

DIGITAL DISCOURSES

AN ESSAY ON ICT IN DEVELOPMENT

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INTRODUCTION

What can be said about the Information and Communication Technology (ICT) in what was formerly known as the Third World?¹ It is widely recognized that there is a huge difference in the world of today between rich and poor, those who have freedom of speech and movement etc., and those who are in those ways restricted (see for example Bauman 1998). As several people have argued, the current social and economical imbalance in the relationship between the First and the Third world is also being paralleled in a 'digital divide' that threatens to widen the gap even further (UNDP 1999, Malloch Brown² 2000, James 2000, Main 2001 etc.).

As a consequence the United Nations Development Programme (UNDP) is one institution among others that argues for an implementation of ICT in Third World countries and operates with plans for helping these countries establish national strategies for this implementation³, and for integrating these countries in a global economy that is increasingly being characterised as 'networks' that order almost instantaneous flows of information and capital (Castells 2000). The implementation is meant both to develop infrastructure, but also to enable the poor part of the rural population in developing countries to use for example the Internet to communicate and to be able to seek out information on their own, and thus being empowered⁴. ICT is therefore increasingly being targeted as an indispensable tool not only in the battle against poverty, but also in development as such (Malloch Brown 2000).

So far the most common way of introducing ICT in Third World countries has been by the way of telecentres (Benjamin 2000, Whyte 2000), a centre that provides a local community with access to communication and information, and the people of the community involved may pay per use. While telecentres are by now fairly common in the cities, the time has come to bring them to the rural areas. This essay aims to do a review of the implementation of ICT in rural areas of developing countries mainly via telecentres, the possibilities ICT may bring along for development, and finally to discuss some of the difficulties that may be involved in the transfer of this new technology.

¹ Recently it has become more 'correct' to refer to North and South, but I choose to stick to the 'old' terms. Especially because I find that there are many Eastern European countries that do not fit in with neither the rich northern countries nor their poorer southern counterparts. Of course it can also be argued whether it is possible to fit all the poorest countries into the same category of the Third World, but it is not the task of this essay to evaluate such categories. Also the terms 'developed countries' versus 'developing countries' has been popular, even though (or maybe because of) its implication that the former has reached the highest stage of evolution, which is yet to be attained by the latter.

² Mark Malloch Brown is the director of the UNDP.

³ Junior Professional Officer Lars Bestle pointed this out at a presentation of UNDP's work 30-03-01.

⁴ Cf. the lecture by Jens Christian Riise 09-03-01 at the course 'Approaches to Development'.

After reviewing the telecentres, the possibilities they bring and the empowerment that they are claimed to facilitate in the first section, I then intend to take up some questions that I find to be vital to this issue. How is this 'New Technology' – ICT – being understood by the different people involved? How is the information brought about by ICT being understood by these people? What are (some of) the social and cultural implications of implementing ICT and/or building telecentres? It is my thesis that not only the tool itself, the technology, the machines, are understood differently in different social and cultural contexts, but that also the information gathered via the new technology, and here I think especially about webpages, is exposed to various (re- and/or mis-) interpretations. From that follows the question of *who* gains *what* from using ICT. What do the different people involved get out of it? The tools and the information in itself are neutral, but can be, and always are, perceived through lenses of anything but neutrality. Furthermore I will argue that a telecentre can be used as a very strong means of power in a rural community, especially if the control of it comes to rest with one local faction of power only. Lastly I intend to discuss some of the other implications of ICT in development, such as the relationship development professionals has to ICT, and what is involved in relation to democracy and market-access.

This critique does not aim to reject neither ICT in development, nor development as such (as a discourse – as exemplified by Escobar 1991), but rather, as Gardner and Lewis (1996:75) suggest it can be done, to work on some of its assumptions from the inside. I do not intend to romanticize or essentialize neither the 'development-industry', nor the people living in the Third World. I am aware that there are many, who *do* want the 'technological fix', just as there are many, who probably prefer to do without it, just as there is disagreement among development workers as to which policies are the best to pursue (cf. Gardner and Lewis 1996:78). This also means that there are diverse ways of interpreting and understanding the phenomena I will be discussing no matter where I look, and the distinction I make between people from the First and the Third World is one based on education as much as national origin or cultural practice; that is, I take for example a computer engineer living in Silicon Valley but originating from India to be a westerner of education.

