It is just incredible when I hear people talking about how open the Web is. It is the ultimate act of intellectual colonialism. The product comes from America so we either must adapt to English or stop using it. That is the right of any business. But if you are talking about a technology that is supposed to open the world to hundreds of millions of people you are joking. This just makes the world into new sorts of have and have nots.

Anatoly Voronov, director of the Russian Internet service provider, Glasnet (Crystal, 1997, p. 108).

The spectre of an Internet-charged global English riding roughshod over other languages is haunting the world. This spectre first appeared in the mid-1990s, when more than four-fifths of the first generation of Web pages were written in English (Cyberspeech, 1997). Today, even though more languages are represented, English remains the default tongue of international discussion online, as well as of e-commerce (The Default Language, 1999), and many people continue to fear the consequences of this dominance for linguistic diversity.

An examination of language use online reveals that the issue is complex. While the Internet has strengthened the need for an international lingua franca—and that lingua franca is most frequently English—there are present other online dynamics that contribute to new forms of language pluralism.

To illustrate these dynamics, I draw on research I conducted in Egypt, Singapore, and Hawai‘i. My approach for analyzing online language use in these three contexts is not that of seeking "impacts" but rather of examining dense webs of interrelationships. Language use online forms part of a largely matrix of technological, social, political, and economic contexts that shape communication in the current era. While I reject the notion of technological determinism which suggests that a technology causes certain results, I also reject notions of technological neutralism which deem media as valuefree vessels that can be used toward any ends. The Internet, like other technologies, is neither good or bad. Nor is it neutral (Kranzberg, 1985). The Internet’s history and design are replete with certain values: for example, the ASCII code that computing and the Internet were first based on privileges Romanized languages such as English over those using other alphabets or ideographs. However, these values don’t determine a particular result; rather, they shape a social struggle—in this case, how individuals and communities construct and express their identities online using language.
These issues provide the focus of this chapter. I begin by exploring the changing role of language in the post-industrial era. I then discuss some examples of online language use in three diverse places: Egypt, Singapore and Hawaii. I conclude with some thoughts about the implications of online language diversity for literacy practices in schools.

**Language and Identity in the Era of Globalization**

The post-industrial era—marked by the broad social and economic changes of the late 20th century following the development of modern computing and telecommunication systems—is characterized by a central contradiction between global networks and local identities (Castells, 1996, Castells, 1997, Barber, 1995). On the one hand, global flows of money, media, and markets—mediated by transnational corporations and multilateral institutions—are increasingly influencing people’s pocketbooks and lives, weakening or at least altering the traditional sovereignty of the nation state. Other customary sources of identity, including time-honored gender roles, permanent careers, and even distinct racial identity, are also being challenged by the social, economic, political, and demographic changes wrought by globalization (Warschauer, 2000b). On the other hand, and in response, a wide array of social movements and organizations have arisen to define and defend local identities, via religious fundamentalism, indigenous movements, men’s or women’s groups, and other new social movements from all sides of the political agenda (Castells, 1997). As Touraine explains, "In a post-industrial society, in which cultural services have replaced material goods at the core of production, it is the defense of the subject, in its personality and its culture, against the logic of apparatuses and markets, that replaces the idea of class struggle" (Touraine, 1994, emphasis in original)

Castells (1996) explains further the central role of identity:

In a world of global flows of wealth, power, and images, the search for identity, collective or individual, ascribed or constructed, becomes the fundamental source of social meaning. This is not a new trend, since identity, and particularly religious and ethnic identity, have been at the roots of meaning since the dawn of human society. Yet identity is becoming the main, and sometimes the only, source of meaning in a historical period characterized by widespread destructuring of organizations, delegitimation of institutions, fading away of major social movements, and ephemeral cultural expressions. People increasingly organize their meaning not around what they do but on the basis of what they are (p. 3).

Within this contradictory mix of global networks and local identities, language plays a critical role. The intersection of language with international networks and globalization is perhaps most evident. Put simply, global trade, distribution, marketing, media, and communications could not take place without a *lingua franca*. These processes of globalization over the last thirty years have propelled English from being
an international language—like French, Spanish, Chinese, or Arabic to becoming a truly global one, spoken and used more broadly than probably any other language in world history. According to Crystal (1997), 85 per cent of international organizations in the world make official use of English, at least 85 per cent of the world’s film market is in English, and more than 65 percent of scientific papers in several important academic fields are published in English. Given the vast global presence of English at the time of the birth of the Internet, as well as the leading role of US scientists and engineers developing the telecommunications industry, it is not surprising that English rapidly became the de facto lingua franca of online communication.

