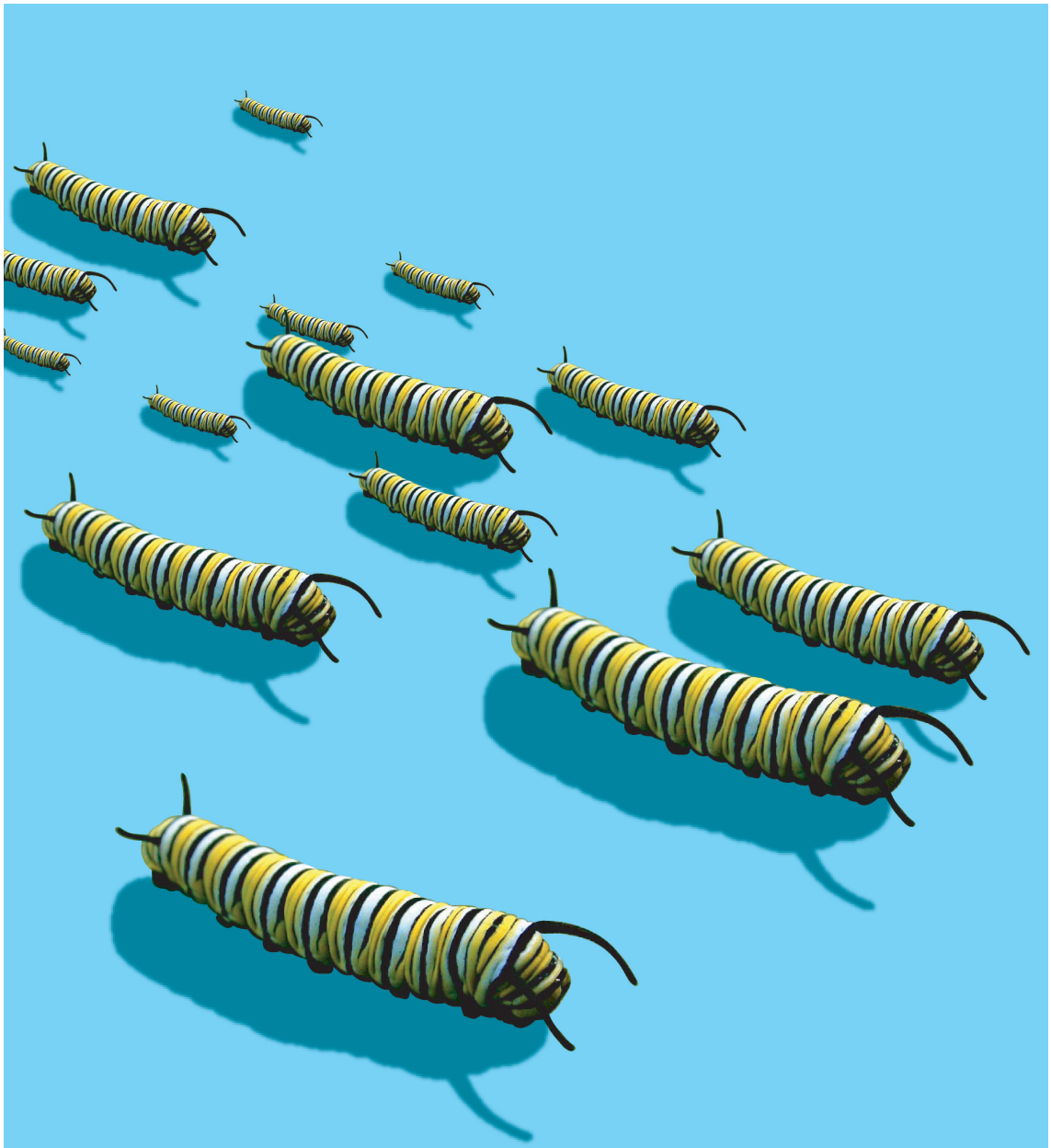

incommunicado reader

Edited by

Geert Lovink and Soenke Zehle





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information technology

for everybody else


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Geert Lovink & Soenke Sehle

Instead of an Introduction

Aiming to bring some of the network-cultural forms of collaboration into ICT debates dominated by standard policy and research procedure, the Incommunicado project does not offer a univocal master-narrative of what's wrong with the world of ICT, or of how it should be. Members of the Incommunicado network are pursueing multiple vectors of inquiry that are unlikely to converge in yet another civil society declaration or intergovernmental policy proposal but - at best - coordinate possible interventions across the imperial terrain of a global network economy, at least heighten our sense of the incommensurability of competing info-political visions. To stress the simultaneity of these efforts, and to take stock of where we think incommunicado 'is' at the time of this writing, the entries below are a first attempt to identify some of these vectors.

Being Incommunicado

The term incommunicado generally refers to a state of being without the means or rights to communicate, especially in the case of incommunicado detention and the threat of massive human rights violations. The latter also implies an extra-judicial space of exception, where torture, executions and 'disappearances' occur all-too-frequently in the lives of journalists and media activists, online or offline, across the world.

After the end of the Cold War and the collapse of the bilateral order, the discourse of human rights has become an important placeholder for agendas of social change and transformation that are no longer articulated in third-worldist or tri-continentalist terms. Yet despite the universalizing implications of human rights, they can also invoke and retrieve the complex legacy of specific anti-colonial and third-worldist perspec-

tives that continue to inform contemporary visions of a different information and communication order.

The term 'incommunicado' was chosen as the name for this research network of activists, academics and geeks to acknowledge that while questions related to info-development and info-politics are often explored in a broader human rights context, this does not imply embracing a politics of rights as such. Instead, one of the aims of the Incommunicado project is to explore tactical mobilisations of rights-based claims to access, communication, or information, but also the limits of any politics of rights, its concepts, and its absolutisation as a political perspective.

Incommunicado 05 Conference

The program of the Incommunicado 05 conference, held in Amsterdam on June 15-17, 2005, had an explicitly broad and investigative character. Besides obvious WSIS topics such as internet governance and open source, the event attempted to put a few critical topics on the agenda, such as the role of NGOs, the 'critique of development' in the internet age, and the question of 'info-rights'. Some debates were also new and had to be explored, such as the role of ICT corporations as 'partners in development' at the UN or the role of culture and corporate sponsorship in the ICT4D context.

While participants agreed that the standard scope of ICT4D debates and research needed to be expanded, there was not yet any agreement on how this might best be done. What is certain is that the kind of critique the incommunicado network was set up to explore and facilitate is unlikely to proceed through the consensus-building model of civil society caucuses and inter-institutional networks. Given the commitment to different, even mutually exclusive logics and models of institutionalisation in different camps, from media activists to a development NGOs and academic ICT analysts, the mutual engagement in a spirit of self-critique has its more or less obvious limits.

But this is not necessarily a weakness. Part of the Incommunicado idea was a critique of the assumption of a general comprehensibility and commensurability of efforts grouped under 'civil society', a shift in emphasis to trace the faultlines of such conflicts and identify their stakes rather than their resolution and subsumption to a master-paradigm that would then serve to contextualise and inform a new politics.

Info-Development

We are witnessing a shift from in the techno-cultural development of the web from an essentially Euro-American post-industrialist project to a more complexly mapped post-third-worldist network, where new south-south alliances are already upsetting our commonsensical definitions of info-development as an exclusively north-south affair. Before the recent 'flattening of the world' (Thomas Friedman, 2005), most computer networks and ICT expertise were located in the North, and info-development - also known by its catchy acronym 'ICT4D', for ICT for development - mostly involved rather technical matters of knowledge and technology transfer from North to South. The old 'technology tranfer' discourse is becoming questionable, if not put upside down. While still widely (and even wildly) talked about, the assumption of a 'digital divide' that follows this familiar geography of development has turned out to be too simple. Instead, a more complex map of actors, networked in a global info-politics, is emerging.

Different actors continue to promote different - and competing - visions of 'info-development'. New info-economies like Brazil, China, and India have suddenly emerged and are forming south-south alliances that challenge our sense of what 'development' is all about. However tempting, these new developments and particularly the emerging alliances should not be romanticized in terms of a new tri-continentalism. However, the cohesion of the new south-south alliances originates in part from the shared resistance to an emergent Euro-American front on intellectual property rights (IPR) and related matters.

Ambitious info-development projects struggle to find a role for themselves either as basic infrastructure, supportive of all other development activity, or as complement to older forms of infrastructure and service-oriented development. Often they are expected to meet a host of often contradictory aims: alleviating info-poverty, catapulting peasants into the information age, promoting local ICT and knowledge based industries, or facilitating democratisation through increased participation and local empowerment. Meanwhile, of course, info-development also facilitates trans-national corporate efforts to offshore IT-related jobs and services in ever-shorter cycles of transposition, leaving local 'stakeholders' at a loss as to whether or not scarce public subsidies should even be used to attract and retain industries likely to move on anyway.