As for definitions, I find it necessary as I go along to distinguish in some places between the 'I' and the 'C' in ICT. IT (primarily the Internet) and CT (email, phone, fax etc.) do have many

characteristics in common, but I find the decisive difference to be that IT is mostly a ‘monological’⁵ way of sharing information, whereas CT is ‘dialogical’, and my main focus will be on the former.

THE BRAVE NEW WORLD MEETS THE THIRD WORLD

So how is ICT being implemented in Third World countries? In this section I will define the concept of telecentres and look at some of the different ways that ICT have been and can be put to use in the Third World in order to empower poor people and make them capable of helping themselves in achieving a higher standard of living measured in health, life-expectancy or just plain income. I will also look at some of the technical (and economical) problems involved.

What is a telecentre?

In rural areas so-called telecentres are still rare phenomena, but they have begun to spring up at several locations in countries such as Mali, Egypt, Kenya, Tanzania etc. financed either by international donors or by income generated by visitors using the facilities (Benjamin 2000)⁶. In the book *Assessing Community Telecentres* Anne Whyte says that:

“Telecentre appears to have no universally accepted definition, beyond the general concept of a physical centre to provide public access to long-distance communication and information services, using a variety of technologies, including phone, fax, computers and the Internet.”
(2000, original emphasis)⁷

People use their newly acquired access to check national prices on the crops they grow, get to know the weather forecast or search for information on medicine etc. Elsewhere, at national or regional level, some countries or provinces have attempted to enhance the level of transparency in government matters to the public (cf. www.andhrapradesh.com). As such the Internet is seen as a

⁵ Although it can be said that IT still allows for more interaction between the user and the medium than for instance a TV does. People *can* be said to communicate via their webpages too, but that I do not see as *direct* communication.

⁶ Benjamin (2000) distinguishes between the donor-funded and often rural based centres drawing on the participation of the locals, and small private sector telecentres, which are established by an entrepreneur and are meant to create profit. In this essay I’m primarily concerned with the donor-funded type that is most commonly associated with development.

⁷ The phenomenon has different names in different places like ‘village information shop’, but I choose to stick to the term ‘telecentre’.

way of improving democratic functions, which is also the case for NGO's and other (new) social movements, who use the Internet to communicate and spread their word.

How are telecentres used?

In 1992 the M.S. Swaminathan Research Foundation initiated a project in the Pondicherry region in Southern India. Its objective was to

“...assess the impact of information and communication technologies in fostering transition to sustainable agricultural and rural development and to document their role in promoting the process of knowledge-empowerment of the rural families.”

www.mssrf.org/information%20village/pobj.html

This was done by setting up 'village information shops', thus enabling the villagers to access information and communication services. The shops were kept running by training the local people in operating and maintaining the shops and processing the generic information on the Internet into something relevant (ibid.), the underlying assumption being that knowledge and information is vital to the process of empowering poor people instead of just giving them “*chemicals and capital*” (Swaminathan 1993). Information is seen to be crucial in achieving such goals as improving health and ecological sustainability, reducing poverty and generally educating people, so that they can help themselves⁸. Among other things the information downloaded can be of assistance in UN-sponsored training programmes for poor people, and can help with information on livestock, environment and agriculture (Ghandi 2000).

Yet another version of the telecentre is 'the Mobile Internet Unit' in Malaysia. It consists of a bus with computers and Internet-access that travels the countryside, where the schools cannot afford ICT-equipment, and introduces the school children to the wonders of World Wide Web. They are taught basic computing skills as well as introduced to what a computer can be used for (Eggers 2000). But what kind of information are they accessing? What kind of information do they need to be 'empowered'?

Anne Whyte (2000) lists a number of things that people may do with their new access to communication and information based on needs expressed by communities in four different African

⁸ As pointed out for example by Jens Christian Riise (09-03-01)

countries⁹. The list displays themes relating to government and democracy, agriculture, health, environment, education, small businesses, institutions and organizations or just plain keeping in contact with relatives overseas (ibid.). Basically all kinds of information become available.

