languages.

[...] This special issue is the first collection of articles written for an English-speaking audience that is devoted the analysis of computer-mediated communication on the multilingual Internet – in languages other than English, and - in one instance - in a sociocultural context in which English is no one's native language, yet is used as a *lingua franca*. The multilingual Internet raises a number of practical and scholarly questions, ranging from the distinctive features of email or chat in languages with specific font-related requirements, to code-switching in bilingual or multilingual online communication, to the effects of the English language and global "netspeak" (Crystal, 2001) on CMC in local languages. Linguistic research has shown that spoken languages vary in their structures, meanings and usage - is this equally true on the Internet, where speakers of different languages come into contact and influence one another on a scale never before imagined?

Davis, D. M. (2000) Disenfranchisement from the Global Technoculture. In F. Sudweeks & C. Ess (Eds.). *Proceedings, Cultural Attitudes Towards Technology and Communication, 2000.* (pp. 105-124). Australia: Murdoch University.

A_{BSTRACT}: Regardless of their local culture or personal value system, many individuals will be facing the realities of joining a global workforce with its emphasis on technological complexity and a shift from physical to mental labor. This paper will examine certain reactions to new Information and Communication

Technologies (ICTs) based on the diversity of human affinities and values for contributing to their social environment. Heuristic information will point to manifestations of such values within cultures, and their embeddedness (or lack thereof) in the technocultural space. Some concerns include the universal human desire for happiness, control and choice as well as their predispositions toward natural and physical interactivity, non-mediated interpersonal relationships, rejection of compartmentalization and dualistic thinking, and a preference for flow and peak experiences in a more tangible three-dimensional environment.

Davis, D. M. & Johnson, S. B. (2002). Questioning Cultural Viability of Creating Universal Meaning with New Information and Communication Technologies. In F. Sudweeks & C. Ess (Eds.). *Proceedings, Cultural Attitudes Towards Technology and Communication, 2002, Université de Montréal, Canada.* (pp. 15-27). Australia: Murdoch University.

ABSTRACT: For the majority of current and future CT users, English is a universal but second language. Given that much of the prior mutually-successful global communication efforts have been tradeentertainment-oriented, we have not fully explored the efficacy of a universal language in a low context environment. This paper's aim is to open a discussion on the multiple layers of cultural values and ambiguities embedded in the structure and content of the global English used in technologically mediated environments that cut across sociocultural boundaries and contexts. The basic question is: Is socio-culturally low-to-nocontext communication by those who don't otherwise know each other fundamentally and mutually meaningful?

Davis, M. (1997). Fragmented by Technologies: A Community in Cyberspace. *Interpersonal Computing and Technology*, 5(1-2), 7-18. http://www.helsinki.fi/science/optek/1997/n1/davis.t xt

A_{BSTRACT}/I_{NTRODUCTION}: The emergence of the Internet as a potential medium of communication raises a number of issues, not least among them, whether the sense of community that may arise in face-to-face (F2F) interaction will be possible to replicate in virtual space. In other words, will computer-mediated communication (CMC) allow people, who may be distant in time and space, context and culture from one another, to manifest some or all of the characteristics of groups in physical and temporal contact.

There does seem to be some evidence to support the view that the various channels of CMC (email, synchronous and asynchronous fora) can help sustain links that already exist. Friends and colleagues find email readily accessible – if you are an academic, or you have a phone and a modem, (but access is an issue not addressed in this paper.) Often thought of as an emergent register, email communication possesses neither the formality of written correspondence nor the immediacy and ethereal nature of telephone conversations, but does have some significance for its regular users.

There is also evidence to suggest that moderately successful interaction can arise from the increasing number of computer-mediated courses that build on an initial, intensive F2F contact and lead to asynchronous forms of communication on agreed themes.

This paper is an examination of some of the, often conflicting and competing, characteristics of cyberspace, drawn from a number of fairly eclectic

sources. It is not intended to be an authoritative or final statement. Rather, a speculation about what educators need to consider when setting up listservs and other kinds of computer-mediated communication.

de Oliveira, S. M. (2003). Breaking Conversational Norms on a Portuguese Users Network: Men as Adjudicators of Politeness? *Journal of Computer-Mediated Communication*, 9(1). http://www.ascusc.org/jcmc/vol9/issue1/oliveira.htm

ABSTRACT: This article examines messages exchanged via asynchronous CMC at a Portuguese university that would be considered impolite in face-to- face interaction. A comparison by gender was conducted of the degree and nature of participation in the university Users' network, focusing on transgressions and chastisement involving inappropriate message content, message form and address form selection. Although women participate less often in discussions on the network, messages posted by women are more often treated transgressions, while men more often initiate responses demonstrating concern with established norms of politeness and the importance of adhering to them. These results confirm traditional gender roles of men as interactionally dominant and representative of "authority," but do not support findings for English- language CMC that women are more concerned with politeness than men; rather, Portuguese men on the university network assume the role of "politeness adjudicators."

December, J. (1996). Units of Analysis for Internet Communication. *Journal of Communication*, 46 (1), 14-38.

This article proposes an approach to defining units of analysis for Internet communication research. To define these units of analysis, the author first defines the term *Internet computer-mediated communication*. This definition identifies the characteristics of Internet communication. He then uses this definition as the basis for developing a set of definitions: *media space*, *media class*, *media object*, and *media instance* as units of analysis for Internet communication studies. Finally, these units of analysis are illustrated with some examples.

Dery, M. (Ed.). (1994). Flame Wars: The Discourse of Cyberculture. Durham, NC: Duke University Press.

This collection of essays is seen by researchers in the field as an important contribution to the study of transitional cultures that have evolved around computers and computer networks. Every essay provides an exploration into the newfound frontier known as cyberculture from a different angle. Davis's essay for example traces some of the metaphors that shape how we think about information. Anne Balsamo provides an analysis of the myths surrounding feminism and technology. You also encounter New Age mutant ninja hackers, technopagans for whom the computer is a magical engine, Pat Cadigan's "synners," virtual reality synthesizers whose brain sockets enable them to plug their minds directly into computer networks, devotees of on-line swinging, or "compu-sex," the teleoperated weaponry and amok robots of the mechanical performance art group, Survival Research Laboratories, Lady El, an African-American cleaning

woman reincarnated as an all-powerful cyborg, and more.

Döbel, R. (1999). Power and Powerlessness in the Global Village: Stepping into the "Information Society" as a "Revolution from Above". *Electronic Journal of Sociology*, 4(3). http://www.sociology.org/content/vol004.003/globvlg2.html

By way of preface, Döbel points out that 'every personal decision concerning the new media and its technology (in more concrete terms: to what extent and in what form someone 'dives' into the virtual reality of the Internet) is also a decision concerning one's own position with respect to a global power structure: knowingly or unknowingly, consciously or unconsciously'. In this essay, he begins by discussing the dual role of both Governments and free markets in driving Internet development and the idea of the "information society". Regarding interpersonal communications. Döbel argues that new technologies constrain human communications, argues that 'real' communication requires and introspection - another communications theme he develops. He concludes by discussing how the deconstruction of 'time constraints' in cyberspace can be construed as a dehumanizing power strategy as 'speed and efficiency' are increasingly idolized.

Doff, S., Huber, S., Klippel, F. & Stanienda, G. (2002). TutorTraining. Arbeitsmaterialien für die Ausbildung von Online-SprachtutorInnen. München: Langenscheidt-Longman.

This book offers an innovative concept for the training of online language tutors who assist language

learners in learning a foreign language autonomously. Theoretical foundations from the fields of learner individuality, technical competence and language acquisition are directly applied to practical suggestions and exercises for future online tutors. Results from a pilot training at the University of Munich and a bibliography for further reading are provided. This concept illustrates how the Internet and email communication can add new dimensions to education within an established methodological framework.

Douglas, J. Y. (2000). 'Nature' Versus 'Nurture': The Three Paradoxes of Hypertext. In S. B. Gibson & Oviedo, O. (Eds.) *The Emerging Cyberculture: Literacy, Paradigm and Paradox.* (pp. 325-349). Cresskill, NJ: Hampton.

In this paper the author compares two conflicting perspectives on hypertexts, the "nature" (determinist) and the "nurture" (constructivist) approach. In particular he discusses the central questions of whether hypertexts are "born" or "made", whether technical capacity determines or limits utility and whether hypertexts make readers into "sovereigns" or "slaves". His conclusion tries to combine both views and tries to make use of both approaches in order to provide us with a slightly better range of options for thinking about this emerging technology.

Dudfield, A. (1999). Literacy and Cyberculture. Reading Online, July 1999. http://www.readingonline.org/articles/art_index.asp? PREF=/articles/dudfield/index.html

This article argues from a teacher's perspective that students are more and more engaging in hybrid forms of literate behavior, using a mix of traditional and new forms of literacy to communicate with others. An examination of literacy events in one cybercommunity where members of this new generation of students are immersed is the subject of the remainder of this article. It claims on that basis that the educators have to become more educated themselves – both about the changing nature of their students in this postmodern world as well as about the literacies of cyberculture –in order to be better equipped to exploit the Internet for all its educational possibilities.

Duncker, E. (2002). Cross-Cultural Usability of Computing Metaphors: Do We Colonize the Minds of Indigenous Web Users? In F. Sudweeks & C. Ess (Eds.). Proceedings, Cultural Attitudes Towards Technology and Communication, 2002, Université de Montréal, Canada. (pp. 217-236). Australia: Murdoch University.

ABSTRACT: Computing metaphors have become an integral part of information systems design. Global information and communication systems such as the Internet/Web have made the cross-cultural use of such metaphors necessary, although they are deeply rooted in cultural practices. This work investigates the crosscultural use and usability of such metaphors by studying the library metaphor of digital libraries in the cultural context of the Maori, the indigenous population of New Zealand. The ethnographic study examines the relevant features of the Maori culture in New Zealand, their form of knowledge transfer and their use of physical and digital libraries. On this basis the paper points out why and when the library metaphor fails Maori and other indigenous users and indicates how this knowledge can contribute to the improvement of digital library design.

Durham, M. (2003). Language Choice on a Swiss Mailing List. *Journal of Computer-Mediated Communication*, 9(1).

http://www.ascusc.org/jcmc/vol9/issue1/durham.html

ABSTRACT: This paper examines how the language situation in Switzerland affects, and may be affected by. the choice of languages for Internet use within the country. It focuses primarily on language choices on a mailing list for members of a Pan-Swiss medical student organization. English has become the *lingua franca*, the preferred language of intra-Swiss communication, within this group. The use of English by list members is charted over four calendar years to determine when and how this change occurred. Qualitative analysis of comments by the members in the e-mails themselves and in interviews provides clues as to why English has become so important on the mailing list. The paper concludes by considering the implications of this case for the linguistic situation in Switzerland in general and for the global spread of English via the Internet.

Durscheid, C. (1999). Between the Written and the Spoken: Communication on the Internet. *Papiere zur Linguistik*, 1(60), 17-30.

A_{BSTRACT}: This article deals with the question of how the forms of communication on the Internet are to be classified – according to spoken or written mode. In this context the characteristic linguistic features of e-mail, chat, and newsgroup communication are analyzed, and it is shown that these result not only from the means of communication but also from the writing conditions. In order to take the latter into account, it is suggested that a distinction be maintained between electronically and non-electronically distributed forms of expression in the

graphic sphere of the oral-written continuum.

Enstrom, E. & Fedderson, K. (1995). Culture and Anarchy in Cyberspace. Works and Days: Essays in the Socio-Historical Dimensions of Literature and Art, 13(1-2), 91-103.

Enstrom and Fedderson report on their own experience with online (university-level) class discussions, with an eye to assessing the ways in which cyberspace discussion may have changed the 'culture' of the classroom and learning experience. Their inquiry was founded on theoretical analyses of others which suggest that computers can help 'shift traditional authority structures in education', creating a postmodern pedagogy in which students become authorities and develop a 'truer multivocal discourse' where discourse is no longer dominates by a single monologic voice.

These authors report that students generated a new hybrid form of text, intermediate between written and spoken. They observed the predicted 'irreverence' that 'is an indication of the egalitarian nature of computer conferencing', noting that cyberspace discussion fostered and allowed expression of a level of intellectual dissent. Moreover, they recognized that their own authority in the classroom did not extend into cyberspace. Conversely, they question whether cyberspace discussion was truly 'dialogic', noting that 'subtlety [of sensing] and capacity for immediate intervention' is lost in asynchronous discussion, and that many contributions are ignored. The authors also found that -unlike in the classroom students overwhelmingly insisted on personal authority as the basis for evaluating course texts: a phenomenon that they suggest is itself derived from a romantic conception of the self that is simply naturalized, and thus less visible.

In conclusion, while the authors agree that asynchronous forum allowed greater student expression and constructed student's relationship with authority differently, they observed little evidence of 'struggle with conflicting ideas', and comment that 'cyberspace frequently fostered a banal rhetoric of repetition, not a liberating engagement with difference'.

Escobar, A. (1994). Welcome to Cyberia: Notes on the Anthropology of Cyberculture. *Current Anthropology*, 35(3), 211-231.

Escobar defines 'cyberculture' as a new cultural order being brought into being by computer, information and biological technologies. He begins with the understanding that any technology represents a cultural invention that in turn helps to create new cultural conditions, and argues that anthropologists must begin to view science and technology as crucial arenas for the creation of culture. Escobar describes how social constructivism theory traces the way different social groups interpret and adopt different technologies, leading to cultural differences in the evolution of technological change and adoption. He goes on to discuss different sociological and philosophical perspectives on and arguments about the nature of cyberculture (is it modern? late-modern? post-modern?) but points out that despite its novelty, cyberculture originates in a 'well-known social and cultural matrix'. He suggests that continuing research might focus on: the discourses and practices generated around/by technology and the new forms of social reality created by technology; ethnographic approaches to cyberculture practices; cultural foundations shaping new technologies; the political economy of cyberculture. He proposes that if anthropology as a field is to "reenter the

real world" it must lose its historic notions of modern/savage and deal with the steady advance of cyberculture.

This paper presents an overview of the types of anthropological analyses that are being conducted in the area of new technologies and suggests additional steps for the articulation of an anthropology of cyberculture. It builds upon science, technology, and society studies in various fields and on critical studies of modernity. The implications of technoscience for both anthropological theory and ethnographic research are explored.

Ess, C. (1998). First Looks: CATaC '98. In C. Ess & F. Sudweeks (Eds.), *Proceedings, Cultural Attitudes Towards Communication and Technology, 1998* (pp. 1-17). Australia: University of Sydney. http://www.it.murdoch.edu.au/catac/catac98/01_ess.pdf

I_{NTRODUCTION}: "The anti-ethnocentric cosmopolitanism underlying [the rosy] vision of the global village may itself emerge as ethnocentric in its own right [...] One hardly needs to be a postmodern deconstructionist (á la Derrida) to call into question just how universally shared some human reason may be – and with it, the suite of shared communicative skills, styles and intentions required to participate in the cosmopolis.'

[...] An emerging pattern of scholarship and research suggests, on the contrary, that the optimistic vision of the electronic global village rests on a number of assumptions which may be culture-bound'. For example, rather than necessarily inaugurating an egalitarian and democratic global village, the new communications media threaten to expand, rather than resolve, cultural conflicts. Specifically, conflicts may be

heightened between Western commitments democracy, free speech, and individualism, and the cultural preferences of many Asian countries for more hierarchical governance, control over culturally significant media, and the collective rather than the individual. Similarly, there is some evidence communications technologies, used from the 'top down' to enforce cultural unity, often fail in the face of deeply entrenched cultural differences. On the other hand, these same technologies may be used to reinforce distinctive cultural identities in the face of various pressures to conform to a larger pattern of beliefs and preferences.'

'This conference [...] and its affiliated publications [...] seek to bring together current insights from philosophy. communications theory and cultural sciences in an interdisciplinary dialogue...the insights gathered here both reinforce and dramatically expand the understanding complex interaction between communication and technology...Briefly, between the poles of utopian visions and dystopian effects of an inevitable democratizing through CMC technologies, many of the papers gathered here sketch a nuanced understanding of a bipolar relationship between culture and technology. The interrelationship exists in a relatively neutral 'Internet culture' that fails to embed or impose specific utopian or dystopian values in CMC technologies, while at the same time allowing for value choices, including the choice to reinforce and enhance local cultures. Taken together, these analyses thus suggest that CMC technologies will not lead to a homogenizing Internet culture (imposing either democratic authoritarian values), but rather a connected plurality of diverse cultures and languages. The pluralistic cosmopolis may prove the Stoics right after all."

Towards the end of this essay, Ess outlines the questions regarding culture, technology communication that guided the establishment of the CATaC organization. He offers us a nice overview of theoretical considerations (the nature of 'culture', the omission of religion, technology as 'carrier of culture') and summarizes current dominant themes in theoretical work: embodiment, gender, and the ongoing debate between postmodernist 'modernist' and theorists communication.

Ess, C. (2000). We are the Borg: The Web as Agent of Assimilation or Cultural Renaissance? ePhilosopher

http://www.ephilosopher.org/modules.php?op=mod load&name=Sections&file=index&req=viewarticle&a rtid=31

Introduction: In the United States, we are immersed in a series of messages concerning technology in general and computer-mediated communication (CMC) technologies (such as the Internet, its offspring the Web, etc.) in particular: these technologies are crucial, we are told, because they will lead us to an "electronic global village." Thanks to these and their even more powerful descendents (just around the corner of an ever brighter future), the electronic global village will enjoy seamless and transparent communication: such communication will inevitably bring in its wake greater freedom of expression, greater democratic governance and affiliated rights, and, last but certainly not least, greater economic prosperity [...].

I have become increasingly convinced, however, that the icon of the electronic global village is not simply advertisers' exaggeration and hype, a crafty – and successful – appeal to deeply-seated US values and

beliefs for the sake of selling hardware and software. I will argue, rather, that such fond beliefs are a kind of bad myth — what Bourdieu calls meconnaisance, a framework internalized in our minds — one that then produces reality as it shapes human acts and behavior, and thus our history and society. This myth is philosophically suspect because we can see rather quickly that it rests on two contradictory philosophical assumptions regarding technology — i.e., the presumption of technological instrumentalism (these technologies are culturally and morally neutral) and of technological determinism (once these technologies are made available, they will inevitably reshape the world — including diverse peoples and cultures — in alignment with the ostensibly universally valid values of democratic governance, free speech, etc.).

philosophical incoherence, moreover, is accompanied by profound political consequences. Especially if the technological determinism presumed by proponents of CMC as leading to greater world democracy and prosperity is granted, and if we recognize that the values and communication preferences embedded in these technologies are not universally shared, but indeed conflict (sometimes deeply) with the values and communication preferences of diverse cultures - then CMC technologies emerge as an agent of a globalization process that threatens to flatten all distinctive cultural values and communication preferences into a single homogenous "McWorld." It is precisely against such homogenizing globalization, of course, that diverse cultures and peoples react, sometimes violently, in the effort to preserve their distinctive identities – what political scientist Benjamin Barber refers as "Jihad."

If we examine, however, what actually happens as CMC technologies are introduced into diverse cultural

contexts – especially as we peek over the boundaries of the dominant U.S. users' communities (what Steve Jones [in press] refers to as a kind of "Gates-ed community") to contexts outside U.S. cultural borders – we find that first of all that neither the claims of technological instrumentalism nor technological determinism are borne out in praxis. Secondly, especially as a strong technological determinism is replaced by a "soft determinism" (so Don Ihde) – the apparent political dilemma between Jihad and McWorld may not be so intractable. Indeed, there are examples to be drawn from praxis...that mark out a middle ground between Jihad and McWorld as CMC technologies are taken up in ways that both allow for a global connectivity (but in a "thin" culture) and the preservation and enhancement of local cultural values and communicative preferences (a "thick" culture).

Ess, C. & Sudweeks, F. (2003). Technologies of Despair and Hope: Liberatory Potentials and Practices of CMC in the Middle East. *Journal of Computer-Mediated Communication*, 8(2). http://www.ascusc.org/jcmc/vol8/issue2/essandsudweeks.html

This article summarizes papers presented at the CATaC '02 conference [that highlighted] "research and reflection from the Islamic world, including the countries of Afghanistan, the Islamic Republic of Iran, Saudi Arabia, Turkey, and the United Arab Emirates [as well as Israeli-Palestinian communications]."

Ess & Sudweeks write "these papers provide us, on the one hand, with new insights into how CMC technologies function in the diverse cultural contexts of the Middle-East, especially the examples of Afghanistan, the United Arab Emirates, and Kuwait, they point to important sorts of middle grounds, places where CMC technologies operate less as the vehicles for an intractable homogenization and more as catalysts for significant processes of hybridization, as individuals are able to consciously choose for themselves what elements of "the West" and their own local cultural identities and traditions they wish to hold to. This would suggest that the powers of globalization and new technologies are not absolute; rather, they can be refracted and diffused through the specific values and preferences of diverse individuals and local cultures."

On the other hand, they conclude "this optimism must be balanced by the harsh realities portrayed in Michael Dahan's account of CMC in the conflict between Israelis and Palestinians. Dahan here uncovers a pattern seen by other researchers as well; namely, that despite initial promises of democratization and liberation, CMC technologies can be easily appropriated by the powerful and only with difficulty by the powerless, so that the implementation and use of these technologies, in the end, only mirrors and reinforces prevailing patterns of power and advantage."

Evers, V. (1998). Designing Interfaces for Culturally Diverse Users. In C. Ess & F. Sudweeks (Eds.), *Proceedings, Cultural Attitudes Towards Communication and Technology, 1998* (pp. 261- 262). Australia: University of Sydney. http://www.it.murdoch.edu.au/catac/catac98/pdf/22_evers.pdf

A_{BSTRACT}: The aim of this research is to find out whether an understanding of metaphors in interface design is indeed culturally sensitive; to provide an addition to current questionnaire-based studies on cultural aspects of interface design; and to provide a

portfolio of appropriate metaphor usage for the cultures involved. Findings are hoped to contribute to a better understanding of how meanings of metaphors vary across cultures. The research may also provide some direction on appropriate intercultural interface design.

Evers summarizes and demarcates the limits of current literature on designing human computer interfaces across cultures. She seeks to overcome these limits in her own research, reported here, on metaphorical meaning and interface acceptance across cultures. Evers' project should provide helpful insights on the complexities of localization. (From Ess, C. (1998) First Looks: CATaC '98. In C. Ess & F. Sudweeks (Eds.), Proceedings, Cultural Attitudes Towards Communication and Technology, 1998 (pp. 1-17). Australia: University of Svdnev. http://www.it.murdoch.edu.au/catac/catac98/01_ess.pdf)

Facey, E. E. (2001). First Nations and Education by Internet: The Path Forward, or Back? *Journal of Distance Education*, 16(1). http://cade.icaap.org/vol16.1/facey.html

A_{BSTRACT}: This article examines the potential value of the Internet in serving disadvantaged groups, specifically First Nations living in rural and remote locations in Canada. It reviews the current scholarship on technology-based distributed learning and identifies some of the questions that remain unanswered. The conclusion outlines a framework for developing successful Internet-based distributed learning opportunities for First Nations populations.

Fernanda Zambrano, L. (1998). Identities? When History Has an Influence. *Tierra Firme*, 16(64), 755-766.

ABSTRACT: It is argued that technological changes in communication at the end of the 20th century are reorienting the social dimensions of time, space, place, identity, cyberspace, and cyberidentities. The speed of communication affects notions of time and space. Every day, modernity loses more of its linearity, rigidity, and its transformation into a distinct rationality in postmodern form. Today's society is mediatized, and individuals are technological terminals. In cyberculture, social actors manipulate identities and deterritorialized; state and nation are irrelevant. Internet provides a privileged space in which social integration, cultural self-affirmation, and productive insertion in the world are possible.

Ferris, P.S. (1996). Women On-line: Cultural and Relational Aspects of Women's Communication in On-Line Discussion Groups. *Interpersonal Computing and Technology*, 4(3-4), 29-40. http://jan.ucc.nau.edu/~ipct-j/1996/n3/ferris.txt

A_{BSTRACT}: Researchers have predicted that the unique characteristics of computer-mediated communication would mitigate gender differences. The recent increase in participation of women on-line provides an opportunity to investigate this prediction. A review of the literature leads to the conclusion that women's communication in cyberspace often mirrors that of face-to-face communication, linguistically and relationally.

However, on-line communities can offer women a unique communication opportunity, allowing for the development and display of a distinct relational and

cultural style.

Conclusion: Although there are exceptions, as a evidenced by such women only groups as Webgirls, the material presented in this paper largely indicates that communication on-line not only retains gender differences in communication, but that, far from mitigating gender differences, CMC sometimes exacerbates them. While the research in this area is still scant, it establishes quite clearly that the predictions made by early researchers must be modified when moved into a field setting. Although, "on the surface" cyberspace does appear to be friendly to women (We, 1993, p. 7), a deeper look reveals that rather than breaking down gender differences and creating greater equality, communication on-line often reflects the problem of gender communication in the everyday world...In spite of the finding that women's on-line communication suffers from constrains problems and same communication, CMC is not without its benefits to women. The unique characteristics of CMC that sometimes exaggerated the gender differences in on-line communication can also work to provide women with a medium with a great potential for the development of those cultural and relational aspects that are peculiarly theirs. Cyberspace allows women to create and maintain extended electronic communities, to network and socialize, to form relationships, and to provide support. Due to the predominance of men on the Internet, these characteristics of women's communication were almost impossible to find in practice (except under certain special circumstances, such as are outlined below). But with the growing numbers of women on-line comes a slow but steady establishment of women's spaces and women's voices.

Fisher, D. R. & Wright, L. M. (2001). On Utopias and Dystopias: Toward an Understanding of the Discourse Surrounding the Internet. *Journal of Computer-Mediated Communication*, 6 (2). http://www.ascusc.org/jcmc/vol6/issue2/fisher.html

A_{BSTRACT}: It is clear that the Internet has the capacity to change how individuals interact with others as well as increase access to information. Whether either one of these factors affects the social landscape has yet to be determined. This fact has not kept many from anticipating the effects of the technology on society. In this paper, the authors contextualize some of the main issues of discussion regarding the Internet, describing these positions in terms of utopian and dystopian perspectives. They present a framework for understanding the extreme response to the technology which suggests that the effects of a technology will not be apparent to social actors for some time after it is introduced to a society. In this way they show that much of the discourse concerning the Internet is ideologically charged, filled as much with the hopes and fears of individual authors as with the reality of the medium's effects.

Fraim, J. (2002). Electric Symbols: Internet Words and Culture. *First Monday*, 7(6). http://firstmonday.org/issues/issue7 6/fraim/index.html

A_{BSTRACT}: The famous Sapir-Whorf Hypothesis posits a linguistic determinism arguing language plays a central role in creation of a worldview. In the sense that language is a product of words, one can say that a culture's worldview is affected and influenced by the words of its particular language. Words both create and communicate worldviews.

Introduction: There is a relationship between internet words and leading events, people and products of cultures. More specifically, there is a relationship between Internet words in specific cultures and leading events and things in those cultures. While our main interest throughout this report is the relationship between leading American Internet words and leading events, people and products of American culture, the techniques and theories we discuss have cross-cultural applications.

