'No through road' for some on the Information Highway

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A recent article in Arabic on the World Arabic Translators Association (WATA) discusses electronic publishing (WATA 2004). The writer, a translator, sees in electronic publishing the panacea to the problems facing comparative research, deductive analysis, and collating of statistical data. According to the article, the Internet facilitates access to information resources (via digital libraries), lowers editing and pre-press overheads as well as the costs of publishing. Apparently, this makes electronically published research 'cheaper', paper-saving, easier to transport and store, and faster to produce. The Internet is alleged to 'contribute to better and faster decision-making regarding the published content'. I am glad that the author, in the closing lines of his/her article, manages to admit that so far the Internet had not diminished the importance of the 'traditional book', despite assurances a few paragraphs before that 'technological advances point to the demise of traditional publishing and a decline in the need for printed materials'.

I don't think that applies to where the author comes from. Out of 270 million Arab people, some 67 million stepped into the twenty-first century without being able to read or write (UNESCO 2002). That's almost 25% of the population. The data may be inaccurate, as some sources state there might be more than one million illiterate people in Arab countries, because the official numbers do not take into consideration the people falling back into illiteracy. The reason? The lack of political will to promote the right to education as some regimes fear that this would lead to demands for social and economical developments.

Today literacy goes beyond the notion of reading and writing; it also encompasses language and computer skills and other relevant skills needed to cope in modern society and fully participate in all aspects of social, economic and even political life. Being able to sign your name, or decipher a sentence, is no longer a criterion for literacy. The world is becoming increasingly complicated, and millions of people in the developing and under-developed countries are not catching up. Electronic publishing, electronic learning, and all other things electronic won't help them catch up if they can't spell 'electronic'. This is just a beginning – let us not forget other factors in this equation: infrastructure, cost, cultural appropriateness, special needs, censorship, traditional resistance, marginalization of women, etc.

Just before starting to write this column I had the pleasure of assisting a number of African refugees in getting to know our local public hospital. The tour was organized by their English language teacher, and the public relations officers at the hospital arranged for four interpreters (me included) to assist them. I was faced with the task of educating, not interpreting – and when the PR officer handed out her business cards (what are these?) and explained that the clients could always e-mail her (what is that?) to arrange for an interpreter, the group showed severe signs of stress. How on earth were these people who had just arrived in Australia and who spoke no word of English, who never had the chance to go to

school, were illiterate in their own language and never saw a computer, to e-mail the hospital to arrange for an interpreter?

Middle East Online, in an article published on 14 th June 2004, discusses how citizens in Mauritania perceive ITC. Mauritania's current government is apparently facing serious opposition in face of its attempts at modernizing the country. The modernization entails improving communications infrastructure and introducing the use of Internet and mobile phones. The article states that 'the problem currently facing the [Mauritanian] government is how to reconcile the use of such ICT as the Internet and mobile phones on one hand with the customs and traditions inherent in a conservative Muslim society on the other'. If we cannot perceive how a mobile can interfere with any religion, or the Internet with tradition, then we can be excused for trying to implement some electronic panacea to move the Third World(s) into OUR 21 st e-century. I n Arab countries, decision making within community institutions is often in the hands of older, authoritarian generations. In taking decisions, these generations mainly rely on traditional considerations that reflect their narrow affiliations and loyalties more than the broad scientific rationalism that requires decisions based on hard knowledge. The dangers posed by the Internet and by mobile phones, as perceived by the Mauritanian opposition, lies in its ability to 'liberate the user from the grip of his family and clan, and make it easy for them to rebel against these institutions' (Salem 2004). Back to the wooden slate and a piece of coal, for they pose no danger to the mind.

Rima Khalaf Hunaidi, the UNDP's assistant secretary general and assistant administrator for Arab states, knows what she is talking about when she decries the 'illiteracy of the mind' among her compatriots. 'It has to do with attitudes, in particular passivity, conformity, the lack of incentives for intellectual inquiry. Our education systems actually may have instilled in many of the generations of this region such attitudes that are inimical to building knowledge societies' (Kaufman 2003). She pointed out that relatively few books are widely published in Arabic because, due to a limited market, each publisher has to submit products to censors from 22 individual countries. Those censors, she said, have different criteria on political, social, religious or other sensitivities, 'and hence publishers end up with what they call 'the lowest common denominator,' which isn't much'. She also said Arab scholars have produced very high quality research in the humanities and social sciences, but not from Arab universities, where they fear going against official policies. Translation is one of the important channels for the dissemination of information and communication with the rest of the world. The translation movement in the Arab world, however, remains static and chaotic. On average, only 4.4 translated books per million people were published in the first five years of the 1980s (less than one book per million people per year) (UNDP 2003).