Info-development creates new conflicts, putting communities in competition with each other. But it also creates new alliances. Below the traditional thresholds of sovereignty, grassroots efforts are calling into question the entire IPR regime of and access restrictions on which commercial info-development is based. Commons or open-source-oriented organisations across the world seem more likely to receive support from southern than from

northern states, and these coalitions, too, are challenging northern states on their self-serving commitment to IPR and their dominance of key info-political organisations.

Meanwhile lesser-known members of the UN family, such as the World Intellectual Property Organisation (WIPO), are beginning to feel the heat brought on by 'no-logo'-style campaigns that are targeting the entire range of public international actors and bring an agenda of accountability to the institutions of multilateral governance. As a response to the increasingly contradictory info-political activities of the major agencies like the ITU, UNDP, UNESCO, and WIPO, even the UN has begun to lose its aura. As public tagging of a perceived positive UN role in governance, humanitarianism, and peacekeeping shifts towards corruption and inter-agency rivalries, (carefully guided by neo-conservative think-tanks), the ensemble of supra-state apparatuses supposed to sustain visions of a post-imperial order suddenly seems mired in a frightening family dispute that threatens to spin out of control.

Critique of Info-Development

The critique of development and its institutional arrangements - of its conceptual apparatus as well as the economic and social policies implemented in its name - has always been both a theoretical project and the agenda of a multitude of 'subaltern' social movements. Yet much work in ICT4D shows little awareness of or interest in the history of such development critique. Quite the contrary, the ICT4D debate, whose terms are often reproduced in the members-only loop of a few influential NGO networks like APC, OneWorld, or PANOS, along with a small number of states and influential donor organisations, remains surprisingly inward-looking, unable or unwilling to actively challenge the hegemony of an a-historical techno-determinism. These global NGOs and Western info development government agencies are new to the fact that there are now a multitude of actors that operate in 'their' field. The Incommunicado project is just of many efforts to broaden the 'ICT4D' scope. A part of this process is a critical investigation into the role of info developmental NGOs.

Even many activists believe that ICT will lead to progress and eventually contribute to poverty reduction. Have development scepticism and the multiplicity of alternative visions it created simply been forgotten? Or have they been actively muted to disconnect current struggles in the area of communication and information from this history, adding legitimacy to new strategies of 'pre-emptive' development that are based on an ever-closer alliance between the politics of aid, development, and security? Are analyses based on the assumption that the internet and its promise of connectivity are 'inherently

good' already transcending existing power analyses of global media and communication structures? How can we reflect on the booming ICT-for-Development industry beyond best practice suggestions?

FLOSS

Pushed by a growing transnational coalition of NGOs and a few allies inside the multilateral system, open source software has moved from margin to center in ICT4D visions of peer-to-peer networks and open knowledge initiatives. But while OSS and its apparent promise of an alternative non-proprietary concept of collaborative creation continues to have much counter-cultural cachet, its idiom can easily be used to support the 'liberalisation' of telco markets. Long occupied with the struggle between free software and open source approaches, FLOSS research is only now addressing some of the paradoxes of immaterial labour and its voluntarist ethic.

Civil Society vs 'The Grassroots'

We have become used to thinking of 'civil society organisations' and NGOs as 'natural' development actors. But their presence is itself indicative of a fundamental transformation of an originally state-centred development regime, and their growing influence raises difficult issues regarding their relationship to state and corporate actors, but also regarding their self-perception as representatives of civic and grassroots interests. In spite of the neat sociological grammar of declarations and manifestoes, increasingly hybrid actors no longer follow the simple schema of state, market, or civil society, but engage in cross-sector alliances. Responding to the crisis of older top-down approaches to development, corporations and aid donors are increasingly bypassing states and international agencies to work directly with smaller non-governmental organisations. And while national and international development agencies now have to defend their activity against both pro- and anti-neo-liberal critics, info-NGOs participating in public-private partnerships and info-capitalist ventures suddenly find themselves in the midst of another heated controversy over their new role as junior partner of states and corporations. Responding by stepping up their own brand-protection and engaging in professional reputation management, major NGOs even conclude that it is no longer their organisational culture but their agenda alone that differentiates them from corporate actors.

The spectacular World Summit on the Information Society (WSIS), barely noticed by

the mainstream media but already uniting cyber-libertarians afraid of UN interventions in key questions of internet governance, is over. While many info-activists are assessing (and re-assessing) the hidden cost of invitations to sit at 'multi-stakeholder' tables along with mega-NGOs and corporate associations, others are already refusing to allow an organisational incorporation of grassroots or subaltern agendas into the managed consensus being built around the dynamic of an 'international civil society'. Mirroring the withdrawal from traditional mechanisms of political participation, there is growing disaffection with multilateralism as the necessary default perspective for any counter-imperial politics. Unwilling to accept the idioms of sovereignty, some even abandon the very logic of summits and counter-summits to articulate post-sovereign perspectives.

If WSIS actors operate with a kind of matrix that covers the relevant institutional actors, policy becomes a matter of shifting resources and responsibilities by way of playing different actors against each other. Some of that makes sense to us, alliance-building within the specific ensemble that constitutes the info-development regime. WSIS could perhaps been a very different space had it not been hosted by ITU but UNESCO, now everything was framed by default by ITU's a-historical don't-even-think-of-mentioning-NWICO techno-managerialism. On a different level, the very idea of info-development implies a commitment to the logic of representation - needs, actors, and remedies can all be identified etc., and this is where policy-making indeed becomes a matter of faith. The formalisation associated with development processes - the discomfort with informal economies, the translation of diffuse desires into needs, and the transformation of people into autonomous bearers of rights to development - is just a consequence of this more fundamental commitment.

On this level, a critique of info-development must also explore the role the logic of representation continues to play. But often the ultimate space of 'critique' is defined in terms of an almost mythological 'grassroots' and popular democracy as authentic sources of legitimacy and 'last instance' of accountability, so all you need for a critique of civil society and NGOism is to show their gradual (and almost inevitable, it seems) estrangement from a social movement grassroots, facilitated by their adoption of corporate models of professionalisation and an emphasis on organizing efforts that are compatible with an intergovernmental summitism. The WSIS summit machine, however, continued to hum along, largely unimpressed by action plans, civil society declarations, and manifestoes, and in this failure already seemed to produce its own critique. The label 'civil society' papers over so many differences that its use should perhaps also be considered in tactical terms, a way to create a very specific kind of intelligibility for political claims that does not really limit their rearticulation in alternative idioms.

Incommunicado Research

Within ICT4D research hasn't been a priority. What we found most often are best practice stories, and while there must be critical assessment reports, they tend to be written for internal use only. Ministries, funding bodies, foundations and NGOs are not eager to share their inside knowledge with outsiders out of fear that any 'negative' information will compromise their position in the scramble for funds and eventually lead to budget cuts. This makes it hard, if not impossible to have an open debate about the terms that floating around, and also to come up with new concepts.

Beyond setting up lists and collaborative weblogs, research is also a means of 'opening up a space' both in terms of activism and knowledge production. This also requires calling into question the assemblage of 'mots d'ordre' that make up the info-development discourse. Such 'mots d'ordre' - including, but not limited to 'access,' 'capacity building,' 'poverty alleviation,' and 'stakeholderism' - are not made to encourage debate but to foster agreement on a consensual perception of what info-development is. We have witnessed this in the context of WSIS, and Incommunicado got started in the context of WSIS. However, even if it maintains a critical distance to it - as do, by now, virtually all groups that have been involved - it is still marked by this focus on the critique of a policy-driven process organized around a fairly standard set of actors. But what's actually happening below the threshold of civil society is a rich and dynamic source of new forms of info-political engagement and new conceptual approaches, so research on the development discourse must engage such micro-level studies as well the 'donor discourse' - reproduced in a trans-national regime that includes state and non-state agencies, philanthropic and profit-oriented efforts - that serves to filter such efforts from the outside of the established research system.

Finally, ICT4D research needs to be considered in the context of shifts in the mode of production of 'science'. Some sociologists argue, for example, that we are witnessing a transition from a an 'academically-centred mode' that values scientific autonomy and peer evaluation, to a 'flexible mode' that is participatory and trans-disciplinary, addressing a host of economic and social questions through research that is accountable, open, and transparent. Such a flexibilisation of scientific production is the ultimate wet-dream of donors more committed to the vague notion of a 'knowledge society' than to the controversial questions of what such a new scientific ethic of accountability, openness, and transparency might actually mean in practice, including a controversy over the criteria of relevance and reliability that determine whether or not efforts that do not uncritically accept the hegemonic assemblage of 'mots d'ordre' still receive support, or a debate among researchers over whether they should really embrace a new flexibilisa-

tion paradigm that still remains committed to the exclusion of 'lay people' outside the institutionalized expertism we have come to accept as the only source of research.