There are many examples of how this work in practice. In India, as mentioned before, there is a regional government that focuses on transparency. In Andhra Pradesh ICT is used to improve administrative efficiency. The aim is to introduce electronic networks “... *at all points of contact between the Government and the citizen*” (www.andhrapradesh.com), making it easier for the citizens to make enquiries and communicate with the bureaucracy for instance in filling out application forms (ibid.). Also in Peru the Internet has made access to documents in public registers a lot easier. What used to take three to four weeks can now be done in the time it takes to type the name of the required document (Scott 2000). Even in rural areas access to information can improve as for example land records locked off in office of the local administrator, who demands money to let anyone see them. Placed on a webpage these become accessible more easily (Down to Earth 2001).

Jamaica is described as a good example of how cooperation with the UNDP can help remote communities with computers and Internet-connection. One place that has benefited from this is the village of Bluefields, where several children and some grown-ups have become computer literate after the building of a community centre where ICT is available. The villagers describe this as an increase in the educational options for the children and a possibility for all to find information. As for instance when the farmers need information about medicine for their animals (Hannah 2000).

The Internet and democracy

Another very important improvement facilitated by ICT is in the relationship between the state and the citizen. As mentioned before, access to official documents can become quicker and easier for everybody with ICT (Scott 2000), and in the Indian Region of Andhra Pradesh, the government has decided to increase the transparency of its operations by going online (www.andhrapradesh.com).

It is also often emphasized that ICT has direct democratic benefits. First of all by allowing NGO's (Juil-Olsen 2001:10) and (minority) social movements to share information and communicate with other of their kind as well as with the outside world. A well-known example of

⁹ Mozambique, Senegal, South Africa and Uganda (Whyte 2000).

the latter's use of the Internet is the Zapatistas in the Chiapas region of Mexico (Castells 1997), and in Malaysia and especially Indonesia "... *opposition groups have successfully utilised the internet as an alternative medium*" (Abbott 2001:111). Furthermore, if access to information is generally freely available as is the case with the Internet, then the control and repressive measures of a dictator against his people are more difficult to exercise. Abbott also warns though that unless Internet-access becomes more widespread, this 'freedom' risks being for the 'online-elite' only, and not those who would benefit the most, because they already are excluded (ibid.). Here I will state though, as Esther Dyson says (1998:19) that the Internet is decentralising, and not in itself democratic. Democracy is where the majority rules, not just where they have free access to information and communication, and for democracy to be the case everybody has to have access¹⁰. And when it comes to the Internet being without a centre: Can we be sure that it stays that way? (cf. Eco 1998). The vital question being of course just how important *different* sources of information and *unmonitored* means of communication is to enhance democratic participation.

The Internet and commerce

Internet access has also come in handy for a lot of rural poor, when it comes to knowledge about prices for their products. If a farmer knows the city market price of the crop he raises, he is in a position to negotiate a fair price – or at least a better bargain – with the middleman, who brings the produce to the market (Down to Earth 2001).

Several other examples of benefits are available. Thailand is a country that hopes to encourage e-commerce as it is called, because it also enables the less privileged to "*peddle their wares to a global market*" (Crispin 2001:31). This is the case for Zimbabwean woodcarvers, who can now sell their crafts via Novica.com¹¹, or Panama Indians, who can sell their creations on their own website (Thyfault 2001). All in all empowerment by encouraging the entrepreneurial spirit of the poor. Jeffrey James (2000) also pursues this line of thinking, and argues that poor countries have to be integrated in the global economy for them to develop and create more jobs. It is assumed that people can help themselves by earning money, once they are granted access to the market.

What 'technical' problems exist?

¹⁰ I owe this reference to my fellow student Mimi Larsson.

¹¹ A website which sells 'exotic' arts and crafts such as masks, jewellery and pottery (www.novica.com).

In order to successfully introduce ICT in poor rural areas, a number of conditions must be met. First of all electricity must be available for computers to work, and phone lines must be present and working¹². In one region of India using the underused power cables of the railroad has solved connectivity and power supply. Another way of providing power is to utilize what means of generating it that people have. One example is that oxen drawing water can generate sufficient electricity to recharge batteries (Down to Earth 2001). Then of course there is the problem of supplying the computers themselves and keeping them up-to-date as the technical sophistication of websites increase. The more graphics for example that can be found on a site, the larger will the demand on the line and on the computer doing the downloading be.

