TECHNOLOGY, LANGUAGE AND LITERACY: THE NEW PEDAGOGICAL CHALLENGE

Claire Kramsch, Francine A’Ness, Eva Lam

INTRODUCTION

Five hundred years ago, three events occurred within sixty years of each other that radically changed the way Western civilization viewed literacy, i.e., knowledge derived from texts and transmission of knowledge through texts. In 1457 the first Latin Psalter came out in print from Gutenberg’s printing press in Mainz. In 1492 Christopher Columbus, led or misled by cartographers of the time, planted the Spanish royal banner on the shore of the New World. When in 1517, Martin Luther nailed his theses to the chapel-door in Wittenberg, they were printed up in German translation and read in every part of the country within fifteen days (Anderson 1983: 39). Shortly thereafter Luther challenged the authority of the Church and the Emperor in Worms. Thus advances in technology together with shifts in political and social power ushered in a cultural revolution that established the pre-eminence of a type of literacy, based on the printed word, that has lasted to this day.

In the last 25 years, however, we have witnessed three events that are once again radically changing the nature of knowledge and its transmission. In 1974 the microprocessor was invented in Silicon Valley, CA., the personal computer took off and so did the internet, the WWW, and the virtual worlds of electronic technology that we know today. In 1989, the fall of the Berlin Wall and the end of the Cold War, facilitated by television and the computer, created a new global world order, where communication occurs as much in cyberspace as it does in outer space, as much on information superhighways and the electronic frontier as in the local realities of space and time. Finally, in October 1998, Bill Gates, Chairman of Microsoft corporation, challenged the authority of the US Government by defending Microsoft’s navigational aid in an anti-trust litigation case against Netscape. Another momentous cultural revolution is happening, where technological, political, social and economic changes go hand in hand.

What is at stake in each of these revolutions, is the very ownership of knowledge and its definition, and the role played by educational institutions in its transmission. Bill Clinton had pledged to give every schoolchild in America access to the internet by the year 2000. While many educational programs continue to be cut, spending on technology for schools rose from $4.3 billion in 1996 to $5.2 billion in 1997 and continues to rise. Many of the computer advocates, blending technology and ideology, insist that “computers will free students from the constraints of authoritarian teachers and rote learning, that the schools can become a place to learn rather than a place to teach.” (NYT Nov. 30, ’97). But learn what?

After a few reflections on the nature of print and digital literacy and on the two different reading cultures they represent, we examine in detail two uses of electronic technology
to teach foreign language literacy. The two examples show that computer technology forces us to revise not only the way we teach, but what we teach, the type of knowledge we communicate and the way we think about communication per se.

PRINT VS. DIGITAL LITERACY

If Europe gave us print literacy and textual realities, America gives us digital literacy and virtual reality. To this day, the technology of print, harnessed by the secular structures of the academy, serves to distinguish the literate from the non-literate, the gebildet from the ungebildet, by fixing the truth in texts that are valued over mere experience and other orally transmitted knowledge (e.g., no academic credit for living abroad). Printed texts (like the Scriptures) are viewed as the repository of authoritative, original truths that can be disclosed through careful analysis and exegesis. It is the study of written texts – textbooks, readings, vocabulary lists, the grammatical paradigms of standard written language – that is deemed worthy of academic recognition. Print literacy is acquired through schooling or induction into the genres of power: the academic essay, the explication de textes, the multiple-choice pencil and paper test. The cognitive benefits of textual training – e.g., abstraction, categorization, criticism and commentary, analysis and synthesis, generalization – all these skills are seen as intellectual training that will make the individual into a functioning member of civil society, whatever his/her occupation, for civil society lives by the rule of written law.