Public–Private Partnerships

Following the growth of private-sector involvement in public infrastructure projects across the globe, corporate investments have often become a substitute for public funding formerly provided by intergovernmental agencies, international aid organizations, and governments. Usually considered in terms of a pooling of private and public resources, public-private partnerships aim at a cooperative provision of services and products to exploit synergy effects. Public institutions are expected to become more 'proactive' in terms of their engagement with private actors, the development process as a whole more equitable and sustainable.

Such official pronouncements aside, assessments from the ground tend to give the relatively new tool of PPP a much more ambivalent review. While major info-corporations are indeed offering themselves as 'partners in development' and support ICT development as vehicles for 'effective service delivery' and 'e-governance', they also take advantage of the newfound enthusiasm for Public-Private Partnerships to stake out their own commercial claims, crowd out public-sector alternatives, and actively discourage alternative forms of development cooperation. Dedicated to PPP – including its latest transformation, the notion of Multi-Stakeholder-Partherships (MSP) –, 'PPP in ICT' will be the focus of another project by members of the Incommunicado network, soon at http://pppwatch.org.

Digital Capitalism and Development: the Unbearable Lightness of ICT4D

Jan Nederveen Pieterse

The application of information and communication technologies (ICT) in development policies—in short, information-for-development or ICT4D—follows ideas of digital divide and cyber apartheid. This discussion situates ICT4D in critical development studies and global political economy and argues that information-for-development is primarily driven by market expansion and market deepening. As the latest accumulation wave digital capitalism generates information technology boosterism and cyber utopianism with the digital divide as its refrain. This discussion criticises the discourses and policies of bridging the digital divide and views information-for-development as part of a package deal in which cyber utopianism is associated, not exclusively but primarily, with marketing digital capitalism. The actual task of information-for-development is to disaggregate ICT4D and to reconsider ICT in development policy in this light. Less emphasis on Internet and more on telephone, radio and television would normalise and ground the discussion. I conclude by arguing that the ICT4D discussion should move away from development aid, NGOs and externally funded digital projects to the central question of disembedding technology from capital.[1]

1 I have benefited from a Communication and Development workshop in Malmö (http://www.k3.mah.se/comdev, http://www.thirdspaceseminar.org) and the Incommunicado 05 conference on Information for Development in Amsterdam (http://www.incommunicado.info/conference) in May and June 2005. I thank Linda Aitio for research assistance. But I claim the mistakes in this treatment.

Bridging the Digital Divide

The digital divide, the theme of a dazzling outpouring of literature,[2] is typically portrayed in statistics, for instance 'the fact that half the world population has yet to make its first telephone call, or that the density of telephone lines in Tokyo exceeds that of the entire continent of Africa' (Campbell 2001: 119). Or, Manhattan has more Internet providers than all of Africa (Fors and Moreno 2002). 88 percent of Internet hosts are in North America and Europe and 0.25 percent in Africa (half of which are concentrated in South Africa). With 13 percent of the world population Africa has only 0.22 percent of landline telephone connections and less than 2 percent of global PC ownership (Ya'u 2004: 14).

The digital divide is a deeply misleading discourse: the divide is not digital but socioeconomic but representing the divide in technical terms suggests technical solutions. It suggests digital solutions for digital problems (Warschauer 2003: 298; Cullen 2001). With the digital divide comes reasoning that correlates connectivity with development performance—'Area A is rich, integrated into market relationships, and has a lot of telephones; area B is poorer, less integrated into market relationships, and has fewer telephones: therefore, a telephone rollout will make B richer and more integrated' (Wade 2002: 450). The next step is to equate connectivity and economic development and to view ICT as key to bridging the rich-poor gap and 'national "e-readiness" as a cornerstone of capacity building... the discourse surrounding ICT has thus become part of developmental discourse itself' (Thompson 2004: 105).

Hence follows the policy of bridging the digital divide. Since digital capitalism doesn't go where profit margins are low such as rural areas and developing countries, the rationale of bridging the digital divide is that development intervention can make up for market imperfections and jumpstart connectivity on a non-profit basis.

Bridging the digital divide has become a keynote of development policy, heavily promoted by major institutions. The World Bank and its Global Information and Communication Technologies Department launched the Development Gateway, InfoDev, the Global Knowledge Partnership, the Global Development Learning Network, World Links for Development, the African Virtual University and a host of other initiatives (Luyt 2004; Thompson 2004; Wade 2002). The G8 launched the Digital Opportunities Task or DOT Force, which is endorsed by the UNDP (Shade 2003). The UNDP started the Sustainable Development Network Program and the Global Network Readiness and Resources Initiative and has teamed up with Cisco to offer ICT courses in developing countries (McLaughlin 2005). The UN is involved via the World Intellectual Property Organization (WIPO). Following the

2 Google gives 6,260,000 entries for 'digital divide' (in 0.08 seconds) in August 2005.

1997 Basic Telecommunications Agreement, the WTO looks further towards e-commerce (Shade 2003: 116). The World Summit on the Information Society meets in Tunis in 2005. Development cooperation in Australia, Canada, the Netherlands, Scandinavia and Switzerland among others sponsors digital projects in developing countries. NGO initiatives include Computer Aid International, World Computer Exchange and the International Development Research Centre (Ya'u 2004: 23).

In Thomas Friedman's book *The World Is Flat*, information technology is the key to bridging the development gap between the United States and India and to bridging the rich-poor gap. 'Three billion people—from India, China, and the former Soviet empire—walked onto a "flattened playing field." They can now "plug and play, connect and collaborate, more directly with your kids and mine than ever before in the history of the planet."' (Friedman 2005) The combination of rising educational levels in developing countries (at a time when the American educational system is showing weaknesses) and the business strategies of multinational companies, with ICT as an enabling factor, creates economic opportunities for developing countries. On the downside is a troubling message to Americans—over the next ten years up to 11 percent of the American workforce may be outsourced (cf. Luyt 2004).

Call centres are opening from Argentina to Kenya and Russia. But are teleworking and teleservices beneficial to India and other information processing countries? They offer jobs to a new middle class segment, but already after a few years the attrition rate in India is 30 to 35 percent. 'Indian staff is required to keep odd hours, adopt American accents, and have few options for career advancement' (Luyt 7). Call centres are a dependent economy geared to patrons and clients in the North to the point that Indians must adopt American names and fake identities. They are a pseudo transfer of technology, which only transfers end-user capability (cf. Tandon 2005).

With the exception of some groups (like software programmers), it seems that most teleworkers who are predominantly women are receiving extremely low wages; and some of them work in the kind of modern-day sweatshop conditions that characterised export oriented manufacturing throughout the developing world. (De Alcantera, quoted in Ya'u 21)

At times information-for-development comes with an extraterrestrial optimism (for example, Sims 2002) that is oblivious to the checkered history of international development efforts. Suddenly technology becomes a development shortcut even though this flies in the face of obvious constraints. First, 'Relative to income, the divide today hardly exists' (Wade 444), so bridging the digital divide is actually about bridging income gaps, and here the evidence is that they are generally growing. Second, 'the digital divide is increasing rather than decreasing' (Ya'u 24), which is plain given the rapid changes and competitive drives in the ICT field. Third, research suggests that 'the digital divide will

never be bridged': 'it would take Africa about 100 years to reach the 1995 level of Ireland' (ibid.). Bridging the digital divide is mopping up with the tap open. This presents us with the unbearable lightness of ICT4D and the illogical nature of bridging the digital divide.

Unpacking this approach, an obvious and often discussed problem is technological fetishism.[3] Some discussions argue that connectivity should be addressed not as a technological fix but as part of a capabilities approach and in terms of social capabilities. This is true and by the same token implies certain priorities: 'Once the illiteracy problem is solved (as in Kerala, India), cheap books are a great boon, but giving illiterate people cheap books does not solve illiteracy' (Wade 2002: 443).

ICT4D as a Package Deal

The wider issue is the package character of ICT4D and the interrelated nature of ICT components and the constellation it is part of. This suggests that the means of bridging the digital divide contradict the very idea of bridging: 'efforts to bridge the digital divide may have the effect of locking developing countries into a new form of dependency on the West. The technologies and "regimes" (international standards governing ICTs) are designed by developed country entities for developed country conditions' (Wade 443).

From the package character of ICT4D emerges the actual task of ICT4D, which is to unpack ICT4D so its development potential can be diagnosed and possibly harnessed.