Today, English is probably used on about 50% of Web sites (see discussion in Graddol, 1997) and perhaps upwards of 90% of sites used for international e-commerce (The Default Language, 1999).

But while English serves to grease the wheels of global networks, language is also critical to the defense of local identity. With other cornerstones of social authority, such as nation, family, and career, battered by the processes of globalization, language can become “the trench of cultural resistance, the last bastion of self-control, the refuge of identifiable meaning” (Castells, 1997, p. 52). The struggle over bilingual education in the US; the Quebecois, Basque, and Albanian separatist movements (in Canada, Spain, and the Balkans); the battles over language and citizenship in post-Soviet countries; and language revitalization movements in Ireland (Gaelic), New Zealand (Maori), Morocco (Tamazight) and many other countries indicate the powerful role of language-based identity in today’s world.

It is not surprising that language and dialect have assumed such a critical role in identity formation. The process of becoming a member of a community has always been realized in large measure by acquiring knowledge of the functions, social distribution, and interpretation of language (Ochs and Shieffelin, 1984). In most of the world, the ability to speak two or more languages or dialects is a given, and language choice by minority groups becomes "a symbol of ethnic relations as well as a means of communication " (Heller, 1982). In the current era, language signifies historical and social boundaries that are less arbitrary than territory and more discriminating (but less exclusive) than race or ethnicity. Language-as-identity also intersects well with the nature of subjectivity in today's world. Identity in the post-modern era has been found to be multiple, dynamic, and conflictual, based not on a permanent sense of self but rather the choices that individuals make in different circumstances over time (Henriquez et al., 1984, Schecter et al., 1996, Weedon, 1987). Language, though deeply rooted in personal and social history, allows a greater flexibility than race and ethnicity, with a person able to consciously or unconsciously express dual identities by the linguistic choices they make even in a single sentence (e.g., through code-switching, see Blom and Gumperz, 1972). Through choices of language and dialect, people constantly make and remake who they are. A
Yugoslav becomes a Croatian, a Soviet becomes a Lithuanian, and an American emphasizes his African-American linguistic and cultural heritage.

The rapid growth of languages other than English online is a reflection of several phenomena, including a demographic spread of the Internet from its early base in North America to much of the rest of the world. This is also a reflection of a broader media trend known as localization. Just as CNN and MTV first globalized their distribution (in English), and then “re-localized” in a variety of languages, so are Yahoo, Google, and other Internet giants relocating their product in different language versions.

However, the growing use of languages and dialects other than standard English reflects more than just demographics or marketing. It also reflects the important role of diverse languages and dialects in assertion of meaning and identity. Even people who use English as a principal means of communication may well choose to also use other languages (or non-standard varieties of English) to express different sides of their identity. This phenomenon will be examined through three examples: in the first, English is spoken as the main language (Hawai‘i); in the second, as a foreign language (Egypt); and in the third, as a second language (Singapore).

**Hawai‘i: the Internet and Language Revitalization**

An important component of the struggle for linguistic rights online is the work of many indigenous groups to make use of the Internet for language revitalization. Members of indigenous and minority groups in North America (see, for example, Office of Technology Assessment, 1995), the Pacific (see, for example, Benton, 1996), and elsewhere are making use of computers and the Internet to try to preserve and revitalize endangered languages.

One outstanding example is provided by the efforts of Native Hawaiians. About 20 per cent of the people in Hawai‘i have some Native Hawaiian ancestry, but due to a century of linguist and cultural persecution, the Hawaiian language has nearly died out and today has only a few hundred native speakers (Wilson, 1998). However, in the 1970s, Native Hawaiian organizations began a revitalization effort, centered in a collection of Hawaiian-immersion pre-schools and K-12 schools. These schools, however-and also the broader revitalization effort-faced a number of obstacles. First, there were few Hawaiian language resources available to the community, and these were mostly found in one or two libraries and thus inaccessible to a people who are spread out in small communities over six different islands. Second, other than on the tiny island of Ni‘ihau, with only 200 inhabitants, there is no other location with a critical mass of Hawaiians who can communicate with each other in their own language. Third, Hawaiian families sometimes lack motivation for the serious effort required to learn and use Hawaiian, especially when most are in dire
economic circumstances and require the English language in order to get jobs and survive. (See further discussion in Warschauer, 1998b, Warschauer, 1999.)

Native Hawaiian educators have made use of the Internet to try to overcome each of these difficulties. A Hawaiian language bulletin board system, Leoki, was created to post and share resource materials in the Hawaiian language. Leoki includes a resource area for sharing of Hawaiian language stories, articles, and songs; a news site with current and back issues of a Hawaiian language newspaper; a dictionary section with up-to-date vocabulary lists; and a newsline with announcements and information about upcoming events (Warschauer and Donaghy, 1997).