Digital literacy does not do away with the text but with the sanctity of the text. The computer screen can blow up, reduce, fragment, highlight, juxtapose, embed into one another a multitude of "texts" in different modalities – written, visual, acoustic, musical. Through its unlimited database, the computer can blur the distinction between orality and literacy, between canonical and non-canonical forms of knowledge, the trivial and the sublime can be downloaded together from the internet at the click of a mouse. The Web and the homepage genre can make public what used to remain in the private domain. Rather than original truths, the computer fosters a multiplicity of opinions and points of view, all struggling for attention and recognition. Whereas print literacy values historical records, legal documents, and teaches students in schools what they should remember, i.e., what is worth remembering (see Pierre Nora’s Lieux de mémoire 1984–92), digital literacy builds the future. In a recent NYT article entitled “Don’t look back”, Frank Rich (31 Oct. 98 A27) reports on the opening of The Tech, a new showplace for Silicon Valley’s revolutionary accomplishments in San Jose, California, where start-up entrepreneurs and venture capitalists exploit the microchip to define tomorrow’s knowledge frontier. This frontier, writes Rich, represents “the cultural coordinates of all our frontiers: the buzz of impatient youth, of gold-rush booms and busts, of new immigrant talent and burgeoning community.” Indeed, if print literacy helps build civil societies or Gesellschaften, digital literacy is busy building communities or Gemeinschaften of people who share similar interests, aspirations or life-styles on the margins of established societies. Digital literacy is busy deschooling society, recreating contexts of learning out of reach of the academic gatekeepers. In the same manner as the nation-state used print literacy to displace the Church in the education of its people, we now see the multinational corporations using the resources of digital literacy to displace the nation-states. By doing so, it attacks print literacy where the latter had become the weakest: namely, in its elitism.
TWO DIFFERENT READING CULTURES

As argued by recent experts in computer-mediated communication (Lanham 1993, Herring 1996, Jones 1996, 1997), we can already see the changes occurring in the reading culture of our students. Print literacy favors the slow, linear reading of texts whose covert structure needs to be discovered, whose interpretation needs to be persuasively argued and put on display for academic disputation and evaluation, whose truths define and frame the problems that future generations will attempt to solve. Many of the younger students today, raised on television or at the computer terminal, are impatient with that kind of reading. Their attention span is different and so are their learning styles. They seem able to process multiple modalities (visual, verbal, acoustic) at the same time, and to tolerate a much looser degree of coherence and relevance of various stimuli than what print literacy made us accustomed to. Their sense of what is private and what public knowledge is different from that of print literacy, and so are the dichotomies between high and low culture that the print medium has fostered over the centuries. Today’s students have the reading culture of the digital age (Reid 1996, Miller 1998, Lane 1998).

Digital literacy favors the non-linear browsing from hypertext link to hypertext link within an overt navigational frame; it privileges analogy and association, the aphoristic soundbite, the play with shapes and sounds, and a reshuffling of the relation of text and context. It offers opportunities for unscheduled learning, for what Lave and Wenger call “legitimate peripheral participation” (Lave and Wenger 1991). Not so much probing and depth of understanding are important here, but, rather, personal relevance, engagement and social contact, ritual and phatic communion, and enough cooperation to solve immediate and practical problems. In the face of our increasingly multilingual, heterogeneous student body, multimedia can give new meaning to the printed word by building communities of practice who discover authorial responsibility and narrative voice through the new medium (see also Kern 2000).

Furthermore, whereas print literacy tends to overemphasize the typological aspects of language (categories of linguistic structure, uniform typography etc.), digital literacy and multimedia in particular favor visual perception and spatial gesturing (pictures, drawings, diagrams, graphs, tables), i.e., the topological aspects of language as social semiotic (Lemke 1998: 290). For the moment, the new medium seems to be quite a-historical; in its reaction against any form of institutionalized knowledge, and its lack of reverence towards tradition, it seems to foster a kind of historical discontinuity that may be of concern to educators and gatekeepers in the academy. But, as we shall see in the examples below, what might be happening is less a rejection of history than a rescripting of history in ways that are foreign to the institutional wardens of public memory through print literacy, but are familiar to the carnivalesque or post-modern tendencies of popular culture.

Table 1 summarizes this very brief reflection on the two literacies that confront each other at the end of this 20th century and on the educational challenge they represent. We now take two examples to show how this challenge gets played out in the acquisition of foreign language literacy in the US.

MULTIMEDIA: TEXTBOOK OR CREATIVE DESIGN?