Another problem is that knowledge of English is a must if one wants to access the greater part of webpages, as eighty percent of these are in English (d'Orville 2000). Creating more webpages in local languages can solve this, but the problem of including those, who are illiterate still remains. In India this has given rise to *the Simputer*. A concept developed by the Indian Institute of Science, the Simputer was conceived to answer the need for a low-cost mass access device that can bring local-language ICT to the (often rural) masses. It is icon-based, has a touch-sensitive screen and the designers want to program it with voice-activated software in some of the major languages used in India (Mulligan 2001). Hence the name SIMple comPUTER (www.simputer.org/history).

Another attempt to overcome these problems is the Rural Voice-rich Information Community. This Indonesian project is a 'voice Internet' to make up for illiteracy and the lack in basic computer skills among the poor. It consists of an interactive device that provides many of the features of the Internet and can be accessed from any telephone (McBeth 1999).

Finally an option is to provide the illiterate and those who don't speak English with the information they ask for. In Cameroon the SNDP¹³ has helped local NGO's etc. with e-mail access, so that the NGO's can act as an intermediary between the locals and the SNDP's office in Yaounde, which finds the information they request (Ghandi 2000). A similar thing happens with regard to the village information shops in the Pondicherry region of India (www.mssrf.org). There is an easier way though if a community telecentre is present. In Bluefields, Jamaica, those who do have the necessary computing skills help out others who don't. One young fisherman checks the Internet often for weather reports, and shares his findings with his colleagues, who don't have the computing skills it takes (Hannah 2000).

¹² One alternative to cables is satellites, but there are still some problems involved in this (see Main 2001).

¹³ Sustainable Development Networking Programme, started by the UNDP in 1996.

All in all it is not the technical problems that prevent the Third World from going online. Technology and special software can overcome both literacy and language barriers, and community telecentres can provide a fairly cheap access for rural people. All this depends of course on finances (d'Orville 2000). Can the costs be minimized so that someone is willing to pay for all this? Only First World donors have that kind of money, and those who are willing to chip in are, apart from some good-hearted institutions and national development agencies, most likely to be the ones with the greatest interest in connecting the Third World: Western governments and companies scrambling for access to potential markets¹⁴. I will return to this in the discussion. Even though money may be *the* major obstacle to the dissemination of ICT in the Third World, there are other issues that may be just as important, when it comes to ICT *in development*. It is these issues that I choose to explore in the next section.

AN ANTHROPOLOGICAL EXCURSUS

In this section I intend to elaborate on some of the questions I raised in the introduction. How do people relate to the Internet as a technology, and how do they relate to the information that they find on the Internet? First we will take a trip to Trinidad in order to see how people relate to 'cyberspace' and how this relation fits with their offline-lives. Then I will show how in West Africa a cultural classic to 'us' can become transformed according to the local social structures, and finally discuss some of the implications of this for ICT in development.

Being 'Trini' on the Internet

Let me first of all continue the discussion of what people choose to *do* with the Internet. So far I have only found one example of anthropologists having done fieldwork on people's use of the World Wide Web. I'm thinking of the recent book by Daniel Miller and Don Slater (2000): *The Internet. An Ethnographic Approach*, based on a fieldwork on Trinidad. Their most important conclusion is that "... *there is no such thing as The Internet. There are a number of different media and contents which people assemble into 'their' Internet. There is however a clear debate about the Internet.*" (ibid. original emphasis). In other words: The Internet *as such* only exists to us as a

¹⁴ It is noteworthy that the private capital investments going from Great Britain to the Third World now by far exceeds the development aid from the British Department of International Development – until 1997 known as the Overseas Development Administration (Gardner and Lewis 2000:26).

discourse on what 'it' is, and what 'it' can do. *Practically* on the other hand the Internet exists differently to each one of us, because we as individuals only are in contact with a very limited part of it, and can relate to a limited part of it, along with our own notion of what 'it', as a whole, is; that is, the discourse. Of course there is a tendency for people within certain groups, positioned within what Pierre Bourdieu would call the same field (see Callewaert 1996:347), to relate to the Internet in similar ways due to similar interests etc.

Miller and Slater then go on to explain exactly how the people, they have interviewed, relate to 'their' Internet, leading to the second conclusion that there is no radical separation between 'online' and 'offline', between virtual reality and 'real' reality, between cyberspace and 'real' space. What people do 'online' is in direct accordance with their lives 'offline', an extension of the activities they go about every day. Turning off the computer does not shut off cyberspace, just as people do not leave 'real' space when they surf the web. And in order to understand why people do what they do in virtual reality, it is necessary to understand what they do in 'real' reality.