Perhaps more importantly, Leoki brings together a community of speakers, who use the open discussion forum, chat line, and Hawaiian language e-mail system. These popular features are used by teachers and students in the immersion schools to allow for Hawaiian language discussion and project-work by students at different schools spread out over several islands (Warschauer and Donaghy, 1997).

Finally, Hawaiian language educators feel that the very existence of Leoki, which has an entirely Hawaiian interface, creates a boon for the Hawaiian language, as it demonstrates that Hawaiian is a modern language appropriate for use via information and communication technologies. Keiki Kawai'ae'a, a director of curriculum materials, explains:

Without changing the language and having the programs in Hawaiian, they wouldn't be able to have computer education through Hawaiian, which is really a major hook for kids in our program. They get the traditional content like science and math, and now they are able to utilize this 'ono (really delicious) media called computers! Computer education is just so exciting for our children. In order for Hawaiian to feel like a real living language, like English, it needs to be seen, heard and utilized everywhere, and that includes the use of computers.

The use of the Internet for language revitalization in Hawai'i has not proceeded without obstacles. Neither Windows nor Macintosh provide a Hawaiian language operating system, so the installation of Leoki is a technically complicated step that not all schools and universities have been willing to undertake. In places where Leoki is not installed, educators make use of other communication and Web-publishing programs to allow for Hawaiian language computing (Warschauer, 1999). In addition, many Native Hawaiians lack computers or even phone lines in their homes, thus making it difficult to expand Hawaiian language Internet use throughout the broader community. Few believe that the Internet can overcome all the problems that indigenous groups face in maintaining and revitalizing their language, but it does provide an additional and valuable tool for this effort.

**Egypt: English vs. Arabic Online**
In Egypt, English is the dominant language of Internet use, both on the World Wide Web and in computer-mediated communication (e.g., e-mail). However, a romanized version of Egyptian Colloquial Arabic has emerged as a competitor to English in informal communications, and it is predicted that standard modern Arabic will be used more frequently in the future once Arabic operating systems become more widely available.

The early and extensive advantage of English on the Internet in Egypt can be explained in a number of ways. First, many key sectors of the Egyptian economy and educational system already function in English (Schaub, 2000). At universities, courses in computer science, engineering, medicine, and information technology are taught largely in English. Early adopters of the Internet thus learned to use computers in English and may not even know how to type in Arabic.

The Internet also arose quickly in Egypt's international business sector. These companies often include foreigners working for them or must maintain communications with foreign suppliers, distributors, or clients. Much of the written communication in these companies already takes place in English.

Finally, communication in Arabic on the Internet remains difficult, and a single standard of Arabic communication has not yet arisen. Many computers in Egypt even lack Arabic operating systems.

For these reasons, most Web sites developed in Egypt are in English. An example is Egypt's well-known "Otlob.com" Website[2], for ordering food delivery from scores of restaurants in Cairo and Alexandria. Though targeted to people living and working in Egypt, Otlob.com exists only in English.

English is also the dominant language of e-mail in Egypt, at least among the young professionals who were the early users of the Internet (Warschauer, Zohry, and Refaat (2000). Some 80 per cent of young professionals surveyed use English exclusively in formal e-mail messages (e.g., related to work purposes). However, approximately half of the professionals use a romanized version of Egyptian Colloquial Arabic in their informal e-mail messages, and more than half use that same version of Egyptian Colloquial Arabic in online chatting. This is especially significant in that Egyptian Colloquial Arabic is seldom used outside of the Internet in written form, and almost never in a Romanized written form. The strong motivation of Egyptians to communicate in their own tongue has thus given prominence to a language form that was seldom used before. This new form even includes the use of numbers to represent phonemes that are not easily rendered in the Roman alphabet. Sometimes communication takes place completely in Egyptian Colloquial Arabic (see figure 1) and other times Egyptian Colloquial Arabic and English are combined in a single message (see figure 2). When combined, terms used in Arabic are usually those that have strong cultural connotations, related to greetings, humor, religion, and Egyptian customs.
In summary, the predominance of English on the Internet in Egypt is due to a variety of factors and corresponds to English's broad use in other business and technological domains in the country. However, a diglossia exists in online communication in Egypt, with people using English in more formal e-mail communications and a combination of English and Egyptian colloquial Arabic in informal e-mail messages and online chats. As Arabic operating systems continue to improve and expand, it can be expected that more Web sites will be created in Modern Standard Arabic and people may begin to write e-mail messages in Arabic script.