The first example is taken from an advanced Spanish class at UC Berkeley, where Francine A’Ness engaged her undergraduate students in the creation of a CD-ROM to teach Latin-American culture in Spanish. At first, she thought they would just digitize the
Table 1: The confrontation of two literacies

<table>
<thead>
<tr>
<th>Europe gave us print literacy and textual worlds</th>
<th>The US give us digital literacy and virtual worlds</th>
</tr>
</thead>
<tbody>
<tr>
<td>authenticity of the text</td>
<td>authenticity of the context</td>
</tr>
<tr>
<td>valued over experience and oral tradition</td>
<td>valued over text</td>
</tr>
<tr>
<td>original truths</td>
<td>multiple opinions and perspectives</td>
</tr>
<tr>
<td>print records memory: rise of law, theology</td>
<td>“don’t look back”, building the future</td>
</tr>
<tr>
<td>texts anchor the laws of civil society:</td>
<td>individuals build interest groups:</td>
</tr>
<tr>
<td>the schooling of society</td>
<td>Internet and the deschooling of society</td>
</tr>
<tr>
<td><em>Gesellschaft</em></td>
<td><em>Gemeinschaft</em></td>
</tr>
<tr>
<td>print journalism</td>
<td>TV, WWW, Internet</td>
</tr>
<tr>
<td>Church elite displaced</td>
<td>Nation-state displaced</td>
</tr>
<tr>
<td>by secular powers</td>
<td>by corporate powers</td>
</tr>
<tr>
<td>print literacy → literature, <em>Belletristik</em></td>
<td>computer’s relational database</td>
</tr>
<tr>
<td>lit. crit. loses touch with experience</td>
<td>simulates life itself,</td>
</tr>
<tr>
<td>critical distance from experience</td>
<td>experiential learning in context</td>
</tr>
<tr>
<td>excludes the non-initiated from knowledge.</td>
<td>claims to give universal access to knowledge</td>
</tr>
</tbody>
</table>

Print Literacy

<table>
<thead>
<tr>
<th>Two different reading cultures</th>
</tr>
</thead>
<tbody>
<tr>
<td>linear reading</td>
</tr>
<tr>
<td>covert textual structure</td>
</tr>
<tr>
<td>slow, exegetic, argumentative</td>
</tr>
<tr>
<td>monolingual, homogeneous culture</td>
</tr>
<tr>
<td>intellectual mission of academia</td>
</tr>
<tr>
<td>transmission of knowledge</td>
</tr>
<tr>
<td>display of knowledge is all important</td>
</tr>
<tr>
<td>paradigmatic, deductive learning</td>
</tr>
<tr>
<td>problem-defining</td>
</tr>
<tr>
<td>non-linear browsing from link to link,</td>
</tr>
<tr>
<td>overt navigational structure</td>
</tr>
<tr>
<td>“sound bite” aphoristic</td>
</tr>
<tr>
<td>multilingual, heterogeneous culture</td>
</tr>
<tr>
<td>professional mission of academia</td>
</tr>
<tr>
<td>transmission of information or affect</td>
</tr>
<tr>
<td>engagement, ritual, social contact</td>
</tr>
<tr>
<td>situated learning, legitimate peripheral participation</td>
</tr>
<tr>
<td>problem-solving</td>
</tr>
</tbody>
</table>

Two different educational goals

| canoncial knowledge                             |
| genres, frames, classifications                 |
| → intelligibility                               |
| authorial responsibility;                      |
| critical awareness of power and control         |
| emphasis on content and truth                   |
| fiction, imagination, incidental knowledge      |
| multiple perspectives, healthy                  |
| anti-autoritarianism                            |
| personal judgement, individual style and voice  |
| creating a community of readers and writers     |
| return to playfulness of form                   |

materials and develop a handy database for accessing individual images that could be shown to future generations of students to supplement the professor’s lectures.

"Using the multimedia authoring program Toolbook, we set about conceiving the navigational frame

... We would privilege no one region, topic or time period and our readers would be at liberty (or so we thought) to explore each site at will and in whatever order they chose. Just as we believed we had absolute creative freedom as authors, we also believed we could grant a similar degree of autonomy to our readers...

The whole text would be hyperlinked ... highlighting, both visually and theoretically, the common ties that unite the many cultures of Latin America."

They chose to have a unit on fiestas celebrating the Virgin Mary in Latin America. After having decided to classify the cult of the Virgin under the rubric "Fiestas" in their
navigational frame, they started out as they would with an illustrated book. One of the students writes in her journal:

"The CD-ROM seemed to me to be a type of illustrated book, where the pictures are often there to keep the readers’ interest or to emphasize a point but they never take precedence over the written word."