For people on Trinidad this means that they in one sense attempt to use the web to realise, what they already are, and what they envision themselves to become. Among other things it helps Trinidadians strengthen family-relationships with members overseas, and furthermore that they envisage the Internet to be a window to the outside world, where they have to represent themselves as being Trini and thus powerful nationalist aspirations are brought along in the encounter with the web. Trinidadians consequently encounter the Internet not in the role of 'global citizens' but as quite the contrary: as anchored in their local identifications as 'Trini' (Miller and Slater 2000).

Having thus established how people on Trinidad relate to the web and its possibilities, it is very easy to extend this argument to the examples in the former section. People use the Internet in accordance with the reality they already are familiar with. The online-world to them becomes what the offline-world has always been. Their use of the Internet falls within the existing social framework that urges people along specific and necessary paths of action, which first and foremost appear meaningful. Therefore the fisherman uses the Internet to check the weather forecast and not the political results of the weapons-embargo on Iraq. Therefore the Indian farmer checks the market price of the crop she grows and not the job-advertisements relating to the urban IT-business. People's use of the Internet goes as far as the combination between imagination and practical needs for information takes them.

Picking up here the line left by Miller and Slater, one could ask again how the new technology is understood? As a new kind of magic? Another *deus ex machina*? A new oracle? Is the man at the

keyboard the new medicine man, who communicates directly with the spirits and *therefore* has the answers on everything? Unfortunately these questions are hard to answer without knowledge from the field, but they lead me on to the question of the position in a community of the people, who are given control of the telecentre.

The power of the telecentre

So far I have taken the concept of community most often being used in reports and visions on telecentres at face-value, and assumed that there indeed is a feeling of coherence among people around a community telecentre. But that may not always be the case. People understand things differently and are in many ways unequal within a given community (Gardner and Lewis 1996:87). Just as Miller and Slater (2000) stated with regard to the practical use of ‘the’ Internet, people have different political positions in a community as well. Communities can be differentiated along many lines of interest, divided according to for example gender or kinship (Crewe 1997:77), and the implementation of a telecentre can tip the balance of power in favour of the side (or the person), which (who) gets to control it. In other words: The telecentre does not enter an empty and innocent world, but becomes a piece in whatever struggles for power and position the inhabitants of a community are engaged in (Gardner and Lewis 1996:87). In many reports it is assumed that people want to help each other and that they *do* form a community, and it seems like disputes or controversies are ignored (Crewe 1997:76). It is very easy though for the operator of the telecentre to refuse to give information to people he or she dislikes, and whoever is in control of communication going in and out of a village is in a very powerful position. Whether he is seen as a medicine man or just simply an information-merchant, the newly acquired position as ‘the keyboarder’ is one of great influence.

A tale from the field

Having shown that the Internet becomes something specific to each one of us, I’ll take this line of thinking further and argue that even if people did choose to utilize the web in much the same way, the end-result would still be a lot of different opinions on the information available, and I do think there is a risk that some information will be either misinterpreted or misapplied, because there is a lot of it available. It is true that all the information anyone ever would need is out there. But that doesn’t mean that the ones, who need it will also automatically access that information, and even if

they did, would they understand that information the way the ones, who produced it, intended it? So there are two problems here: Finding the information you need in the 'info-inferno'¹⁵ and once you've found it, understanding and applying it.

When it comes to the first point, Umberto Eco has argued that there is so much information available that it almost functions as a censorship, and only an educated elite will know how to find what they are looking for (1998:77). Is it just a question of time before people become saturated with information, as some find it to be the case in the USA (Thyfault 2001)? Maybe it is necessary to make a distinction between *information* and *knowledge*. There is a lot of information available on the Internet, but the sheer amounts of it, and the speed at which it is up- or outdated, may prevent it from ever becoming active knowledge that someone can apply¹⁶. Another version of this problem is that people need to know, what they are looking for. That is, they are not likely to find anything that they didn't either know beforehand or at least would expect. Checking out the weather and possible cures to diseases is one thing, actually learning something new about for instance hygiene or sanitation is something completely different, because people only know what they know, not what they don't know, or what could be useful for them to know. Eco has furthermore argued in a critique of the Italian press that newspapers on the Internet are a bad idea for exactly this reason. People only check the articles that they look for and miss a lot of information, standpoints and maybe even warnings that could have been stimulating. Eco sees a danger of a division between a well-informed and well-educated elite and an 'info-proletariat', who won't know anything about what goes on in the world (Eco 1998:75).