...Not long ago, the Internet began as an interactive forum where people from all over the world could meet and speak to each other despite the barriers of land, oceans and culture. Then came major corporations that tried to erect a central stage to make the Internet a platform to preach their own messages.

Despite the early interactive history of the Internet, its superstructure was increasingly dominated by major corporations and their business paradigms of one-way communication based around broadcasting models. In effect, the Internet was used as an economic tool to promote business rather than as an informational resource to understand culture. Economic goals dominated cultural insight. The dot.com crash caused the disappearance of many Internet companies and forced a re-evaluation of business models. Yet the crash had little effect on the Internet's interactive social community and its untapped potential for understanding culture.

Today, the Internet offers a vast unexplored territory of social and cultural insight ready to be mapped and mined by a new generation of Internet explorers. Members of this new generation will be observers of information more than producers of it. Their efforts will help reduce information rather than produce

information. As Web inventor Tim Berners-Lee notes in Weaving the Web, "The Web is more a social creation than a technical one."

Freiermuth, M.R. (2000). Native Speakers or Non-Native Speakers: Who Has the Floor? Online and Face-to-Face Interaction in Culturally Mixed Small Groups. *Computer Assisted Language Learning*, 14 (2), 169-199.

ABSTRACT: This study examines the interaction of mixed groups (two native speakers of English with two nonnative speakers) both in traditional face-to-face conversation and in an online chat format to note any differences between the two groups. Because of the accumulating research pointing to computer-mediated communication (CMC) as a forum that provides hesitant learners with greater opportunities, it was expected that online interaction would prove to be more equitable than face-to-face conversation. Words and turns were recorded for each four-member group and then counted to measure equity. Besides differences in word and turn distribution, the transcripts revealed a number of interesting qualitative differences between the two groups. From the observations made in this study, we note that language learners not only contribute more often online, but we infer that they also feel more comfortable contributing and are less concerned about any language deficiencies that might cause them to refrain from speaking in a face-to-face setting. These findings are important to language/ESL teachers who plan language learning activities that mix NSs and NNSs together.

Galvin, M. (1995). Themes and Variations in the Discourse of Technoculture. *Australian Journal of Communication* 22 (1), 62-76.

A_{BSTRACT}: In recent years, there have been many indications of the emergence of a culture referred to at first as technoculture and more recently as cyberculture. While the genesis of this culture is clearly connected with the increasing fusion of computers, traditional communications media and telecommunications (a trend which has accelerated with the spread of the Internet), technoculture has also resulted in a wave of books, magazines, journals, other types of broadcast media such as television programs, and a variety of online forms. This article examines particular samples of this discourse and attempts to locate it in various social and political contexts. In particular, it highlights the advertising and marketing of personal computers and associated products.

Gammack, J. G. (2000). Mindscapes and Internet Mediated Communication. In F. Sudweeks & C. Ess (Eds.). *Proceedings, Cultural Attitudes Towards Technology and Communication, 2000.* (pp. 175-191). Australia: Murdoch University.

A_{BSTRACT}: Cultures are considered to be epistemologically heterogeneous, and it is assumed that epistemologically similar individuals exist across distinct cultures. Epistemological type is viewed as prior to, and transcendent of, nationality and culture. identifying a shared epistemological basis for communication will be more likely to succeed in dialogical contexts where conformity to prevailing national stereotypes may fail. Two levels of communication are distinguished using Bohm's terms – explicate: (conformity to social and cultural symbolic norms and conventions) and implicate:

(the level at which implicit communicative intention originates). Cyberspatial interactions potentially undermine normative cultural influences and permit multicultural or transcultural environments in which new codes extending from epistemological types, (rather than cultural) became possible, limited only by media potential and symbolisation itself. A theory with implications for an alternative to the homogenization of verbal communication is advanced, with a consideration of potential elements of codes for universal understandings.

Garner, R. & Gillingham, M. G. (1996). Internet Communication in Six Classrooms. Conversations Across Time, Space and Culture. Mahwah, N. J.: Erlbaum.

This book tries to find answers to the question what's happening with new information and communication technologies in the schools by a thorough introductory chapter on "Internet Conversations as Intensely Social Activity", six classroom case studies and a concluding analysis of patterns of Internet communication on the side of the pupils, the teachers and between the two of them. The case studies and analysis are focussed on the issues of time, space and culture.

Gay, P. (1999). Crossing Cultures: Netting a Classroom Community. *Text-Technology*, 9(1), 33-48.

Abstract: Computer-Mediated Communication

(CMC) has the potential to initiate extraordinary possibilities for collaborative learning across contexts of cultural and social differences. It is virtually possible today for students in different parts of the world to take a class together What happens when you Net two culturally different classroom communities? What is involved in relocating the classroom in cyberspace? Is it possible to form a new hybrid global classroom community? The Internet-linked pilot project described here is an exploratory first step toward addressing these questions.

While CMC eliminates distance and the new classroom does not seem place-bound while virtually immediate, it does bring us to other boundaries we cannot so easily cross: "The speed and reach of the medium charms us into forgetting that we are crossing boundaries, moving through lines of time and place that mark our differences". Expanding the classroom is about much more than opening the windows (pun intended ;-). Relocating the classroom in cyberspace means rewriting the classroom.'

Gayol, Y. (1996). The Role of Culture in the Integration of Distance Education: The Mexican Perspective. *Internationalism in Distance Education: A Vision for Higher Education. ACSDE Research Monograph 10.* Penn State Monograph Series, 173-185.

The first part of this paper presents an overview of different types of open and distant education developed in Mexico and of the recent trend to organize a common policy in higher education for what is now called the North American Region (Canada, the United States and Mexico). The second part describes some of the cultural misperceptions in the U.S. and Mexico that make

openness and wider educational cooperation difficult. Finally, the cultural issues that need to be shared, changed or retained in order to overcome the educational barriers to cooperation are examined.

Gayol, Y. & Schied, F. (1997). Cultural Imperialism in The Virtual Classroom: Critical Pedagogy. In Transnational Distance Education. ICDE Conference Proceedings: 'The New Learning Environment: A Global Perspective', June 2-6, 1997. Pennsylvania State University, US.

ABSTRACT: On a global scale, computer-mediated communication (CMC) is becoming one of the most important pedagogical sites for upper and middle class people. CMC encompasses all the existing forms of narration: conversation, speech, written and visual, produced either individually or in an industrialized form. CMC is more powerful than other media not only because it allows for a fusion of technologies and texts, but because it allows people to have instantaneous, decentralized and always available interventions. Thus CMC makes it possible to explore, manipulate, produce and distribute discourses all over the world. However, distance educators mainly address this total discursive environment simply as a highly specialized and disciplinary matter. Consequently, empiricist epistemologies and procedures derived from mainstream pedagogy serve as the basis for most distance education programs. Frequently, these models are used to produced educational programs delivered globally. Yet the ethical and cultural implications of this approach are rarely discussed in distance education literature.

The purpose of this study is to begin to develop a cross-cultural perspective on the cultural consequences

of the global use of CMC. The paper argues that only by viewing CMC from a critical, anthropological perspective as a new cultural artifact can the impact of this new discursive practice be understood. The paper concludes by discussing CMC's possible consequences on global communities differentiated by their wealth, income and technical access to telecommunication technologies.

Ghasarian, C. (1996). Inter-Culture-Net: Solitary Transcultural Practices in the Heart of the Global Village. *Culture*, 16(1), 85-93.

A_{BSTRACT}: with the development of new ways of diffusing and accessing information, on-line networks favour the creation of a new type of international communication in which social hierarchies and state control are seriously compromised. As is the case with new reproductive technologies, this technology is developing according to a logic of its own faster than regulations to control it. Through the Internet, the oppositions here/elsewhere, near/far are shaken and the relational dimension of cultures continues to overtake the territorial dimension.

Gibbs, D. & Krause, K.-L. (2000). Metaphor and Meaning: Values in a Virtual World. In D. Gibbs &. K.-L. Krause (Eds.) *Cyberlines. Languages and Cultures of the Internet.* (pp. 31-42). Albert Park, Australia: James Nicholas Publishers.

The authors of this interesting paper investigate the range of metaphors in use in the virtual world and the often surprising sources from which they are drawn. As a convincing example the familiar "superhighway" metaphor is analysed in terms of the values it carries, the spawning of related images and its links with other metaphor clusters in order to demonstrate common

patterns of metaphoric coinage in the cyberworld. A discussion of the ways in which metaphors function leads into a final analysis of the values associated with metaphorical terms used in relation to the Internet and their cultural and educational implications.

Gibbs, D. &. Krause, K.-L. (Eds.) (2000). *Cyberlines. Languages and Cultures of the Internet.* Albert Park, Australia: James Nicholas Publishers.

In Chapter 1, 'Cyberlanguage', Gibbs argues that new forms of thinking, perceiving and recording are being constructed in cyberspace that will have far- reaching effects on our evolving cultures and subcultures. Gibbs and Krause explore the metaphors used to describe cyberspace to unearth the values beneath them although they note that 'there appears to be little understanding amongst users of the Internet or society at large, that language choices construct the social and cultural values of the Internet'. Finally, Krause examines the nature and roles of the language that links the worlds of the virtual and the real. She analyses cyberpunk and hacker subcultures, and concludes that while the Internet facilitates interaction, these pathways are not as smooth and unimpeded as they may seem.

Gibbs, D. (2000). Cyberlanguage: What it is and What it does. In D. Gibbs &. K.-L. Krause (Eds.) *Cyberlines. Languages and Cultures of the Internet.* (pp. 11-29). Albert Park, Australia: James Nicholas Publishers.

The author explores the phenomenon of cyberlanguage with an emphasis on its social and educational implications. She presents an analysis of the origin and formation of terms used to talk about all

things connected with communicating in cyberspace followed by a consideration of the influences which have shaped content and style on the Net (e.g. American language and predominantly male early users). She finally argues that new forms of thinking, perceiving and recording are being constructed at some speed with far reaching effects on our evolving formation of cultures and subcultures.

Gibson, S. B. & Oviedo, O. (Eds.) (2000). *The Emerging Cyberculture: Literacy, Paradigm and Paradox.* Cresskill, NJ: Hampton.

"A "forward-looking" collection providing snapshots of changes as they are occurring and about to occur with respect to literacies in cyberculture. It offers a multi-dimensional picture of the state of the art of communication in cyberspace as well as intellectual pointers to the issues that hypertextual literacy practices raise. Focus on theoretical approaches and future perspectives for communicating and teaching.

[This] is a book of many movements, which trace the ways in which new communications technologies are impacting current notions and conceptualizations of literacy. The book's contributors, all of whom are academic specialists in the scholarly study of technology and literacy, suggest that new technologies, such as the Internet, offer us new ways to communicate with one another (and thus new literacies), and new ways of thinking about literacy.

To demonstrate this, as well as to gauge the ways in which literacy is shifting in relation to new technologies, the editors have divided the collection into four parts ("movements") that show us (1) examples from the past in which technological innovation has shaped literacy, (2) contemporary examples of shifts in literacy prompted

by technology, (3) the ways in which new conceptions of self and community can arise in response to shifts in technology, and (4) how changes in literacy prompted by technology manifests themselves across the disciplines. Ultimately, each section provides us with a glimpse into how literacy itself is in motion." (From an online review by Jonathan Alexander in Kairos 6.1, http://english.ttu.edu/kairos/6.1/binder.html?reviews/alexander/index.html)

Gill, S. (1998). The Cultural Interface: The Role of Self. In C. Ess & F. Sudweeks (Eds.), *Proceedings, Cultural Attitudes Towards Communication and Technology,* 1998 (pp. 246-251). Australia: University of Sydney. http://www.it.murdoch.edu.au/catac/catac98/pdf/20gill.pdf

"Gill reports on differences between Japanese and British uses of and attitudes towards e-mail, especially with regard to the ability of e-mail to appropriately convey This study reinforces Lorna Heaton's emotions. observations - especially regarding a characteristically (but not exclusively) Japanese concern with contextual elements of communication not well captured by e-mail texts, over against British subjects' greater comfort with e-mail as a form of efficient communication. At the same time, Gill reiterates Hongladarom's observation that use of CMC technologies which favor a given set of culturallyspecific communication preferences may in fact issue in changes in individual and social norms defining appropriate communication behaviors". (From Ess, C. (1998). First Looks: CATaC '98. In C. Ess & F. Sudweeks Proceedings, Cultural Attitudes Communication and Technology, 1998 (pp. 1- 17). Australia: University of Sydney.

Gladney, G. A. (1996). Some Enduring Issues of Cyberspace Technology: A Medium Theory Perspective. *New Jersey Journal of Communication*, 4 (2), 110-26.

A_{BSTRACT}: Uses insights from medium theory to show how several issues arising from past communications revolutions apply to the potential impacts of cyberspace technology. Includes these issues: monopoly of knowledge and creation of information élites; threats to cultural stability and homogenization; and harnessing of epistemological strengths and weaknesses of all existing media in terms of humankind's sensory organization/cognitive capacities.

Goodfellow, R., Lea, M., Gonzales, F. & Mason, R. (2001). Opportunity and e-Quality: Intercultural and Linguistic Issues in Global Online Learning. *Distance Education*, 22(1), 65-84.

ABSTRACT: In this paper the authors investigated some of the ways that cultural and linguistic differences manifest themselves in global online environments. They start from the position that the providers of educational opportunity across national and geographic boundaries have a responsibility to consider how their materials and practices can help to promote cross-cultural understanding. They discuss some of the negative implications of taking a 'centre and periphery' view of participants in an internationally-marketed online MA program, but offer some data on student performance to justify using that perspective to initiate a more in-depth investigation of their experience of cross-cultural interaction during the courses. They present

some of the outcomes of a qualitative study of student talk about these issues, and identify the topics of 'cultural otherness', 'perceptions of globality', 'linguistic difference', and 'academic convention' as focal constructs around which their experiences could be recounted. They discuss how to interpret these narratives, in terms of our aim of promoting cross- cultural understanding through online education, and also in terms of action needed to address perceived inequalities in the educational opportunity offered by the courses as they stand.

Grotenhuis, F. D. J. (2000). How Cultural Differences Affect the use of Information and Communication technology in Dutch-American Mergers. In F. Sudweeks & C. Ess (Eds.). *Proceedings, Cultural Attitudes Towards Technology and Communication,* 2000. (pp. 349-360). Australia: Murdoch University.

Arstract: This paper discusses how differences affect the use of information communication technology in Dutch-American mergers. The preliminary findings of two case studies are used to illustrate (1) how culture shapes communication attitudes, (2) the problems encountered with the use of computermediated communication in such merger processes, and (3) problems with the integration of different information technology systems. From the theory it was expected that culture would have a profound effect on the use of information and communication technologies, such as computer- mediated communications. First results, indeed, indicate that miscommunications via email are due to cultural differences, although the impact of culture depends on the degree of integration between the merging

companies. Moreover, language and also the contextual differences of the information exchanged play a role. Furthermore, the Internet and video conferencing were more and more frequently used in the studied cases. Regarding videoconferencing, distance and time differences played a major role, next to cultural differences. In both mergers studied, the adaptation and integration of IT systems was heavily underestimated and more complicated because of cultural differences. The first results indicate that despite all the advantages of computer-mediated communication, still, face to face meetings remain necessary to prevent (culture) clashes in the long run.

Guedon, J.-C. (1997). The Cyberworld or How to Surmount the Wall of the Individual. *Français dans le Monde*, special issue, July, 14-25.

A_{BSTRACT}: The impact of computer technology on human communication is examined, and the fears and distrust many express toward the future developments in computer-mediated communication are compared with the perception of the telephone as a subversive and dangerous tool when it was invented in the 19th century. Cyberspace and cybermonde are discussed as notions relevant to the characterization of future societies' culture and communication patterns, and the Internet is argued to add rather than detract from human individuality. However, it surpasses the limitations of the individual in the cognitive sphere constructing a network of collective, interconnected intelligence. The notion of distributed intelligence is introduced to characterize this new network of individuals in cyberspace.

Gunawardena, C. N., Nolla, A. C., Wilson, P. L., Lopez-Islas, J. R., Ramírez-Angel, N. & Megchun- Alpízar, R. M. (2001). A Cross-Cultural Study of Group Process and Development in Online Conferences. *Distance Education*, 22(1), 85-121.

A_{BSTRACT}: Employing survey and focus group data, this study examined if there are differences in perception of online group process and development between participants in Mexico and the United States of America (USA). Survey data indicated significant differences in perception for the Norming and Performing stages of group development. The groups also differed in their perception of collectivism, low power distance, femininity, and high context communication. Country differences rather than age and gender differences, accounted for the differences observed. Focus group participants identified several factors that influence online group process and development: (1) language;

(2) power distance; (3) gender differences; (4) collectivist vs. individualist tendencies; (5) conflict; (6) social presence; (7) time frame; and (8) technical skills.

Gunawardena, C. N., Walsh, S. L., Reddinger, L., Gregory, E., Lake, Y. & Davies, A. (2002). Negotiating "Face" in a Non-Face-to-Face Learning Environment. In F. Sudweeks & C. Ess (Eds.). *Proceedings, Cultural Attitudes Towards Technology and Communication, 2002, Université de Montréal, Canada.* (pp. 89-106). Australia: Murdoch University.

 $A_{BSTRACT}$: This exploratory study examined the negotiation of "face" in an on-line learning environment by conducting face-to-face or on-line interviews of participants from six cultural groups. Utilizing a

qualitative research design, it addressed the question: How do individuals of different cultures negotiate "face" in a non-face-to-face learning environment? Results of conducted with sixteen interviews participants representing six cultural groups indicated that cultural differences do exist in presentation and negotiation of "face" in the online environment. In evaluating responses to the three scenarios presented in this study, we found that regardless of cultural heritage, the majority of participants expressed the importance of establishing positive face in an online course environment. They wanted to project a positive, knowledgeable image with association to dominating facework behaviour. With regard to conflict behaviour, responses were mixed and indicated cultural as well as individual differences. We believe that the results of this study can guide us in designing more inclusive online learning environments in the future.

Gunkel, D. J. & Gunkel, A.H. (1997). Virtual Geographies: The New Worlds of Cyberspace. *Critical Studies in Mass Communication*, 14 (2), 123-37.

A_{BSTRACT}: Investigates the legacy, logic, and consequences of the appellation "The New World of Cyberspace" that connects cyberspace to the Columbian voyages of discovery and the larger network of European expansionism. Engages in a critical investigation of the colonial logic implied by this seemingly innocent taxonomy, and examines its deployment in and significance for current research.

Hale, J. R. (1996). *Cultural Change and the Internet*. Essay retrieved from the Internet 20/08/03: http://gsulaw.gsu.edu/lawand/papers/su96/hale.htm

S_{UMMARY}: This paper is a survey of how modern communications technology in general, and the Internet in particular, affects the rate of cultural change in the United States and the world.

If the influence of the nation state is destined to wane because of the growth of the information age, this is unfortunate. Email and instant access to information could be of great benefit to democracy. However, while the new age offers the potential for greater human freedom and prosperity, this is in no way a certainty. Technology can aid tyrants as well as common citizens. Perhaps the best outcome would be a balance between the power of the state, its citizens, and the corporations. But at the end of the twentieth century it is the world that is in the balance, and it is not clear towards which alternative events will lead. Information may not be culturally neutral, but it is morally neutral. The tools of the information age can be used to bring people together or drive people apart, free people from drudgery, or enslave them even more thoroughly. Given the continuing rapid pace of technological change, all we can really do is wait to see what happens.

Harpold, T. (2000). The Misfortunes of the Digital Text. In S. B. Gibson & Oviedo, O. (Eds.) *The Emerging Cyberculture: Literacy, Paradigm and Paradox.* (pp. 129-149). Cresskill, NJ: Hampton.

A paper investigating the reading apparatus required by digital texts, "which is more complex and insecure in its own right than paper, and less open than is a book to inspection of its flaws or weaknesses", for example with unprogrammed failures of software. The author suggests that digital texts are empirically fragile and ontologically inconsistent. This not only changes the readers' interactions with them drastically but also defines "a boundary for a poetics of these documents", which trigger our desire to read.

Hart, W. B. (1998). Intercultural Computer-Mediated Communication (ICCMC). *The Edge: the E-Journal of Intercultural Relations*. 1(4) http://interculturalrelations.com/v1i4Fall1998/f98hart http://interculturalrelations.com/v1i4Fall1998/f98hart

Introduction: Given the likely increase in intercultural interaction over global computer networks, it becomes apparent that because people from different cultures are "on the net" and because cultural differences can effect communication and lead to possible misunderstandings intercultural conflict, computermediated communication (ICCMC) merits study. This paper takes on the task of framing some of the important questions that should be asked at the outset of the study of ICCMC (e.g. on the specific problems and dangers of ICCMC for example cultural misunderstandings – its advantages disadvantages compared to face-to-face communications and the investigation of cultural imperialism on the Internet).

Hassan, R. (1999). Globalization: Information Technology and Culture within the Space Economy of Late Capitalism. *Information, Communication and Society*, 2(3), 300-317.

A_{BSTRACT}: This article analyses the process of globalization from the perspective of a 'political economy of space' where the interactions of the processes of capitalist accumulation within contexts of geographic and social space has profound shaping

effects upon the nature of politics, economics and society generally. The argument will show contemporary globalization has two dimensions: outward into geographic space, and inward into culture and society. The focus then moves to culture and information technology within the space economy of late capitalism and argues that a crisis of finite geographic space has led to the deepening of the commodificationary processes of capitalists accumulation into the identity-spaces of culture and society. For hugely popular 'cyber-gurus' such as Howard Rheingold and Myron W. Krueger, the development of information technologies such as the Internet-derived 'virtual communities' are spaces where new forms of democracy and 'being' can emerge. This article argues that 'cyberspace' and 'virtual communities' are deeply dystopic and alienated spaces, and cyber-Utopian dreams of other possible worlds made virtual through information technology are at best naïve, when it is realised that the information revolution that evolved from the processes of a particular type of globalization, has conceived and developed technologies with primarily profit, productivity, surveillance labour-saving and escapism in mind.

Haughey, M. (2001). Aboriginal Digital Opportunities. Addressing Aboriginal Learning Needs Through The Use Of Learning Technologies. *Journal of Distance Education*, 16(1).

http://cade.icaap.org/vol16.1/haughey.html

A_{BSTRACT}: This papers reports on the objectives of a document prepared by the Conference board of Canada for the office of Learning Technologies which were to identify the uses of current technologies, enumerate links with education and skills training, describe the

obstacles and provide descriptions of innovate solutions and include a guide that First Nations Communities could use in making decisions about the adoption, use and implementation of technology.

Haulmark, M. (2002). Accommodating Cultural Differences in a Web-Based Distance Education Course: A Case Study. In Proceedings, 9th Annual International Distance Education Conference, January 22-25, 2002. Austin, Texas. http://www.cdlr.tamu.edu/dec_proceedings/dec% 202002/Haulmark.pdf

ABSTRACT: Because of the potential discrepancies in understanding that exist in cross-cultural learning situations; a need exists to study the many contexts in which cross-culture exchanges take place within distance education. This study's intent was to describe Thai students' experiences while participating in an online course. The major theme that emerged was adaptation and forced, short-term change, notably in the area of working in culturally diverse groups and active learning.

Heaton, L. (1998a). Preserving Communication Context: Virtual Workspace and Interpersonal Space in Japanese CSCW. In C. Ess & F. Sudweeks (Eds.), Proceedings, Cultural Attitudes Towards Communication and Technology, 1998 (pp. 207-230). Australia: University of Sydney. http://www.it.murdoch.edu.au/catac/catac98/pdf/18

heaton.pdf

"[Opposing] the view that technologies are value and culturally neutral, Heaton takes up two case studies to show how cultural values and communication styles specific to Japan are incorporated in the design of

computer-supported cooperative work (CSCW) systems. She does so out of a social constructivist view, one that further suggests that technologies can be 'read' as texts, and drawing specifically on Bijker and Law's notion of technological frame to explain how Japanese designers invoke elements of Japanese culture in justifying technical decisions.

Heaton highlights the importance of non-verbal cues and the direction of gaze in Japanese culture as an example of Hall's 'high context/low content' category of cultural communication style, in contrast with Western preferences for direct eye contact and 'low context/high content' forms of communication. She also notes in her conclusion the Japanese interest in pen-based computing, speech synthesis, virtual reality interfaces, etc., as resulting not only from the physical difficulties of using a Roman keyboard to input Japanese, but also the cultural preference for high context communication." (From Ess, C. (1998) First Looks: CATaC '98. In C. Ess & F. Sudweeks (Eds.), Proceedings. Cultural Attitudes Towards Communication and Technology, 1998 (pp. 1-17). Australia: University of Sydney.

http://www.it.murdoch.edu.au/catac/catac98/01_ess.pdf)

Heaton, L. (1998b). Talking Heads vs. Virtual Workspaces: A Comparison of Design Across Cultures. *The Edge: The E-Journal of Intercultural Relations*, 1(4).

http://www.interculturalrelations.com/v1i4Fall1998/f 98heaton.htm

This paper illustrates the interaction of process and product in the design of computer supported cooperative work (CSCW) systems. It explores significant regional and cultural differences in CSCW

design and proposes an explanation, grounded in the notion of cultural frame, for these observations. This explanation focusses on the interaction between the specific situation in which is design taking place, its larger social, cultural or institutional context, and the unique actions of designers. Based on how they understand the world around them, designers make assumptions that guide their design choices. As participants in their larger professional, organizational and national cultures, individual designers link their creations with larger social or cultural values. In particular, "Japanese culture" is highly significant in the frames of Japanese CSCW designers, while a group of ideas centering on "democracy" plays an equivalent role in the frames of Scandinavian designers.

While the focus of this paper is on comparing Japanese and Scandinavian CSCW design, this should not be taken to imply simply a discussion of national culture. As will come clear in the discussion, organizational and professional cultures are also vital elements in the mix. For the purposes of this research, defined as а dynamic national/geographic, organizational, and professional or disciplinary variables in constant interaction with one another. Culture changes according to the context and over time, and should be understood not in terms of prefixed categories, but as accumulations of actions, patterns which constitute, reinforce and transform social life. In short, culture is continually constructed and reconstructed.

Gesture [is a feature of cultural context that] has a major importance, as does shared view of workspaces. Japanese work tends to present solutions which are technically innovative and which require major investments of technical resources (high bandwith communication channels, large flat screen displays, a

number of video cameras, etc.). Finally, the Japanese groupware scene is much more technically oriented than European or American contexts. Japanese researchers readily admit to their technical focus and product orientation. In fact, one of the prime criteria for evaluating a research project appears to be whether or not it is up and running, and it is inconceivable for the researchers interviewed that research not lead to a *working system*.

In contrast, video-mediated communication is completely absent in Scandinavian work, which focuses on organizational issues and is typically presented in the form of cases in which designers have been active participants. Cooperative design, supporting users in their daily work, and looking at work as situated in a specific context are common themes. British work is fairly equally distributed among case studies, conceptual and technical articles, while the volume and variety of work done in North America makes it very difficult to classify: all tendencies are represented – from high-tech video-intensive environments, to ethnographic studies of implementation and use, to theoretical models of coordination. (Summary adapted from the introduction and concluding sections of the paper.)