Contemporary globalisation is a package deal and ICT is deeply wired into this cluster. Information technologies and microelectronics-based telecommunications since the early 1980s created the possibility for the globalisation of supply: the information and communication revolution cheapened long-distance communication and enabled plant relocation and outsourcing to low wage areas. Information technology also enables providing global product information or the globalisation of demand. While flexible production has come with growing research and development cost it also comes with a shorter shelf life of products and thus pressure to expand market shares to amortise the

3 'The digital divide is often portrayed in crassly reductive terms as a mere technological access problem that can be ostensibly addressed by providing cheap computing and communication technologies to the poor. However, the digital divide is not merely a technological problem due to the absence of connectivity or access to cyberspace. This instrumentally informed discourse on digital divide is a modernist tendency to unreflectingly categorize and compartmentalize complex sociotechnological changes into one-dimensional social problems in a bid to resolve them through simple technological fixes.' (Parayil 2005: 41) Cf. Hand and Sandywell 2002.

cost of technology investments, in the process generating incentives for global marketing and creating global brand recognition. With the global advertising boom (and advertising growing three times faster than trade) comes the political economy and culture of branding and logos. Information technology is also tied up with the globalisation of competition; the changing dynamics of global inter-firm competition involve inter-corporate tie-ups, networking and mergers and acquisitions to manage the cost and risks of research and development and global marketing. Corporate mergers both downsize companies and seek to make brands stronger. ICT further provides the technical means for financial globalisation, as in 24 hour electronic trading, which has come together with financial deregulation and 'securitisation' or the dilution of the separation between banking and non-banking forms of corporate finance, which, in turn, enabled corporate globalisation and the wave of corporate merger activity from the 1980s onward. One form this takes is the spread of new financial instruments such as options and derivatives.[4]

In global political economy these trends are discussed under headings such as flexible accumulation and post-Fordism and as a mode of production. A mode of production or regime of accumulation combines systems of production (technologies and the organisation of firms) and forms of regulation (political and legal regulation of business and capital). This suggests that we cannot pick and choose elements from this configuration without in effect activating and transplanting the entire constellation or much of it. This is already apparent at a technical level.

Complex ICT systems have "layers" of components—including PCs, computer hardware, telecommunications, cables, software—and decisions made about standards for one layer in one part of a large organisation can easily interfere with decisions about standards for another layer made in another part of the organisation. Compatibility can take years to achieve at a huge cost, by which time new incompatibilities may have arisen. (Wade 448)

What is at stake in contemporary globalisation is both different national capitalisms, each of which is dynamic and in flux, and the interaction of capitalisms, which is mediated through complex layers of technology, international finance, international trade, international institutions, macroeconomic policies, knowledge systems, legal standards and proprietary arrangements. Development policy is part of the interaction of capitalisms. The terms of this interaction are generally set by hegemonic powers and institutions.

Accordingly what matters too is with which perspective we approach these questions—from the inside (the advanced countries) looking out or from the outside looking in

4 Cf. Dicken 2003; Nederveen Pieterse 2004: Ch 1.

(from the point of view of developing countries). The development approach suggests the latter while the realities of power and privilege imply the former. The trade-offs involved in investing in ICT tend to be viewed differently in developed countries than in developing countries: 'it does not make sense to have hospitals connected to the Internet when there are no drugs in the hospitals, or for schools that have no chairs to be connected to the Internet' (Ya'u 26). ICT4D reworks several familiar problems in development policy, some of which are sketched below.

Development policy is incoherent. Surely education is more important to development than digital access and is also a condition for digital literacy. Uneven education worries organisations such as UNESCO, which calls on states to devote as much as 26% of their budgets to education (Ya'u 19). Yet the structural reform policies advocated by the IMF and World Bank require cuts in public spending including education. It does not make sense to cut education spending *and* argue for ICT4D, to erode basic capabilities and advocate fancy digital capabilities.

ICT4D implies the imposition of a development model. According to techno determinists the spread of technology = development. This recycles conventional modernisation thinking, which ranges from Enlightenment positivism (and Lenin's formula of progress as Soviets plus electricity) to post-war modernisation theory. In this series, ICT4D is Modernisation 2.0 (Shade 2003: 14). Second, for neoliberal economists and entrepreneurs the spread of market forces = development. Both these discourse communities make an instrumental use of information-for-development: what matters is technological transformation and market expansion. What these views share is at minimum development naivety, which may be both genuine and deliberate (involving not just the sociology of knowledge but the sociology of ignorance). In defining poverty as the absence of technology and market forces they lack awareness of social development. In the process these views present the disease as the remedy and hegemony as freedom (cf. Shade 117). More precisely, what is at issue is the imposition of a development model.

Time and again technological modernisation has served as a means to effect political and economic reforms. Information technology also functioned this way in western countries—making reforms seem inevitable and thus selling the Reagan and Thatcher reforms in the US and UK ('There Is No Alternative') to trade unions and labour constituencies. ICT indeed is wired in many directions.

ICT promotion serves as a rationale for trade and investment liberalisation in developing countries. As Ya'u notes, 'African countries that have undertaken the liberalisation of their telecommunication sector have ended one form of monopoly—state monopolies—and found themselves saddled with a new monopoly—that of foreign investors' (19).

ICT support also undergirds changes in development institutions. ICT promotion fits

the World Bank's new career as Knowledge Bank. Joe Stiglits's theory of information asymmetry as a cause of market imperfection provides the World Bank with a rationale to improve the functioning of markets by remedying information gaps; which sidesteps critiquing markets themselves (Thompson 2004).

ICT raises the question of appropriate technology. Questions that are seldom asked are 'which technology is appropriate, are low-tech more appropriate than high-tech options, and for what are the technologies going to be used?' (Fors and Moreno 2002: 199).

ICT is designed according to the requirements of the prosperous markets. 'Developing countries are placed at a growing disadvantage by the software-hardware arms race in the global market for savvy computer users. (...) The effect of this technological arms race is to keep widening the digital divide between the prosperous democracies and the rest of the world.' (Wade 452)

ICT privileges western content. While ICT places the emphasis on the channels of information in the process it privileges western content. 'What does it mean that people have access to information or channels that they do not own? Citizens are provided access to channels over which they have no control. Increasingly, also, they are offered little or no real choice over content.' (Ya'u 24)

Intellectual property rights presuppose Western legal norms. Intellectual property rights and the harmonisation of patent law are a major frontier of contemporary globalisation (Drahos and Braithwaite 2002; Drahos 2003). As Ngenda points out, 'The international intellectual property model is a product of Western legal norms' (2005: 60). It carries the imprint of individualism and proprietary individualism such as the droit d'auteur (66). The incentive for reward principle has become enshrined in the World Intellectual Property Organization (WIPO) along with the view that 'patent protection is an indispensable incentive to creative and inventive work' (67-8).

> 'Like too much of all good things, too much IP protection does not reward society. The intensification of intellectual property benefits the owners of the innovations, while society at large suffers welfare loss due to rent-seeking or monopolistic behaviour of knowledge economy firms that depend on patents, copyrights, and other IP rights regimes as their source of profit.'
>
> *- Parayil 2005: 48*

ICT manufacturing does not necessarily add up to ICT diffusion. Latecomer nations lack the financial resources to invest in new technologies, which also presuppose a business infrastructure in soft social capital such as appropriate institutions (Wong 2002: 168). While East and Southeast Asian countries have been strong in electronics manufacturing they have been weak in services, especially financial services and knowledge based services of the kind that use ICT. This was a factor in the 1997 Asian crisis. Disparities in ICT diffusion are significantly higher among Asian countries than among non-Asian countries; Japan and the four Asian NIEs rank above the norm in ICT diffusion while the six Asian LDCs underperform, especially with regard to Internet use (Wong 185). Thus there is a significant digital divide between the five more advanced countries of the region and the other developing Asian countries. Wong concludes that high involvement in ICT production has little or no spillover effect in ICT diffusion.

Digital Capitalism: Cyber Utopia

The digital divide theme is unusual because it is quite ordinary for new technology to spread unevenly, so why should digital technology be different? Now, however, cyber apartheid and information apartheid looms and according to a flood of studies, all have to get wired: schools, libraries, community centres, senior citizens in retirement homes, and the homeless to meet their information needs (e.g. Stansbury 2003; Wicks 2003).

The boundary between ICT4D and ICT marketing is thin. ICT4D may be a terrain in its own right but it is also part of general ICT boosterism in which ICT is the latest major wave of capital accumulation—think railroads, electricity and chemical industries in the nineteenth century and automobiles and telecommunications in the twentieth century. Each accumulation wave comes with its own 'boosterism': it is not sufficient for new products to be made; they must also be invested in, sold and used. They must be the talk of the town.