The students clearly started out with a print literacy mentality. They felt responsible as authors for keeping the readers’ interest within a linear sequence of development; pictures were to provide additional, supplementary information and clarification, and were to be clearly subordinated to the written text, thus maintaining the traditional hierarchical precedence of the written word; pictures were to give incidental emphasis to points that were already presented in writing. Such a perspective sees the written text as primordial in its integrity and the reader as a secondary phenomenon, whose interest has to be kept alive for the purposes of the exercise, but is not crucial for the survival of the text.

After a while, however, the students took better advantage of the new medium and its intrinsically new characteristics. Having scanned a small devotional prayer card that shows the veiled head and shoulders of the Virgin, they enlarged it so that it could take center stage on their page. Through “hot words”, like marianismo (cult of the Virgin Mary), they managed to include all their introductory information without crowding out the image or running out of space (Figs. 1 and 2).

By clicking on the word made marianismo, the reader would make a definition appear in a small text field. For aesthetic purposes, i.e., to render the text more attractive, the students cropped the two angels from another devotional postcard devoted specifically to the Virgin of Guadalupe (Fig. 4). When you now click on marianismo, the text floats above the Virgin held by two angels.

The second page they created was dedicated to the Fiesta de la Virgen de la Purisima Concepción in Leon, Nicaragua (Fig. 3). Using a photograph of a gold medallion they had found in a book, they cropped the medallion from its chain, and reframed it on a pale blue background next to a short text explaining the ritual that takes place during the festivities in celebration of this Virgin.

Three words altar, grito and gorra were made into “hot links”. To establish coherence across pages, the students placed the Virgin once again in the center and put the text around it or embedded it underneath a series of “hot” object fields. To leave this page, there are only two choices: back to the index page or forward to the Virgen de Guadalupe.

This third page is “hotter” still. The visual logic of the previous two pages is repeated with a vibrant image of Mexico’s national Virgin in the center. The students again took the image from a devotional prayer card, featuring the Virgin flanked by four small angels (Fig. 4).

In each of the four corners miniature scenes depict the story of her appearance to the peasant Juan Diego (Fig. 5). In order to make their page more interactive and “less crowded”, the students decided to crop each of the miniature scenes from the original and to make them into “hot” or clickable links to narrative texts.

The four angels had already been erased and embedded in page one. Thus the Virgin was left standing alone, like the two others that had gone before. She was made “hot”, i.e. she could be blown up to fill the whole page by clicking on her image.

The last page was dedicated to Columbia’s Virgen de Las Lajas, taken from the Internet (Fig. 6). The students found that the image was too big for the CD ROM, so they cropped it at the bottom causing the saints, Francis of Assisi and Domingo de Guzman, a local saint, to lose their feet in the process. Once again, to give the impression that the Virgin is ap-
Celebraciones Marianas en Latinoamérica

Indudablemente una de las fiestas más importantes, impuestas por la cultura española en Latinoamérica, es el fiestario María. Por la parte de las culturas indígenas, no se aceptó para manejar la transformación de un tema de fiesta costumbrista religioso. Muchos crearon la expresión mariana y aunque se la relaciona con la creación de la idea de la virgen en Latinoamérica, se debe entender como una creación que generó un conjunto nuevo de rituales y festividades.

El esfuerzo de la Virgen María por la conquista de las misiones indígenas y mestizas explica su propia cultura. Antojaba devoción y la Virgen María tiene un lugar en el catolicismo tradicional en las culturas amerindias. Leyendas y costumbres la imagen de la Virgen para resaltar la vida y su presencia en el mundo, producto del contacto entre culturas.

La Virgen María es la dona madre de las culturas latinoamericanas, creadora de sagrados y milagros de la Virgen de la Inmaculada de México. Dicha es la doña madre de las culturas americanas, transmitiendo al culto de dicha forma el reconocimiento de Dios mediante la Virgen, de la cual se derivan diferentes elementos de la imagen de la Virgen de la Inmaculada.

La Virgen María es el centro de la identidad de los pueblos latinoamericanos, creadora de apoyos y milagros de la Virgen de la Inmaculada de México. Es la dona madre de los cultos americanos, transmitiendo al culto de dicha forma el reconocimiento de Dios mediante la Virgen, de la cual se derivan diferentes elementos de la imagen de la Virgen de la Inmaculada.