Herman, A. & Swiss, T. (Eds.). (2000). *The World Wide Web and Contemporary Cultural Theory*. New York: Routledge.

"In light of its hype of technical innovation, rhetoric of hyberbole, and claims of universality, the World Wide Web very much needs the critical perspectives of contemporary cultural theory. The essays in this collection offer and excellent variety of critical interpretations of the commercialization of the web,

myths and metaphors of cyberspace and other "posthuman" spinoffs, cybertopias and emancipatory promises of new identities and communities, and hypertextual epistemologies and literacies. While remaining properly critical of most bids for the technological sublime made by zealous promoters of the web, most of these cultural critics accept the importance of the web in our economic, social and personal relations [...]. Recognizing that the web's claims to revolutionize postmodern social and personal life usually ignore a long history of modern technological and cultural innovation, understand contributors that postindustrial capitalism and contemporary globalization, along with such instrumental technologies as the World Wide web, represent a shift in the dominant economic, technological and even epistemological paradigms.

Although several contributors [...] discuss the way the web reinforces conventional hierarchies of race, class and gender, this volume does not offer much news about the exclusion of minorities, the privileging of white masculinity, and the overdetermination of patriarchal sexuality (especially via pornography) on the web. Occasional references to the dominance of English as the primary language of the web do not make up for the fact that the volume neglects contemporary debates regarding such as monolingualism's contribution to the American Electronic Empire. Most of the contributors draw on a wide range of postmodern critical theorists, such as Foucault, Baudrillard, Lyotard, Derrida, Harawya and Bhabha, but there is little critical consideration of this theoretical tradition." (From a review by John Carlos Rowe (2002) in *The Information Society*, 18,71-72)

Herring, S. C. (1996). Two Variants of an Electronic Message Schema. In S. C. Herring, (Ed.), Computer-Mediated Communication: Linguistic, Social and Cross-Cultural Perspectives. Amsterdam: John Benjamin.

ABSTRACT: The commonly accepted hypothesis that men's messages to electronic discussion groups tend to be more information-oriented whereas women's are more socially oriented is tested. The schematic structure of messages from two large Internet academic mailing lists were analyzed: the WMST list, which focuses on women's studies and is 88% female, and the LINGUIST list, which focuses on linguistics and of which 85% of regular contributors are male. It was found that both men and structure their messages interactively. Expressing views dominates the utterances of both genders, with exchanging information a secondary purpose. Gender differences were discovered, but not those hypothesized. Women's messages were found to be more interactional and also more informative whereas the expression of critical views dominated in male messages. Evidence was also found that members of the minority gender on each list shifted their style toward majority gender norms. Concern is expressed that the stereotype of women as being unconcerned with exchanging information will negatively affect their participation in the Information Age.

Hewling, A. (2002). Elements of Electronic Literacy: A Contextualised Review of the Literature. Available at:

http://iet.open.ac.uk/pp/a.hewling/AnneHewling.htm

I_{NTRODUCTION}: The arrival of the global computer age and the increasing accessibility of the Internet has been

mirrored by shrinking ownership of the world economy. Castells (1998) notes that whilst directly employing only around 70 million people world-wide at the end of the 20th century, multinational companies were responsible for generating one third of the world's private economic output. This situation has changed the nature of working practices and thus the need for and nature of the education systems required to support them. Them move towards a knowledge based global economy (albeit one supported by generic skills in learning how to learn and adapt) has accentuated recognition of the large proportion of the world's population who have no or limited access to education. Such inequality is seen not only as socially unacceptable in the 21st century world but also as untenable since education has become essential for any kind of productive employment. Schools, colleges and universities are coming under increasing pressure to educate huge numbers of students and, furthermore, to educate them in terms of 'the global lifelong learning economy'. This frame of reference holds 'flexibility' as its key as change becomes a constant: 'societies, organisations and individuals are required to change, to learn to change and to change to learn. Lifelong learning is seen as 'the dynamic adaptation of individuals, groups and organizations as a consequence of the compelling effects of dominant change agents. Technological developments are thus simultaneously creating a need for more knowledge; demanding technology-competent workers; and offering the means to provide such knowledge and workers. In the context of this globalized world, online, 'virtual' education is seen by some as a panacea for many inequalities and social evils.

Hewling, A. (2003). Unravelling Cultural Interference in Electronic Literacy for Remote-Access Virtual Learning Environments. In *Proceedings, UNESCO Conference on Intercultural Education, 15–18 June 2003.* Finland: University of Jyväskylä.

A_{BSTRACT}: This initial study looks at online students' use of different areas of a virtual learning environment platform. Finding a preference for communications activity amongst both native and non-native speakers of the platform language, it goes on to examine the students' asynchronous messaging behaviour. This behaviour also offers evidence to suggest that it may be influenced by cultural factors such as language and place of residence.

Ho, C. M. L. (2000). Developing Cultural Awareness and Writing Skills Through Email Exchange. *The Internet TESL Journal* VI (12). http://iteslj.org/Articles/Ho-Email.html

ABSTRACT: This paper is based on an international information technology-based collaborative between primary level pupils from two schools in Singapore and Birmingham (UK). Through the electronic exchange of information the pupils explored different writing tasks for various purposes and types of audience. The study offers insights into how information technology can be used as a tool not only to develop pupils' confidence, language skills and creativity, but also to develop their sense of awareness of intercultural concerns, and of their being part of a dynamic, international, global community. The project also yielded discernable shifts in teachers' traditional roles and responsibilities, and the part they played in their students' participation as the project developed. Notable differences were also observed in pupils' expectation of

teachers in the two countries.

Ho, J. (2003). APEC Multilingual International Trade Project: Methodology and Case Reports on Needs Assessment. *Journal of Computer-Mediated Communication*, 9(1). http://www.ascusc.org/jcmc/vol9/issue1/ho.html

A_{BSTRACT}: As Internet use continues to grow worldwide, its potential to facilitate e-commerce and international trade, especially among small and medium-size enterprises (SMEs), is well recognized. However, formidable barriers in language and word processing have to be overcome before significant uptake of such computer-mediated communication by SMEs can be realized. A pragmatic methodology to enable multilingual e-mail communication is introduced, in a prototype system called "TigerTalk for SMEs." This approach has been endorsed by the Asia Pacific Economic Cooperation (APEC) as the Multilingual International Trade Project. The first phase of needs and feasibility assessment is reported in eight case studies.

Holmes, D. (Ed.). (1998). *Virtual Politics: Identity and Community in Cyberspace*. New York: Sage Publications.

"Virtual Politics is a critical overview of the new – digital– body politic, with new technologies framing the discussion of key themes in social theory. This book shows how these new technologies are altering the nature of identity and agency, the relation of self to other, and the structure of community and political representation.

The principal theme of Virtual Politics is that electronically and digitally simulated environments offer

an important metaphor for understanding social relations. This volume focuses on how virtual reality effectively extend space, time and the body; and shows how technologies such as the motor car and environments such as the cinema and the shopping mall, prefigure cyberspace. Virtual Politics examines the loss of political identity and agency in cyberspace and identifies a disembodied consumer in anonymous control of a simulated reality." (Book description from Sage Publications)

Hongladarom, S. (1998). Global Culture, Local Cultures, and the Internet: The Thai Example. In C. Ess & F. Sudweeks (Eds.), *Proceedings, Cultural Attitudes Towards Communication and Technology,* 1998 (pp. 231-245). Australia: University of Sydney. http://www.it.murdoch.edu.au/catac/catac98/pdf/19 hongladarom.pdf

"Hongladarom examines two threads of discussion developed in a Thai Usenet newsgroup, one dealing with critiques of the Thai political system and the other with the question of whether Thai should be a language, perhaps the only language, used on the newsgroup. In contrast with concerns that CMC technologies will erase local cultures and issue in a monolithic global cultures. Hongladarom argues that the Internet facilitates two different kinds of communication: (i) communication that helps reinforce local cultural identity and community (in part, as this communication fulfills what Carey calls the 'ritual function', i.e. strengthening community ties); and (ii) communication that creates an 'umbrella cosmopolitan culture' required for communication between people from different cultures. Hongladarom further suggests that we distinguish between a Western culture which endorses human rights, individualism,

egalitarianism and other values of a liberal democratic culture (a 'thick' culture in Walzer's terms), and the cosmopolitan culture of the Internet as neutral (a 'thin' culture). The Thai experience suggests that the Internet does not force the importation of Western cultural values. Instead, Thai users are free to take up such issues and values if they wish, and they can do so while at the same time preserving their cultural identity." (From Ess, C. (1998) First Looks: CATaC '98. In C. Ess & F. Sudweeks (Eds.), *Proceedings, Cultural Attitudes Towards Communication and Technology, 1998* (pp. 1- 17). Australia: University of Sydney.

http://www.it.murdoch.edu.au/catac/catac98/01 ess.pdf)

Howe, C. (1998). Cyberspace is no Place for Tribalism. *WICAZO-SA Review*, 13(2).

Howe writes: "If Indian communities wish to stake out a place in cyberspace, then they must understand that in so doing they are capitulating to the underlying philosophy of the Internet. Cyberspace is a fantastic technological achievement founded on the ideas of Western civilization. But it is not merely the latest "foreign good" – such as cooking pots, firearms, and automobiles – to be adopted into tribal communities. Whereas those other technologies had analogs in tribal communities to the particular localities, societies, moralities, and experts that constitute tribalism.

The Internet is an exceedingly deceptive technology whose power is immensely attractive to American Indians. But until its universalistic and individualistic foundation is restructured to incorporate spatial, social, spiritual, and experiential dimensions that particularize its application, cyberspace is no place for tribalism."

By way of illustration, Howe quotes Benjamin Franklin (from Fuchs and Havighurst 1972, 3, reprinted

in John Reyhner and Jeanne Eder, Eds. A History of Indian Education (Billings: Eastern Montana College, 1989), 21-22): "You who are wise must know that different nations have different conceptions of things; and you will therefore not take it amiss, if our ideas of this kind of Education happen not to be the same with yours. We have some Experience of it; Several of our young people were formerly brought up at the Colleges of the Northern Provinces; they were instructed in all your Sciences; but, when they came back to us, they were bad Runners, ignorant of every means of living in the Woods, unable to bear either Cold or Hunger, knew neither how to build a Cabin take a Deer, or kill an Enemy, spoke our Language imperfectly, were therefore neither fit for Hunters, Warriors, nor Counsellors; they were totally good for nothing."

Inglis, N. L. (1998). Worlds Apart. Cross-Cultural Undercurrents in the Use of Email and the Internet. *Language International*, 10(2), 16-17,44.

This non-academic essay focuses on the ways that culturally-shaped approaches to email may bring about miscommunications. Inglis writes: "Internet and email literature is jargon-ridden and prepared from an American perspective. Less is known about what happens when non-Americans avail themselves of these electronic services. British email users often ignore even urgent personal messages. Your correspondents may inform you how much they enjoyed your emails by "snail mail" months after the fact... Uninhibited email exchanges and probing... net searches are a distinctively "American" practice. People from more hierarichal cultures may be suspicious of the Internet's spontaneity."

Inglis nevertheless discusses the possibility that

access issues and technical constraints may be responsible for the current linguistic bias on the Internet. He explains: "[...] at present, about 60 percent of the Internet's host computers are located in the US. Outside North America and some European countries, most of the world's connections to the Internet are very recent and limited [...]. Some promoters of native languages have already used the medium to their advantage. For instance, roughly 30 percent of all world wide web pages published in French come from Québec, even though French Canadians represent only five percent of all French speakers. [...] we nonetheless have a long way to go before we get to a truly multilingual Internet, in which an author can include a Greek quotation in a Russian text that will be properly displayed on the reader's computer in South America. Software standards with this kind of capability are emerging."

Jacobson, D. (1996). Contexts and Cues in Cyberspace: The Pragmatics of Naming in Text-Based Virtual Realities. *Journal of Anthropological Research* 52 (4), 461-479.

A_{BSTRACT}: Although the relative paucity of social cues in computer-mediated communication poses problems for the organization of social relations in cyberspace, recent studies have begun to focus on the ways in which this deficit is managed. This article contributes to this research by addressing the question of how participants distinguish between contexts in online discourse.

Ethnographic data, collected online over several months from naturally occurring computer-mediated communication show that many MOO cues are common emoticons, e.g., :) & :(, for smile & frown; however, other cues are peculiar to MOO, where participants

choose character names to create a social identity. The use of real names often indicates a difference between the imaginary & the real, as well as indicating closeness, as in a virtual wedding. Assumptions that participants make about their online relationships are similar to, & equally as diverse as, off-line social interaction. Most interaction models are applicable to either situation, that computerdisputing the claims mediated communication would dramatically alter relationships.

Overall, this paper illustrates the structure of contexts and the dynamics of contextualizing communication and interaction in cyberspace.

Jones, S. (1997). *Virtual Culture: Identity and Communication in Cybersociety*. New York: Sage Publications.

"While other books speak about cyberculture, *Virtual Culture* directly engages in and with the interactions, relationships, identities, and communities that grow, flourish, wither, and evolve online. Not content with learning about online culture via Wired magazine, the contributors of Virtual Culture log in and explore first hand their respective sites of study.

Following a brief introduction, Jones gets things started with "The Internet and its Social Landscape." Similar to his introductory essay in Cybersociety this chapter seeks not to reconfigure the scope of cyberculture studies but rather to introduce and problematize the field's key terms and definitions. Informed by the work of Benedict Anderson and James Carey, Jones, Chair and Professor of Communication at the University of Illinois at Chicago, editor of CyberSociety, and the co-editor of the soon-to-bereleased international journal New Media & Society,

historically locates popular rhetoric regarding the Net's potential to transcend time and space. Next, he problematizes the notion of virtual communities, questioning whether they should be referred to as "discontinuous narrative spaces" rather than communities and introducing salient points regarding the important distinctions between social recognition, occupancy, and discussion interaction. After а brief Communications Decency Act, the author challenges the idea of an online public sphere by questioning whether public unity and rational discourse can occur in a space populated by multiple identities, random juxtapositions, and online agents and bots.

Chapter two, "The Individual within the Collective: Virtual Ideology and the Realization of Collective Principles," explores the ways in which collectivity on the Net is juxtaposed against individuality [...] The next chapter, "Virtual Commonality: Looking for India on the Internet," explores a particular Usenet newsgroup, soc.culture.indian or sci, to analyze the ways in which marginalized people form virtual communities... Chapter four, "Structural Relations, Electronic Media, and Social Change: The Public Electronic Network and the Homeless," shifts from virtual communities to community networks... In the wordy yet deep [chapter five] "Why We Argue About Virtual Community: A Case Study of the Phish.Net Fan Community," Nessim Watson sets out with two purposes: to examine the interactions which take place on a particular online community, Phish.net, and to question the very term virtual community [...] The most interesting aspect of chapter six, "Gay Men and Computer Communication: A Discourse of Sex and Identity in Cyberspace," is the proposed topic – how do gay men use Internet Relay Chat, or IRC, to communicate with one another? [...] chapter [seven] explores the organization of social

relationships in an online community. What is unique, however, is the fact that the online community does not take place on a listsery, or in a MUD, or with IRC, but rather through a Web site... Chapter eight, "(Re)-Fashioning the Techno-Erotic Woman: Gender and Textuality in the Cybercultural Matrix"... begins by analyzing the ways in which technozines such as Wired, Mondo 2000, and bOing bOing represent and incorporate women, which, to no one's surprise, is guite similar to the conditions found in old media. Covering much of the same ground Vivian Sobchack treads, Dietrich then turns to cyborg theory as put forth by Donna Haraway and Sandy Stone. Dietrich concludes by arguing that women must occupy cyberspace and "cultivate the margins of electronic culture, where greater experimentation is taking Juxtaposed next to a radical call for online feminism is an analysis of online activity by the radical right. In "Approaching the Radical Other: The Discursive Culture of Cyberhate," Susan Zickmund explores the ways in which far-right groups (and their detractors) collect and relate with one another online. "Punishing the Persona: Correctional Strategies for the Virtual Offender" [fuses] theoretical frameworks of the body developed by Foucault and Sandy Stone with theories of punishment put forth in Hobbes' Leviathan, Richard MacKinnon seeks to answer the questions "what is virtual crime?" and "how is one virtually punished?" MacKinnon explores the questions through three now-famous "cyber criminals" -Kevin Mitnick, Mr. Bungle, and Jake Baker.

[...] [T]he essays of *Virtual Culture* engage directly in and with cyberculture. This engagement is not only interesting, it is productive. It reveals how scholars are (and must continue to) rethinking traditional methodologies to fit into this new site of cultural study. Moreover, and perhaps more importantly, the essays

shed light upon the richness and diversity of online culture – from virtual communities and community networks to cybercrime and virtual sexuality." (Extracted from a 1998 review by David Silver in the *Resource Center for Cyberculture Studies*,

 $\frac{http://www.com.washington.edu/rccs/bookinfo.asp?Revi}{ewID=30\&BookID=40})$

Jones, S. (1998). Understanding Micropolis and Compunity. In C. Ess & F. Sudweeks (Eds.), Proceedings, Cultural Attitudes Towards Communication and Technology, 1998 (pp. 21-23). Australia: University of Sydney. http://www.it.murdoch.edu.au/catac/catac98/pdf/02 jones.pdf

ABSTRACT: This article begins with an analysis of virtuality and virtual culture as forms of social flow, and builds towards an analysis of the elements of Micropolis, fractalized metropolis, as the setting for postmodern (sub) urban life. The construction and organization of "links" on the Internet is akin to Forster's (1948) request in Howard's End that we "Only Connect". What makes the Internet and its promise of "only" connection so compelling is "compunity" (the merger of computers and community), and its power lies in its promise to (fractally) recreate something we believe has been lost, namely, community. But the fractalized image-ination of community online is akin to the gated community offline, or, one might say, is itself a "Gates-ed" community. Its unreality is understood to make it somehow apart from the social, and this paper will argue that the opposite is more often the case. The management of connection that preoccupies a social life online is itself the interface between one fractal and the other.

Ess writes: [Jones] reviews a number of familiar

communication theorists, including Ong and McLuhan, as he develops his own metaphors of 'path' and 'field' to discuss the influence and meaning of Internet messages. In particular, he takes up Carey's distinction between ritual and transportation models of communication to address 'compunity'...- a merger that is strained between the traditions and rituals of real life and the kinds of communication as transportation facilitated through CMC. Jones analyses four areas – privacy, property, protection and privilege – as central to possible online communities. His analysis both effectively represents the postmodernist approaches which have dominated Anglo-American analysis of hypertext and CMC, and uncovers important ambiguities in the effort to recapture lost community online. Such efforts, according to Jones, are only partially successful and they introduce in their wake new difficulties distinctive to cyberspace." (From Ess, C. (1998) First Looks: CATaC '98. In C. Ess & F. Sudweeks Proceedings, Cultural Attitudes Communication and Technology, 1998 (pp. 1-17). Australia: University of Sydney.

http://www.it.murdoch.edu.au/catac/catac98/01_ess.pdf)

Joo, J.-E. (1999). Cultural Issues of the Internet in Classrooms. *British Journal of Educational Technology*, 30(3), 245-250.

A_{BSTRACT}: Despite the rapid and broad diffusion of the Internet in schools, educators have paid relatively little attention to the cultural impact of this new technology in teaching and learning. This article investigates some cultural issues that the Internet has introduced into classrooms, with illustrations of good practice. It aims to stimulate critical discussions among educators on ethical and cultural aspects of Internet

use, including equality of access and participation for all people, and mutual respect for, and promotion of, underrepresented languages and cultures. This article finally demonstrates an urgent need to re-shape the Internet as a human, rather than merely computer, network.

Jordan, T. (1999). *Cyberculture: The Culture and Politics of Cyberspace and the Internet*. London: Routledge.

Jordan's theoretical analysis of cyberspace focuses on power: 'that which structures culture, politics and economics [...] power names the things that determine how a life may be lived'. The technology, culture and politics of virtual discussions are inextricable. In this book, Jordan investigates the nature of power in cyberspace and three regions of power in cyberspace: power typical of individual lives, of virtual communities and of virtual imaginations. As an interrelation of these three, Jordan argues that 'cyberpower' is 'a complex form of power in which a digital grassroots find and use tools to gain greater choice of action in their lives but whose use of tools also fuels the increasing domination of a virtual elite over the nature of cyberspace and its capabilities. 'The power and paradox of cyberspace is its ability to liberate and dominate simultaneously." On the one hand, cyberspace is inherently anti-hierarchical. On the other, access to cyberspace is controlled by two major factors: cost and culture, and Jordan argues that currently, only a small privileged group of users in the developed world currently have access. Specifically, 'cultural' barriers include lack of knowledge of the 'rules' of online culture(s), and cultures of technology

advertising designed to persuade users that only the most modern equipment will allow access to the Internet.

Jordan discusses the ways that individuals create and adopt online identities - both stable and fluid - and the ways that they participate in virtual communities. He notes how users move from their 'login home' to virtual spaces that involve moment(s) of self-definition: choosing an online name, posting a bio, choosing a selfdescription. 'Identity fluidity' is the process by which online identities are constructed and these are identities not necessarily close to offline identities, hierarchies are the processed by which offline hierarchies are reinvented online. (Jordan also discusses how identity fluidity can lead to harassment and deception in cyberspace). Both of these rely on cyberspace being an 'informational space' - bodies and hierarchies can be recreated because cyberspace is constituted out of information. Jordan believes that together these elements create cyberpower as a possession of individuals.

Individuals in cyberspace go on to create new social spaces and construct societies, and 'the forms of communication typical of cyberspace underpin new forms of community'. Interestingly, Jordan argues, that once a collective is formed, then all individuals become 'at least in part subject to it', leading to Jordan's concept of the 'cyberpower of the social'.

Jordan cites Barnes (1988) who wrote 'societies exist where normative order exists', and argues that claims that there is perpetual change in cyberspace deny that there can be a normative order of any sort in virtual communities. And yet, virtual communities do exist, and maintain normative orders or cultures, which Jordan believes, can be mapped. Moreover, within the

social fabric of the Internet, Jordan argues that an elite exists, fuelled by 'technopower', and that this elite has increasing control over cyberspace.

Jordan also echoes Anderson's notion of 'imagined communities' by pointing to the importance of the collective imagination in the creation of cyberculture: imaginary relationships help define collectives by hypothesizing commonalities, by emphasizing the creation of its own internal rules or 'culture', and by allowing conceptions of a 'deep horizontal comradeship'. Moreover, Jordan notes that cyberspace's imaginary is twin-sided, giving rise to exaggerated hopes and fears, opposing conceptions of the future.

Jordan considers different theoretical perspectives on 'power' (as possession, as social order, as domination), and considers power dynamics in the technological infrastructure of cyberspace, in individuals, communities and imagery to create his vision of 'the first war of cyberspace: between the elates and the grassroots.

Jordan, T. (2001). Language and Libertarianism: The Politics of Cyberculture and the Culture of Cyberpolitics. *The Sociological Review*, 49(1), 1-17.

A_{BSTRACT}: A significant number of theories concerning the nature of cyberspace or virtuality are being constructed with little regard for the empirical realities of online life. This article sets out certain simple empirical factors related to the nature first of politics in cyberspace and second culture in cyberspace. These questions are posed as 'what is the politics of cyberculture?' and 'what is the culture of cyberpolitics?'. The politics of cyberculture revolves around issues of grossly uneven regional distribution of the Internet and a bias towards Anglo-American language and culture that

is based on the competitive individual. The culture of cyberpolitics revolves around informational forms of libertarian and anarchist ideologies that posit cyberspace as the realm of individual freedom. These cultures and politics can be related to each other as the structure and action of cyberspace. The assumption that cyberspace is constituted by individuals is revealed as an assumption of both, and connection between, cyberpolitics and cybercultures.

Kaplan, N. (1995). E-literacies: Politexts, Hypertexts, and Other Cultural Formations in the Late Age of Print. http://iat.ubalt.edu/kaplan/lit/

Kaplan writes: "In this hypertextual essay, I offer some brief definitions and descriptions of electronic textual formations and argue that the proclivities of electronic texts – at least to the extent that we can determine what they are – manifest themselves only as fully as human beings and their institutions allow, that they are in fact sites of struggle among competing interests and ideological forces.

Or, to put the matter another way, social, political, and economic élites try to shape the technologies we have so as to preserve, insofar as possible, their own social, political, and economic status. They try to suppress or seek to control those elements of electronic technologies uncongenial to that purpose. The degree to which they are successful in controlling the development and use of electronic texts will define the nature and the problems of literacy in the future."

Kaplan defines hypertexts as "multiple structurations within a textual domain" and explains: "Imagine a story...that changes each time one reads it. Such documents consist of chunks of textual material (words, video clips, sound segments or the like), and sets of

connections leading from one chunk or node to other chunks. The resulting structures offer readers multiple trajectories through the textual domain [...] Each choice of direction a reader makes in her encounter with the emerging text, in effect, produces that text. The existing examples of this form, especially the fictions, are so densely linked, offer so many permutations of the text, that the "authors" cannot know in advance or control with any degree of certainty what "version" of the story a reader will construct as she proceeds...

Those texts left fully accessible to readers, those in which readers can write as well as read -texts Michael Joyce terms constructive – depart most sharply from printed ones. The textual additions, deletions, reformations a reader might make are indistinguishable from those the first writer created. And being electronic, such a text can easily be replicated and disseminated widely. These forms have no paper-based equivalents: they are "native," if you will, to a specific computing environment."

Kaplan, N. (2001). Knowing Practice: A More Complex View of New Media Literacy. In *Proceedings of the International Conference on Advances in Infrastructure for Electronic Business, Science and Education on the Internet, 2001. L'Aquila, Italy* http://iat.ubalt.edu/kaplan/ssgrr01.pdf

A_{BSTRACT}: In this paper, I examine the pervasive quest for invisible computers, applications, and interfaces in order to make a case for resisting the pressure to standardize platforms for delivering online courses and other Web-based applications. We need to be especially wary of the argument that the ideal information resource or technology imposes no cognitive load on its users. Although usability experts

like Jacob Nielsen present a cogent case for routinizing, for example, the colours of visited and unvisited links in HTML documents, such a strategy may fail to provide the cognitive scaffolding knowledge workers will need to confront changing technological environments in productive ways. In other words, too great a reduction of the cognitive challenge in the present may prevent people from developing effective learning strategies they can apply to future technologies. Drawing on constructivist theories of learning, I argue that applications and interfaces must remain visible and accessible to knowledge workers if they are to develop new media literacies.

Keniston, K. & Hall, P. (1998). Panel: Global Culture, Local Culture and Vernacular Computing. In C. Ess & F. Sudweeks (Eds.), *Proceedings, Cultural Attitudes Towards Communication and Technology, 1998* (pp. 329-331). Australia: University of Sydney. http://www.it.murdoch.edu.au/catac/catac98/pdf/28_hall.pdf

"Keniston and Hall observe that India is the world's largest democracy, containing almost one-sixth of the world's population. Yet, given the nearly complete absence of software in India's seventeen official languages (besides English), 95% of her citizens are excluded from computer use, the Internet, and the World Wide Web. Keniston offers his bad dream of 'the Rule of the Digirati,' a small elite who will rule the digital future as English speakers and producers/consumers of a 'lowest-common-denominator world culture,' over against the remaining 99% of the world's population. This 99% represents the 95% who do not speak English in India, and all the world's illiterate and innumerate, which includes the underclasses of the North of India

and the vast majority of peasants, farmers, and workers in the South.