When it comes to the second problem; how to understand and apply knowledge, anthropologists have provided numerous examples of how information, stories etc. are being understood and misunderstood cross-culturally. The following, which has become a classic anecdote in anthropology, will serve as an illustration of my point. In the early 60'ies the American anthropologist Laura Bohannan was on her way from England to Nigeria to do fieldwork among the Tiv (1993). Before she left though, she had a discussion with a British colleague about the interpretation of Shakespeare. The colleague found that Americans very often had difficulties with the 'very English poet' Shakespeare, while Bohannan found that human nature was very much alike all over the world, and the general structure of the classic plays would be understood in the same way everywhere, though some details could be misunderstood due to difficulties of translation and different customs (ibid.:162). One night in the field Bohannan was offered the chance to prove her

¹⁵ This is what Jens Christian Riise (09-03-01) names the phenomenon of huge amounts of information being available.

¹⁶ Again a point that I owe to Mimi Larsson.

point. She was asked by the elders of the Tiv-village to tell a story from her home, but when she commenced with *Hamlet*, the Tiv-elders soon took over the storytelling. They found that Claudius, Hamlet's uncle, had done well not just in taking over power after Hamlet's father's death (they found Hamlet too young and inexperienced to be capable of being king), but also in marrying Hamlet's mother, as it was customary in their society for a good chief to provide for his brother's widow in this way. The elders furthermore along the way established that indeed Hamlet *was* mad, and that witches were to blame for most of the mischief and deaths that occurred in the story¹⁷. Hamlet went mad, because Claudius bewitched him, and Ophelia drowned by witchcraft committed by her brother Laertes, who needed money to pay off his gambling debt (ibid.). One of the elders said towards the end:

“... [it] is clear that the elders of your country have never told you what the story really means ... We believe you when you say your marriage customs are different, or your clothes and weapons. But people are the same everywhere; therefore, there are always witches and it is we, the elders, who know how witches work.” (ibid.:166).

This is an example of how what appears to be a straightforward story to most westerners can be reinterpreted in different cultural and social contexts, because even though people in some ways are the same all over the world, they are in other ways very different. Hamlet is 'global' insofar as it can be read or watched as a performance in almost any country today, but the meaning that is ascribed to it is always local. In Nigeria the audience understands the structure of the play and the hierarchy between its characters depending on the set of *local* hierarchical relations (Friedman 1994:199). Claudius is here the good guy, because he is the embodiment of a strong African chief.

Implications for Internet-use

This leads to the question of how information on the Internet can be understood? Information is not produced in and neither received in a vacuum. People interpret it in accordance with their 'habitus'¹⁸ (Bourdieu 1977:72). A lot of information demands that the reader has a specific education if the content is to be understood the way the author intended it. Meaning is not inherent

¹⁷ As Evans-Pritchard has shown to be the case for the Azande (1976), in many African societies witches are blamed for virtually any misfortune that happens to someone.

¹⁸ The habitus in Bourdieu's terminology is a set of unconscious 'structuring structures' that reflect the social and cultural influences a person has been subject to during one's life (Bourdieu 1977:72, see also Callewaert 1996:347).

in the sign itself, but is produced by the person, who looks at it. It often takes education to be able to separate relevant from irrelevant among the millions of websites available, and very often a specific education to be able to comprehend some of the very detailed and complex advice that can be found on the web¹⁹. Having the technical skills to operate a keyboard is not enough. From this perspective it is easy to perceive ICT as threatening to widen the gap between the educated 'haves' and the non-educated 'have-nots' even more.

Furthermore, the interpretation of information also depends on who is believed to be behind it. If a webpage sponsored by the state instructs people to act in a specific way, people may choose to do the exact opposite if they regard the state or the government as an enemy, a Leviathan, who just tries to control them (see Parpart 2001).