But isn't this precisely why electronic publishing would be such a great panacea? One could publish anything online, share it via e-mail, participate in forums and collaborate. Yet by 2003, there were only 18 computers per 1000 persons in the Arab World and only 1.6 per cent of the population has Internet access. These indicators scarcely reflect a sufficient level of preparedness for applying information technology for knowledge diffusion. And to make things worse, in 2003, the Arab countries as a group adopted an expanded definition of terrorism, which assumed institutional expression at the regional level in 'The Arab Charter against Terrorism'. This charter was criticized in Arab and international human rights circles, because its expanded definition opens the door to abuse. It allows censorship, restricts access to the Internet, and restricts printing and publication, while it does not protect personal freedom, since it does not require a prior judicial order authorizing the wire-tapping of individuals or groups (UNDP 2003:40).

Another constraint is censorship of the Internet. This global media miracle, which originally arose to transcend borders and overcome distances, has fallen under the control of the censor in Arab countries. In Iraq for instance, it was not possible to access the Internet – long

branded as a 'tool of American propaganda' – until mid 2000. Even after that, access remained limited. In Saudi Arabia, the government closed 400000 Web sites after initially allowing access to the Internet in 1999. The increase in Arab Internet users in 2001 saw both restrictions on access and censorship of the Internet grow stronger once more (Norton 2002).

In January 2004, I was visiting one of the Gulf countries on a business trip. Among my friends was one who insisted that the Israeli *shekel* had on it the map of Israel as extending from the Persian Gulf via North Africa all the way to the Atlantic. She was not able to tell me more about the source of her information, so to convince her otherwise I decided to do a Google search. I typed in (+shekel + Israel) and Google obligingly provided me with a list of URLs. Accessing any of these, however, turned out to be impossible. The state-owned ISP, being the only available ISP in that country, had filtered and blocked any Web site which mentioned the word ' Israel'.

The report also mentions the third – and most mundane – of reasons: cost. In the Arab world, the majority of people have low incomes, while the cost of knowledge acquisition is high, especially if the commodity is directly imported or is produced locally using imported components. The price of knowledge rises with its transaction costs, which can be heavy. Rents paid to the producers of knowledge, to those who incorporate knowledge into commodities and services and to those who operate local monopolies all bring up its cost. In the Arab region, as in the world at large, the high cost of accessing the Internet is inversely linked to its diffusion. High costs and the relatively limited availability of personal computers in the Arab world are reflected in low Internet usage compared to developed countries and South East Asia (Norton 2002:62). One may safely assume that similar reasons lie behind the inability of 32% of polled Bulgarians to identify the term 'Internet', while only 23% have ever used it (Reuters 2004)

To remain objective and fair, let me now look at a developed country, Australia, and its disadvantaged and under-developed indigenous population. There is an estimated 418000 Australians who identify as being of Aboriginal and Torres Islands descent. The stress is on the word 'identify', which is more social than ethnic in meaning. This is a sad remnant of those native Australians and forms only 2% of the whole Australian population (ABS 2001). They also form the end of the pecking system, with all the accruing problems related to being there: rampant unemployment, lack of education, chronic alcohol and drug problems, crime, domestic violence, child abuse, lack of access to services (most still live on remote 'missions'), health problems and racial discrimination, to mention a few.

The percentage of Aboriginal and Torres Strait Islander people living in rural electorates is significantly higher than in city electorates, and many live in remote parts of rural Australia. The NATSEM report did not investigate access to computers and the Internet by indigenous communities. However, recent reports commissioned by governments in NSW and the ACT indicate that Aboriginal and Torres Strait Islanders are less likely to have computers at home, and are much less likely to have access to the Internet (Clark 2001) As part of the 2001 budget, the federal government has committed $400000 for this year for the telecommunication needs of indigenous communities (Moloney 2001). That amounts to less than a dollar per an Aboriginal person. Since it costs $200 to simply install a telephone line in a house within 5 km of an exchange, and most of the Aboriginal communities live in desert areas where there are no exchanges, the government's magnanimity seems totally out of proportion to the problem.