India thus stands as a fair example of the global challenges to any dream of an 'electronic global village' as facilitated by CMC technologies. Keniston and Hall discuss collaborative efforts towards software localization in India as steps towards the 'happy dream' of making computers and networks accessible to the vast majority of India's citizens. Recognizing the role of political and cultural factors in localization projects, Keniston and Hall leave us with a series of questions that must be faced in such efforts. They suggest that technology alone will not determine our responses to such questions; rather, what we choose to do, particularly in the collaborative effort to set standards for localization that are 'global without being imperialistic', will determine which dreams are realized in our digital future". (From Ess, C. (1998) First Looks: CATaC '98. In C. Ess & F. Sudweeks (Eds.), Proceedings, Cultural Attitudes Towards Communication and Technology, 1998 (pp. 1-17). Australia: University of Sydney.

http://www.it.murdoch.edu.au/catac/catac98/01_ess.pdf)

Kiesler, S. (Ed.). (1997). *Culture of the Internet.* Mahwah, NJ: Erlbaum.

"The editor and contributing authors for *Culture of the Internet* would probably agree that as a communication medium, text-based applications provide better clues [than Web-based 'demos'] to what the Internet is. The editor's...purpose is ...to contribute to a fuller definition of the Internet as a communication medium. The articles are categorized under five topics, "The Net as It Was and Might Become," "Electronic Groups," "Power and Influence," "Computer-Supported Cooperative Work," "Networked Organizations," and

"Differences in Access and Usage."

The section on the history and future of the Internet is preceded by Kiesler's reminder that computers were not devised as communication tools but as information processors. This context, in turn, provides a counterpoint to the diversity of evolving Internet uses studied in the section's four pieces: "The Rise and Fall of Netville," by John King, Rebecca E. Grinter and Jeanne

M. Pickering; "Atheism, Sex, and Databases," by Sproull and Samer Faraj; "Pornography in Cyberspace: An Exploration of What's in USENET," by Michael D. Mehta and Dwain E. Plaza, and finally, "From the Couch to the Keyboard: Psychotherapy in Cyberspace," by Yitzchak M. Binik, James Cantor, Eric Ochs, and Marta Meana. The section also includes a short report on early evidence from the same Carnegie Mellon study mentioned in the first paragraph of this review.

The section on electronic groups differs from the later section on networked organizations in that the groups in the former were born in cyberspace; those in the latter existed before and outside of the virtual places. Of particular interest to IT researchers will be "Seeking Social Support: Parents in Electronic Support Groups," by Kristin D. Mickelson and "An Electronic Group Is Virtually a Social Network," by Barry Wellman. A third contribution by Sherry Turkle, "Constructions and Reconstructions of Self in Virtual Reality: Playing in the MUDs," is worthwhile if only because Turkle is a talented storyteller.

Under "Power and Influence," are three pieces on each of three phenomena implied by their titles, "Coordination, Control and the Internet," by Kling, "Conflict on the Internet," by Peter J. Carnevale and Tahira M. Probst, and "A Brave New World or a New

World Order?" by Christopher R. Kedzie. These works should be read and considered by digital library designers as they consider privacy, democracy and related power issues.

Finally, the differences between having access to and using the Internet are examined in the last section. There are two articles, both of which will be of use to those readers working on problems of access to and distribution of digital library content. "Computer Networks and Scientific Work," by John P. Walsh and Todd Bayma looks at how communities of scientists use the Internet in their work. The other work, "Computers and Connectivity: Current Trends." by Tora K. Bikson and Constantiin W. A. Panis, focuses on household access and usage. Their inquiry reminds readers of implications for a society where many cannot afford access. As a social issue at the core of information science, this final section serves as an appropriate conclusion to a volume dedicated to Internet culture." (From an online book review by Anne Hoag, D-Lib Magazine, November 1998. http://www.dlib.org/dlib/november98/11bookreview.html)

Kim, K-J. & Bonk, Curtis, J. (2002). Cross-Cultural Comparisons of Online Collaboration. *Journal of Computer-Mediated Communication*, 8(1) http://www.ascusc.org/jcmc/vol8/issue1/kimandbonk.html

A_{BSTRACT}: This study investigated two interconnected conferences formed by students and instructors from two different cultures – Finland and the United States – to discuss case situations or problems in school observations, in order to examine cross- cultural differences in online collaborative behaviors among undergraduate preservice teachers. A

conference for Korean students in the following semester was added and analyzed for more diverse cross-cultural comparisons. In terms of the first part of this study, computer log data indicated that there were more crosscultural postings in the Finnish conference by U.S. students than Finnish visitors within the U.S. conference. In addition, student postings made up nearly 80 percent of these discussions. Qualitative content analyses of computer transcripts were conducted to compare their collaborative behaviors with the conferences. Results some cross-cultural differences in participants' online collaborative behaviors. Korean students were more social and contextually driven online, Finnish students were more group-focused as well as reflective and, at times, theoretically driven, and U.S. students more action- oriented and pragmatic in seeking results or giving solutions. The U.S. and Finnish students spent much time sharing knowledge and resources and also providing cross-cultural feedback. Findings indicate that instructors who facilitate online collaboration among multicultural students need to be aware of cultural differences in the learners' online collaborative behaviors. and such differences need to be taken into account to foster online collaboration among culturally diverse learners. Some data from post-collaboration questionnaires, student interviews. and videoconferencing further informed these findings.

Kim, S. (1998). Cultural Imperialism on the Internet, *The Edge: The E-Journal of Intercultural Relations*, 1(4).

http://www.interculturalrelations.com/v1i4Fall1998/f98kim.htm

This article reviews arguments of cultural

imperialism on the Internet made by a range of scholars. many of whom theorize that information and its technology have remained in the hands of the economic elite. Individuals and governments around the globe have expressed concern regarding the influence of Western cultural products on local and national cultures. In common 'core and periphery' theories, information and technology are controlled by core nations and flow is unidirectional, from core to periphery, with little opportunity for peripheral nations to participate in the process. Kim argues that ever- expanding pluralities of media do not justify such an omnipotent view of media, and further notes that the Internet and globalization promote two-way information and technology flow. Kim also questions deterministic models of the influence of technology on culture and reminds us that 'the path from transmission to cultural consequence is much more complicated in the international sphere'. Theories of cultural imperialism 'deny the power of the audience to interpret the message in its own context or to form its own meanings from the message'. In addition, research indicates that local cultural producers eventually begin to compete with American products.

Kim also highlights the flaw of equating 'culture' with consumer behaviour – an assumption that denies the complexities of cultural development. Other theorists propose multidimensional 'non-isomorphic' paths of global cultural flows, and question the core/periphery dichotomy. In addition, new technologies have also promoted national and regional cultural productions outside the West.

Kim offers a number of illustrating case studies, and concludes that while 'cultural imperialism' theories may be helpful in assessing the impact of traditional 'mass media', structural differences make such theories less

useful for Internet and other electronic media technologies.

Kinnaly, G. (1997) The Rules of the Road for Effective Internet Communication. *Library Mosaics*, 8(3), 10-16.

This article from an American journal is neither a research report nor a theoretical exploration of cyberculture and language. It is included as an example of one of the ways in which cultural/linguistic 'rules' of Internet communications are communicated disseminated to new users. The essay is written in casual and informal style, and defines the features of 'netiquette': ' a set of guidelines which has informally evolved as more and more people use the Internet as a method of communication and information retrieval'. It sequentially addresses netiquette for Email, Online Discussion Groups, and Newsgroups, warns the reader against common Internet 'mistakes ('SHOUTING', format, privacy issues), discusses the use of acronyms and emoticons, and defines common cyberculture jargon words. There is no meta-analysis of cultural specificity or English language use.

Knupfer, N. N. (1997). New Technologies and Gender Equity: New Bottles with Old Wine. In *Proceedings* of Selected Research and Development Presentations at the 1997 National Convention of the Association for Educational Communications and Technology (19th, Albuquerque, NM, February 14-18, 1997)

A_{BSTRACT}: Educational practice is influenced, in part, by the constant visualization of gender stereotypes throughout society in various forms, in both the old and new technologies. The imagery of computer technology as male turf has been carried into the World Wide Web through graphic advertisements. Male administrators make decisions about school practice that influence the implementation of new distance education technologies. The pervasive message of gender stereotypes has a tremendous influence on children and adults, and can bring biased value systems into what seems to be otherwise technologically innovative environments. The discusses developing male and stereotypes; culture and groups; and gender stereotypes in print media, television, cyberspace, and ITV educational environments. Instructional designers can influence the educational industry, home market, school environment, and practices in business and military environments. Instructional designers can influence designing educational practice bv instructional environments that attend to the needs of the female population as well as those of the males. Even though the majority of network users are males, females must be encouraged to learn skills and be provided with opportunities to have equal access to information.

Kolko, B.E., Nakamura, L. & Rodman, G.B. (Eds.) (2000). *Race in Cyberspace*. New York: Routledge.

"[V]ery few [researchers to date] have shown how people on-line systematically and radically alter national cultures, race, and/or ethnicity. Race in Cyberspace... is one of the first anthologies that attempts to fill this gap... In the introduction, the editors remind us that in discussions about the "real world" it is very difficult to explain that racial categories are socially constructed [...] [W]ith respect to cyberspace studies, the nature of the invisibility of participants in cyberspace is of utmost importance. As Joe Lockard asked, "[I]f racialism is demonstrably fraudulent in the physical world, what possible analytic validity might it possess in a virtual

world?" (176). The authors have proven, in various ways, that despite the invisibility of the participants and despite the realization that, as a New Yorker cartoon asserted, we don't know if the users are dogs, race still matters. Thus, rather than describing cyberspace as a "parallel world," the authors have shown that cyberspace is indeed a perpendicular one, with participants creating a new community in this transnational location while drawing upon lessons learned in their physical locations.

[...] Because cyberspace is indeed perpendicular to the "real world," future work on race in cyberspace can also benefit from studying more extensively what happens to racial categories when they are discussed in areas that are particularly designated for discussions about race and ethnicity." (From an online review by Emily Noelle Ignacio https://www.com.washington.edu/rccs/bookinfo.asp?ReviewID=104&BookID=97)

Korgen, K., Odell, P. & Schumacher, P. (2001). Internet Use among College Students: Are there Differences by Race/Ethnicity? *Electronic Journal of Sociology*, 2(2). http://www.sociology.org/content/vol005.003/korgen .html

A_{BSTRACT}: This study reports on differences by race/ethnicity in use of the Internet among undergraduates and other students at Internet-accessible colleges and universities. Differences were significant for overall use and even among students owning their own computers. While presence or absence of a computer in the home of origin (and length of time, if present) strongly influenced Internet use, such factors did not account for all the differences found by

race/ethnicity. Self-reported study time was also found to be strongly connected to Internet use and this also differed significantly by race/ethnicity.

Koutsogiannis, D. & Mitsikopoulou, B. (2003). Greeklish and Greekness: Trends and Discourses of "Glocalness". *Journal of Computer-Mediated Communication*, 9(1). http://www.ascusc.org/jcmc/vol9/issue1/kouts_mits.html

Within the context of the new ABSTRACT: communication ecosystem, attitudes towards computermediated discourse (CMD) practices have not been extensively investigated. This study explores social attitudes towards "Greeklish," a specific discursive phenomenon of CMD, which involves the use of the Latin alphabet in Greek online communication. It approaches Greeklish as a glocal social practice, and investigates attitudes towards Greeklish as they are represented in the Greek press. Three main trends are identified in the corpus. The first, a retrospective trend, views Greeklish as a serious threat to the Greek language; the second, prospective trend, approaches Greeklish as a transitory phenomenon which will soon become negligible due to technological advances; the third, resistive trend, points to the negative effects of globalization and relates Greeklish to other communication and sociocultural practices. Adopting a critical discourse-analytic perspective, this study attempts to map the discourses which permeate each one of these trends in order to reveal different, often heterogeneous and conflicting representations of Greeklish in Greek society at a specific historical moment.

Kötter, M. (2003). Negotiation of Meaning and Codeswitching in Online Tandems. *Language Learning & Technology*, 7(2), 45-172. http://llt.msu.edu/vol7num2/kotter/

A_{BSTRACT}: This paper analyses negotiation of meaning and codeswitching in discourse between 29 language students from classes at a German and a North American university, who teamed up with their peers to collaborate on projects whose results they had to present to the other groups in the MOO during the final weeks of the project. From October to December 1998, these learners, who formed a total of eight groups, met twice a week for 75 minutes in MOOssiggang MOO, a text-based environment that can be compared to chatrooms, but which also differs from these in several important respects.

The prime objective of the study was to give those students who participated in the online exchanges a chance to meet with native speakers of their target language in real time and to investigate if the concept of tandem learning as promoted by initiatives like the International Tandem Network could be successfully transferred from e-mail-based discourse to a format in which the learners could interact with each other in real time over a computer network.

An analysis of electronic transcripts from eight successive meetings between the teams suggests that online tandem does indeed work even if the learners have to respond more quickly to each other than if they had communicated with their partners via electronic mail. Yet a comparison of the data (184,000 running words) with findings from research on the negotiation of meaning in face-to-face discourse also revealed that

there was a marked difference between conversational repair in spoken interactions and in the MOO-based exchanges. This paper discusses potential reasons for these differences, investigates the learners' exploitation of the bilingual format of their exchange, and thereby attempts to demonstrate how online tandems can contribute to successful second language acquisition (SLA) and the development of learners' metalinguistic abilities.

Kramarae, C. (1999). The Language and Nature of the Internet: The Meaning of Global. *New Media and Society* 1 (1), 47-53.

Kramarae points out that the elastic and expanding nature of the Web has abolished some of the traditional barriers to intercultural communication (prohibitive telephone and travel costs), and bypasses some traditional authority and some traditional classifications of logic. In this paper, she asks: 'can English serve adequately as the basic language of the Internet? How universal is this Global English? Will the development of English on the Internet destructively replace any indigenous communication? If language is a system of signs of a language community, what is the community of Global English? Whose conventions are being signed and maintained by English as it is used on the Internet? Does English, as the dominant language, broadcast a particular dominant culture? Is language diversity a barrier to communication or a source of enrichment?'

Potential problems are identified: A) Thinking in one language and writing in another creates a dilemma. B) English is perceived as threatening certain cultural identities. C) The ability to include emoticons and visual images requires individuals to develop visual literacy skills. The creation of the Esperanto language and the

proliferation its periodicals are cited to illustrate the possibility of creating an egalitarian Internet language. Noting the rapid increase in the number of non-English-speaking Internet users, it is concluded that other languages may replace English as the Internet's *lingua franca* in the future.

Lafargue, C. (2002). Electronic Commerce and Identity Construction in an Era of Globalization: Suggestions for Handicraft Producers in Developing Regions. In F. Sudweeks & C. Ess (Eds.). Proceedings, Cultural Attitudes Towards Technology and Communication, 2002, Université de Montréal, Canada. (pp. 317-335). Australia: Murdoch University.

indigenous ABSTRACT: This paper addresses communities of handicraft producers who are engaging in electronic commerce. As web sites for crafts are becoming more numerous, impoverished producers in developing regions are hoping that the Internet will increase revenues by eliminating the need intermediaries and by opening new consumer markets. Parallel to improving trade terms, there is a notion that the purchase of such craft products online might actually help to preserve a way of life that is in danger of disappearing in an era of globalization. However, does the commodification of a cultural product, such as an exotic handicraft, safeguard social conventions within the communities of their producers? The purpose of this paper is to propose a conceptual framework for discerning the relationship between the macroeconomic phenomenon of how communities of handcraft producers are adjusting to the mass market trends of globalization with the microeconomic phenomenon of how individual identity is negotiated in specific

transactions of handmade goods. This conceptual framework takes into account Stoper's theory on possible worlds of production and Wertsch and Scollon's work on mediated action theory. In conclusion, this study argues that online consumption of handicrafts does not de facto mitigate the acculturating impact of globalization on indigenous communities.

Lapadat, J. C. (2002). Written Interaction: A Key Component in Online Learning. *Journal of Computer-Mediated Communication*, 7(4). http://www.ascusc.org/jcmc/vol7/issue4/lapadat.htm

Lapadat notes that in order to assess the relationships between online course design, participants' interactions, and learning, a first step is to examine closely and describe the nature of online class participants' interactions within synchronous and asynchronous conferences. In this article, she addresses the role of interactive writing as an integral element in the conceptual development that takes place in such online courses. She argues that the interactive textual environment of asynchronous online conferences is particularly facilitative of both social and cognitive construction of meaning because the nature of online interactive writing itself bootstraps the construction of meaning. (Adapted from the Abstract.)

Lea, M. (Ed.). (1992). Contexts of Computer- Mediated Communication. New York: Harvester Wheatsleaf.

The contributions in this early volume in the field discuss a range of issues and topics relating to the recontextualization of computer-mediated communication: social influences on CMC processes

and outcomes, varieties of use of CMC systems and how their uses can be manipulated individually and and collectively, influences on design, supply consumption of CMC systems, and issues representation in design, conduct of research on CMC, and our beliefs and ways of talking about CMC. In doing so, a range of communication and information technologies are included: electronic mail, computer conferencing, videotex, interactive CD-ROM, group decision support systems, and so on. The book should be of interest to researchers and students who are studying these kinds of technologies as well as those engaged in designing advanced computer-mediated communication or computer-supported co-operative work systems. In her conclusion the editor stresses that computer-mediated communication is radically context- dependent in its conceptions, physical manifestations, processes and effects.

LeBaron, J., Pulkkinen, J. & Scollin, P. (2000). Promoting Cross-Border Communication in an International Web-based Graduate Course. Interactive Multimedia Electronic Journal of Computer Enhanced-Learning, 2(1). http://imej.wfu.edu/articles/2000/2/01/printver.asp

A_{BSTRACT}: The design and distribution of cross-border higher education courses via global computer networks is a rapidly growing phenomenon. This paper describes two rounds of an international graduate-level Web-based course in education. It presents research that focuses on the challenge of international, cross- cultural graduate course design in education. Using diverse methods of inquiry, successes and failures of the effort to address cross-cultural concerns are reported. This inquiry informs the work of teachers,

researchers, course designers and program developers seeking to expand instructional horizons through international academic collaboration.

Lemke, J. L. (1993). Education, Cyberspace and Change. *Arachnet Electronic Journal on Virtual Culture*, 1(1).

http://www.kovacs.com/EJVC/lemke.htm

A_{BSTRACT}: Possible new directions for education and related social and cultural changes are discussed from the viewpoint of post-modern perspectives on learning, information technologies, and the dynamics of complex systems. A new model of education in cyberspace rather than in school and classrooms is formulated, together with key questions for a new educational research agenda. The potential impact of these changes on cultural values and on the way humans interact with the natural and built environment are considered.

Leonardi, P. M. (2002). Cultural Variability in Web Interface Design: Communicating US Hispanic Cultural Values on the Internet. In F. Sudweeks & C. Ess (Eds.). Proceedings, Cultural Attitudes Towards Technology and Communication, 2002, Université de Montréal, Canada. (pp. 297-315). Australia: Murdoch University.

A_{BSTRACT}: Culture plays a key role in forming opinions and values about the Internet, yet most research about the Internet has tended to emphasize a Western vision of its role and importance in society. This paper explores the cultural interchange between US bilingual Hispanics and the Internet. Through an analysis of 40 participants' evaluations of the manifestation of Hispanic cultural qualities in website

design, I attempt to show the unique cultural training US Hispanics bring to mediated interaction. Finally, I conclude with recommendations for website interface design with respect to US bilingual Hispanic audiences.

Lévy, P. (1998). Education and Cyberculture: New Relations with Knowledge. *Educação, Subjetividade & Poder,* 5, 9-19.

ABSTRACT: Analyzes contemporary changes in the relationship between education, knowledge, cyberculture. Reflections are offered on knowledge, especially its articulation with the World Wide Web. Different techniques supporting knowledge are analyzed (e.g., the oral tradition, the book, the library, and the computer), noting how the scientific experience was modified by each. Simulation is discussed as a form of assistance for intelligence and cyberculture, which favors the processes of collective intelligence. Changes in education and the economy of knowledge are considered, affirming the benefits of open and distance learning and the role of teachers. A new conception of education is identified, highlighting the impact of the interaction of knowledge and the changing relationship between knowledge/competence/professions in the modern world. The need to arrive at an explicit social recognition of knowledge constituted outside the school is emphasized.

Lévy, P. (2001a). *Cyberculture*. Minneapolis: University of Minnesota Press.

Lévy makes here an ambitious attempt to "understand and explain" cyberculture, and argues that the reality of technology as business does not mitigate its social and cultural value. The real issue, he claims, is not whether we are "for or against" technology but

whether we "recognize the qualitative changes in the ecology of signs, the unfamiliar environment that results from the extension of new communication networks throughout social and cultural life."

Lévy argues that 'participants in virtual communities have developed a strong sense of social morality, a set of customary, though unwritten, laws that govern their relations', most often relating to relevance of information posted. There is an expectation of reciprocity: that members will offer information where possible, in exchange for access to the community information resource. Over time, individual reputations - good and bad – are developed in virtual communities, which Lévy considers the 'symbolic payback' of community Freedom of generally speech is participation. encouraged; censorship is generally opposed. Conflicts are frequent, and those who break community 'moral rules' may be flamed mercilessly. At the same time, strong affinities and friendships often form

Lévy claims that manipulation and deceit are no more likely in online communities than in communications via any other medium; indeed, he suggests that since most virtual communities are organized to permit members expression and responses 'in the presence of attentive readers', virtual communities actively discourage the irresponsibility of anonymity.

Lévy cautions against a simple theory of 'substitution', however, and points out that 'virtual relationships are not a substitute for physical relationships'. 'The image of the isolated loner in front of a computer screen is based more on fantasy than sociological inquiry', he claims.

Overall, Lévy hypothesizes that virtual communities bring about a 'true actualization' of human groups that

were merely 'potential' before the arrival of cyberspace. Our desire for virtual communities reflects an ideal of deterritorialized human relationship, he argues – one that is nonhierarchical and free.

A central hypothesis of Lévy's work is that cyberculture "expresses the rise of a new universal. different from the cultural forms that preceded it, because it is constructed from the indeterminateness of some global meaning". In other words, cyberspace is so diverse and chaotic, it cannot be trammelled. Its anarchy is its greatest strength: 'universal without totality'. In particular, he suggests that cyberculture reattaches the meaning of text messages to context – a feature of oral cultures, and one that was previously broken by the arrival of text although this recreating of 'text in context' is on a different scale. Instead, universality of meaning is "constructed and extended by interconnecting messages with one another, by their continuous ramification through virtual communities, which instills in them varied meanings that are continuously renewed".

Lévy questions the frequently offered image of the "impact of technology", reminding us that technology is continuous with culture and society, and a simple outgrowth of that which makes us human. Technologies, he argues "embody projects, imaginary schemes, highly varied social and cultural implications [...] behind the technologies, ideas, social projects, utopias, economic interests and strategies of power [...] can be seen acting and reacting". Because of this, Lévy argues, "any assignment of a univocal meaning to technology is questionable.

Paradoxically the rate of change *is* a constant of cyberculture, and partly explains the sensation of impact, exteriority and strangeness experienced by

users characterized by Lévy as a "state of dispossession". He predicts, however, that 'collective intelligence' – the "synergy of skills, resources and projects, the constitution and dynamic maintenance of shared memories, the activation of flexible and nonhierarchical modes of cooperation, the coordinated distribution of decision centres" – will ultimately ease individual adoption of new technologies. Interestingly, cyberspace itself is a principal condition for collective intelligence, thus growing itself through positive feedback.

Far from being 'postmodern', Lévy argues that cyberspace is a technical materialization of modern ideals, firmly situated in the revolutionary and republican ideals of liberty, equality and fraternity.

Finally, Lévy argues that while not nonexistent, 'the political, economic, and technological constraints to the global expression of cultural diversity have never been as weak as they are in cyberspace.' Not only do our complaints about the lack of diversity fail to correspond with reality, but also more importantly, there is noone to complain to. Cyberspace contains whatever people put into it.'

Lévy, P. (2001b). *The Impact of Technology in Cyberculture*. Minneapolis: University of Minnesota Press.

Lévy argues that while "a technology is produced within a culture, [...] a society is conditioned by its technologies". It is difficult to assess the social and cultural implications of information technology because the field is so unstable" growth and change occur daily. Conditioning, rather than determining, implies that technology provides access to certain possibilities, that certain cultural or social options couldn't seriously be

contemplated without its presence" [...]. Rather than identifying 'impacts, he suggests that it is more informative to identify points of irreversibility "where technology forces us to commit ourselves".

Importantly, Lévy identifies acknowledges that use of technology is influenced both by collective imposition of technology choices, and, on the other hand, by lack of consciousness of available technology on the part of individuals. He identifies that the real "struggle to inflect our becoming occurs in "zones of indeterminacy" where designers, enthusiasts and entrepreneurs are creating in unpredictable and uncontrolled ways.

Lévy cautions that the growth of cyberspace does not automatically determine the development of collective intelligence. Rather he describes a number of phenomena also growing out of cyberspace:

- "cognitive isolation and overloading (the stress of communication and computer use
- dependence (addiction to the Web, or to games within virtual worlds)
- domination (reinforcement of decision and control centres, quasi-monopolistic control by economic powers of important network functions
- exploitation (instances of monitored telecommuting, or delocalization of activities in the Third world)
- collective stupidity (rumours, the conformity of the network and virtual communities, the accumulation of data devoid of information, "interactive television")"

Interestingly, Lévy also notes that "technological change results in suffering almost by necessity", even as it contributes to the creation of new planes of existence.

Cyberspace is fundamentally deterritorializing, whereas the modern state is based on the notion of territory, Thus, cyberspace can be used to circumvent territorially based laws of trade, information exchange and communication. Some governments therefore view cyberspace as a challenge to sovereignty and national security, while social groups are fighting to maintain cyberspace as a zone of victory for citizens against government power.

Liu, Y. (2002). What Does Research Say about the Nature of Computer-Mediated Communication: Task-Oriented, Social-Emotion-Oriented, or Both? *Electronic Journal of Sociology,* 6(1). http://www.sociology.org/content/vol006.001/liu.htm

This literature review indicates that computermediated communication (CMC) is both task- and socialemotion-oriented in nature. Specifically, this paper discusses, compares and contrasts several major aspects of these two research models. Results indicate that both models share similarities in the three areas of participants' methods, research and characteristics. Major differences between the two approaches occur in the areas of theoretical foundations, technology involved and experimental duration in research methodology and major findings. Suggestions for future CMC research are proposed in order to more clearly identify the nature of CMC environments.

Lovink, G. (2002). *Dark fiber: Tracking critical Internet culture.* Cambridge, MA: MIT Press.