In the series of capital accumulation waves the ICT wave is a special case in that it is a highly capital intensive sector that has not delivered on its promise; it has absorbed multibillion dollar investments in infrastructure (such as the Fiberoptic Link around the Globe and satellite systems) that are vastly underused. ICT has been in the forefront of TNC operations; in the 1990s typically up to a third of American TNC investments in developing and emerging markets from Mexico to Russia went to the telecom industry (Schiller 1999). It is a prime terrain of transnational mergers and acquisitions and mega corporations such as WorldCom, Vodafone, Viacom, MCI and Mannesmann. ICT is both a dream space of multinational capital (according to President Clinton the Internet should become a free

trade zone), the spearhead of market-led development in a world-to-come of minimal regulation, and typically faces preferences for national regulation of telecoms.[5]

In Schumpeter's analysis of capitalism new technologies and inventions are the motor of capital accumulation. This also looms large in the long wave approach to capitalism. But to boost entrepreneurial activity new technologies and inventions also require cultural changes.

Accumulation boosterism is an exercise in the economy of appearances, which is as much about conjuring up economic opportunities as reflecting them, and in the process opens up frontiers (Tsing 2004). It is about the *aura* of innovation, the *creation* of markets, the effervescent *buzz* of entrepreneurial dynamism and expansion. The general propensity to drama in capital accumulation is enhanced in ICT because ICT *is* and is *about* the communications business. Just as broadcasters typically broadcast the gospel of broadcasting ICT communicates the wonders of communication and preaches the ICT gospel. According to this accumulation script ICT is essential to opening up new business opportunities, unprecedented translocal and global horizons and vast empowerment opportunities.

ICT4D is a strategic part of ICT expansion: ICT4D is digital capitalism looking South—to growing middle classes, rising educational levels, vast cheap labour pools, and yet difficult regulatory environments. It is about *market expansion* and converting unused capacity into business assets on the premise that new technology is the gateway to hope. And it is about the *deepening of the market* by pressing for liberalisation, opening up spaces for competition and investment, bypassing regulations or devising new regulations that will shape the future.

One might view this as a marketing campaign for Internet service providers (Gurstein 2003) but probably more is at stake. Brendan Luyt asks 'Who benefits from the digital divide?' (2004) and identifies several beneficiaries of cyber utopianism: information capital, elites and states in the global South, the development industry, and civil society groups and NGOs. Information capital stands to gain new markets and cheap labour. 'If the South increasingly assumes the role of information processor for the North and acts as a lucrative market for the new products of informational capitalism, this is not due to chance' (Luyt 5). Measures against software piracy are a significant part of its interest: 'The Business Software Alliance, an organisation initially established by several of the biggest names in the industry ... with the express purpose of fighting software copyright infringement, has been especially active in the developing world...'(4).

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5 'It was symbolic that, in many of the world's capital cities, postal or communications ministries were physically situated near the seat of power' (Schiller 1999: 48).

For elites and states in the global South where economic development is essential to state legitimacy, ICT4D serves as another development tool. For the development industry ICT is a strategic tool around which to fashion new public-private partnerships, matching the growing corporatisation of development. Traditionally about 30 percent of World Bank disbursements have gone to infrastructure projects in transport and communication, which also aid transnational capital. Civil society groups and NGOs find in ICT a low cost instrument to communicate with like-minded groups.

Thus, ICT4D is a prism in which key profiles and problems of neoliberal globalisation are refracted. It stands at the crossroads of today's major forces in private, public and social spheres: telecoms, international institutions, states and civil society groups and cyber activists.

If we take a step back it is clear that cyber utopia is an unlikely project. Digital capitalism has been in the forefront of the neoliberal globalisation of the past decades. The telecom industry and the dot.com economy have been central to the economic expansion of the 1980s and 1990s (Schiller 1999). For Susan Strange telecoms were a key instance in the making of casino capitalism (1996). Although the telecom industries don't rank among the Fortune 100, they include mega conglomerates. Telecoms have been a major force in the worldwide neoliberal turn and have also played a key part in the conservative turn.[6] As the saying goes, the media do not defend corporate capitalism, they *are* corporate capitalism. That the media are part of the problem is keenly understood in the United States.

From the early 1900s on the United States has developed the world's most extensive communication infrastructure. Because of its large geography and thin population radio, telephone and later television play a large role in American society and also information technology is more developed than anywhere else. So should ICT be able to bridge rich-poor gaps the United States would be the leading case. Digital divide arguments have led to providing local community Internet access in schools and libraries (Menou 2001). But this has been to little or no effect, n'en déplaise techno determinism, public-private partnerships and silicon snake oil. Social inequality in the United States has *grown* significantly precisely since the 1980s and along with the ICT wave (Nederveen Pieterse 2004). In the United States ICT has either been indifferent to or has contributed to increasing social inequality.

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6 Media tycoons such as Rupert Murdoch and Conrad Black have habitually backed conservative politics. Rupert Murdoch funds the *Weekly Standard*, the house magazine of the American neoconservatives. Silvio Berlusconi in Italy and Thaksin Shinawatra in Thailand emerged as entrepreneurs through the telecom or information industry.

American telecoms have typically practiced 'two-tier marketing' plans, polarising products and sales pitches to reach 'two different Americas'—rich and poor. ... 'Nobody puts as much effort into dual marketing as the telecommunications industry', stated *Business Week*.' (Schiller 53) This has resulted in sharply polarised provision of services, from telephone to Internet access, privileging *power users*: 'Evidence mounted that the corporate-sponsored build-out of high capacity networks was systematically evading poor neighbourhoods in order to concentrate on well-off suburban residences and business parks' (Schiller 54). Internet access among blacks and minorities in the United States varies by income, so inequality is *social*, not digital. As Mark Warschauer notes, 'just as the ubiquitous presence of other media, such as television and radio, has done nothing to overcome information inequality in the United States, there is little reason to believe that the mere presence of the Internet will have a better result' (2003: 297; cf. Davis 2001; Schiller and Mosco 2001).

ICT4D and Development Studies

From the point of view of development studies we can situate ICT4D at various levels. First, technology represents knowledge and capability and as such it forms part of a capabilities approach to development, notably the human development approach. Second, the new technologies are embedded in capital and as such they evoke development from above; most public-private partnerships around ICT are typically too technical and capital intensive in nature to be participatory. Third, technology is a means of control; witness the surveillance capabilities of ICT (such as global positioning systems aligned with cell phone signals) and the corporate campaigns against software piracy and open source software. Fourth, ICT revives the old debates on appropriate technology and dependent development (Hyder 2005; Tandon 2005).

The digital projects sponsored by foreign aid and implemented by NGOs display the usual dilemmas of alternative development; most projects are not locally owned and not sustainable and fold when the funding runs out (discussed below).

ICT is wired into contemporary accelerated globalisation, which in development has meant structural adjustment and rolling back the developmental state in favour of market forces. Digital divide discourse is reminiscent of previous techno fixes that stressed the need for mechanisation and tractors, infrastructure development or the construction of large dams, prioritising capital needs over local needs. Software, the second digital divide, involves intellectual property rights, cognitive frameworks, cultural styles and vernaculars (such as English) that raise questions of knowledge monopolies and

cultural imperialism. 'Humanware', the third digital divide, forces us to return to the basic questions of education and human development, the familiar terrain of capability and inequality. Yes, education is a leveller *if* it is available and *if* it comes with other reforms—land reform, social provisions, etc. A brief précis of general development implications of ICT4D is in Table 1.

1. ICT4D and development policy: overview

ICT4D	*Dimensions*	*Development*
Technology	Capability	Human development
	Embedded in capital	Development from above
	As means of control	Dependent development
Digital divide	Technological fetishism	Development as techno fix
Accumulation	Neoliberal globalisation	Structural adjustment
Development aid	NGO projects	Alternative dependency
Software	Intellectual property rights	Monopoly rents
Human ware	Education	Human development

ICT4D and Development Policy

A contributor to a discussion on the implications of technological change noted: 'Poverty is a choice the world has made. It is a political choice. The information revolution will be another instrument to implement that choice. Only a governance revolution would represent a real change. And to link the information revolution with democratisation is naïve in the extreme, parallel to the current leap of faith linking democratisation and open markets' (quoted in Hedley 1999: 86). Govindan Parayil offers a more benevolent view:

> What is most urgent is to find ways to integrate informational economy with traditional economy in a fair manner such that the asymmetric relationship between the two could be overcome... While information and communications technologies, like any other general-purpose technology cluster, have the potential to benefit all, it is the unfair political economic context within which they are developed, deployed, and diffused that needs to be reformed or better reconfigured for equitable development... (2005: 49)

It's just that changing 'the unfair political economic context' is a tall order. The weary succession of development decades shows that it takes a lot more than technology and capital inputs to achieve development. Development policy is a terrain of hegemony and struggle and policy compromises among hegemonic forces and institutions shape and

obfuscate the terms and nature of this struggle (Nederveen Pieterse 2001). Hegemonic compromises introduce development fads and shibboleths—such as good governance, transparency, democracy, civil society, participation, empowerment—which when all is said and done usually sustain business as usual. ICT4D in most of the senses in which it is used is another development fad and part of the process of obfuscation. The problem is not just that many info development projects are under funded and ill conceived or that ICT4D is driven by corporate interests; the deeper issue is that ICT4D is a Trojan horse that locks developing countries into everlasting dependency.