One of the big questions left is; how do people learn? Is it enough to provide them with information or do they need skills to dissect that information? And can those skills be taught via the Internet? Personally I doubt it. All I know is that new information and new skills do not enter a vacuum. They are fitted in nicely with the cultural knowledge and whatever education that people already possess, so if information is empowering and people need some skills to understand that information, the teaching of those skills has to take as a starting point the worldview of the people, who are going to learn. That is why ICT may be of more help to people from the middle-class, who already have some education. These people are the ones that can help boost the economy of a country, with assumptions of a trickle-down-effect for the poor. Of course as Swaminathan mentions "*...whenever poor people derive some benefit from a technology, the rich also benefit. The opposite does not happen.*" (www.mssrf.org/information%20village/knowledge-system-program.html). I find the discourse on ICT very similar to modernisation theories of the 50'ies and 60'ies in this respect (cf. Little and Painter 1996:604).

The following is an example of how I imagine information can be misunderstood with severe consequences: It is easy to imagine people taking matters into their own hand, if access to for instance medical advice is available online. A visit to the doctor or the veterinarian is costly, and maybe there is no one close by. In such a case it is tempting to attempt a treatment based on advice from the Internet, but this can easily become an outright invitation to quackery. Even if someone can identify the exact symptoms displayed by the sick family member or neighbour, it is a huge leap from there to identify the actual disease and hence also the right treatment. When it comes to this,

¹⁹ It is often emphasized that information can be accessed in no time via the Internet, but in reality it *does* take a lot of time to find what you are looking for, especially if you don't have the analytic skills that are necessary for searching (see also d'Orville 1997).

even doctors can be wrong. What I *do* see as an advantage about ‘e-medicine’ or ‘telemedicine’ is that it can help doctors in developing countries with specialist advice on difficult issues, such as treatments or surgery. In this way telemedicine can benefit everybody.

Some people working on telecentre-projects seem to be at least partly aware of this problem that people can misunderstand or not understand at all (cf. Swaminathan 1993)²⁰. Also James mentions that there is little information on the Internet today that “...*rural people in developing countries can understand and use*” (2000:775). In some places telecentres are build based on the needs for information expressed by the people in the affected community (www.bigpond.com.kh/users/uta). As mentioned earlier, a lot of effort is also going into creating local-language websites and user-friendly hard- and software (for example the Simputer), or even into ‘translating’ information to something that people *can* use (www.msrf.org). Then the question remains – will they use the information? How well does the information ‘translated’ correspond to what the people expect or find that they need to know, and is it at all possible to generalise as to what ‘they’ need?

DISCUSSION

How does all this add up? What will be the role of ICT in development in the future? A lot of reports about telecentres demonstrate their worth, when it comes to empowerment and improvements of for instance sustainability, food security and so on, and it *has* made a difference to a lot of people. But as I have tried to show, and as at least some development-workers seem to be aware, it simply isn’t enough to distribute ICT-equipment. How the technology is understood, and going even further how the information available itself is understood, is an important question. In the same breath it can be discussed what lies behind the assumption that ICT necessarily *will* empower poor rural people: Most of all that their ‘local’ knowledge is insufficient to make a decent living or even survive, or at least that so-called development professionals possess ‘better’ knowledge. This is what Robert Chambers among others has criticised (1983). That the knowledge of rural poor often is quite advanced and innovative, more so than most professionals would think. As mentioned before though, some projects excel at actually taking the knowledge and needs of the poor as their starting point (www.bigpond.com.kh/users/uta).

²⁰ “*Information, in the field of agriculture, to be of benefit has to be tailored to local agro-ecological and socio-economic conditions.*” (Swaminathan 1993)

The market and democracy

So far I have only shortly discussed the possibilities in market-access or democratic participation. Regarding the former, Linda Main (2001) discusses whether the implementation of ICT in developing countries is empowerment or imperialism. From her point of view ICT is a potential, but the market²¹ demands that poor people are connected. The market demands to have them as consumers, because the development of ICT in poor countries is to a large extent driven by (American) businesses and business interests that want a return on the investments made in development. The return being access to the new big markets in the Third World. This is an example of how demands from donors follow the implementation of the new technology (ibid.:85f). I do not see a contradiction between ICT as empowering and ICT as part of a larger imperialist scheme though. It can be both. ICT can in many ways help poor people improve their lives, but at the same time from another point of view ICT is part of capitalist endeavour by First World companies to expand their businesses.