Figura 1

Figura 2
La Fiesta de la Virgen de la Purísima Concepción

En Nicaragua, especialmente en León, donde nació esta bella tradición, la gente desahoga en las calles, visitando cada hogar con para adorar a la Virgen de la Purísima, después del cual se reporta que da nombre a esta tradición.

La Gritería Chiquita es una tradición menormente conocida. Debido a la cercanía del volcán Cerro Negro a la ciudad colonial de León, han habido múltiples erupciones y eventos que han afectado la vida diaria de sus habitantes. En 1947, se temió una erupción que podría afectar a León. El obispo declaró que se rezara a la Virgen, que protegería a los habitantes. A partir de este momento, el voluntariado comenzó a ser logrado por la Virgen, que ha protegido a León de las erupciones y da nombre a esta tradición.

La Gritería Chiquita fue instituida en 1947 y se celebra el 7 de diciembre. En este día, se realizan dos gritos: uno el 7 de diciembre y otro el 14 de agosto, víspera de la fiesta de la Asunción de la Virgen, para pagar su promesa.

<table>
<thead>
<tr>
<th>Atrás</th>
<th>Inde</th>
<th>Fw</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1910</td>
<td>1920</td>
<td>1930</td>
</tr>
<tr>
<td>Nacional</td>
<td>Revolucionaria</td>
<td>Moderna</td>
</tr>
</tbody>
</table>

---

Figure 3

ORACIÓN A LA VIRGEN SANTÍSIMA DE GUADALUPE

Acuérdate, piadosísima Virgen María de Guadalupe, que en tus celestiales apariciones en la montaña del Tepeyac, prometiste mostrar tu clemencia amorosa y tu compasión a los que te amamos y buscamos solicitando tu amparo, llamándote en nuestros trabajos y aflicciones. Oírás nuestros suspiros, enjuague nuestras lágrimas y damos consuelo y alivio. Jamás se ha olvidado decir que ninguno de los que hemos implorado tu protección, ya en públicas necesidades, ya en nuestras casas privadas, pidiendo tu socorro, huvimos sido abandonados. Con esta confianza acudimos a Ti, siempre Virgen María, Madre del Dios verdadero, y aunque amargando bajo el peso de nuestros pecados, venimos a postrarnos en tu presencia soberana, seguros de que te has de dignar cumplir miserericordiosa tus promesas; esperamos que no ha de molestarnos ni afligirnos cosa alguna, ni tuframos que temer enfermedad ni otro accidente penoso, ni dolor alguno, estando bajo tu sombra y amor. Que en admirable imagen has querido quedar con nosotros. Tú, que eres nuestra Madre, nuestra salud y vida, estando en tu regazo maternal y curiendo en todo por tu cuenta, no necesitamos ya de ninguna otra cosa. No deseches, oh, Santa Madre de Dios, nuestras súplicas, antes bien, inclina a ellas tus oídos constitutivos y escucharnos favorablemente. Amén.
La historia de la Virgen de Guadalupe

1. La Virgen aparece

2. La Virgen habla

3. Juan Diego obedece

4. Se reconoce el milagro

Epoca
Atras | Indic | Fin
Precolombina | Colonial | Nacional | Revolucionaria | Moderna
1519 | 1820 | 1910 | 1950 | 2000

Figure 5

La Virgen de las Lajas

No se sabe con certeza quien desencadenó esta aparición de la Virgen de las Lajas. La imagen se encuentra en una de las piedras más ásperas de la Cordillera de los Andes. Se dice que se vio traída la imagen de la Virgen del Rosario, que desprendía rayos de luz y resplandeciente. Un templo fue construido en ese sitio y la imagen fue perfeccionada en óleos coloridos.

Adorando a la Virgen aparecen en la pintura Santo Domingo de Guzmán y San Francisco de Asís. Acto seguido, relegados vienen principalmente de Colombia y Ecuador, a adorar a la Virgen de las Lajas. Como muestra de su agradecimiento y devoción, muchos peregrinos dejan placas en piedras en el camino a su santuario.

Epoca
Atras | Indic | Fin
Precolombina | Colonial | Nacional | Revolucionaria | Moderna
1519 | 1820 | 1910 | 1950 | 2000

Figure 6
paring not only to the saints but also to the reader, the two saints were cropped from the picture, isolated into two separate object fields and enlarged. To continue the logic they had established on the previous page, the students made the Virgin “hot” but not the saints. When clicked upon, the Virgin now rises aloft in her glory and worshipped, not only by the two saints, but by every user of the program as well.