The instrumental approach according to which information technology can be used and appropriated towards diverse ends and serve either utopia or dystopia is contradicted by more complex assessments of the nature of information technology such as actor-network theory (Hand and Sandywell 2002).

First, from the point of view of development policy the emphasis on the Internet is inappropriate and reflects class bias and is inspired by commercial interests. Of course, information technology is meaningful for social movements, as in the Zapatistas' use of Internet and the Filipinos' use of cell phones in their people power interventions (Castells 1996; Léon et al. 2005) and enables 'organised networks' of many kinds (Lovink 2005). Yet the Internet is principally a middle class medium; as a medium, essentially an extension of the typewriter, it presupposes literacy and the ability to absorb or create content and digital literacy. This may be termed a Starbucks approach to ICT4D.

From the point of view of development policy it would be appropriate to place more emphasis instead on television, radio and telephone. For instance in Indonesia the Internet is minuscule but radio and television are huge. Of eleven or so TV channels only one is a public channel, the others are commercial. Looking at the ordinary communication technologies grounds and normalises our discussion: if some of the digital debates are over our heads because of novel technical and legal issues we are all quite familiar with the problems of ordinary mass media—problems of ownership, unequal services and access, commercial bias, and questions of content. Obviously this is not a development shortcut; rather it can serve development ends only after several hurdles have been passed. Then media such as community radio allow more local input and have greater outreach and development potential than the fancy digital media.

Another question is who is the agent of information-for-development? Here the role of development aid and NGOs may be overplayed. The digital NGO projects display the usual characteristics of alternative development: reliance on project funding; uneven NGO unaccountability (to donors more than to communities); authoritarian or non-participatory management styles; non-replicable projects because they rely on specific capabilities and social capital, so most projects are not locally owned and not sustain-

able; and insufficient attention to the problems of 'scaling up' (Wade 2002; Sorj 2003). While the projects run they produce alternative dependency and when the funding dries up so do most projects.

Government supported information projects with government providing inputs of content (making access to government forms and licenses available online) may be more viable than foreign aid projects but usually fall short of their promise (Wade 2002; Weerasinghe 2004;Gupta 2005). India offers several good examples of developmental uses of Internet such as nonprofits that bring agricultural extension and other information to farmers in rural India,[7] for instance *e-Choupal*.[8] The government of India supports several. Government supported initiatives such as *Drishtee* use a kiosk based revenue model to bring IT enabled services to the 'rural masses'.[9] Other projects focus on village level e-education.[10] However, as Sanjay Gupta (2005) notes, 'E-governance is limited to e-government or e-services. Little participation is granted to the beneficiaries in decision-making or the design of the initiatives. Few cater to the needs of the poorest of the poor; Drishtee, for example, does not even consider the lowest 25% income-wise as its clients.'

If we look to ICT4D as a new threshold in development policy rather than as another

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7 See http://www.indiagriline.com, http://www.mahindrakisanmitra.com, http://www.agriwatch.com and http://www.mssrf.org. A website that gives comprehensive information on ICT initiatives in India is http://www.bytesforall.org. I owe these examples to Sanjay Gupta (2005); cf. Arifa 2002; Chandra 2002; Singh 2002; Wade 2002; Ashraf 2004.

8 'e-Choupal is a web based initiative of ITC's International Business Division, offers the Farmers of India all the information, products and services they need to enhance farm productivity, improve farm-gate price realisation and cut transaction costs. Farmers can access latest local and global information on weather, scientific farming practices as well as market prices at the village itself through this web portal - all in Hindi. Choupal also facilitates supply of high quality farm inputs as well as purchase of commodities at their doorstep.' (http://www.echoupal.com)

9 'The services it enables include access to government programs and benefits, market related information, and private information exchanges and transactions.'(http://www.drishtee.com)

10 This involves projects such as 'Every Village a Knowledge Centre', http://www.mssrf.org/special_programmes/ivrp/ivrpmain.htm. 'Breaking the traditional confines of a school, Hole-in-The-Wall Education Limited takes the Learning Station to the playground, employs a unique collaborative learning approach and encourages children to explore, learn and just enjoy!' (http://www.niitholeinthewall.com). Cf. http://www.trai.gov.in

round of business as usual, then development aid on the part of bilateral or multilateral aid agencies or foundations, and also government provided services may not be the first place to look. Realistically, the first place to look is at IT services that are provided by the private sector.

In many developing countries village phone networks such as *n-Logue* in India and *Grameenphone* (http://www.grameenphone.com)[11] in several countries have a considerable impact. Consider for instance the mobile phone coverage of *Safaricom* in Kenya (http://www.safaricom.co.ke). Many, often low-key private sector enterprises and also entrepreneur networks (http://www.tie.org) use IT. There is no reason to overstate or exaggerate the significance of these initiatives; their purpose and reach are limited. But these private sector enterprises are not financially dependent upon external sources of funding and operating at low profit margins they have a greater reach and are more sustainable than donor or public sector projects. India may have an edge among developing countries in digital literacy (high education levels, English language, development as a national priority, decentralised state, local developmental states); yet Sanjay Gupta notes:

... only 10,000 of the over 600,000 villages have seen some Internet-based ICT for development initiatives, most of which have important ingredients missing: social focus, community-driven, need-based and local initiative. ... Their business strategy has been primarily focusing on certain type of transactions: related to land and agriculture or the provision of government services. They are mostly undertaken by the private sector with the intention of making them financially sustainable and profitable. Few have the empowerment of the socially and economically underprivileged groups as an objective. ... Benefits for women in such initiatives are scarce, and little effort is made to encourage the use of services by women. Part of the problem is that most kiosks are operated by men, which discourages women from using them, given the social milieu in most parts of India. Also, content and services are more geared towards the needs of men rather than those of women. Most initiatives suffer from problems such as power cuts or lack of adequate power, and low-quality connectivity (Gupta 2005).

But it is important to look beyond the attempts to bridge the digital divide by repli-

11 'With the assistance of n-Logue and the financial support from the State Bank of India, the LSPs recruit local entrepreneurs to set up and run village-based information kiosks. These kiosk owners are typically locally-based men or women who have at least a 12th Standard education, and demonstrate the ability and motivation to run their own business. Marketed under the brand name 'Chiraag', which means enlightenment, these kiosks offer a variety of services aimed at providing benefit to rural areas while contributing the kiosk's sustainability.' (http://www.n-logue.com)

cating and extending existing hardware and software technologies. Digital capitalism presents more pressing issues. Robert Wade notes that 'LDC governments should not take technological and international regimes as given... They need more representation in standard setting bodies and more support in the ICT domain for the principle that "simple is beautiful"' (2002: 444). What matters is to shift the discussion away from the assorted applications of information technology to the technologies themselves.

The core problem that ICT4D poses is *disembedding technology from capital.* This is the real challenge of information-for-development and it brings us back to old questions of technology transfer and to full technology transfer rather than pseudo or adaptive transfer (Tandon 2005). During the Cold War years South Korea and Taiwan could disaggregate products and obtain their embedded technologies through reverse engineering and by redesigning them bypass property rights and acquire intellectual property. The current regime of intellectual property rights (TRIPS in the WTO) and the talks on the harmonisation of patent laws seek to forestall and limit these options. China now follows a different avenue and uses its market power and bargaining clout to disaggregate foreign direct investment packages to obtain not just end-user capability but design technologies. But this route is not open to the smaller developing countries.

Digital capitalism poses the problem of technology dependency anew, in both hardware and software. Efforts to develop appropriate IT hardware include developing a simple low-cost computer (simputer). Entrepreneurs in China, India (Arifa 2002) and Brazil are developing low cost designs that may provide 'Southern high-tech alternatives'. Whether they compete in these efforts or will at some point converge is at this stage not the most important question.

The second major frontier is software and the free and open software systems (FOSS) movement. This is of special importance because intellectual property rights are a major and will likely become the central site of North-South negotiation and contestation. With the advanced economies increasingly losing their edge in manufacturing to the emerging economies and seeing their lead in services and research and development shrinking as well due to outsourcing and teleworking, intellectual property rights are their main remaining advantage (leaving aside the ongoing international trade talks on agriculture and textiles).