**Singapore: Plural Englishes**

An important question to be asked about the Internet and language diversity deals with variation within languages. Put simply: Will the Internet contribute to standardization of languages or greater diversity within them?

An intuitive answer would be that the Internet will contribute to standardization, since, by fostering international communication, it will also necessitate common standards. If people in the US, India, Nigeria, the Philippines, and South Africa are all communication with each other online using English, logic has it that they would have to conform to certain common standards in order to understand each other. But, as with other issues related to the Internet and language diversity, the answer is perhaps not so simple as it seems. An example of the complex interrelationship between the Internet and English language variation is seen in Singapore.

The vast majority of Singaporeans speak a highly colloquial dialect of English known as "Singlish," which is almost incomprehensible to English speakers outside of Singapore (Pakir, 1997). Most, but not all, Singaporeans can also speak Standard Singaporean English, which varies only slightly from standard forms of British or Australian English, and are thus bidialectal.

What then is the relationship between new media technologies and the competition between Singlish and Standard Singaporean English? While it is too early to know, it is clear that new media technologies are creating greater incentives to advocates of both language varieties. On the one hand, educational and government leaders are aggressively pushing for an end to Singlish and for the sole use of the standard variety. They motivate their appeal on the basis of the new opportunities for international business and communication that take advantage of modern media (see, for example, Goh, 1999), if Singaporeans can communicate in a form of English comprehensible to people around the world.

On the other hand, the Internet provides a very powerful means for grassroots communication, and, as was seen with Egyptians (above), Singaporeans mostly prefer to use their own colloquial dialect as a means
of expression in their informal communications such as online chatting. Singaporean chat rooms are filled with Singlish, causing great concern to Singaporean educators.

One Singaporean put to verse his strong defense of Singlish, especially in the age of information technology, in a poem written (of course) in Singlish and distributed (of course) on the Internet. The anonymous poet explains his views in the verse that follows:

Wah! I heard we all now got big debate.
They said future of proper English is at stake.
All because stupid Singlish spoil the market,
want to change now donno whether too late…
Other people hear you, say you sound silly.
So like that how to become world-class city?
Basically Singlish got good and got bad.
Aiyah! Everything in life is all like that.
Actually Singlish got one bright side.
I am talking about our national plight…
Other people all say we all got no culture.
All we got is a lot of joint business ventures.
So we got no culture to glue us together.
End up we all like a big bunch of feathers.
Wind blow a bit too strong only we fly away.
Everybody all go their own separate ways.
Now we must play Internet otherwise cannot survive.
Next time the only way to make money, or sure to die.
When other countries' influences all enter,
we sure kena affected left, right and centre.
Sekali our Singaporean identity all lost until donno go where.
Even Orang-Utan Ah Meng starts thinking like a Polar Bear.
But still must go I.T. otherwise become swa koo,
only smarter than Ah Meng of the Mandai Zoo.
Wait the whole world go I.T., we still blur as sontong,
next time we all only qualified to sell laksa in Katong.
But actually we all got one "culture" in Singlish.
It's like rice on the table; it is our common dish.
I know this funny "culture" is not the best around
so we must tahan a bit until a better one is found.
Not all the time can marry the best man,
so bo pian got no prawns, fish also can.
I donno whether you agree with me or not?
I just simply sharing with you my thoughts.
Singlish is just like the garden weeds.
You pull like mad still it would not quit.
Sure got some people like and some do not like.
Singlish and English, they'll still live side by side.

Although some words may be difficult to understand, the poet's overall meaning is clear. The influx of Information Technology is threatening to overwhelm Singapore with global culture, and Singaporeans must more than ever hang on to Singlish as a way of protecting their local identity, or else they will lose their identity just as much as if Ah Meng—the popular orangutan in Singapore's national zoo-started acting as if she were a polar bear.

**Global Networks and Local Identity**

Linguistic diversity is a complex social phenomenon that will not be determined by a single medium or technology. In any case, technologies more often serve to amplify trends that already exist, or create new possibilities, rather than to bring about particular results.

What trends then might the Internet be amplifying? The examples discussed in this chapter represent some of the broad social trends that characterize today's post-industrial information technology society. As Castells (1996, 1997, 1998, see also Friedman, 1999, Barber, 1995) notes, the central contradiction of our time is between global networks and local identities. The Internet promotes global networking through international communication in English. At the same time, though, it provides an important vehicle for grassroots one-to-one and many-to-many interaction and publishing. That interaction will frequently take place in a wide variety of languages and dialects, in correspondence with the cultural and identity needs of the diverse peoples of our planet.