“Writing” a hypertext of this sort clearly entails issues of narrative coherence, expository logic and aesthetic representation as well as authorial choices and their consequences – issues that have traditionally been the hallmark of schooled literacy. Here, however, it potentially engages students’ authorial responsibility and narrative voice to a much greater extent than written texts, because the product falls under the public domain, and it allows a much greater degree of liberty taken with the original source. We saw how the representations of the Virgin created a kind of secondary cultural authenticity that has its own discursive and aesthetic logic. This logic might be different from the logic of print literacy. But, despite its claim to greater authenticity, it is also different from the lived experience of Latin America the authors tried to convey. Nevertheless, in the end all the students were of the opinion that multimedia gave a much more complete, real and authentic access to Latin-American culture than did printed text. There is a correct way to read a written paper and that’s linearly. This is a convention understood by both author and reader. It helps the author to manipulate how her text will be read and in what order the reader will absorb the information presented. In the CD ROM, ... “the author does not have this same control”. Nothing will ensure that the user will follow the hotlinks in the order the author had in mind, nor that she will follow any hotlinks at all. As Purves writes:

Hypertext changes the form of control as well as the nature of control. In electronic space, where simultaneous text spaces surround the reader and writer or are displayed on the screen, the motion of reading or writing is not determined by the left-to-right, top-to-bottom, front-to-back fixity of the book. One may float through the spaces in a number of different orders and skip from the inside of one space to the outside of another. (1998: 242)

While the students had invested a great deal of thought and effort into designing a multimedia program with a specific authorial perspective, the nature of the medium could not guarantee that the readers would discover or even adopt the authors’ perspective.

The issues raised by this small example of the use of multimedia for the teaching of Spanish literacy are momentous. The knowledge of the Spanish language and culture, traditionally imparted via grammar and vocabulary, is now transmitted via navigational frames, textual links, pictures and other non-verbal means whose semiotic systems interact in a variety of ways.

Electronic culture offers another definition of authenticity and authorship than does typographical culture: it is participatory, multimodal, holistic, associative, and seriously puts into question what it means to become culturally literate in a foreign language.

ON-LINE IDENTITIES: AUTHORS OR NARRATORS?

The issue of authorship emerges again but in a different form in the use of the World Wide Web by learners of English as Second Language, a research project undertaken by Eva Lam at UC Berkeley. Almon, a young Hong Kong immigrant and ESL learner in a California high school, expressed frustration over the fact that his English was still lagging behind, even though he had been in the United States since 1992. He felt discriminated against in school because of his Chinese accent and was worried about his job prospects because of his low proficiency in English. “I just don’t belong” he complained. In the latter part of his senior year, Almon became actively involved with the World Wide Web, com-
pleted a personal home page on a Japanese pop singer, compiled a long list of names of his on-line chatmates in several countries around the world, and wrote regularly to a few e-mail pen pals. His writing ability in English improved dramatically and he felt increasing pride in expressing himself in English. How did that happen?

First, Almon constructed a personal website through an international server called "GeoCities", advertised as follows:

Welcome to GeoCities, the largest and fastest-growing community on the Internet ... More than 2 million people have already joined, and thousands more are signing up every day.

... GeoCities is a thriving on-line community of people just like you. We call our members "homesteaders" because they've staked a claim on their own plot of "land" on the Internet.

... There are 15 themed avenues (Entertainment, Arts & Literature, Sport & Recreation etc.)...From the neighborhoods, you can peruse the best home pages, visit our exciting, interactive avenues, or just cruise the suburbs...

From this ad, we can see that web technology offers not only the virtual base for the construction, storage and retrieval of electronic texts, but also a full-fledged metaphor for the building of social and cultural communities. The fusion of the words home and page merges the two overlapping tropes of rootedness and literacy into an American life-style that is exported over the Internet. One can peruse texts (or homepages) by cruising down the neighborhoods and suburbs of contexts (or themes). As Francine described earlier in her statement about the CD ROM on Latin America, the medium lends itself to building a sense of community and commonality. The names and themes of the over 40 neighborhoods (with branches called suburbs) offer a chance to interact with people just like you. These themes are characteristically empty stereotypes, or lieux de mémoire devoid of all historical memory.