In software development many corporations large and small have a stake in outflanking Microsoft monopolies and instead developing and fine-tuning the Linux operating system and other open source systems because these allow reprogramming of core features and may thus offer greater flexibility, stability and security. Developing country governments such as Brazil and other emerging information economies increasingly use Linux in government administration also with a view to savings (Sugar 2005). Cyber activists

and other 'organised networks' (Lovink 2005) are also active in this domain.

It would be a fantasy to think of a 'digital Bandung' or an 'IT Cancún' (similar to the walkout from the WTO talks in Cancún in November 2003 initiated by China, India, Brazil and South Africa and the Group of 21 developing countries). This assumes more policy cohesion than is now available. But there is room to strengthen this general approach and the convergence of interests of various stakeholders with a view, ultimately, to fashioning an alternative digital political economy.

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Digital Divide:
Conceptual Problems, Empirical Evidence and Policy Making Issues

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Introduction

This article seeks to advance the development of public policies based on an empirical analysis of the dynamics of digital inclusion/exclusion in the poorest sectors of the population. The ideas discussed here are rooted in quantitative and qualitative research conducted in the low-income communities of Rio de Janeiro during the second semester of 2003. The research was carried out in two stages,[3] and represents a universe of nearly 1,200,000 people. Eight separate focal groups, made up of a range of age groups and gender, complemented the research.

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3 In the first survey we used a universe representative of the total number of *favela* residents. In the second, six *favelas* were researched, two with higher income, two with a medium income, and one with a medium-low income, using a more detailed questionnaire. The first survey included the population above 15 years of age that do or do not use computers. The second included children from 10 years old and up, and all those interviewed did use computers, in order to deepen our understanding of this universe.

Digital Exclusion is Multi-Faceted

Most studies on digital exclusion focus on small communities or local experiences, and their value is limited because they do not generally have an interface with studies based on quantitative data.[4] At the same time statistical studies,[5] and in particular those from developed countries, have as a central – and generally unique – parameter the division between those who have and those who do not have access to computers and to the Internet. Although important, this measurement is insufficient to understand the broader social dynamics and define policies to make access universal because of three important limitations:

a) They do not identify the quality of access, whether in terms of the connection speed or in terms of cost/access time available, in particular for the poorest groups of the population.

b) When the quantitative studies do distinguish between socioeconomic strata, they use those who have a computer in their home as the universe. As we will see, this criterion leads to important distortions in the perception of the problem.

c) They do not give information on the diversity of uses and the relevance of digital inclusion for users. This last point, although central, will not be considered within the limitation of this work.

Digital exclusion is not a simple phenomenon of those who have access to computers or the Internet versus those who do not, of those who are included versus those who are excluded. While this is a real polarity, it sometimes masks the multiple aspects of digital exclusion. The reason for this is simple: the criterion of access or no is a reasonable generalisation when we look at public services or traditional intermediary consumer goods (although the type of TV, refrigerator or car can be better or worse; and for the poor population the cost of the call limits the use of the telephone, or the cost of gasoline the use of the car).

But the number of computer owners or people with access to the Internet is not a sufficient measure of digital exclusion. Why? a) Because the quantity of time available and the quality of access decisively affect internet use; b) because information and communications technologies (from here on, these will be referred to as ICTs) are very dynamic

4 A common opposition is reproduced among quantitative studies, carried out generally by economists, and qualitative studies, conducted by sociologists and anthropologists.

5 That is, the analysis of the social, economic and cultural consequences of the unequal distribution of access to new information and communications technologies.

and require constant updating of hardware, software and access systems, which in turn requires constant investment by the user so the technology does not become obsolete; and c) because the potential for use depends on the ability of the user (in the case of internet) and their social network (in the case of e-mail).

In the next section we present some of the main results of the research and the implications for policies and social projects on digital inclusion.

Empirical evidence

a) Universe of users

Digital inclusion in a country is generally defined by the percentage of people, in the total population, with access to computer and/or Internet at home.[6] To identify the people included, the criterion normally used is the number of computers per home and/or computers in the home with access to the Internet. This methodology has been criticised, because in certain countries with a relatively high number of collective access points (commonly denominated telecentres or cyber cafés), the number of people who access internet per computer is much higher than the average of accesses per home. It has also been argued that middle class families normally have more than one computer in the home, which does not occur among poor families. This means that there are a greater number of users per computer among poor families and a smaller number of users per computer in middle class families.

In the case of Brazil, the statistical impact of telecentres is secondary, given that the number on a national scale is still relatively small. However, as we will see, they are still far from being insignificant for the communities in which they are located. At the same time, the idea that a greater number of people use the computer in poor families' homes should be qualified, since – as our research shows – in the majority poor families, few people actually use the computer.

As the following data show, the quantification of digital inclusion based on the number of computers per home produces a completely erroneous vision about access to computers and the Internet for the poorest sectors of the population. This is because only half of those who have computers have access to the Internet. This is also because, for computer users in *favelas,* the workplace and other peoples' homes are the most common places to access Internet.

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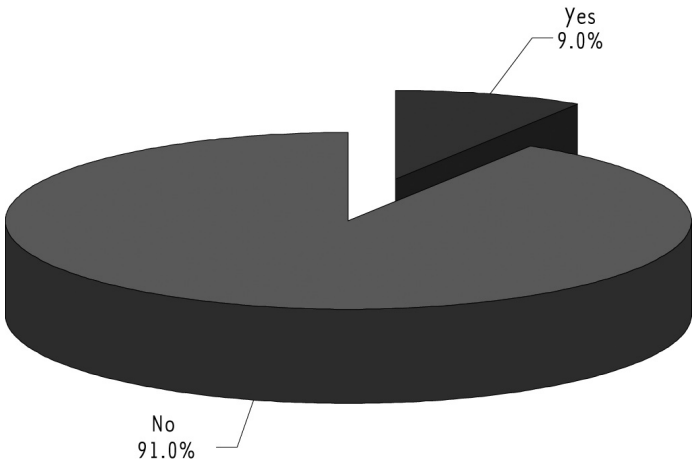
6 For example, the Map of Digital Exclusion, by the Getúlio Vargas Foundation (in Portuguese): http://www2.fgv.br/ibre/cps/mapa_exclusao/apresentacao/apresentacao.htm

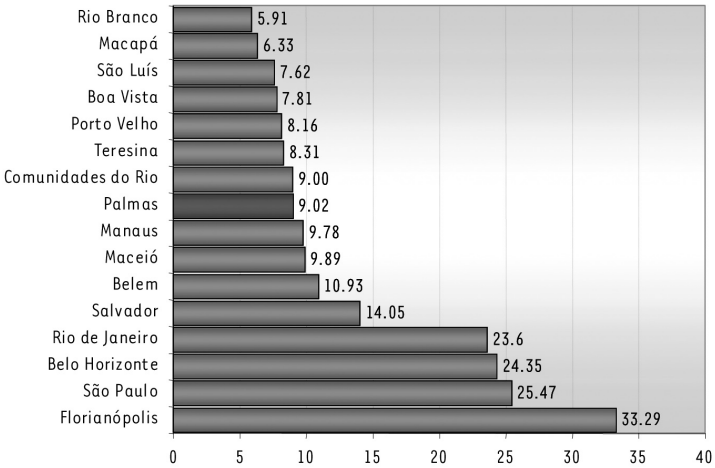
Let us take a look at the statistics:
According to the research, 9% of homes in *favelas* have computers.

Graph 1: Number of computers in residences in favela communities in Rio de Janeiro



Moreover, computer access in *favelas* is higher than the average for many capital cities in the north and northeast of the country. Computer access in the *favelas* of Rio de Janeiro is close to the national average, but 30% lower than the average for the state. In relation to Rio de Janeiro city, *favelas* have one computer for every 2.6 computers in the city (and compared with the more wealthy neighbourhoods, the ratio is about one to six).

Graph 2: Comparison between rates of digital inclusion in low-income communities in Rio de Janeiro and selected capital cities

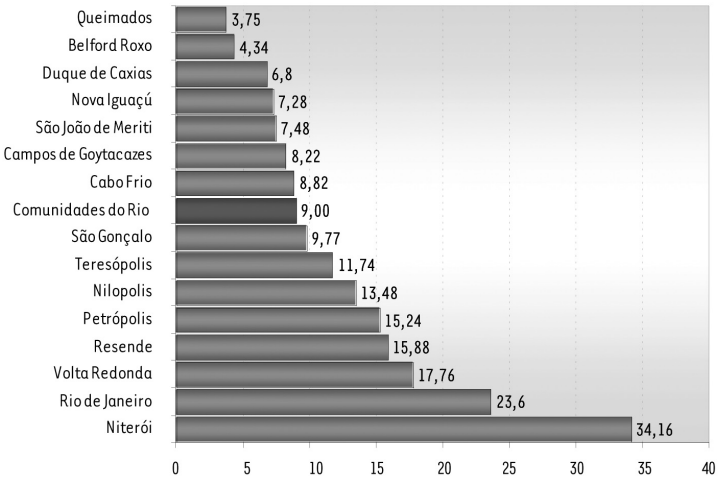


Note: Digital inclusion, in this case, refers to the percentage of computers in the total number of homes.