Publisher's Abstract: According to media critic Geert Lovink, the Internet is being closed off by corporations

and governments intent on creating a business and information environment free of dissent. Calling himself a radical media pragmatist, Lovink envisions an Internet culture that goes beyond the engineering culture that spawned it to bring humanities, user groups, social movements, nongovernmental organizations (NGOs), artists, and cultural critics into the core of Internet development.

In "Dark Fiber, Lovink combines aesthetic and ethical concerns and issues of navigation and usability without ever losing sight of the cultural and economic agendas of those who control hardware, software, content, design, and delivery. He examines the unwarranted faith of the cyber-libertarians in the ability of market forces to create a decentralized, accessible communication system. He studies the inner dynamics of hackers' groups, Internet activists, and artists, seeking to understand the social laws of online life. Finally, he calls for the injection of political and economic competence into the community of freedom-loving cyber-citizens, to wrest the Internet from corporate and state control.

The topics include the erosion of email, bandwidth for all, the rise and fall of dot-com mania, techno- mysticism, sustainable social networks, the fight for a public Internet time standard, the strategies of Internet activists, mailing list culture, and collaborative text filtering. Stressing the importance of intercultural collaboration, Lovink includes reports from Albania, where NGOs and artists use new media to combat the country's poverty and isolation; from Taiwan, where the September 1999 earthquake highlighted the cultural politics of the Internet; and from Delhi, where a new media center explores free software, public access, and Hindi interfaces.

Luke, W. T. (1997). The Politics of Digital Inequality: Access, Capability and Distribution in Cyberspace. *New Political Science*, 41-42.

http://www.urbsoc.org/cyberpol/luke.shtml

ABSTRACT: What is the significance of the WorldWide Webs of power and wealth being spun today out along the Internet? How do these informatic networks operate as one of our most vital meaning systems through which we negotiate our shared understandings, conduct war, build our frameworks for peace, and engage in competitive commerce? The nature of the cultures we form, and our resulting network of social relationships, are increasingly shaped in this new virtual community. Since so much of our communication is conducted mostly over digital networks, many of our personal relationships with all of their cultural meanings are being reframed by the forms of "cybersubjectivity" in such networked "infostructures". More importantly, a politics of digital inequality is now surfacing here, and tough questions about very basic conditions of access, capability, and distribution in cyberspace need to be raised. This discussion is only the barest beginning, but it starts thinking through these issues by critically rereading some of the more optimistic rhetorics of transformation now coming from its digital devotees.

Luke writes "The Internet still is essentially a very Anglophone world in which IBM, Compaq, Digital, Apple, Hewlett Packard, Microsoft, or Oracle produce almost all of the hardware and software, and North American or European Telcos support most of the connectivity arrangements. ASCII implicitly sums up the digital planet at this time: it is one dominated by American Standard Codes for Information Exchange."

Macfadyen, L. P. (2003). International Education Online? A Report on Six Canadian Case Studies. Canadian Bureau for International Education,

Ottawa.

http://www.maple.ubc.ca/downloads/CBIEPhase_3_ Report.pdf

ABSTRACT: While the benefits of international education are beyond question, established international education (IE) activities remain beyond the reach of most Canadian Can information and communication technologies (ICTs) expand access to international education in a meaningful way? This report describes highlights of case studies of six diverse and innovative Canadian adventures with online IE: At the University of British Columbia, the online course Working in International Health' contributes to internationalization of the curriculum and prepares students for work in the developing world. Mount Royal College in Calgary leads an international 'Consortium on Design Education' online design challenge to introduce students to international and intercultural elements of design. At Ryerson University, integration of a "Virtual Law Firms" experiential online activity gives students first-hand experience of the world of international business law. The new 'University of the Arctic' makes use of ICTs to connect students from over 40 institutions in eight Arctic states. 'Introduction to Ethnomusicology' at the Université de Montréal demonstrates Québec's leadership of international ICT initiatives in the Francophone world, and challenges Canadian and African students to rethink their cultural perspectives on music. And the 'e-Learning for Business Innovation and Growth' project in Newfoundland and Labrador extends international learning to lifelong learners.

We report how these exciting new projects advance internationalization priorities for Canadian students and institutions, support international and intercultural learning, offer students increased access to IE and realworld learning, and also teach a range of professional skills. We discuss the challenges and lessons learned by developers of online IE projects, and describe important ways in which IE offices can support new ventures of this kind. These case studies demonstrate how participation in online IE activities also offer professional development and international learning to faculty, non-teaching staff and lifelong learners. Importantly, they exemplify the ways in which ICTs can help Canadian colleges and universities move away from old paradigms in which developed nations send their students and their 'knowledge' to the developing world, and instead create a new space for students and faculty to meet as equals.

Macfadyen, L. P., Chase, M., Reeder, K. & Roche, J. (2003). Matches and Mismatches in Intercultural Learning: Designing and Moderating an Online Intercultural Course. In *Proceedings, UNESCO Conference on International and Intercultural Education*, Jyvaskyla, Finland, June 2003.

A_{BSTRACT}: This paper explores communicative trends in an online, facilitated course for intercultural learners. We examine participation rates and communicative interactivity between culturally diverse learners, and find that participation rates differ by cultural grouping, by gender and by role, and that online interactions are dominated by facilitator-learner exchanges (rather than by peer-to-peer communications). Ongoing case study analysis will examine the ways that differences in facilitator

practices, the use of story, identity construction, and facilitator/learner expectations conspire to facilitate or hinder interaction and participation in the online culture of this e-learning environment.

Maitland, C. (1998). Global Diffusion of Interactive Networks: The Impact of Culture. In C. Ess & F. Sudweeks (Eds.), *Proceedings, Cultural Attitudes Towards Communication and Technology, 1998* (pp. 268-286). Australia: University of Sydney. http://www.it.murdoch.edu.au/~sudweeks/catac98/pdf/24_maitland.pdf

"Maitland collected data on Internet diffusion in different countries and uses Hofstede's five dimensions of national culture, enhanced by the work of Herbig and Hall, to develop five empirically-testable hypotheses regarding specific cultural dimensions and the diffusion of interactive networks. Conjoining sociology economics, Maitland argues that three of Hofstede's cultural factors may be indeterminate regarding network diffusion; that is, individualism vs. collectivism, femininity vs. masculinity, and long term vs. short term orientation. Maitland proposes that diffusion of network technologies will advance more rapidly in cultures marked by weak uncertainty avoidance (cultures in which "What is different is seen as curious, as opposed to dangerous."), greater aender equality, and low ethnocentrism/high cosmopoliteness (orientation outside the social system). In direct contrast to the prevailing emphasis on equality and decentralization in postmodern analyses of CMC and hypertext, however, Maitland further suggests that network diffusion will also be favored by cultures with high degrees of power distance (i.e., preference for centralization and an acceptance of inequalities in power and status)." (From

Ess, C. (1998) First Looks: CATaC '98. In C. Ess & F. Sudweeks (Eds.), *Proceedings, Cultural Attitudes Towards Communication and Technology, 1998* (pp. 1-17). Australia: University of Sydney.

http://www.it.murdoch.edu.au/catac/catac98/01_ess.pdf)

Malone, A. (1995). Orality and Communication on the Internet. *Working Papers in Linguistics*, 15, 57-76.

This study serves as an introduction to the whole range of 'speech' patterns that can be seen in written electronic communication. Section 2 provides a general survey of spoken and written features. These are then compared (in Section 3) to those found in computer-mediated discourse. The study describes the formatting and stylistic methods that electronic users employ to compensate for the paralinguistic and extralinguistic information still missing in the (new) written medium. It finds that a vast and resourceful array of CMC features exists to emulate most of the visual and verbal clues that are typically associated only with speech.

Mar, J. (2000). Online on Time: The Language of Internet Relay Chat. In D. Gibbs &. K.-L. Krause (Eds.) *Cyberlines. Languages and Cultures of the Internet.* (pp. 151-174). Albert Park, Australia: James Nicholas Publishers.

The author provides a critical analysis of the nature of language characterizing the interactions of synchronous computer-mediated communication (CMC). On the basis of a transcript downloaded from the Internet, she applies the theoretical framework of register theory to analyse its linguistic patterns in terms of field, tenor and mode. She identifies a range of linguistic differences between the synchronous

interactions of Internet Relay Chat rooms and other forms of communication and shows that this new and increasingly popular form of interaction is very different not only from CMC such as email, but also from other realtime speech activities such as face-to-face casual conversation.

Marcus, A. & Gould, E. W. (2000). Cultural Dimensions and Global Web User-Interface Design: What? So What? Now What? In *Proceedings of the 6th Conference on Human Factors and the Web in Austin, Texas, 19 June 2000.*

http://www.amanda.com/resources/hfweb2000/hfweb00.marcus.html

A_{BSTRACT}: This paper introduces dimensions of culture, as analyzed by Geert Hofstede in his classic study of cultures in organizations, and considers how they might affect user-interface designs. Examples from the Web illustrate the cultural dimensions.

The Web enables global distribution of products and services through Internet Websites, intranets, and extranets. Professional analysts and designers generally agree that well-designed user interfaces improve the performance and appeal of the Web, helping to convert "tourists" or "browsers" to "residents" and "customers." The user-interface development process focuses attention on understanding users and acknowledging demographic diversity. But in a global economy, these differences may reflect world-wide cultures. Companies that want to do international business on the web should consider the impact of culture on the understanding and use of Web-based communication, content, and tools. This paper contributes to the study of this complex and challenging issue by analyzing some of the needs, wants,

preferences, and expectations of different cultures through reference to a cross-cultural theory developed by Geert Hofstede.

Mason, R. D. (1998). *Globalising Education. Trends and Applications.* London: Routledge.

This book is a systematic and thoroughly researched study of how technologies have altered the delivery and reception of education. Mason examines how global education is actually delivered in practice, case studies which investigate current developments and applications in the USA, Europe, the UK and Australia, and conclusions drawn from the issues covered. She studies the huge impact of the World Wide Web on current educational practice, exploring the implications for students, teachers and the larger institutional framework, and provides an important overview of the current technology and the technologies to come.

Mavor, S. & Trayner, B. (2003). Exclusion in International Online Learning Communities. In S. Reisman, J. G. Flores & D. Edge (Eds.). *Electronic Learning Communities: Current Issues and Best Practices* (pp. 457-488). Greenwich, Connecticut: Information Age Publishing.

A_{BSTRACT}: Advances in communications technology have meant that some higher education institutions are now able to offer online courses to a wider audience of students from different parts of the world. However, the process of internationalizing online courses is more complex and more problematic than it may seem. In this chapter the authors question some of the assumptions underpinning teaching, learning, and the building of learning communities in international online courses.

They suggest that considerable care in course design and teaching is needed to avoid participant feelings of exclusion from these communities and the consequent risk of students giving up or failing to benefit fully from the course. Writing from the context of Portuguese higher education, they discuss the related issues of sociodiscursive practices of online learning, pedagogies for online learning communities, cultures and policies in higher education, and the choice of software for supporting online learning and international learning communities. The chapter concludes recommendations for designing and teaching online courses and for creating international online learning communities. The authors suggest that as international online courses grow in number, further research will be needed into international communication in online environments and the discoursal, socio-political/cultural and technological issues involved in building international learning communities.

McLoughlin, C. (1999). Culturally Responsive Technology Use: Developing an On-line Community of Learners. *British Journal of Educational Technology*, 30(3), 231-243.

A_{BSTRACT}: In tertiary contexts, Web-based instruction often appears to be tailored to the needs of a particular cultural group, recognizing the specific learning needs, preferences and styles of a single, perhaps homogeneous, group of learners. However, in designing instruction, there is typically a tension between the need to ensure flexibility and access to learners of "multiple cultures", while at the same time taking into account the need for localisation and a requirement to accommodate a particular set of learners' cognitive styles and preferences. Considering both the micro- and

macro-cultural levels of design is therefore essential if culturally appropriate design is to be achieved in Webbased instruction.

One of the limitations that has been recognised in striving towards culturally appropriate design is that current instructional design models do not fully contextualise the learning experience, themselves the product of a particular culture). A proposed solution is the adoption of a multiple cultures model of design, which is not culturally exclusive. This paper traces the development of an on-line unit for Indigenous Australian learners, and accounts for the cultural issues that impacted on the design of learning tasks and the associated avenues for communication provided to learners. In this context, culturally responsive design was ensured by the adoption of an epistemology and pedagogy based on Lave's (1991) community of practice model. Adapting the model to on-line delivery required incorporation of culture specific values, styles of learning and cognitive preferences, and tasks that were designed to go beyond surface level comprehension to achieve deep learning. The micro cultural level of the virtual community is considered in relation to participatory structures, task design, goal orientation and development of communicative processes that were intended to support the learning needs of a much wider group of Indigenous Australian students.

McLoughlin, C. & Oliver, R. (2000). Designing Learning Environments for Cultural Inclusivity: A Case Study of Indigenous Online Learning at Tertiary Level. *Australian Journal of Educational Technology*, 16(1), 58-72.

http://www.ascilite.org.au/ajet/ajet16/mcloughlin.html

ABSTRACT: In this paper the authors trace the design processes involved in the development of an online learning environment for indigenous Australian learners preparing to enter university, and account for the cultural issues that impacted on creation of learning tasks and styles of communication. The paper argues for cultural localisation, which means incorporating the local values, styles of learning and cognitive preferences of the target population. It also means going beyond surface level design considerations, to achieve culturally inclusive constructivist learning environments. Examples of tasks, activities and forms of online interaction are provided in the context of a bi- cultural model of learning that recognises diversity and different learning needs. It is recommended that when creating WWW-based course support sites for cultural inclusivity, systematic attention must be given to particular design guidelines, which include responsiveness to learner needs, community based learning and cultural contextualisation of learning activities.

Miah, A. (2000). Virtually Nothing: Re-Evaluating the Significance of Cyberspace. *Leisure Studies*, 19(3), 211-225.

A_{BSTRACT}: This paper provides a critical analysis of virtual environments made in recent leisure and cultural studies discussions, which claim virtual reality to be the

technotopia of postmodern society. Such positions describe virtual realities as worlds of infinite freedom. which transcend human subjectivity and in which identity becomes no longer burdened by the prejudices of persons. Arguing that cyberspace offers little more than a token gesture toward such liberation, the paper suggests a shift in focus from the power relations that might change or remain because of virtual environments, to an awareness of their implications for human beings. Such technologies as chat rooms, the Internet, and cyber-sex are used to illustrate the fundamental challenge of virtual leisure to the human condition. This human condition is often presumed to represent 'reality/actuality' and, as such, is said to be in contrast to virtual environments. However, this paper extends its critique of virtual reality by questioning such a distinction and arguing that new cyber-virtual reality is no more or no less than a sophistication of virtualness that has always reflected the human, embodied experience. Consequently, it is argued that cyberspace is more profound for its challenge to identity construction than for its emancipatory function.

Michaelson, K. L. (1996). Information, Community and Access. *Social Science Computer Review*, 14 (1), 57-59.

A_{BSTRACT}: Communication in cyberspace creates the possibility of forming communities of interest that can either compete with or reinforce communities in place. For some individuals, computer networks offer opportunities for greater participation in public life; for others, participation in on-line groups has the potential to diminish commitment to local communities. On-line communities contain unique forms of immediacy, asynchronicity, and anonymity that give them dynamics

not shared by communities based on physical presence and face-to-face interaction. These new forms of community, and the technological and cultural resources required for participation in them, have the potential for creating new forms of stratification and hence new barriers to universal access.

Mobley, M. & Wilson, M. (1998). Cultural Aspects of Internet Usage: A Preliminary Inquiry. *Educational Education Research and Development*, 46(3), 109-113.

Mobley and Wilson point out that previously, "analysis of factors that inhibit or contribute to the spread of the Internet has been focussed on telecommunications capabilities, network measurement and economic data". In this paper, they attempt to "draw attention to non-economic factors that enhance or discourage international adoption of the Internet, including cultural mores, religious convictions, literacy, gender traditions, class distinctions and social perceptions."

They ask: "What are the differences in the access and use of the Internet among different cultural groups? Are there any religious beliefs, social mores, ethical ramifications that affect the use of the Internet? How is technology generally perceived by members of [different] culture[s]? What are the differences in the access and use of the Internet among males and females? Do the various governments try to control the content or use of the Internet?"

In conclusion, they argue that "the diffusion of the Internet and the World Wide Web is not affected solely by economics. There are many different reasons why some areas of the world are integrating the Internet at a quicker pace than others" and offer a number of

illustrating examples.

Moeller, H.-G. (2002) The Revolutionary Insignificance of the Internet, Or: Why Neither Chinese Wall Newspapers Nor the Internet Make People Speak. In F. Sudweeks & C. Ess (Eds.). Proceedings, Cultural Attitudes Towards Technology and Communication, 2002, Université de Montréal, Canada. (pp. 195-209). Australia: Murdoch University.

ABSTRACT: This paper challenges the "revolutionary" significance" ascribed to new communications technologies by recent Internet theoreticians, namely the hope that it will "make people speak". It is shown how the current debate on "emancipatory potentials" of the net follows the patterns of a nearly thirty year old debate on mass media (between H. M. Enzensberger and J. Baudrillard) and that Internet optimism repeats the rhetoric of earlier mass media optimism. Internet communication is distinguished from Internet technology (which is part of the environment of communication, but not communication itself) and understood as being (largely) a part of mass communication. On the basis of the functioning of Chinese pre-electronic mass media, Maoist communication theory and Niklas Luhmann's system theory it is argued that mass communication does not only not "make people speak", but, on the contrary, reveals that people cannot speak at all.

Moore, M. (1996). Is There a Problem in Intercultural Distance Education? In *Internationalism in Distance Education: A Vision for Higher Education. ACSDE Research Monograph, 10.* Penn State Monograph Series, 187-193.

A_{BSTRACT}: In this paper the author argues that

distance educators need to reflect on the consequences of participating in international programs. Western educators export values along with educational content, often to the detriment of the international recipients. Problems relating to educational intervention include maintaining a balance between freedom and control and an uncritical propagation of consumerism and philistinism through the adoption of mass-media marketing technologies for educational delivery. Programs should be sensitive to the values of other cultures and designed to provide US students with the opportunity to listen to and learn from their foreign peers.

Morse, M. (1997). Virtually Female: Body and Code. In J. Terry & M. Calvert, (Eds.), *Processed Lives: Gender and Technology in Everyday Life*. London: Routledge.

Abstract: Considers challenges presented cyberspace to the feminist enterprise of working for social change. An initial challenge of this technology is the cultural discourse that associates femininity with technological ineptitude. Because technology has rarely been addressed to females, women have had a difficult time in becoming motivated to learn about and employ new technologies. A further challenge is the essentially gendered nature of cyberspace, a technological arena in which disembodiment is a key feature of its allure. Though these challenges exist, it is suggested that the present moment offers a unique opportunity for women to act on emerging notions and interpretations of virtual reality that, in the near future, will become hardened. A number of female-oriented domains in cyberspace are identified as capitalizing on this opportunity. It is concluded that for these efforts to succeed they must

cross cultural boundaries and oppositions to create new domains that include both technological haves and havenots.

Murray, D. E. (2000). Changing Technologies, Changing Literacy Communities? *Language Learning & Technology*, 4(2), 43-58. http://llt.msu.edu/vol4num2/murray/default.html

ABSTRACT: Many people who write about information technology draw a parallel between the introduction of the printing press in 15th century Europe and the introduction of the computer. The parallel is based on the notion that technological revolutions entail rapid and far-reaching social change that is the inevitable result of the introduction of a major new technology. In this view, changes in the technologies of literacy affect literacy practices and communities: The transformation from an oral culture to a literate one reshaped consciousness; the introduction of alphabetic writing in Ancient Greece transformed Greek thought; the invention of the printing press moved the power of scholar-priests to more democratic institutions and promoted individualism, nationalism, and secularism. Scholars thus claim that the introduction of the computer will inevitably result in a different social consciousness of what literacy is and how it functions in individuals and society. This common view does not reflect the realities of history. Technologies themselves did not cause changes such as the Reformation. Changes result from mutually influencing social and technological factors: New technologies like the printing press merely facilitated changes already beginning to take place.

Negretti, R. (1999). Web-based Activities and SLA: A Conversation Analysis Research Approach. Language Learning and Technology, 3(1), 75-87. http://llt.msu.edu/vol3num1/negretti/default.html

A_{BSTRACT}: Different Internet technologies foster the acquisition of different language skills. In the case of synchronous interaction tools, such as Webchat, the concern is to evaluate whether and how this communication context affects the process of acquiring a second language. A collection of Webchat interaction data among English non-native speakers (NNS) and native speakers (NS) is the basis for a microanalytic investigation conducted form a Conversation Analysis (CA) perspective. The main purpose is to discover patterns and conversational strategies used by participants in this on-line context.

A CA research approach was chosen since it investigates the machinery and the structure of social action in language, avoiding preformulated theoretic categories. This is important since CMC represents a new SLA context, forcing both NS and NNS to produce different structures and strategies. The study analyzes, in particular, whether Webchat implies a reduction of the range in interactional practices, actions performance, sense making, and meaning negotiation, thus affecting the SLA process. Finally, the researcher considers the reliability and validity of this type of qualitative research in this new technological area.

Using some research methodologies taken from CA literature, an analysis of the data focuses first on the overall structure of interaction and sequence organization in connection with the on-line communication setting features. It then passes to turn-taking organization, with attention to recurrent structures and patterns as in openings and closings; turn design

(or packaging of actions); expression of paralinguistic features in this on-line context; and some (interlanguage) pragmatic variables. The conclusion resolves the findings and underlines NNS versus NS behaviour, offering hypotheses about SLA through Webchat and synchronous CMC in general, encouraging further investigation.

Nishimura, Y. (2003). Linguistic Innovations and Interactional Features of Casual Online Communication in Japanese. *Journal of Computer-Mediated Communication*, 9(1). http://www.ascusc.org/jcmc/vol9/issue1/nishimura.h http://www.ascusc.org/jcmc/vol9/issue1/nishimura.h

A_{BSTRACT}: This study explores the linguistic and interactional properties of informal asynchronous computer-mediated communication (CMC) in Japanese. Using Bulletin Board Systems (BBS) messages as the primary source of data, the study identifies innovative uses of kanji, other scripts and punctuation, and examines the incorporation of such informal spoken features as final particles. Young Japanese BBS users are found to employ colloquial language online as if conversing offline, and interact appropriately with their fellow participants in their Internet community.

O'Dowd, R. (2003). Understanding the "Other Side": Intercultural Learning in a Spanish-English E-Mail Exchange. *Language Learning & Technology*, 7(2), 118-144. http://llt.msu.edu/vol7num2/odowd/

A_{BSTRACT}: Intercultural learning is often assumed to be an automatic benefit of e-mail exchanges between groups of learners in different countries, but little research exists on whether on-line intercultural collaboration does actually develop learners'

understanding of the other culture's perspective and world view. This paper reviews what recent literature suggests intercultural learning to involve and then reports on a year-long e-mail exchange between Spanish and English second year university language learners. Using the results of qualitative research, the paper identifies key characteristics of e-mail exchanges which helped to develop learners' intercultural communicative competence (Byram, 1997). It also outlines elements of e-mail messages that may enable students to develop successful intercultural relationships with their partners.

Onibere, E. A., Morgan, S., Busang, E. M. & Mpoeleng, D. (2001). Human-Computer Interface Design Issues for a Multi-cultural and Multi-lingual English Speaking Country — Botswana. *Interacting with Computers*, 13(4), 497-512.

A_{BSTRACT}: This paper reports on research carried out to determine whether a localized interface is preferred by users in a multi-cultural and multi-lingual country where a non-local language is nationally used. We attempted to discover whether local symbols are more acceptable to users as icons and also whether the current phrases used in menus and icon descriptions are clearly understood by the various communities.

A survey was conducted nation-wide among computer end-users in Botswana. The results indicate an overwhelming desire from users for a localized interface. However, there appears to be little need for localized icons and no agreement as to which language to use for text-based interfaces.

In conclusion, it appears from our findings that there is no need for localized icons. Perhaps as IT use expands beyond the office, more local culturally relevant

contexts will emerge to form the basis of icon design. More work needs to be done to establish whether users prefer to use their different local languages for text- based interfaces rather than any one particular local language. It would also be interesting to establish whether these findings transfer to other multi-cultural and multi-lingual English-speaking countries, since it may depend on how much the English (or American) culture has eroded the local cultures.

Orvell, M. (1998). Virtual Culture and the Logic of American Technology. Revue Française d'Etudes Americaines, 76, 12-27.

Orvell asks "Does virtual reality constitute a new epistemology a new way of knowing and experiencing the world, a break with previous models along the lines of Kuhn's revolutionary paradigm shifts? [...] Or is it part of a continuum reaching back at least to the last century? Is it a product of technological innovation made possible by the ever-increasing powers of the micro-computer? Or does it relate to cultural forms that are dispersed widely across the space of popular culture?" His main interest is in formulating a cultural frame or context for this supposedly new phenomenon - virtual reality - which would identify it as the most recent expression of a cultural drive that begins in the nineteenth century. Orvell argues that debates about postmodernity have 'evinced a kind of amnesia about the past', and claims that cyberspace and virtual reality technologies are essentially continuous with the Romantic imagination as it developed in the US in the 1830s and 40s. Indeed, he elaborates that 'the rhetoric of technology and the rhetoric of Romantic poetry are [...] virtually the same [...] both seem possessed by a similarly totalistic ambition, the urge to master the world

in the name of a ruling imagination'. Orvell uses examples from American literature and poetry to illustrate how the 'triumph of the Romantic imagination' is one of disembodiment. He goes on to describe the ways in which sequential technological and communications innovations have promoted new modes of 'virtual reality' – viewed as utopian and dystopian by different camps.

Palfreyman, D. & al Khalil, M. (2003). "A Funky Language for Teenzz to Use": Representing Gulf Arabic in Instant Messaging. *Journal of Computer-Mediated Communication*, 9(1). http://www.ascusc.org/jcmc/vol9/issue1/palfreyman.html

A_{BSTRACT}: Computer-mediated communication (CMC) users writing in Arabic often represent Arabic in 'ASCIIized' form, using the Latin alphabet rather than the Arabic alphabet normally used in other contexts (Warschauer, El Said, & Zohry, 2002). Analyzing ASCII- ized Arabic (AA) can give insights into ways in which CMC is shaped by linguistic, technological and social factors. This paper presents a study of AA as used among female university students in the United Arab Emirates, drawing on data from a small corpus of instant messenger (IM) conversations, and from an e- mail survey of users' experience with this form of writing. The AA in the conversations was found to show influences from computer character sets, from different varieties of spoken Arabic, from Arabic script, from English orthography and from other Latinized forms of Arabic used in contexts which pre-date CMC. Users have developed creative (but variable) solutions to the constraints involved, but the purposes of AA use also extend for social reasons to situations where technical

constraints do not apply.