For example,

Paris is the neighborhood of: Romance, poetry, and the arts
Broadway: Theater, musical, show business
Athens: Education, literature, poetry, philosophy
Vienna: Classical music, opera, ballet
Wellesley: A community of women
Tokyo: Anime and all things Asian

Almon chose to settle his homepage in "Tokyo", where a global community of Asians gathers around Japanese pop culture. Almon's on-line chatmates are located in such diverse sites as the US, Malaysia, Japan, Hong Kong, Canada. Almon says he prefers female penpals because they are better able "to help somebody grow in self-knowledge and confidence". Female penpals take on a nurturing, motherly supportive role. Here is a posting of Almon to Ying, a Chinese female penpal from Hong Kong (written in English although in other instances, he frequently code-switches to Chinese.) Almon had presented himself as a shy person in need of support and Ying had responded accordingly:

Almon: Hum ... you said you can share my happiness or sadness, that's great. It is a very important thing to be a good pal. So don't try to hide when I need to share things with you, okay. Also I would like to listen, if you have anything you want to share too ...

World Wide Web literacy, both close/personal, and remote/impersonal, seems to allow a much greater fluidity of roles and identities than print literacy. The anonymous and a-historic nature of the exchange above makes it easier for Almon to take on an empathetic, sharing and caring personality, that can use conventional phrases like sharing happiness or sadness, being a good pal to express his personal needs.
The electronic conventionalized emotions further facilitate closeness and distance at the same time. Here is an exchange with Ada, a Hong Kong Chinese living in Canada:

Almon: I have some photo scans of my childhood and fellowship, I don’t know if you are interesting to take look
Ada: oh... i’m interested...
Almon: Ok, I hope you don’t feel sick by look at my pic. hehe ^_^ [raised eyebrows/ smile]
Ada: I’m sure I won’t
Almon: the pic is very blur...
Ada: You are very happy and cute when you’re small : > [smile]
Almon: Yeah, I like my smile when I was a kid. But, I don’t know will I smile like that again... hee hee.
Ada: you’ll have a smile like the one you had when you’re a baby...if you can be as simple as a baby...I mean it in a nice way...
Remember Jesus told us that we have to be like a child if we want to go to heaven.
Almon: Yes, I’m 100 % agreeing what you’re saying. That’s what I always thinking, so I very like the people childlike outside, but also mature inside...

Seiko, a Japanese female living in the US, gives him advice to which he responds:

Almon: Seiko, arigatoo for your advice to me (>_0) [eyewink] I will try to more open myself, and be more talkative. But, it takes time to change. Hey, you know what, something can always control my sentiments. Can you guess it? ... Yeah, right. It’s music.

If we examine these postings, they sound both very personal and very much like a role-play. The hedges and qualifiers: “you know what?”, “Can you guess it?””, “hehe”, “oh”, “hum”, “okay” as well as the emoticons of the genre (>_0), establish a distance between Almon the author and Almon the narrator, between the world that is spoken about and the world in which the speaking occurs.

The gender roles adopted by the interlocutors reinforce the impression of a rhetorical or textual identity that is being developed and that is related to but different from the biographical identity of the authors. Werry (1996: 59) notes the interplay between involvement and detachment in the synchronus communication of internet relay chats:

When communicating on IRC there is a different sense of connection to the world; it does not belong to the speaker in the sense that a spoken word does. Yet at the same time, words exist in a temporal framework which approximates oral discourse, which requires interactivity and involvement, and which invites the fabrication of the texture and signature of an individual speaker’s voice.

Almon tries to explain this to one of his penpals:

Almon: I believe most people has two different “I”, one is in the realistic world, one is in the imaginative world. There is no definition to define which “I” is the original “I”, though they might have difference. Because they both are connect together. The reality “I” is develop by the environment changing. The imaginative “I” is develop by the heart growing. But, sometime they will influence each other. For example me, “I” am very silent, shy, straight, dummy, serious, outdate, etc. in the realistic world. But, “I” in the imaginative world is talkative, playful, prankish, naughty, open, sentimental, clever, sometime easy to get angry, etc... I don’t like the “I” of reality. I’m trying to change myself.