To the question of democracy I will only add a few thoughts. Most importantly that it takes knowledge to participate in a democratic society, and that knowledge can (often) be accessed via an Internet-connection. But does that mean that people will access that knowledge? Does that mean that people will understand that knowledge? And finally, does it mean that they will participate, even if they *do* have the technical possibility? Almost everyone in the Western world has this option; access to knowledge and democratic participation, but far from everybody takes advantage of it. This is not to say that ICT should not be implemented, or that it will not function as a tool in the service of democracy in the Third World, but simply that it takes more than simply providing a tool to create a democratic tradition.

ICT and the development professional

Finally I find it interesting to consider what ICT is to the Western individual involved in development. Has the ICT-hype something to do with a fascination with the wonders of the new technology? To understand the development discourse about ICT it is necessary not only to look at what it is to those meant to be beneficiaries of an implementation, but also what it is to those outsiders arguing *for* this implementation. It is necessary to turn the coin and see what is on the

²¹ If the reader will excuse this reification of the market-mechanisms.

other side. It is very tempting to follow Chambers (1983) and argue that the discourse about ICT is conceived and executed by (often Western) high-ranking professionals or development experts, who are often *biased*, when they enter the field (ibid.:13-23). That the ones who talk the most about ICT are the ones who have already benefited from it and, in some cases, are likely to benefit even more if the Third World is connected. Perceiving ICT to be a necessary tool in development is from this point of view an elitist *representation* (cf. Friedman 2000b). It mirrors the world-view of the people involved with ICT and development, meaning that their assessment of the future role of ICT is embedded in their own social and cultural identity – a high modern cosmopolitan habitus (Friedman 2000a). The focus on ICT by the development professional reflects a real experience of the world that is transferred onto other people (Friedman 2000b:646f). In other words, ICT is second nature to many development professionals. It has become naturalized and taken-for-granted by the ones who fight the ideological battle against poverty, and hence their call for ICT to be a necessary part of sustainable development. The easier it is for oneself to perform a certain task or work with specific equipment, the easier it is to overlook that some people are not capable at all of doing that same task or working that same equipment, or that some people may not need the equipment at all.

From the viewpoint of the development professional, the implementation of ICT is also a way of *measuring* development²². It is easy to count how many computers or telephone lines a certain village has been blessed with, and thereby proving to the different stakeholders that a difference has been made and development has taken place. This can be criticised as being overly attentive to the institutional aspects of development. A focus on form only and not content. Access to ICT is not enough in itself. Participation takes more than that. Luckily there is a lot of attention to this problem from some of the people involved (for example Whyte 2000), but the focus on research in this area is mostly concerned with the people who participate, and not with the ones who are kept away or for some reason choose not to go to the telecentres. That is, the research is focussed on the ones who *do* show up. Again the unseen poor (Chambers 1983) is the person we ought to look for.

CONCLUSION

In this essay I have presented an overview of the potential that many development-workers see in the implementation of ICT in Third World countries, with a predominant focus on poor

²² I am indebted to my supervisor at the Department of Ethnography and Social Anthropology Martijn van Beek for the following argument.

people in rural areas. I have discussed what I find to be some assumptions involved in this debate, and I have argued that it is necessary to shift focus from what the new technology potentially can do, to a focus on what potential there is in the people, who are going to *use* the new technology. In order to anticipate what the implementation of ICT will mean, I believe it is crucial to look at the way the new technology is understood and hence used. I choose to see not what the machine can do for men, but what men can do with the machine. The potential for using ICT in development is not in the technology itself, but in the practices and beliefs of the ones, who are going to use it.

This essay is a call to make the people involved in the implementation of ICT in Third World countries aware of the social and cultural implications of the work that they are doing, not an argument against giving ICT a role in development. All in all I think that ICT has a great potential as a tool for development in the Third World, but mostly to people from the middle-class, who already have some education. It is claimed that ICT can empower the poor, but I have my doubts as long as the poor are still illiterate and do not have for instance electricity. The point is that ICT does not empower anyone on its own, but is one thing among many that needs to be introduced to people before things will change for the better. It is for instance not enough to advertise the sculptures of a poor woodcarver on the Internet, if there are no roads on which to freight the sculptures to the buyer. The prospects of ICT is more likely to be along the way of stopping urbanisation, because it as a tool of communication can help to connect rural and urban areas. However people still need an education to deal efficiently with this tool, especially when it comes to the 'I' part of ICT.

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