Panyametheekul, S. & Herring, S. C. (2003). Gender and Turn Allocation in a Thai Chat Room. *Journal of Computer-Mediated Communication*, 9(1). http://www.ascusc.org/jcmc/vol9/issue1/panya_herring.html

ABSTRACT: This paper analyzes gender in relation to turn allocation in a popular Thai chat room on the World Wide Web. We analyze turn-taking and response patterns in light of Sacks, Schegloff and Jefferson's (1974) model of turn allocation in face-to-face conversation, taking into consideration the independent variable of participant gender. We also analyze use of, and responses to, flirtation in the chat room. Our results show that females participate more often and receive a higher rate of response from both females and males. Males, who are in the minority, must work harder to take the floor, even in their attempted flirtatious interactions. These results suggest that gender interacts with culture online in complex ways: Contrary to previous findings on gender in chat rooms, and contrary to culturally-based expectations about the subordinate status of Thai women, females appear to be relatively empowered in the Thai chat room studied here, as assessed through turn allocation patterns.

Paolillo, J. (1999). The Virtual Speech Community: Social Network and Language Variation on IRC. Journal of Computer-Mediated Communication, 4 (4). http://www.ascusc.org/jcmc/vol4/issue4/paolillo.htm

A_{BSTRACT}: Many scholars anticipate that online interaction will have a long-term effect on the evolution

of language, but little linguistic research yet addresses this question directly. In sociolinguistics, social network relations are recognized as the principal vehicle of language change. In this paper, I develop a social network approach to online language variation and change through qualitative and quantitative analysis of logfiles of Internet Relay Chat interaction. The analysis reveals a highly structured relationship between participants' social positions on a channel and the linguistic variants they use. The emerging sociolinguistic relationship is more complex than what is predicted by current sociolinguistic theory for offline interaction, suggesting that sociolinguistic investigation of online interaction, where more detailed and fine-grained information about social contacts can be obtained, may offer unique contributions to the study of language variation and change.

Pargman, D. (1998). Reflections on Cultural Bias and Adaptation. In C. Ess & F. Sudweeks (Eds.), Proceedings, Cultural Attitudes Towards Communication and Technology, 1998 (p81). Australia: University of Sydney. http://www.it.murdoch.edu.au/catac/catac98/pdf/06_pargman.pdf

A_{BSTRACT}: SvenskMUD is an Internet-accessible Multi-User Domain (MUD) System. But, in contrast to 99% of all Internet-accessible MUDs, SvenskMUD is not a global community. SvenskMud is instead the first vernacular (i.e. non-English speaking) MUD in the world, and the only Swedish-speaking MUD in Sweden today. This paper problematizes four questions regarding cultural attitudes and their relation to CMC technologies. Moving from the historical and the general to the present and the specific I will in turn

discuss the following questions: (1) how have American cultural attitudes (historically) shaped the development and use of CMC technologies? (2) how do cultural attitudes (today) shape the implementation and use of CMC technologies? (3) how do cultural attitudes manifest themselves in the implementation and use of MUDs? (4) how do cultural attitudes manifest themselves in the implementation and use of SvenskMud?

Ess writes: "Pargman identifies important ways in which cultural biases are 'built in' to computer systems and the Internet...and then identifies representative interactions between social practices and technological artifacts in the "social-technical design cycle". Pargman then provides a fine-grained analysis of the multiple cultures to be considered in thinking about culture and technology - Swedish culture, youth culture, hacker culture, fantasy culture and CMC culture generally. Pargman's paper provides a specific instance of a non-English implementation of a significant CMC technology as it also reminds us that 'culture' is not a hermeticallysealed category, but a series of interweaving flows of diverse beliefs, values and behaviours." (From Ess, C. (1998) First Looks: CATaC '98. In C. Ess & F. Sudweeks Proceedings, Cultural Attitudes (Eds.), Towards Communication and Technology, 1998 (pp. 1- 17). Australia: University of Sydney. http://www.it.murdoch.edu.au/catac/catac98/01 ess.pdf)

Piecowye, J. (2002) Habitus in Transition? In F. Sudweeks & C. Ess (Eds.). *Proceedings, Cultural Attitudes Towards Technology and Communication, 2002, Université de Montréal, Canada.* (pp. 375-382). Australia: Murdoch University.

ABSTRACT: This short paper considers the impact of

computer-mediated communication on the culture of the United Arab Emirates. It asks: if the very culture of the nation is being recast through the use of computer-mediated communication, then to what extent is CMC influencing the personal decision making process of those CMC users? The question is addressed in part through an examination of the use of CMC and particularly as exemplified through email among a group of female university students in the UAE.

Pincas, A. (2001). Culture, Cognition and Communication in Global Education. *Distance Education*, 22(1), 30-51.

A_{BSTRACT}: This paper is intended to provoke discussion of the complexities brought about by differences in pedagogic and linguistic cultures and the hidden international problems that globalisation of education therefore creates. Worldwide students encounter discourse problems rather than simple language difficulties. Yet their learning is judged by English-Western norms giving high value to criticality as well as "standard English". It is argued that when online global higher education addresses these multi-cultural issues it needs to include re-examination of related fundamental presumptions.

Porter, D. (Ed.). (1997). *Internet Culture.* New York: Routledge.

Porter writes: "the culture that the Net embodies [...] is a product of the peculiar conditions of virtual acquaintance that prevail online, a collective adaptation to the high frequency of anonymous, experimental, and even fleeting encounters...correspondents in cyberspace, after all, have no bodies, no faces, no histories beyond what they choose to reveal. There are

no vocal inflections, no signatures, no gestures or embraces. There are words, but they often seem words stripped of context, words desperately burdened by the lack of the other familiar markers of identity in this strange ethereal realm...the experience of ambiguity and misreading is bound to be less an exception than the norm. It is the collective response to this experience of ambiguity, the gradual process of adaptation to the semiotic universe of free-floating electronic alibis that constitutes the unique culture of the Internet...Whether what comes out of all this virtual talk can be properly termed "community" is a complicated question that a number of [essays in this volume] address. There is no doubt, however, that such interactions when sustained, can give rise to a unique and intriguing form of social space, and one that will continue to provoke reassessments of the fundamental nature of "community" itself".

"The defining interaction of Internet culture lies not in the interface between the user and the computer, but rather in that between the user and the collective imagination of the vast virtual audience to whom one submits an endless succession of enticing, exasperating, evocative figments of one's being [...]. One can find on the Internet established conventions of self-presentation and argument, widely shared systems of value and belief, complete lexicons of gestural symbols to convey nuances of personal style, and modified standards of social decorum that facilitate easy interactions with strangers."

"The essays are grouped into four sections corresponding roughly to...the four primary sites of cultural production and adaptation that they represent: virtual communities, virtual bodies, language, writing and rhetoric; and politics and the public sphere...The collective aim of the contributors is to interrogate both

the sustaining myths and rituals of existing virtual worlds and the implications of the on-going mass migration onto the electronic frontier, and perhaps also, finally, to provoke freshly informed reconsiderations of the more familiar landscapes left behind. Virtuality has infused the reality of millions; the hybrid culture which they now inhabit is the subject of this book."

Poster, M. (1998). Virtual Ethnicity: Tribal Identity in an Age of Global Communications. In S. Jones (Ed.) CyberSociety 2.0: Revisiting Computer-Mediated Communication and Community (pp. 184-211). Newbury Park, CA: Sage.

"Poster discusses "the fate of ethnicity in an age of virtual presence". His answer: users can create ethnicity online, but the place of communication will restrict one's choices. Within MOOs, for example, users can portray ethnicity with virtual people-icons, names, and even voices. But through email, where choices are limited, there are no absolute barriers to presenting ethnicity. Poster's essay is helpful in understanding this important topic, but it lacks examples that could strengthen it. He does not satisfactorily explore, furthermore, tribal or communal identity that the title of his essay embraces." (From an online summary by T. S. Frobish http://acjournal.org/holdings/vol2/Iss3/reviews/frobish.htm).

Poster, M. (2000). The Digital Culture and its Intellectuals: From Television, to Tape, to the Internet. Berlin: Freie Universität.

Poster characterizes the Internet as 'a decentralized system of global exchange of cultural objects at almost no cost; a time-space, human-machine assemblage that is distinct from print'. In this essay, he traces the impact

on Western (specifically, American) culture of new technologies through the twentieth century, and how cultural theorists theorized their impact on 'modern' society. Poster argues that the 'machines' of media, beginning with television 'reconfigure the basic constituents of culture - the relation of body to mind, human to non-human, space and time, subject and object'. Critically, new technologies fostered a 'massive decentralization of information, putting into the hands of the ordinary individual the ability to produce copies of cultural objects', promoting a culture of individualist subjectivity; it is even argued that 'top-down' planned societies such as that of the former Soviet Union could not endure such decentralized information flows, and that new technologies therefore contributed to the collapse of the communist states of Eastern Europe.

In particular, Poster argues that in addition to allowing 'virtual presence, remote presence, remote speech and 'extending the ears and eyes to distant locations', Internet technologies actually installed 'a new kind of space': a 'second order of culture, one apart from the synchronous exchange of symbols and sounds between people in territorial space'. The Internet is the first medium to offer cultural objects everywhere and at any time, in a way that is beyond the control by the institutions of nation-state and corporation. The virtual order of cyberspace, claims Poster, 'brings into proximity distant locations and implodes into instantaneity sequential events. The longterm cultural consequences of this innovation must be devastation for the modern'. His only caveat is that 'no technology results in automatic consequences'. The paradox as viewed by Poster is that users of the Internet are at one and the same time empowered (Internet as tool) and fragmented (by participating in a nonhierarchical nonlocal non-centralized network phenomenon).

Poster, M. (2001). What's the Matter with the Internet? Minneapolis: University of Minnesota Press.

Like a number of other commentators, Poster illustrates in this dense book the way that responses to the impact of the Internet on culture and society tend towards the extremes: hopeful or pessimistic. While detractors worry that the Internet undermines community, inhibits social interaction, exacerbates economic and racial divisions and facilitates greater state and corporate intrusion into our lives, enthusiasts rave about the transformative qualities of the new medium, its potential to stimulate creativity, inspire new social forms and further democratization.

Poster focusses on questions of identity and nationality, and explores the concept of "virtual ethnicity". He asks: "Is there a new form of planetary culture alongside existing ones that appears in the 'space' of electronic communications? [...] Can there be a form of culture that is not bound to the surface of the globe, attaching human beings to its particular configurations with the weight of gravity, inscribing their bodies with its rituals and customs, interpellating their selves with the force of traditions and political hierarchies? [...] is virtual ethnicity a transgression of essentialism in all its forms. including that of Western rationalism? [...] What is the fate of ethnicity in an age of virtual presence?". Citing examples, Poster highlights the angst and optimism surround the particular impact of the Internet on ethnicity: cyberspace as a destructive mass market for cultural artifacts and traditions, removing 'ownership' of culture from ethnic groups? Or cyberspace as global village, promoting global harmony and site for universal recognition. Interestingly, Poster draws parallels between the

possibility for virtual ethnicities and historic examples of ethnicities that have survived in the absence of a 'grounded space' such as Jewish ness. In conclusion, Poster makes connections to Lévy's concept of the Internet as "collective intelligence" – one in which identity (and thus ethnicity) is a temporary fluid link to a process of creation. 'Linked to continuously shifting global processes of textual, graphic and aural formations, individuals in cyberspace cannot attach to objects in the fixed shapes of historic ethnicity'.

Poster argues that the Internet demands a social and cultural theory appropriate to the specific qualities of cyberspace, and reformulates here the ideas of postmodern thinkers (Foucault, Deleuze, Heidegger, Baudrillard and Derrida) to account for and illuminate the 'virtual world'.

Postma, L. (2000). A Theoretical Argumentation and Evaluation of South African Learners' Orientation Towards and Perceptions of the Empowering Use of Information. In F. Sudweeks & C. Ess (Eds.). Proceedings, Cultural Attitudes Towards Technology and Communication, 2000. (pp. 327- 340). Australia: Murdoch University.

A_{BSTRACT}: This paper attempts to illustrate how African learners orient themselves towards information in a traditional pre-computerized learning environment. The data which the interviews yielded were interpreted against the framework of critical theory. The critical objective of the paper is to show that the disempowering elements in learning through years of the acquisition of Western knowledge presentation might again be replicated in another form, namely that of computer- mediated learning or communication. The paper illustrates that young African learners are situationally

and not critically empowered by information as presented in the current form by institutions of learning, like the formal school and the information centre. It is the researcher's assumption that the African learner's accommodation to the context and the forms of information transfer inhibits an authentic development of ways of learning and critical knowledge construction: African learners find themselves in more than one respect in relations, which are alienating themselves as learners from their own authentic ways of knowledge making. The interaction with and orientation to the contexts, which mediate and present information, might not be an empowering experience. The paper wants to contribute to the formulation of program design for computer-mediated communication. It conceptualizes a learning environment with a new culture, which is based on the learning elements of social constructivist theory and the communal principles of "Gemeinschaft" in a postmodern era. It also wants to indicate to learning program designers how to facilitate conscientization and the empowerment of African learners in their interaction with information. In reaching this a community of critical information users and authentic knowledge constructors might be created.

Rahmati, N. (2000). The Impact of Cultural Values on Computer-Mediated Group Work. In F. Sudweeks & C. Ess (Eds.). *Proceedings, Cultural Attitudes Towards Technology and Communication, 2000.* (pp. 257-274). Australia: Murdoch University.

A_{BSTRACT}: This study explored the cultural value referred to by the decision-making groups in Group Support Systems (GSS) supported environments. Groups from Australia and Malaysia participated in a series of GSS supported experiments using an

unstructured task. There were four to five members in each group. Qualitative analysis of their comments showed that there were differences between groups from the two national cultures in the values they referred to in decision making process and further differences between the groups when they moves from ordinary groupwork to computer supported groupwork. In addition these differences were not alike for the groups from the two nations. The paper concludes with some pointers drawn from the study to the design of future computer supported groupwork systems.

Reeder, K., Macfadyen, L. P., Roche, J. & Chase, M. (2004). Negotiating Culture in Cyberspace: Participation Patterns and Problematics. *In preparation*.

ABSTRACT: In this paper we report findings of a multidisciplinary study of online participation by culturally diverse participants in a distance adult education course offered in Canada, and examine in detail three of the study's early findings. First, we explore both the historical and cultural origins of "cyberculture values" as manifested in our findings, using the notions of explicit and implicit enforcement of those values. Second, we examine the notion of "cultural gaps" between participants in the course and the potential consequences for online communication successes and difficulties. Third, the analysis describes variations in participation frequency as a function of cultural groups in our data. We interpret these patterns in the light of cross-disciplinary theories from Sociolinguistics, Applied Linguistics, Genre and Literacy Theory and Aboriginal Education. We identify the need for additional research, primarily in the form of larger scale comparisons across cultural groups of patterns of participation and

interaction, but also in the form of case studies that can be submitted to microanalyses of the form as well as the content of communicator's participation and interaction online.

Rey, L. (1998). Attitudes Towards Technology and Communications Across the Multiple Cultures of Switzerland. In C. Ess & F. Sudweeks (Eds.), Proceedings, Cultural Attitudes Towards Communication and Technology, 1998 (p.185). Australia: University of Sydney. http://www.it.murdoch.edu.au/catac/catac98/pdf/13_rey.pdf

Rey focuses on Switzerland, which enjoys the 'luxury' of no less than four official national languages. This 'multiculturality' within a narrow space, however, is not often exploited fully, so as to enliven and enrich national discussions and debates. More often than not the public remains focused within its own language domain; facility in more than one language is the exception rather than the rule. It is hence little surprise that linguistic boundaries are at once cultural boundaries. This is often apparent in national elections; differences of opinion run along linguistic boundaries. The different linguistic communities also distinguish themselves one from another in their daily routines. Rey proposes a few differences can be ascertained in the communication of German- and French-speaking Switzerland. On the basis of a small study of letters to the editor, delivered via e-mail to various newspapers in German- and French-speaking domains, Rey develops some empirically grounded hypotheses concerning the different uses of electronic communication in German- and French-speaking Switzerland. (From Ess, C. (1998) First Looks: CATaC '98. In C. Ess & F.

Sudweeks (Eds.), *Proceedings, Cultural Attitudes Towards Communication and Technology, 1998* (pp. 1-17). Australia: University of Sydney.

Rheingold, H. (2000). The Virtual Community: Homesteading on the Electronic Frontier. Boston: MIT Press. http://www.well.com/user/hlr/vcbook/

"This groundbreaking classic explores the entire virtual community, beginning with a selective but probing look at the author's original online home, The Well...But the bulk of the material relates to how individuals interact online much as they do in a face-to- face community.

Rheingold speaks to how both friendships and enmities are formed online and how people come together to support each other through misfortune. He gives the example of how computer-moderated communication enabled members of one Well community to send vital medical aid to a friend hospitalized halfway around the world. Rheingold goes on to show how communities can form by various electronic communication methods, using the conferencing system of The Well as one example. He also examines how people interact through mailing lists, live chat, and the fantasy cyberenvironments of online role-playing games. In the process, he questions what kind of relationships can really be formed in a medium where people can change their apparent identity at will.

This book questions whether a distinction between "virtual" communities and "real-life" communities is entirely valid. The Virtual Community argues that real relationships happen and real communities develop when people communicate upon virtual common ground. Rheingold also shares his far-reaching knowledge of how technology effects our social

constructs. If you are involved in an online community, here is your cultural heritage." (From an online review by Amazon.com).

Ribeiro, G. L. (1995) On the Internet and the Emergence of an Imagined Transnational Community. *Sociedad e Estado*, 10(1), 181-191.

A_{BSTRACT}: Many processes cooperate in the formation of a transnational condition. But the main symbolic basis for the emergence of an imagined transnational community, or rather, of a virtual transnational community, is the global network of computers. Benedict Anderson (1991) can demonstrate, retrospectively, the importance of a literary capitalism for the creation of an imagined community that would evolve into a nation. It is suggested here that electronic capitalism is the necessary environment for the development of a transnation. Considering the internal characteristics of the virtual transnational community, such ideas as cyberculture, virtual class, and computer English as a Creole of the global system are explored in order to debate the implications of transnationality on culture, language, and power.

Richards, C. (1998). Computer-Mediated
Communications and the Connection between
Virtual Utopias and Actual Realities. In C. Ess & F.
Sudweeks (Eds.), Proceedings, Cultural Attitudes
Towards Communication and Technology, 1998 (pp.
173-184). Australia: University of Sydney.
http://www.it.murdoch.edu.au/catac/catac98/pdf/12
richards.pdf

"Richards approaches cyberspace through the genre of analysis defined by utopian and dystopian poles, so as to ask "how emergent notions of virtual

utopia are related to the utopian functions of cultures generally." This calls into question, especially, the issues surrounding embodiment ...; that is, are utopias envisioned for embodied human beings in 'real life,' face-to-face (embodied) communities entirely relevant to the virtual utopias made possible for disembodied entities in cyberspace? Richards further takes up two well-known postmodernist analyses of communication in cyberspace Baudrillard's more pessimistic and dvstopian perspective vis-à-vis Sherry Turkle's more noncommittal, ambivalent position - and argues that Paul Ricoeur's reader-response theory offers a more fruitful framework for helping us distinguish between the use and abuse of utopian rhetoric in efforts to understand the new communicative possibilities of cyberspace." (From (1998) First Looks: CATaC '98. In C. Ess & F. Sudweeks (Eds.), Proceedings, Cultural Attitudes Towards Communication and Technology, 1998 (pp. University 1-17). Australia: of Sydney. http://www.it.murdoch.edu.au/catac/catac98/01 ess.pdf)

Richards, C. (2000). Hypermedia, Internet Communication, and the Challenge of Redefining Literacy in the Electronic Age. *Language, Learning & Technology*, 4(2), 59-77. http://llt.msu.edu/vol4num2/richards/default.html

A_{BSTRACT}: This paper argues that the dominant hypermedia models of electronic literacy are too limited to do justice to new media and changing views of literacy in the electronic age, especially in terms of their recourse to postmodern theories of representation. Such models tend to interpret the use of digital media in relation to readers or users of information viewed as producers or constructors of their own meaning and

identity. Such a perspective on the move from print to electronic literacy generally does not distinguish between the literal intention of an author or designer and a rhetorical strategy which frames and elicits responses by an audience or the "receivers" of communication, in short, a view of electronic media as ultimately a source of contingent or accidental meaning and discrete texts of information. A critique will be made of the limitations and contradictions of a general hypermedia perspective as a basis for engaging with and going beyond – not rejecting or denying – the often innovative and useful contributions of hypermedia theorists to seek a more integrated, relevant, and grounded theory of electronic literacy in terms of a communications approach. This article thus attempts to practice as well as reflect the kind of "dialogical" approach to knowledge and human interaction advocated by Ricoeur when, for instance, challenging Derrida's poststructuralist delineation of writing and speaking as separate systems communication – Derrida being one of the key references for a general hypermedia perspective. On this basis, it suggests that a "rhetoric of design" is perhaps a missing link providing a convergent focus for developing further an inclusive framework of electronic literacy which incorporates Internet communication as well as hypertext and interactive multimedia.

Richter, R. (1998). Intercultural Learning via the Internet? *Zeitschrift für Interkulturellen Fremdsprachenunterricht*, 3(2). http://www.ualberta.ca/~german/ejournal/richter1.ht m

This paper explores new ways of incorporating the WWW into Foreign Language teaching. The author

focuses on the use of the Internet in the field of intercultural learning. She argues that a successful and longterm integration of the Internet in this area will only be possible if teachers and learners use it for cooperative ways of interacting rather than as a tool to manifest differences between the learners and teachers of the different cultures involved.

Roche, J. (2001). Interkulturelle Sprachdidaktik – Eine Einführung. (Intercultural Language Teaching – An Introduction). Tübingen: Gunter Narr Verlag.

This work offers an introduction to the teaching of language and culture in an intercultural context. It illuminates various facets of the relationship between language and culture during the processes of foreign and second language acquisition and language teaching, and the author presents and discusses the theoretical framework of intercultural communication from a linguistic, psycholinguistic. hermeneutical pedagogical/methodological perspective. The book not only provides a comprehensive overview of research in the field but also develops a new framework for the teaching and learning of languages in an intercultural context. In addition, it contains a section on practical aids to language learning and teaching, a chapter on media in language acquisition and a vast bibliography of relevant literature far exceeding literature in the English language.

Roche, J. (2004). Making a Case for Interactive Texts in Language Learning and Teaching: The Role of Hyperfiction in Developing New Literacies. Proceedings, *ReCALL Journal*, 16(1). *In Press.*

A_{BSTRACT}: This article briefly discusses the notion of hyperfiction in the context of hypertext, text and reading

processes, emphasizes pedagogical benefits of using hyperfiction in teaching language and culture, presents an exemplary hyperfiction chapter in a new e- programme for the learning of German (uni-deutsch.de) and gives a brief outlook on future research on the subject. Roche argues that it would be more appropriate to focus on the processes of reading than on the outer structure of hypertext itself in order to get a sense of hypertext's textual innovation potential. For that purpose one ought to look at the central elements of reading processes, that is, how coherence is generated and progresses in the process of reading. When a writer writes a text, he or she will project his or her own sense of coherence on the text. This will be expressed by various structural, semantic and pragmatic means. The essential difference to traditional texts is thus that in hypertexts, such as hyperfiction, the author produces various coherent paths through the text, usually by relying on a structure which allows the reader various combinations of text modules. Nevertheless, the task of making sense out of such modules and/or the inherent strands hidden by the author rests with the reader anyway. When tackling this task of generating coherence the reader operates on two levels: he/she analyses and combines recurrent elements (on the horizontal level) by using textual, linguistic and metalinguistic clues (e.g. pronouns, synonyms). Those associative recurrences are constructed either by going backwards or forward in a text. In a similar bi-directional way the reader has to achieve a hierarchical integration of concepts, references, themes and other semantic clues. In hypertexts those tasks are comparatively speaking more demanding on a reader as the level of incompleteness and thus uncertainty is usually higher, and even more so in fictional texts. It is perhaps the degree of required inferences that distinguishes

hypertexts from traditional texts the most.

Ruhleder, K. (1995) 'Pulling Down' Books vs. 'Pulling Up' Files: Textual Databanks and the Changing Culture of Classical Scholarship. In S. L. Star (Ed.). *The Cultures of Computing*. Oxford: Blackwell.

A_{BSTRACT}: The culture of classical scholarship is changing as traditional paper-based materials are being repackaged in electronic form. This paper investigates the changes effected by a Greek textual databank, the Thesaurus Linguae Graecae (TLG). The TLG changes the textual landscape, making available to scholars texts previously accessible with difficulty - or not at all. At the the traditional relationship same time, it changes between scholar and text. 'Knowing' a text is replaced by knowing how to construct search algorithms. Critical notes, repositories of centuries of expertise, are decoupled from source materials. And new forms of technical expertise are becoming necessary in order to exploit domain expertise. The questions raised by classicists' use of textual databanks concern all communities which move from 'pulling down' books to 'pulling up' files.

Runkehl, J., Schlobinski, P. & Siever, T. (1998). Language and Communication on the Internet. *Muttersprache*, 108(2), 97-109.

A_{BSTRACT}: After a brief introduction to the technical aspects of the Internet, the communication forms afforded by the medium are described: e-mail, newsgroups (Net News Transfer Protocol [NNTP]), Telnet (e.g., Online Public Access Catalog [OPAC]), File Transfer Protocol (FTP), World Wide Web (WWW), magazine reading, and chatting/lurking. Language

usage changes resulting from Internet communication, in particular e-mail and chatting, are examined, and the fusion of oral and written code features and verbal and nonverbal elements is illustrated. The stylistic mix of Internet communication is discussed.

Russell, G. & Russell, N. (1999). Cyberspace and School Education. *Westminster Studies in Education*, 22. 7-17.

ABSTRACT: The increasing importance of the Internet, and the ways in which students and educators react to Internet-related environments prompts consideration of the nature of this new teaching, learning and cultural environment for schools. The Internet and other interactive on-line computer-based applications are related to concepts of cyberspace. Educational cyberspace is defined as a cognitive computeraccessible space which can be differentiated from those spaces which are associated with the use of print and electronic media. The origins of cyberspace, based on the works of William Gibson, are discussed in this paper, and the related aspects, including on-line and off- line hypertextuality and asynchronous cyberspace. communication are explored in order to develop a framework (or mapping) of future educational cyberspace developments. It is concluded that an understanding of perceptions of educational cyberspace will become increasingly important for teachers as students continue to immerse themselves in both educational and recreational users of the Internet.

Rutter, J. & Smith, G. (1998). Addressivity and Sociability in 'Celtic Men'. In C. Ess & F. Sudweeks (Eds.), *Proceedings, Cultural Attitudes Towards Communication and Technology, 1998* (pp. 196-201). Australia: University of Sydney.

http://www.it.murdoch.edu.au/catac/catac98/pdf/16 rutter.pdf

"Rutter and Smith take up 'Celtic Men,' a newsgroup originally specific to Shetland Isles (UK), as a both specific, culturally located example of developing communication and a more general example of newsgroup CMC. Their research explores how posters present themselves as agents with distinct identities and personas, and how this occurs within the frame of sociable interaction, specifically, the use of addressivity techniques to secure different 'footings' (drawing on the work of Goffman). Because their example is an on-line community originally developed out of - and still sustained by – a relatively isolated, close-knit community, this example may be suggestive for how CMC technologies both fray and preserve real-life cultural identities." (From Ess, C. (1998) First Looks: CATaC '98. In C. Ess & F. Sudweeks (Eds.), Proceedings Cultural Towards Communication Attitudes Technology, 1998 (pp. 1-17). Australia: University of Sydney.

http://www.it.murdoch.edu.au/catac/catac98/01 ess.pdf)

Sampaio, A. & Aragon, J. (1997). 'To Boldly Go (Where No Man Has Gone Before)': Women and Politics in Cyberspace. *New Political Science*, 41- 42,145-167.