But, I think you usually would see “I” in imaginative world because I’m very open to writing e-mail to people. ^-^ [Japanese emoticon for smile] How about you?? Do you have two different “I”? hee hee.

The question arises, of course, as to the originality of the narrative self developed through multimedia. Much of these youngsters’ postings display quite conventional narrative roles, they borrow their codes from Madison street advertising, Silicon Valley talk, popular psychology, and religious discourse. Goffman would characterize these borrowings as so many “animations” of other people’s discourse. Yet there is no doubt that Almon has found in the multiculturral world of Japanese popculture a community that understands him and supports him and that this in turn has helped improve his English. In this particular
case, the function of language is less to inform or to explain than to reach out, to affect, and be recognized as a valid conversational partner. The phatic uses of utterances take precedence over their propositional truth.

This second example of the uses of literacy for learning a foreign language raises important questions about non-native speaker identity and voice. Learners of a foreign language have traditionally taken the native reader/writer as their model, and have traditionally been taught to emulate the written conventions established by the target society. The global society to which Almon aspires to belong has cut itself loose from any national historical canon; it takes its cues from an international youth popular culture that poaches freely on cultural traditions and icons, and that plays with language in quite unconventional ways. This is particularly easy with English as a Second Language, but it is also possible with other international languages like French, German, or Spanish. Which norms should language learners abide by, which voices should they adopt as they try and gain friends and influence people?

CONCLUSION

Computer technology is still used in foreign language education the way print technology has been, i.e., for the acquisition of discrete points of grammar and vocabulary, and for the ability to retrieve and communicate information through written texts. The two examples examined in this paper show some of the opportunities and challenges presented by electronic technologies for the teaching of literacy (for a critical discussion of the issues, see, for example, Burbules 1998, Knobel et al. 1998).

The Latin-American culture CD-ROM showed that enhanced access to unlimited databases of culturally authentic texts of various kinds becomes meaningful and relevant to the students only if the students themselves actively manipulate these texts into coherent contexts for which they take full authorial responsibility. But the medium puts into question traditional notions of text, authorship and authorial responsibility. It forces teachers and students to rethink what it means to understand text, to teach a foreign culture, to learn foreign concepts.

The Geocities internet chats on Almon's homepage showed that multimedia can foster a healthy separation between author and narrator identity. But it also challenges educators to help students create for themselves a narratorial identity that does not merely reproduce existing codes. The language they use in the process might not be the standard variety sanctioned by the academy, but it is certainly a variety that is more appropriate to their age group, their interests, and the needs of the global community they wish to identify with. Here again, teachers are confronted with the fundamental paradox of their profession – it is their responsibility both to give their students a voice in a certain social and national community, and to help them transcend the limits of nation, class, and region, and access the larger transnational world of the internet.

In the introduction to their recent book, Network-Based Language Teaching: Concepts and Practice (2000), Richard Kern and Mark Warschauer, following Charles-Crook (1994) show how the computer has been used as a tutor, a pupil, and a toolkit. As a tutor, they say, it can provide immediate positive or negative feedback on grammatical or vocabulary drills; as a pupil, it obeys commands to do things like walk around and explore simulated environments by following street signs or floor plans, etc.; as a toolkit, it can access and organize information through databases, spreadsheets, word processors and the like. These three uses correspond to three different kinds of literacy, which we could call: code literacy, imperative literacy, procedural literacy. While Kern and Warschauer would view the uses of the computer explored by Francine A'Ness' students as procedural literacy, they would see Almon's
use of the computer as a powerful extension of computer-as-toolkit, "in that it now facilitates access to other people as well as to information and data."

From the educational perspective we take in this paper, we would like to argue that in both cases access to people - i.e., understanding what people from different cultures are about - requires yet an additional kind of literacy. It requires a sensitivity to context and discourse, a readiness for interpretation, as well as a willingness to temporarily abandon one's "navigational frame" and adopt another. The new technology entices students to develop such an interpretive literacy at the same time as it seems to only require them to manipulate and play with ever greater quantities of information. Or it seems to encourage a phatic communion among like-minded communities of language users. The challenge that language educators face is to make sure they engage their students in the complexities of understanding the living and historically different Other, as much as the computer engages them to find their own voice in another language. (1)

REFERENCES


(1) A different version of this paper can be found in the electronic journal Language Learning and Technology 4:2 (2000) 78–104. <http://ilt.msu.edu>