For urban Aborigines, access to online is 'reasonably' available – especially through public libraries. But it is a fact that Aboriginal children often drop out of school at very young ages, and therefore never learn the skills necessary to access information in printed material, let alone in electronic format. Another issue is that most of the 'Aboriginal' Web sites are

designed by non-Aboriginal people and are thus culturally inappropriate even to those members of the community who can access the content. For those very rare Aboriginals who make it to tertiary education, Barreket *et al.* (2000) found that they tend to use e-mail less to contact their lecturers and other students (this could be due also to the fact that it is a very face-to-face culture), and that they had very poor levels of information literacy as compared with other students, lacked access to technical training, and had no personal networks that could facilitate technical support. They also tended not to stay at the campus a lot, and thus had less time to exposure to computers and the Internet. Aboriginal and Torres Strait Islander students tend to call more for personalized peer mentoring and tutorial assistance than IT support and developmental opportunities, suggesting that technologically facilitated education may not be appropriate to the learning styles of some students from this group. So here we return, full 360 degrees, to cultural appropriateness.

The UK spent £3 million between 1998 and 2000, trying to prove that the Internet was changing society (Ward 2000). The project found that it was not doing that. Government and local authorities were wrong to think that improved access to the Web for those who cannot afford to surf from home will end social exclusion; on the contrary, E stood for Exclusion. Public library access and Internet kiosks were being used by people already 'hooked up' at home, probably in the same way as public servants 'hooked' on cigarettes step out to have a smoke. Access did not generate use; there is more to using the Internet than the hardware. As Prof. Phil Agre, of UC, said a long time ago: 'In order for the Internet to become a tool for social progress, not a tool of oppression or another centralized broadcast medium or simply a waste of money, concerned citizens must understand the different ways in which the Internet can become embedded in larger social processes. … Machinery does not reform society, repair institutions, build social networks, or produce a democratic culture. People must do those things, and the Internet is simply one tool among many. Find talented people and give them the tools they need. When they do great things, contribute to your society's Internet culture by publicizing their ideas' (Agre 1998).

The situation in the most developed of all world countries, the USA, is not rosy either. In the year in which Agre sounded his warning, another American scientist was finding disturbing evidence that the Afro-American students were not accessing the Internet at the same levels as their white colleagues (Hoffman 1998). The ration was 33:73% of polled students. Two years later, NASDAQ predicted that it will be income, not race, that will decide who falls on which side of the digital divide (Fridman 2000). I wonder why the NASDAQ researchers never made the link between the concepts of racial minority, disadvantage, low income and Internet access. In 2003, a study found that 42% of US citizens are not wired, albeit for various reasons. It is almost ironic to find how many people are turning away from the Internet, or simply refuse to use it (Hafner 2003). Some can't, and some can, but won't. Will those who can't today one day turn away from the Internet as well? The Internet has been around since 1968 (as ARPANET) and in the public domain since 1993. What has the public done with this marvelous invention, this gate onto the world of knowledge? A check of the most-accessed sites in the week ending 31 st October 2004 (http://www.search.com/top) shows that the most common Internet activity involves obtaining free file sharing software (15 of top 50 searchers) used to find pirated, CD-quality sound files that consume enormous bandwidth as they are propagated around the Internet, followed by other freeware such as spyware and adware removers (6 searchers), MP3 players and music downloads (9 searchers), games (3 searchers) messengers (5 searchers) and other software (5 searchers). Google ranked 7 th – but you really need to be a novice to search for Google on another search engine. Yahoo as a search term ranked 21 st. The term 'science' unfortunately, ranked 977. Obviously we are a far way from intellectual elitism in Cyberville.

Was Bill Gates right when he stated in 2000 that unless you had good health, you can't have high literacy levels, and if you don't have high literacy levels then what do you need a PC for

(Gates 2000)? His speech is a bone of contention and doesn't sit comfortably with those Cyberville romantics who want to see in connectivity the solution to all social evils in the world (for example, see Barker 2000).

The information superhighway and its electronic vehicles may be taking some of us, some of the time, somewhere. Unfortunately, for the majority of the masses, it seems to be running past them, oblivious of their real needs. A bit like the highway between Durban and Johannesburg that does not touch the lives of those who live on both its sides, unless they happen to cross it and get run over. No amount of chips and cables is going to fix the world's hunger, poverty, draught, backwardness and isolation. The Dalai Lama, on his visit to Melbourne (Australia) in 2002, addressed the audience on the issue of IT. He said, ' Science, technology and other material facilities in the developed world lead people to believe that their problems will all disappear. We have seen that this is not the case'. Whatever the solutions, they have to be for people, by people and of the people. As much as we might want to romanticize the Internet, it is no panacea and there are no e-solutions.

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