A_{BSTRACT}: Examines competing perspectives on new technologies, paying particular attention to the interpretations of language offered by poststructuralists

as well as variant strands of feminism. In borrowing from these theories, an attempt is made to spell out implications of new technologies for the lives of women, especially the manner in which they construct new language systems, new subject positions, and ultimately new political practices. It is maintained that cyberspace communication challenges traditional concepts of language and, by extension, traditional constructions of historical agents as masculine and rational actors. In its place, these new technologies provide a context for more fluid formations of language that themselves are largely void of many of the cultural indicators (e.g., age, race, sex, or physical appearance) that have constricted women's expression. Ultimately, optimism is expressed about the opportunities that cyberspace creates for women users and feminist politics in general; however, limitations to these opportunities are also evident. Also discussed are how questions of authenticity and ownership of information, which are necessary attendants of cyberspace anonymity, have mitigated against communication between and by women.

Savicki, V., Lingenfelter, D. & Kelley, M. (2002). Gender, Language Style, and Group Composition in Internet Discussion Groups. *Journal of Computer-Mediated Communication*, 7(2). http://www.ascusc.org/jcmc/vol2/issue3/savicki.htm

A_{BSTRACT}: This study focuses on group gender composition and the seeming relatedness between gender roles and group process functions described as task and maintenance, as found on the Internet. The sample was drawn from randomly selected set of 27 online discussion groups from both the Internet and from commercial information services (e.g.

Compuserve) using the ProjectH dataset. The 2692 valid messages were coded for language content (fact, apology, first person flaming, status, etc.) that has been related to gender role in other research. Each message was also coded regarding the gender of its author. Results held with the conventional impression that men far outnumber women as participants in online discussion groups. However, results were mixed in regard to the relation of language patterns and group gender composition. Gender composition was related to patterns of computer-mediated communication in this context. However, there were an unexpectedly high proportion of participants of indeterminate gender in this dataset, it is difficult to test the hypotheses with precision. However, the sample is comprised of "real-life" groups, so what is lost in experimental control is compensated for in generalization to other uncontrolled settings.

Schlickau, S. (2003). New Media in Teaching Languages and Cultures. Professorial Dissertation, Ludwig-Maximilians-Universität, Munich. (In press)

A_{BSTRACT}: This dissertation focuses on a variety of opportunities that may arise from the application of new media in foreign language learning. Traditional language learning programs, the World Wide Web as a resource of information and new forms of media-based communication are all discussed from an intercultural perspective.

The description of learning potentialities of the WWW begins with a discussion of hypertexts as a specific text type and an analysis of prerequisites that must be met by the learners to make use of them. Using annual reports and commercials of German and British enterprises as examples of the WWW's multimedial

dimension, it is shown how text types and patterns of action differ between these cultures, and illustrations are given of how emerging questions about differences can be answered on the basis of additional internet inquiries so that transcultural understanding may gradually increase.

Another focal point of this dissertation is the use of video conferences as an opportunity for synchronic communication with members of the target culture – and one that can even be systematically integrated into institutional teaching. On the basis of empirical video conferences between German and US-American students, it is shown which dimensions of communication cause the most problems in intercultural understanding – dimensions often neglected in traditional language teaching. Research in corresponding seminars proves that communicative practice alone does not lead to an efficient development of intercultural competencies. It must be enriched with cognitive methods that bring forward linguistic and cultural awareness.

Shields, R. (Ed.). (1996). *Cultures of Internet: Virtual Spaces, Real Histories, and Living Bodies.* London: Sage Publications.

"Shield's edited book, *Cultures of the Internet*, is [...] a collection of essays mainly written by Internet users, many of whom occupying the lower strata of the academic hierarchy. This is no coincidence, since students were the first to start using e-mail regularly. Moreover, much of the computer-supportive work in academic settings has a low status. As a result, the book presents to us not the speculative desires of cutting-edge high flyers, but people who understand the technology from within and who have experienced what

it is like to exist in virtual communities.

Many of the essays in Cultures of the Internet paint the worlds of e-mail, usenet and the Internet with a remarkable intimacy, bringing their own experiences of these worlds in relation to more abstract theoretical elaboration with considerable ease. For example, in one of the chapters Katie Argyle shows us how her understanding of that which sociologists refer to as 'the social' changed after she became an Internet user. To undermine the claim that computer technology fosters cultures of distance, of indifference, a blasé society, Argyle (in another chapter called 'Death on the Internet') presents us with an illustration of the way Internet users dealt with the death of one of their virtual community members. Other more experiential essays concern issues such as censorship (Leslie Regan Shade), using e-mail in Jamaica (Joerge Drykton), an essay by a collective called 'Interrogate the Internet' focusing more critically on the politics of domination and hegemony that characterize the Internet, and an essay by Heather Bromberg on 'Identity, Belonging and Consciousness in Virtual Worlds'.

More theoretical essays by Lemos, Hillis, Nguyen & Alexander and Plant deal with respectively the sociocultural complexities of electronic communication, virtual reality, cyberpolitics and the specifically gendered practices of networking. The main ethos of these essays is critical but always on the basis of an informed analysis. Mark Lajoie's essay 'Psychoanalysis Cyberspace' is more openly hostile. However, the distinction between virtual and material reality which he emphasizes, prohibits him from seeing cultures of the Internet as anything other than expressions of paranoia and narcissism. Far from being an odd one out, however, such a dissonant voice is indicative of the range of perspectives that Shields has been able to

gather in one collection, illustrating the relatively open and contradictory nature of the Internet itself. As Shields writes in the introduction 'technology mediates presence'; the Internet is not a place of separation but of intimation, 'making the distant and foreign, present and tangible' (p. 5). This communicative ethos can be traced back to the very form of the book itself. The book introduces an innovative way of writing, using a system of footnotes, which provide a venue for a counter- reading that disrupts the grain of the text, alongside the more conventional endnotes that signal scholarly erudition and referencing. Although it remains a printed form of communication, this system of footnoting allows for a satisfactory approximation of the hypertext-hybrid as far as print goes." (From an online review by Joost van Loon (1996) Sociological Research Online. http://www.socresonline.org.uk/1/3/van_loon.html#top)

Smith, B. (1997). Virtual Realia. *The Internet TESL Journal*, III(7).

http://iteslj.org/Articles/Smith- Realia.html

A_{BSTRACT}: In this paper the author discusses the use of virtual realia (digitized objects and items from the target culture) as a tool in language teaching. These can be brought into the classroom as examples or aids and used to stimulate spoken or written language production. He argues that virtual realia can be used as an online tool in making the vague concrete for language learners. It can facilitate the integration of computer- based foreign language instruction with other disciplines, such as cultural studies, history and literature. In doing so, Virtual Realia reveals in his opinion the similarities and differences between native and target cultures as well as raises (multi)cultural awareness. Virtual realia can improve the quality and

availability of culturally-based, authentic EFL materials.

Smith, M. A. & Kollock, P. (Eds.). (1998). Communities in Cyberspace. New York: Routledge.

"Marc Smith and Peter Kollock, in their edited book Communities in Cyberspace, provide readers with a series of sociological studies that address the question, "what kinds of social spaces do people create with networks?" The content includes a series of studies on cyberculture that ranges from the investigation of persistent categories of inequality such as race, class, and gender to an analysis of community formations in cyber spaces. The authors emphasize media as a group endeavor rather than simply a communication tool. The book is divided into five parts beginning with Part I and chapter one as an introductory section outlining the topics throughout the book including types of communication media, identities in cyberspace, issues of honesty and deception, persistence of race, social control dynamics. community structures, and collective action processes. Furthermore, a common thread running through the chapters is an "understanding that the kinds of interactions and institutions emerging in cyberspace are more complicated than can be captured in one-sided utopian or dystopian terms". Other concerns involve thinking of the Internet as a research site and understanding how interactions in these online spaces change social action as well as create consequences.

...While the book follows several sociological perspectives, it offers an excellent survey of current topics surrounding the structures and processes involved in new online communities. Social scientists should find this useful for teaching a course on cyberculture or for background literature for other cyber-

community studies. It problematizes and avoids the extremes of utopian and dystopian understandings of the Internet and its communities and, instead, focuses on the often contradictory processes occurring in online communities." (Extracted from a 2003 review by Janet Armentor in the Resource Center for Cyberculture Studies.

http://www.com.washington.edu/rccs/bookinfo.asp?ReviewID=242&BookID=204).

Sotillo, S. (2000). Discourse Functions and Syntactic Complexity in Synchronous and Asynchronous Communication. *Language, Learning and Technology*, 4 (1), 82-119. http://llt.msu.edu/vol4num1/sotillo/default.html

ABSTRACT: The present study investigates discourse functions and syntactic complexity in English-as-asecond-language (ESL) learner output obtained via two different modes of computer-mediated communication (CMC): asynchronous and synchronous discussions. Two instructors and twenty-five students from two advanced ESL writing classes participated in this study. Answers were sought to the following questions: a) Are the discourse functions present in ESL learners' synchronous discussions of reading assignments quantitatively and qualitatively different from those found in asynchronous discussions? And, b) which mode of CMC shows more syntactically complex learner output? The results showed that the quantity and types of discourse functions present in synchronous discussions were similar to the types of interactional modifications found in face-to-face conversations that are deemed necessary for second language acquisition. Discourse functions in asynchronous discussions were more constrained than those found in synchronous

discussions and similar to the question-response-evaluation sequence of the traditional language classroom. Concerning syntactic complexity, the delayed nature of asynchronous discussions gives learners more opportunities to produce syntactically complex language. Asynchronous and synchronous CMC have different discourse features which may be exploited for different pedagogical purposes. In the hands of experienced teachers, both modes of CMC can be used as novel tools to enhance the language acquisition process by encouraging interaction among participants, collaborative text construction, and the formation of electronic communities of learners.

Stacey, D., Goodman, S. & Stubbs, T. D. (1996). The New Distance Learning: Students, Teachers and Texts in Cross-cultural Electronic Communication. *Computers and Composition*, 13(3), 293-302.

This paper describes a chance meeting on the Internet that led to a transatlantic collaborative learning and teaching project, using a means of communication that allowed a shift in traditional teacher-student relationships. Each participant describes and reflects on the experience. In particular, Goodman notes 'one of the most interesting aspects of the discussions we had was the extent to which text interpretation is culturally specific. I didn't feel able to interpret the...document with much confidence. David Stacey concludes 'writing on the Internet...forces the understanding that meanings have to be negotiated.'

Stald, G. & Tufte, T. (Eds.). (2002). *Global Encounters: Media and Cultural Transformation*. Luton: University of Luton Press.

"At least one reasonably fair way to review a book is to consider how well it lives up to its own goals. The editors state these as follows:

- to theorize about and empirically study the processes of cultural globalisation, recalling the social, economic and political contexts in which they occur;
- to give explicit attention to the role of the media in the processes of cultural globalisation;
- to approach this defined mediacentric field from as many angles as possible, including product, genre and audience;
- to maintain a theory-praxis dynamic in the book, where empirical data inform the theory;
- to illustrate, through the case studies, how cultural globalisation can be studied, stressing methodological reflections – i.e. on transparency and reflexivity – as a pertinent issue.

To accomplish these goals, the editors have collected twelve chapters (including a chapter authored by each) under three different headings: (I) Globalisation, differentiation, and world modernity; (II) Cultural urbanization, world media and global commons; and (III) Cosmopolitanism, diaspora and cultural diversity. As might be expected, individual contributions overlap these headings. So, for example, the first and third chapters in part I, Jonathan Friedman's "Globalisation and the Making of a Global Imaginary," and Renato Ortiz's "Cultural Diversity and Cosmopolitanism," centrally address our understandings of 'cosmopolitanism,' and thereby

provide important background and complement to the chapters in Part III.

Moreover – and this is one of the central values of the book for me - the expected threads of cultural homogenization as an impact of globalization process on identities and cultures national are helpfully complemented by what was for me a relatively new thread. So, in Part II, Danish media scholar Stig Hjarvard argues – contra notions of a McLuhanesque "electronic global village" - that global media instead effect a kind of cultural and mental urbanization, so that any emerging 'global' society made possible by the rapidly expanding nets of electronic communication rather resembles a metropolis, not a simple village. By the same token, the specific studies on youth, diaspora, and minority identities included in Part III – of young Danes' media use (Stald); of rural black African males in a South African university (Larry Strelitz); South Asian families in London (Marie Gillespie) - complemented by a study on how 'global' media have become localized in India, with a specific focus on conflicts regarding gender identity (Norbert Wildermuth); Iranian immigrants in London (Annabelle Sreberny); and, finally, media use among young immigrant Danes (Tufte) - flesh out in comprehensive detail just what some of the neighborhoods in Hjarvard's communicative metropolis look like: who lives there, where they come from, how they understand themselves vis-à-vis a maiority culture

 and how media use interacts with these often widely diverse experiences and constructions of complex identities.

In these ways, the centrifugal forces at work in this collection – i.e., its effort to include as many different perspectives as possible (four continents, eight countries), thereby running the risk of simply presenting a disconnected collection – are helpfully

counterbalanced by themes and threads that connect the diverse chapters on multiple levels.

I hope this initial overview makes two things clear. One, the book pursues ambitious and important goals. Two, despite the clear risks of fragmentation that issue both from such a range of goals and the range of contributors, topics, approaches, etc., - both individual contributions and the book as a whole rather offer extended and important insights into the interactions between media, globalization, and multiple ways in which these two interact with a range of diverse cultural identities. Simply put, the book achieves its goals in good measure. In doing so, it stands as a very significant contribution to the growing literature on culture, technology, and communication more broadly and more specifically, as an essential text for anyone interested in issues of media, globalization, and cultural identities." (Extracted from a 2003 review by Charles Ess in the Resource Center for Cyberculture Studies._ http://www.com.washington.edu/rccs/bookinfo.asp?Revi ewID=278&BookID=213).

Stander, A. (1998). Bridging the Gap: Issues in the Design of Computer User Interfaces for Multicultural Communities. In C. Ess & F. Sudweeks (Eds.), Proceedings, Cultural Attitudes Towards Communication and Technology, 1998 (pp. 255- 260). Australia: University of Sydney. http://www.it.murdoch.edu.au/catac/catac98/pdf/21 stander.pdf

"Adrie identifies several cultural factors at work in interface design, including: intracultural class differences in use of abstractions and generalizations, where such abstractions and generalizations are required to successfully navigate graphical interfaces;

culturally variant senses of the 'locus of control' (either more internal or external), where an internal sense of control might be necessary for successful mastery of computers; culturally-variant understandings of colors and symbols, as these are incorporated in the visual design of user interfaces; and the role of ethnicity, class, gender, and age in predicting individual success. Stander refers here to a study of South African students from eight different cultural groups and six languages, illustrating major differences in performance as correlated with cultural and linguistic differences". (From Ess, C. (1998) First Looks: CATaC '98. In C. Ess & F. Sudweeks (Eds.), *Proceedings, Cultural Attitudes Towards Communication and Technology, 1998* (pp. 1- 17). Australia: University of Sydney.

http://www.it.murdoch.edu.au/catac/catac98/01_ess.pdf)

Star, S. L. (Ed.). (1995). *The Cultures of Computing.* Oxford: Blackwell.

Star explains that the unifying thread behind this collection of essays is a focus on the ubiquitous blurring of the boundaries between online and offline worlds. She explains "[computers] embody the limitations of any medium. They simplify, make choices that are often invisible about voice, politics and knowledge [...] there is no guarantee that interaction over the net will not simply replicate the inequities of gender, race and class we know in other forms of communication" Her intention is to "explore a wide range of cultural practices associated with the design and use of computing". Rather than asking "what difference are computers making in the world?" this volume explores different kinds of work that people do together with and around computers. "Because computers are simultaneously communication media and product, objects of analysis and infrastructure for analysis, intimate and formal, they

form good occasions to study a variety of basic processes: the development of material culture, the formation of practice-based networks, the fallibility of language, the relationship between power and infrastructure." Each essay "examines the ways in which people are brought together in computing practices as computing learners, artists, gatekeepers and scientists' – subcultures of cyberspace."

Strickland, C. (1998). Aspects of Diversity, Access and Community Networks. In C. Ess & F. Sudweeks (Eds.), *Proceedings, Cultural Attitudes Towards Communication and Technology, 1998* (pp. 135- 146). Australia: University of Sydney. http://www.it.murdoch.edu.au/catac/catac98/pdf/09 strickland.pdf

A_{BSTRACT}: This paper addresses the issue of access to community networks for diverse cultural and ethnic populations. It uses ethnographic research conducted at La Plaza TeleCommunity in Taos, New Mexico. The paper asserts that access issues are very different for the three dominant cultures in Taos and much of the Southwest: Hispanic, Pueblo Indian, and Anglo. It examines the Anglo-managed community network and the difficulty experienced in introducing e-mail and the Internet to Hispanics and Taos Pueblo Indians.

Ess writes: "[This paper] provides an ethnographic study of La Plaza Telecommunity in Taos, New Mexico, USA. La Plaza is an effort to realize the Clinton administration's early vision of a National Information Infrastructure accessible by all Americans in a community with an average income of less than

\$13,000/year and telephone coverage of 65%. In addition to economic obstacles, Strickland identifies cultural barriers that emerged between La Plaza

Telecommunity, as a largely male/Anglo and thus individualistic enterprise, and the more communalistic culture of the Pueblos and the family- and relationship-oriented culture of the Hispanics. While the failures of La Plaza are disheartening for those who hope CMC technologies will facilitate greater communication and democracy, Strickland's analysis helps make clear both economic and cultural realities which must be faced to realize such lofty goals." (From Ess, C. (1998). First Looks: CATaC '98. In C. Ess & F. Sudweeks (Eds.), *Proceedings, Cultural Attitudes Towards Communication and Technology, 1998* (pp. 1-17). Australia: University of Sydney.

http://www.it.murdoch.edu.au/catac/catac98/01_ess.pdf)

Su, H.-Y. (2003). The Multilingual and Multi-Orthographic Taiwan-Based Internet: Creative Uses of Writing Systems on College-Affiliated BBSs. *Journal of Computer-Mediated Communication*, 9 (1). http://www.ascusc.org/jcmc/vol9/issue1/su.html

A_{BSTRACT}: This study investigates creative uses of writing systems on the electronic bulletin boards (BBSs) of two college student organizations in Taipei, Taiwan. Data were collected from postings on bulletin boards and semi-structured interviews with members of the student organizations, and analyzed using qualitative and ethnographic methods. Four popular creative uses of writing systems are identified and discussed: the rendering in Chinese characters of the sounds of English, Taiwanese, and Taiwanese-accented Mandarin, and the recycling of a transliteration alphabet used in elementary education. It is argued that these practices are enabled by the written nature of the Internet, the orthographic systems available in the society, and the multilingual situation in Taiwan, and

that the everyday meanings associated with the writing systems and languages are appropriated and reproduced through online practice, resulting in a unique mode of communication in its own right.

Sudweeks, F. (1998). Cybersocialism: Group Consciousness in Culturally Diverse Collaborations. In C. Ess & F. Sudweeks (Eds.), *Proceedings, Cultural Attitudes Towards Communication and Technology* 1998 (pp. 127-128). Australia: University of Sydney. http://www.it.murdoch.edu.au/catac/catac98/pdf/09 sudweeks.pdf

"Fay Sudweeks reports the findings of surveying over 100 researchers involved in two-year collaborative project relying centrally on computer-mediated communication. She proposes seven criteria for determining the presence of a group consciousness, and, as a result of her survey, a number of predictive hypotheses concerning the emergence of collaborative group consciousness across cultural and geographic boundaries." (From Ess, C. (1998) First Looks: CATaC '98. In C. Ess & F. Sudweeks (Eds.), Proceedings, Cultural Attitudes Towards Communication Technology, 1998 (pp. 1-17). Australia: University of Sydney.

http://www.it.murdoch.edu.au/catac/catac98/01 ess.pdf)

Sussman N.M. & Tyson D.H. (2000). Sex and Power: Gender Differences in Computer-Mediated Interactions. *Computers in Human Behaviour*, 16(3), 381-394.

A_{BSTRACT}: A preponderance of psychological literature indicates gender differences in written and oral communication. This study explores a new channel of

communication, that of cybertalk. As this method of discourse is not gender-salient, one might argue that sex differences in communication style would be eliminated or reduced. However, we suggest that gendered power differentials in communication style transcend the medium. Archived electronic discussions (n=701) on sextyped topics were selected and analysed for length, frequency of communication and discourse content (fact hypothesized opinion). It was communicators would display power behaviors by writing longer postings, by posting more frequently, and by writing more opinionated discourse as compared to female communicators. Congruent with the first prediction, men's discourse entries consisted of a greater number of words. However, women communicated more frequently than did men, a finding opposite to the hypothesized direction. The third gendered comparison, while not reaching statistical significance, indicated a modest trend with men writing more opinionated communications in two out of the three sex-typed categories (masculine and gender- neutral). Findings suggest that cyberspace, a context where gender communicators is not salient, remains a male-dominated atmosphere, where gender differentiation and power displays in communication persist, similar to other communication modes.

Sy, P. A. (2000) Barangays of IT. In F. Sudweeks & C. Ess (Eds.). *Proceedings, Cultural Attitudes Towards Technology and Communication, 2000.* (pp. 47-56). Australia: Murdoch University.

A_{BSTRACT}: In broad strokes this paper adumbrates the issues in Filipino virtual communities and social interactions mediated by information technology (IT). Problems and prospects are explored with the optic of

the *barangay*, a social unit that evolved from pre-Spanish "boat community" (*barangay*) to its present dominant geopolitical form. While IT tends to be instrumental in Western hegemonic encroachment into the Filipino lifeworld, some of its libertarian potentials are gaining ground in emerging cyber-barangays which require new 'focal things and practices'. The emerging Filipino communities mediated by IT are spheres of localization amidst globalization and questions of nationhood. Finally, the paper proposes to 'Filipinize' IT

 that is, to creatively and critically appropriate IT into practices congenial to Filipino culture.

Sy, P. A. (2002). Technology in Search of Colonies. The Impact of Computer-Mediated Colonization on Ethnicity, Social Inequality and Civil Society. In F. Sudweeks & C. Ess (Eds.). *Proceedings, Cultural Attitudes Towards Technology and Communication, 2002, Université de Montréal, Canada.* (pp. 421-438). Australia: Murdoch University.

ABSTRACT: This paper examines computer-mediated colonization both as (1) a special form of neo-colonialism despite formal political situation where, independence, a society is made dependent upon and subordinated to another, and as (2) a mode of internal colonization where the stirring medium of technology. together with power and money, makes it possible for social systems to impinge on the lifeworld. The interplay of both external form and internal mode of neocolonialism may be illustrated in the ways that information technology simultaneously undermines ethnicity and elicits a reaction formation of strong ethnic identification in contemporary society, as well as in the ways the "digital divide" undercuts traditional identities and further fragments society along technological lines.

While there may be no shortcuts to counter the emerging colonization, what might help mitigate, if not overcome, the pathologies of computer-mediate colonization is the wiring of "civil society" in domains where non-instrumental, identity-affirming utilization and signification of information technology outweighs its deployment for purely systemic and economic goals.

Takahashi, S. (1996). Talk Across the Oceans: Language and Culture of the Global Internet Community. *Journal of Visual Literacy*, 16(1), 11-23.

A_{BSTRACT}: This article discusses some of the technological difficulties associated with the use of English or other European languages on the Internet by taking Japanese computing as an example. Second, it discusses the linguistic culture of the language with special attention to English because it dominates international communication. The author takes a closer look at how technology limits and expands our talk and suggests some aspects of the future role of various languages in the computer domain. The author finally argues that we may increase our awareness of communication throughout the world by a better understanding of the Internet culture.

Thanasankit, T. & Corbitt, B. J. (2000). Thai Culture and Communication of Decision Making Processes in Requirements Engineering. In F. Sudweeks & C. Ess (Eds.). *Proceedings, Cultural Attitudes Towards Technology and Communication, 2000.* (pp. 217-242). Australia: Murdoch University.

A_{BSTRACT}: This paper aims to explore the impact of Thai culture on communication during decision making processes in Requirements Engineering, and to gain a better understanding of its influence on the

Requirements Engineering process. The paper illustrates the interaction of technology and culture, and shows that rather than technology changing culture, culture can change the way technology is used. Thai culture is naturally inherent in Thai daily life and Thais bring that into their work practices. The concepts of power and uncertainty in Thai culture contribute towards hierarchical forms of communication and decision making processes in Thailand, especially during Requirements Engineering, where information systems requirements need to be established for further development. The research shows that the decision making process in Thailand tends to take a much longer time, as every stage during Requirements Engineering needs to be reported to management for final decisions. The tall structure of Thai organizations also contributes to a bureaucratic, elongated decision-making information systems development. process during Understanding the influence of Thai culture on Requirements Engineering and information systems development will assist multinational information systems consulting organizations to select, adapt, or change Requirements Engineering and information systems developments methodologies to work best with Thai organizations.

Thompson, H. (2002). Cyberspace and Learning. *Electronic Journal of Sociology*, 6(1). http://www.sociology.org/content/vol006.001/thompson.html

A_{BSTRACT}: This paper attempts to go beyond the issues of "soft" and "hardware" requirements to consider the necessity of placing the computer within the social context of teaching/learning. It is concluded that the interaction of teachers/learners with the

computer, as a socially constructed artifact, is particularly seductive and must be approached with caution; but that it also provides a completely new and exciting elevation of the existing possibilities for the production of knowledge.

Thorne, S. (2003). Artifacts and Cultures-of-Use in Intercultural Communication, *Language Learning & Technology*, 7(2), 38-67. http://llt.msu.edu/vol7num2/thorne/

A_{BSTRACT}: This article develops af conceptual understanding how intercultural framework for communication, mediated by cultural artifacts (i.e., Internet communication tools), creates compelling, problematic, and surprising conditions for additional language learning. Three case studies of computermediated intercultural engagement draw together between discursive correlations orientation, communicative modality, communicative activity, and interpersonal dynamics. These emergent factors contribute to varying qualities and quantities of participation in the intercultural partnerships. Case one, "Clashing Frames of Expectation – Differing Cultures-of-Use," suggests that the cultures-of-use of Internet communication tools, their perceived existence and ongoing construction as distinctive cultural artifacts, differs interculturally just as communicative genre, pragmatics, and institutional context would be expected to differ interculturally. Case two, "Intercultural Communication as Hyperpersonal Engagement," illustrates pragmatic and linguistic development as an outcome of intercultural relationship building. The final case study, "The Wrong Tool for the Right Job?", describes a recent generational shift in communication tool preference wherein an ostensibly ubiquitous tool, e-mail, is shown

to be unsuitable for mediating age peer relationships. Taken together, these case studies demonstrate that Internet communication tools are not neutral media. Rather, individual and collective experience is shown to influence the ways students engage in Internet- mediated communication with consequential outcomes for both the processes and products of language development.