The Internet is not a neutral tool, indifferent to how it is used. Its history and design have tended to privilege the wealthy (who could afford computers and telecommunications), the well-educated (who were both literate and skilled at computers), and the English speaking (since the English language functioned well in the “ASCII” code of modern computing). However, identity is a powerful phenomenon in today’s world,
and communities around the globe have broken up the monopoly of standard American and British English online. The existence of native language such as Hawaiian, local languages such as Egyptian Arabic (written, if necessary, in Romanized form), and non-standard varieties of English (such as Singlish) are all testimonies to the strong will of diverse peoples to communicate in their own voice and culture online.

Finally, it is important to consider the significance of this diversity for language and literacy practices in schools. In the education of culturally and linguistically diverse students, a long-time debate has taken place between advocates for the voice of power (by giving people access to standard English) and advocates for the power of voices (by valuing students’ diverse languages and cultures, see Auerbach, 1997). The communicative experiences reported here suggest that this is a false dichotomy. First of all, the growth of other languages on the Internet is representative of the general importance of multilingualism in today’s world. The spread of English as a global language has not lessened the importance of other languages for media, marketing, and communications internal to other countries. And in a world where many well-educated people speak English, what special language advantage does a monolingual American or British person have, in competition with a bilingual German, Japanese, Chinese, or Egyptian? A linguistically diverse world requires multilingual citizens.

And, in a sense, the same dynamic applies to diverse dialects of English. As Graddol (1999) demonstrates, the majority of English speakers in the world are not native speakers, but are rather those who have used English as a foreign or native language. Just as the British lost their exclusive privilege as the owners of English to the Americans and Australians, so will the broader Anglo-Saxon community lose its “ownership” of English to Singaporeans, Nigerians, Malaysians, Filipinos, and the many other diverse speakers of global English(es). Understanding the nature and value of dialectical diversity—and even being able to communicate in a variety of dialects and genres appropriate to the circumstances—is another indication of a well-educated English speaker in the 21st century (Warschauer, 2000a). The objective should not be to squelch languages and dialects, but to give students choices—to select the languages, dialects, genres, and media most appropriate to making a particular point in a particular circumstance (New London Group, 1996). That may involve informal interaction leading to a very formal finished product—or the incorporation of informal and formal genres and varieties of language in an appropriate manner in a single piece of art (see Warschauer, 1999). Indeed, one of the sophisticated examples of student media production I have seen is that of a Native Hawaiian student who developed a multimedia formal Hawaiian language hypertext to provide a sociolinguistic analysis of a local English Creole (see Warschauer 1999). And one of the sadder moments I’ve seen in a classroom is when a student, using the Internet for the very first time, tried
to write a short, informal (but medium- and genre-appropriate note) to a friend, only to be told sternly by the teacher that such types of communication were not allowed (Warschauer, 1998a).

This is one further example of how literacy is much more complex than the simple ability to decipher texts. Rather, being literate has always referred to "having mastery over the processes by means of which culturally significant information is coded" (de Castell and Luke, 1986). In today's world, that information is coded not only in a plurality of media, but also in a plurality of dialects and languages. A pedagogy of multiliteracies is needed to best address both these forms of plurality, encouraging reading, writing and communication in diverse media, genres, dialects, and languages (Cope and Kalantzis, 2000, New London Group, 1996).

In summary, if today’s world is characterized by a contradiction between global networks and local identities, let us as teachers use the Internet to serve both. Standard English used online can give help provide students’ access to the “voice of power,” whereas online communication in diverse languages and dialects can help students find and express the power of their own voice.

**Figure 1: Discussion on an Egyptian Online Chat Forum**

**latif:** enty akhbarek eih? shofty ra2eess el ouezara elgedeed

**Meshtehi:** allah a7la klmah sma3tah alyoom

**Alawahad:** tkalam ya al 7bab

*translation*

**latif:** what's new with you? did you learn about the new Prime Minister

**Meshthihi:** wow! that's the best thing I've heard today

**Alawahad:** why don't you say something you louse


**Figure 2: A Sample Informal E-mail Message in Egypt**

Hello Dalia,

7amdellah 3ala el-salama ya Gameel.we alf mabrouk 3alal el-shahada el-kebeera ..
Keep in touch .. I really hope to see you all Soooooo00000000000on (Maybe in Ramadan).

Kol Sana Wentom Tayyebeen.
Waiting to hear from you...

Laila
Translation:
Hello Dalia,
Thank God for the safe return, my sweet. Congratulations for the big certificate. Keep in touch. I really hope to see you all Sooooo00000000000on (Maybe in Ramadan).
Happy Ramadan.
Waiting to hear from you...
Laila


References


Note