Thurstun, J. (2000). Screen Reading: Challenges of the New Literacy. In D. Gibbs &. K.-L. Krause (Eds.) *Cyberlines. Languages and Cultures of the Internet.* (pp. 61-77). Albert Park, Australia: James Nicholas Publishers.

This paper presents an analysis of some ways in which the development of the computer, the WWW and the Internet is changing our conception of literacy and challenging the reader in various ways. The author takes up the issues of the perceptual difficulties posed by the new technology and the need for the reader to develop entirely new skills and habits of thought. Furthermore, she explores the challenges associated with the reading of electronic texts and in particular draws attention to the need for critical thought about the current conventions for web design an the electronic presentation of information.

Tully, P. (1998). Cross-Cultural Issues Affecting Information Technology Use in Logistics. In C. Ess & F. Sudweeks (Eds.), *Proceedings, Cultural Attitudes Towards Communication and Technology,* 1998 (pp. 317-320). Australia: University of Sydney. http://www.it.murdoch.edu.au/catac/catac98/pdf/26 tully.pdf

"Tully reports on a survey of members of the Society of Logistics Engineers, an information technology professional group with chapters in nineteen countries. Given that 25%-50% of an employee's job behavior is culturally determined, understanding cultural differences and their potential impact on job performance is obviously crucial. Tully reports, first of all, that Americans value individual choice and achievement in contrast with other cultures' valuing the demands and accomplishments of family, clan or village. (These results intersect with Hofstede's category of individualism vs. collectivism and are consistent with others' use of Hofstede in their analyses, i.e., Dustdar, Maitland, and Merchant.)" (From Ess, C. (1998) First Looks: CATaC '98. In C. Ess & F. Sudweeks (Eds.), Proceedings, Cultural Attitudes Towards Communication and Technology, 1998 (pp. 1-17). Australia: University of Sydney. http://www.it.murdoch.edu.au/catac/catac98/01 ess.pdf)

Turk, A. & Trees, K. (1998). Culture and Participation in Development of CMC. In C. Ess & F. Sudweeks (Eds.), *Proceedings, Cultural Attitudes Towards Communication and Technology, 1998* (pp. 263- 267). Australia: University of Sydney.

http://www.it.murdoch.edu.au/catac/catac98/pdf/23 turk.pdf

"Turk & Trees endorse what they call a highly participative methodology for designing culturallyappropriate CMC, using a specific project involving three indigenous populations in Ireamugadu, Australia, as an example. Their report details the culturally specific communication elements which must be included in a "Cultural Information System" intended both to avoid infringing upon local cultural constraints and to convey significant details and relationships characteristic of the social system. Their project further involves conjoining critical ethnography and visual anthropology with philosophical efforts articulate ontological, to epistemological, and ethical issues." (From Ess, C. (1998) First Looks: CATaC '98. In C. Ess & F. Sudweeks (Eds.), Proceedings, Cultural Attitudes Towards Communication and Technology, 1998 (pp. 1-17). Australia: University of Svdnev.

http://www.it.murdoch.edu.au/catac/catac98/01 ess.pdf)

Turk, A. (2000). A WorldWide Web of Cultures, or a WorldWide Web' Culture? In F. Sudweeks & C. Ess (Eds.). *Proceedings, Cultural Attitudes Towards Technology and Communication, 2000.* (pp. 243-256). Australia: Murdoch University.

A_{BSTRACT}: High levels of usability are achieved in information systems through application of user-centred design practices (focusing on user characteristics and task analysis) in combination with formative evaluation

procedures, often within an iterative prototyping cycle. This approach can be adapted for the development of World Wide Web (WWW) sites. The most widely adopted method of measuring usability of such sites involves the selection and use of an appropriate set of heuristic criteria. A rational choice procedure may be based on an analysis of the purposes of the site and the characteristics of intended users. One of these factors could relate to the culture of intended users.

After establishing this context, the paper proceeds to summarise recent work that seeks to establish relationships between the 'culture' of users and their preference for particular user interface and WWW site designs. The relative significance of other factors is discussed and suggestions for further research are provided.

The paper concludes by suggesting that it is difficult (without more research) to design WWW sites which are culturally-appropriate through the use of guidelines and heuristics. Indeed, a WWW-based culture may be developing among a majority of WWW users. There may also be other user attributes (e.g. IT experience) which are of more significance for site design than culture. Where a site is intended for a limited set of users with a specific culture, a participative development methodology is suggested. This allows representative users to comment on usability of a prototype of the site or take part in more extensive usability evaluation procedures. In this way their culture (and other characteristics) can be reflected in the design directly, rather than via a general set of guidelines.

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

"At the heart of Turkle's argument is an in-depth

examination of how technology (specifically computers. computer interfaces, and online communities) disrupts our modernist assumptions about identity and the 'Self,' a continuation of the groundbreaking research in her first book, The Second Self. Turkle succeeds in negotiating through complex contexts for the Self by drawing on resources and research in psychology, sociology, psychoanalysis, and philosophy (among others). The book is organized well as Turkle navigates (and transgresses) the murky theoretical waters of aesthetics, artificial intelligence, and virtuality and the effects each paradigm has on identity. Moving from the broadest assumptions of a modernist aesthetic view of a core (centered) Self to the more fragmented, yet fluid, postmodern view of fragmented (decentered) Selves, her research resonates with similar arguments in our own fields of rhetoric, composition, and electronic pedagogy.

[...] In her first section, "The Seduction of the Interface", Turkle sets up a familiar dichotomy in order to distinguish for her readers how identity issues online differ from traditional f2f (face-to-face). Like Lanham, Turkle ascribes much of the new identity to a shift from a modernist aesthetic to a postmodernist aesthetic, though Lanham uses the rhetorical and philosophical opposition as his hermeneutic framework. And like Faigley (who meticulously traces the effects of postmodernism on composition theory and pedagogy), Turkle deftly and thoroughly historicizes the relations we have to our computers and to those we meet through them in the next section, "Of Dreams and Beasts." Finally, she brings all of this research to bear on computer-mediated identity relations (playful and serious, ethical and political) in "On the Internet."" (From an online review by Cynthia Haynes, Kairos http://english.ttu.edu/kairos/2.1/reviews/haynes/turkle.ht

Van Belle, J.-P. & Stander, A. (2002). Gender Differences in the Perception and Use of Email in Two South African Organisations. In F. Sudweeks & C. Ess (Eds.). Proceedings, Cultural Attitudes Towards Technology and Communication, 2002, Université de Montréal, Canada. (pp. 131-142). Australia: Murdoch University.

ABSTRACT: ... This study replicates [an] original study in two South African organisations: "older" knowledge workers in a commercial organization, and younger students at our university. Our findings differ, depending on which sub-samples are considered. Overall, the difference which Gefen and Straub found in perceived ease-of-use and perceived social presence [where women perceived email as more useful but more difficult to use than men] appears no longer valid. These results could be explained through the use of non-parametric statistics or the specific demographics of the sample. Overall, however, there is a significant difference in perceived usefulness and, consequently, actual rates of usage...although not consistent with Gefen and Straub's...findings seem to validate most of the 'Technology Acceptance Model'.

Van den Branden, J. & Lambert, J. (1999). Cultural Issues Related to Transnational Open and Distance Learning in Universities: A European Problem? *British Journal of Educational Technology*, 30(3), 251-260.

A_{BSTRACT}: Open and Distance Learning (ODL) is much more than a didactic or technological issue. On the basis of contemporary approaches to culture, it is both an agent and a barometer of culture: culture

influences the appearances, models and contents of ODL, but is influenced itself as well by the ODL phenomenon. Illustration of the point is made through an analysis of the historic roots of ODL in comparison with Europe's contemporary transnational and technology based ODL. The analysis results in an agenda for important cultural issues, such as the institutional character of ODL, its contribution to Europe's competitiveness, the shaping of a European citizenship, and the nature of European ODL in terms of its cultural barriers and cultural assets. The ambiguity of culture typically emerges when looking at language. European transnational, and especially technology based ODL, may be hindered by the multilingual societies of Europe, and remain so as long as language policies are imposed. It is advocated that language policies be replaced with language management, applied in a creative way (e.g., by implementing appropriate technical solutions). The final question examined here, is whether these problems and solutions are particular to Europe, or whether there are good reasons for acknowledging the cultural origins, barriers and assets of a wider ODL model.

Voiskounsky, A. (1998). Internet: Cultural Diversity and Unification. In C. Ess & F. Sudweeks (Eds.), *Proceedings, Cultural Attitudes Towards Communication and Technology, 1998.* Australia: University of Sydney.

"This author takes a sociohistorical approach to human mental development as his starting point for an analysis of Internet usage – a usage he finds to be both unifying and fragmenting in significant ways. Voiskounsky's analysis is distinctive insofar as he examines both techniques of hypertext browsing

(something that is unique to CMC environments) and the influence of status/position/rank on holding the floor and turn-taking rules (traditional categories of discourse analysis, now applied to the new environment of CMC).

Voiskounsky further examines whether or not emoticons. ASCII-based icons intended to compensate for the emotively 'cool' content of email text as ways of signalling basic emotions, are genuinely universal. Finally, Voiskounsky points out the complex results of English as the *lingua franca* of the net and the Web, being taken up by non-native speakers, resulting in greater 'contamination' of other languages with English terms, as well as a new pidgin Network English. (This analysis suggests...that culture and language are not monolithic and impermeable blocks of content and practice, but rather fluid and permeable entities in constant interchange with one another.)" (From Ess, (1998) First Looks: CATaC '98. In C. Ess & F. Sudweeks (Eds.), Proceedings, Cultural Attitudes Towards Communication and Technology, 1998 (pp. 1-17). Australia: University of Sydney.

http://www.it.murdoch.edu.au/catac/catac98/01_ess.pdf)

Voyageur, C. J. (2001). Ready, Willing, and Able: Prospects for Distance Learning in Canada's First Nations Community. *Journal of Distance Education*, 16(1). http://cade.icaap.org/vol16.1/voyageur.html

A_{BSTRACT}: The educational attainment levels of First Nations people in Canada lags behind that of mainstream society for various reasons. Advances in information technologies and distance education program delivery mean that First Nations people can obtain post-secondary education credentials without having to leave their home communities which often are in rural or remote areas. However, before programs can

be delivered, the current technological competence and usage levels in reserves must be determined. This research provides baseline information on the access to and use of various technologies and the degree, type, pervasiveness and availability of technologies such as computers, Internet, email, voice mail, computer networking, satellite systems, teleconferencing and other communications services. The investigation of information technology usage in selected First Nations communities provides insight into their readiness for distance learning opportunities in the community.

Walterman, J. & Machill, M. (Eds.). (2000). Protecting our Children on the Internet: Towards a New Culture of Responsibility. Gütersloh: Bertelsmann.

The international and interdisciplinary reports and contributions in this volume reflect a long process of consultation and research on the basis of which the Bertelsmann Foundation developed a catalogue of recommendations for ensuring the protection of minors and freedom of speech on the Internet. The second contains diverse section comments on recommendations from different angles. The editors aim at a contribution towards the international search for a balance between North America and other regions as they make their way onto the Internet. They claim that in the spirit of this new medium, the users and their safety should be put first.

Walz, S. P. (2000). Symbiotic Interface Contingency. In F. Sudweeks & C. Ess (Eds.). *Proceedings, Cultural Attitudes Towards Technology and Communication,* 2000. (pp. 125-143). Australia: Murdoch University.

A_{BSTRACT}: As a highly personalized 'version', this

essayistic meditation on identity within an utmost mediated world offers – embedded into a research on identity issues in Online Virtual Reality Environments – the challenge of diverse scientific narrational strategies by applying complex layering in order to convey complex, fragmented scenarios. Symbiotic Interface Contingency aims at being self-referential, where its form corresponds with its contents, that is, to deal with the de- and reconstruction of cultural myths and meaning-making systems. Alas, it also explores a state of contingency formerly known as 'Cyborgian', and 'post- modernist', a struggle it seems *Homo Medius* faces throughout advanced capitalistic, liberal- democratic citizenship.

Wang, H.-J. & Hong, Y. (1996). Flaming: More Than a Necessary Evil for Academic Mailing Lists. *Electronic Journal of Communication*, 6(1). http://www.cios.org/getfile/wang_V6N196

ABSTRACT: Academic mailing lists are formed by scholars and professionals interested in intellectual discussion and professional exchange of ideas. Academic mailing lists focus on academic and scholarly subjects, but they are not immune from "flaming," hostile, insulting language in computer-mediated communication. Two scholarly mailing lists, ANTHRO-L and MEDLIB-L, were monitored to during 1994 and investigated for flaming. Three types of flaming were discovered in those professional groups: the personal attack (venomous remarks), taunting (sarcastic barbs), and didactic (admonishments, rebukes, reprimands). People flame when others violate the rules of Internet culture, when there is ethnocentrism (differences in values), and when people misunderstand each other. The following tips for understanding flaming are

discussed: educate the ignorant; enforce the rules; facilitate effective communication; and reshape society. As a unique part of the Internet culture, however, flaming has a special role to play in academic mailing lists. Although a punitive measure, it educates the ignorant, polices cyberspace, brings order to the group, and scares away unwanted commercial advertising. Flaming also encourages clear writing and no-nonsense communication.

Warschauer, M. (1999). *Electronic Literacies:* Language, Culture and Power in Online Education. Mahwah, NJ: Lawrence Erlbaum Associates.

"In this book, Warschauer argues that "becoming fully literate in today's society, at least in the industrialized world, means gaining competent control of representational forms in a variety of media and learning how those forms best combine in a variety of genres and discourses". Digital technologies such as the Internet are rapidly changing our perception and definition of literacy, and this change demands research to clarify the complex interrelationships that exist among new electronic literacies, educational practices, and reform, and struggles for social and cultural equality.

Electronic Literacies describes one of the early research studies to document the role of the Internet and other new digital technologies in the development of language and literacy. It provides rich ethnographic data based upon Warschauer's study of Internet use by a sample of culturally and linguistically diverse students in four language and writing classes in Hawai'i. Warschauer maintains that in their pursuit of literacy, these student populations often fall victim to inequalities in terms of technological access, language and discourse access, and cultural appropriation. In

Electronic Literacies, Warschauer skillfully weaves the data he collected into an interdisciplinary theoretical base to describe his view of the relationship of technology to language, literacy, education, culture, and class." (Adapted from a review by Loretta F. Kasper in *Language Learning & Technology*, 3(1), 27-30, http://llt.msu.edu/vol3num1/review/review3.html)

Waters, S. (1997). Ghosting the Interface: Cyberspace and Spiritualism. *Science as Culture*, 6, 3(28), 414-443.

ABSTRACT: Traces continuities between spiritualism and recent writings on cyberculture that characterize this space as one in which human consciousness is raised to a higher level. It is shown that authors who write on virtual culture privilege the virtual nature of cyberspace over its sociological reality. This tradition of attributing spiritual aspects to technology is traced as far back as the 19thcentury British spiritualist tradition. In this tradition, spiritualism offered an optimistic vision of territorial expansion and engaged with new technologies in what were perceived to be exciting ways. The backlash against this spiritualist tradition is taken to mirror similar antispiritualist rhetoric among contemporary critics of cyberculture. It is concluded that the differences between spiritualist and cyberist phenomena will most likely become more distinct over time, but commentators should remain sensitive to the institutions responsible for developing and marketing the new technologies of transcendence.

Webb, S. (1998). Visions of Excess: Cyberspace, Digital Technologies and New Cultural Politics. *Information, Communication & Society*, 1(1), 46-69.

A_{BSTRACT}: Critically situates contemporary concerns with cyberspace and digital media in a cultural dimension and, in so doing, sets the emerging new communication technologies alongside issues of cultural limits and boundaries. It is argued that cyberspace is destined to attract two competing criticisms: being too true to life, or not being true enough. It is argued that these tensions are part of the cyberspatial embodiment of certain significant cultural aesthetics that are subsequently interwoven into the fabric of popular technoculture. This embodiment number of competing а characterizations for the potential of digital media through slogans of cyberspace. Addressed is how spatial metaphors, forms of technological enhancement, utopian aesthetics, technoculture, and posthuman philosophy are framed as "frontier discourse." The materialism of transhumanist and extroprian politics is examined from a phenomenological standpoint. These frontier projects posit a disclosing space for digital media that offer a radical shift from the human to nonhuman computermediated environment. Phenomenological analysis shows these new cultural politics to be intimations of the real and an illusion of radical Otherness that is chimerical and exemplary of unreflexive modes of becoming.

Werry, C. C. (1996). Linguistic and Interactional Features of Internet Relay Chat. In S. C. Herring, (Ed.), Computer-Mediated Communication: Linguistic, Social and Cross-Cultural Perspectives. (pp. 47-63). Amsterdam: John Benjamin.

Werry takes as his data a synchronous mode of CMC known as Internet Relay Chat (IRC). The chat sessions he analyzes are in English (on an Australian channel) and French. In addition to providing a useful taxonomy of features that characterize this little-studied genre, Werry argues for the essential "orality" of IRC by pointing out ways in which participants attempt to recreate aspects of spoken language through graphic and orthographic means.

Williams, H. L. & Meredith, E. M. (1996). On-Line Communication Patterns of Novice Internet Users. *Computers in the Schools*, 12(3), 21-31.

ABSTRACT: This paper reports an investigation of students' online communication patterns when their classroom environment has been newly expanded electronically through a public Listserv for classroom interaction and private Email on the Internet. Its results suaaest that as а process, computer-based communication experiences can encourage collaborative learning, independent thinking, and the sharing of knowledge - a knowledge experienced and refined, constructed socially, tested, and applied situationally over a length of time, space an electronic transfer.

Williams, M. C. & Gunatunge, R. S. (2000). Information Systems and Organisational Culture in a Developing Country. In F. Sudweeks & C. Ess (Eds.). *Proceedings, Cultural Attitudes Towards Technology and Communication, 2000.* (pp. 195- 208). Australia: Murdoch University.

A_{BSTRACT}: Research in information systems development and use in developing countries like Malaysia is presently dominated by a traditional or positivist approach. Positivist approaches have largely failed to understand how information systems impact the culture, communication and organisational behaviour, within broader cultural, community, and social contexts. This paper highlights the limitations of positivistic approaches to the investigations of information systems and organisational behaviour in developing countries using a case study.

Williams, S. W., Watkins, K., Daley, B., Courtenay, B., Davis, M. & Dymock, D. (2001). Facilitating Cross-Cultural Online Discussion Groups: Implications for Practice. *Distance Education*, 22(1), 151-167.

A_{BSTRACT}: Online discussion is a powerful tool for the development of critical thinking, collaboration and reflection. However, the effective instructional use of online discussions places new requirements on instructors for skilful facilitation. When the construct of cross-cultural participants is added, the facilitation requirements increase. The purpose of this research was to determine and address the issues and challenges experienced by facilitators who are facilitating cross-cultural group discussion activities in an online environment, and to provide strategies facilitators might employ when in this environment.

Utilising action research methods of data collection and analysis, this study found that in a cross-cultural environment, the challenges of the facilitator expand beyond the currently identified range of problems of facilitation. Challenges such as questioning, participation, interpersonal and group dynamics, facilitator expectations and anxieties have surfaced as issues when facilitating in a cross-cultural online environment.

Willis, A. (2000). Nerdy No More. A Case Study of Early *Wired* (1993-1996). In F. Sudweeks & C. Ess (Eds.). *Proceedings, Cultural Attitudes Towards Technology and Communication, 2000.* (pp. 361-371). Australia: Murdoch University.

A_{BSTRACT}: This paper uses the early issues of *Wired as* a vehicle for interrogating notions of the techno- lifestyle anticipated as a result of the corporatization of the Internet. It implies a cultural collision between society as we knew it, and the techno-lifestyle anticipated by *Wired* visionaries. This cultural collision occurs at the nexus of: cyberdemocracy and restricted cyber-access; social hierarchies of race and gender; and participation as consumption reinforced through the *Wired* text.

Wilson, M. S. (2001). Cultural Considerations in Online Instruction and Learning. *Distance Education*, 22(1), 52-64.

A_{BSTRACT}: The increase in globalisation of distance education has revealed the existence of cultural discontinuities that affect learning effectiveness. The theoretical basis of such discontinuities is discussed in terms of the model of Vygotsky, Tharp, and Flowerdew and Miller. In addition, findings from the author's

research involving West African extension students and print-based instructional material is also reported. The implications for instruction and research are discussed and intervention strategies are suggested.

Wilson, M., Qayyum, A. & Boshier, R. (1998). WorldWide America? Think Globally, Click Locally. *Distance Education*, 19(1), 109-123.

A_{BSTRACT}: Educators at all levels are enthusiastic about the potential of the World wide Web to provide learners with access to vast amounts of information and exciting opportunities for interaction. However, few educators have considered the extent to which American corporations and institutions dominate the Web. Using a framework based on Chomsky's 1988 examination of the mass media, the authors examine three filters that mediate learners access to online courses and information: browsers, search engines and the digitization of content. recommendations for educators who wish to counteract the imbalance are included.

Witmer, D. & Taweesuk, C. (1998). Why People Use the World Wide Web: An Application of Uses and Gratifications Theory. In C. Ess & F. Sudweeks (Eds.), Proceedings, Cultural Attitudes Towards Communication and Technology, 1998 (pp. 289-316). Australia: University of Sydney. http://www.it.murdoch.edu.au/catac/catac98/pdf/25_witmer.pdf

"Witmer & Taweesuk rely on Csikszentmihalyi's notion of 'flow,' use and gratification theory, and additional theoretical considerations. Witmer and Taweesuk developed a survey instrument to measure functional uses, motivations, attitudes, and use of the

Web and other media in a survey of public relations students and professionals in the U.S. and Mexico. Their results (limited in terms of sample size and representativeness) suggest that Mexican and U.S. business communicators are more alike than different in their use of the Web - probably because their professional needs override cultural differences which might otherwise affect Web use. They also suggest that the interactive character of CMC technologies may make the constructs of flow more appropriate than use and gratification theory as a basis of future investigations." (From Ess, C. (1998) First Looks: CATaC '98. In C. Ess & F. Sudweeks (Eds.), Proceedings, Cultural Attitudes Towards Communication and Technology, 1998 (pp. 1-17). Australia: University of Sydney. http://www.it.murdoch.edu.au/catac/catac98/01 ess.pdf)

Wong, A. (2000). Cyberself: Identity, Language and Stylization on the Internet. In D. Gibbs &. K.-L. Krause (Eds.) *Cyberlines. Languages and Cultures of the Internet.* Albert Park, Australia: James Nicholas Publishers.

Wong examines the processes of cultural identity formation and experimentation in the context of the Internet. She analyses the role of language and stylization in such processes, and the cultural changes that are occurring through the influence of Internet technologies. Her discussion focusses on 'bodilessness', default identities and assumptions of identity; the relationship between style and identity; the influence of cartoon cultures and 'adolescent identity' on the style of cyberspace; and the global rhetoric surrounding the Internet and its communities.

Woodman, G. (2003). Intercultural Communication Online. Designing a Training Concept for German-British Interactions. München: Langenscheidt-Longman.

This study provides an account of the author's encounter with the "multidisciplinary theory-practice interface" of intercultural communication. The challenge described here is that of developing a design concept for a computer-based training program to improve communication between German-speaking BMW employees and English-speaking Rover employees. Findings from disciplines as varied as pragmatics, neurolinguistics, intercultural communication, business psychology, TEFL and information science are interwoven with BMW's own empirical research to produce an innovative training program.

Yates, S. J. (1996). Oral and Written Linguistic Aspects of Computer Conferencing: A Corpus Based Study. In S. C. Herring, (Ed.), *Computer- Mediated Communication: Linguistic, Social and Cross-Cultural Perspectives.* (pp. 29-46). Amsterdam: John Benjamin.

The author describes and analyzes the construction of a large CMC corpus based on messages exchanged on a computer conferencing system at the Open University in the UK. Yates compares his corpus with computerized corpora of spoken and written English, following Halliday's model that considers textual, interpersonal and ideational functions of language. His results show that CMC is more like written language with respect to vocabulary results (textual), more like spoken language with respect to the use of personal pronouns (interpersonal) and makes greater use of modal auxiliaries (ideational) than either speech or

Yetim, F. (2001). A Meta-Communication Model for Structuring Intercultural Communication Action Patterns. *SIGGROUP Bulletin* 22 (2), 16-20.

A_{BSTRACT}: This paper presents a meta-communication model for discursive construction of communication action patterns that may be part of an information system which supports communication and cooperation in virtual intercultural communities. The paper also provides a brief review of previous ideas on meta-communication from the language action perspective.

Introduction: Meta-communication — meaning communication about communication — can be viewed as communication that takes place when there is a breakdown in communication, i.e. ex post meta-communication, or pro-active discussion about communication, i.e. ex ante meta-communication. Meta-communication is seen as an inherent part of any information and communication system design...This paper discusses a model from the language action perspective that aims to provide facilities for both ex post and ex ante meta-communication on the construction of communication action patterns. We first examine the earlier work on meta-communication in the language action perspective.

Zhang, K. & Xiaoming, H. (1999). The Internet and the Ethnic Press: A Study of Electronic Chinese Publications. *The Information Society*, 15(1), 21-30.

A_{BSTRACT}: Explores the roles of online publications in promoting ethnic communication, drawing on a case study of online Chinese-language publications. Examined are the potentials of such publication in

supplementing and expanding traditional ethnic media functions, strengthening cultural and communal ties of ethnic groups, and mobilizing them for action. It is argued that, in the age of cyberspace, the role of ethnic media in fortifying the cultural traits of ethnic immigrants is expected to be further strengthened. As a result, ethnic groups are more likely to be assimilated into the mainstream culture without losing their own cultural roots and ethnic identity.

Ziegahn, L. (2001). 'Talk' About Culture Online: The Potential for Transformation. *Distance Education*, 22(1), 144-150.

A_{BSTRACT}: The asynchronous online class environment offers students extended time for reflection on messages sent and received. The purpose of this study of a computer-mediated graduate course on inclusive community building was to explore how students talked about sensitive cultural topics, and how the online nature of the course influenced reflection. Transformative learning, which seeks to change those deeply held beliefs which often frustrate multicultural inclusion, provided the analytical frame. Four reflective orientations emerged, as students struggled with emotional reactions to discussion topics, searched for the conceptual labels that helped explain experience, connected with past values, or reflected on assumptions underlying their worldviews.

Authors' Affiliation

- Leah P. Macfadyen: Centre for Intercultural Communication, The University of British Columbia, Vancouver, Canada.
- Jörg Roche: Department of Languages and Communication, Ludwig-Maximilians-Universität München, Germany.
- Kenneth Reeder: Department of Language and Literacy Education, The University of British Columbia, Vancouver, Canada.
- Mackie Chase: Centre for Intercultural Communication, The University of British Columbia, Vancouver, Canada.