The unequal distribution of computers among the population in different cities in Brazil is a reflection of the unequal levels of wealth and education. This is particularly striking for the poor population of the northern and northeastern regions in relation to the central-southern region. But having a computer is also associated with something more intangible: it reinforces the notion that computer skills are valuable assent and can be a key to obtaining employment and success in education. In other words, as the productive system becomes more computerised, the idea that it is important to master this instrument quickly 'infiltrates' among the diverse social sectors, because using computers comes to be seen as a condition to getting work and to doing well in school. In fact, this was the only question in our study for which we found a consensual answer, independent of education level, ethnicity or gender: nearly all of those interviewed indicated having computer skills helps get a job. If the distribution of computers has an obvious correlation with the level of income and education, it is equally associated with wider cultural patterns of 'digitalising' the society.

Making reference to 'poor communities' can lead us to imagine a homogenous group, when in reality, there are differences within each poor community and among them:

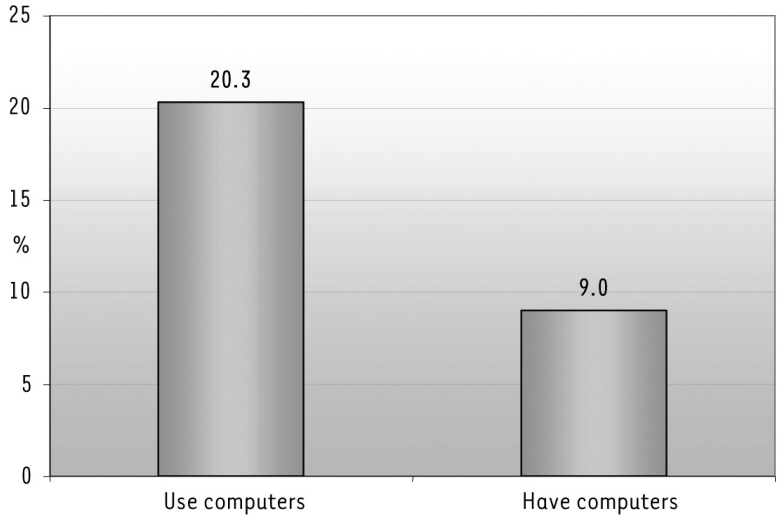
Graph 3: Comparison of the rates of digital inclusion in low-income communities in Rio de Janeiro city and selected other cities in the state of Rio



Note: Digital inclusion, in this case, refers to the percentage of computers in the total number of homes

However, the number of people with computers in the home does not define the number of users, which is double the number of those who have a computer:

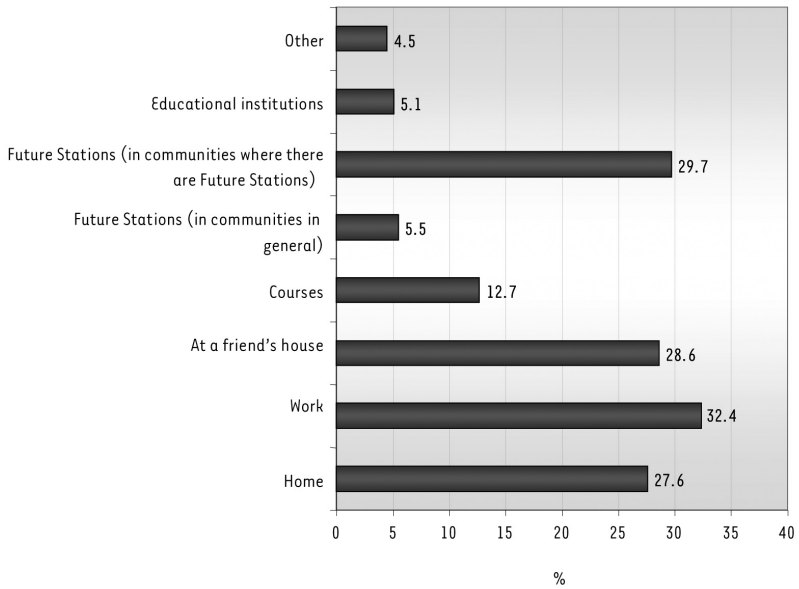
Graph 4: Percentage of people who have and use computers in low-income communities in Rio de Janeiro city



A possible explanation as to why the number of computer users is higher than the number of homes with computers is that each computer is used by several family members. But this explanation is insufficient because only 27.6% of those interviewed indicated the home as the main place to use a computer. In addition, those interviewed and the interviews from the focal groups indicate that the computer generally is seen as a good for personal consumption, although who actually has or owns the computer are not clearly defined. Young people in particular may define the computer as "theirs," even though their parents bought it. Thus the question of ownership is directly associated with use, because in general it is the user who defines the computer as his or hers. The tendency to individualise computer ownership relates to the fact that many members of the family do not use the computer, as well as to a desire to affirm possession of the computer due to possible scheduling conflicts. The latter was an issue cited in the focus groups as a source of tensions in the family.

The higher number of users in relation to owners is mainly a consequence of the fact that in *favelas* the home is not the main place where people use computers:

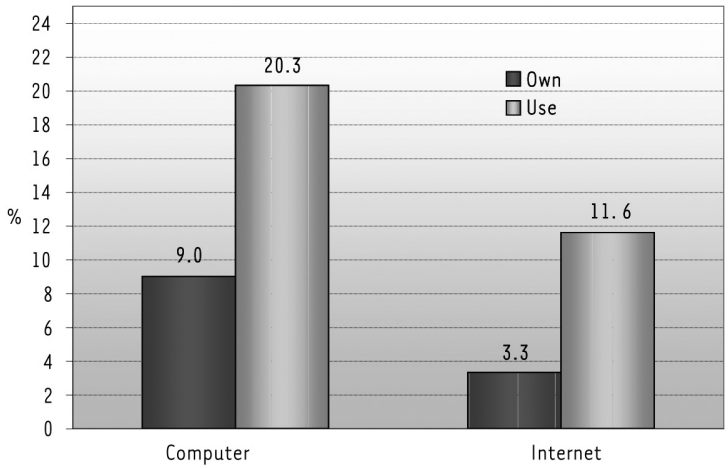
Graph 5: Main place to use computers in low-income communities in Rio de Janeiro city



The workplace, and not the home, is the main place where *favela* residents use computers, followed by the homes of friends and acquaintances. Home is the third most likely place for people to use computers. In *favelas* where they exist, Future Stations (telecentres set up by Viva Rio, a local NGO, are the second most frequent place to access computers, with nearly 30% of computer users interviewed so responding. This data contradicts the expectation that in the poorest sectors of the population the number of users per computer in the home is high, because there are few members of the family that use the computer, normally dependents and minors.

This phenomenon of disassociation between possessing a computer and using a computer is reproduced in relation to the Internet. Although only half of those who have computers at home have access to the Internet, the number of Internet users is more than triple those who have access at home:

Graph 6: Percentage of people who have and who use computers and Internet in low-income communities in Rio de Janeiro city

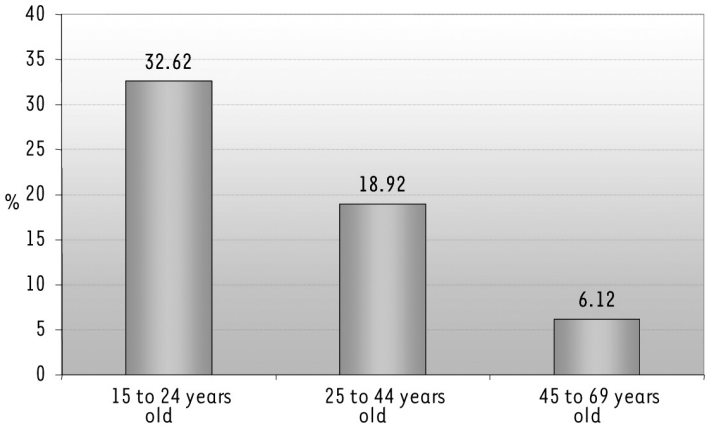


Note: The percentages refer to the total in this sample

b) Factors for integration / exclusion

Among computer users in the *favela*, as in the general population, there is a tendency for computer use to decrease as age increases. In the *favela,* however, this tendency is especially notable. The lowest educational levels generally occur in the most elderly sectors of the population, and so do the lowest chances to learn on the job:

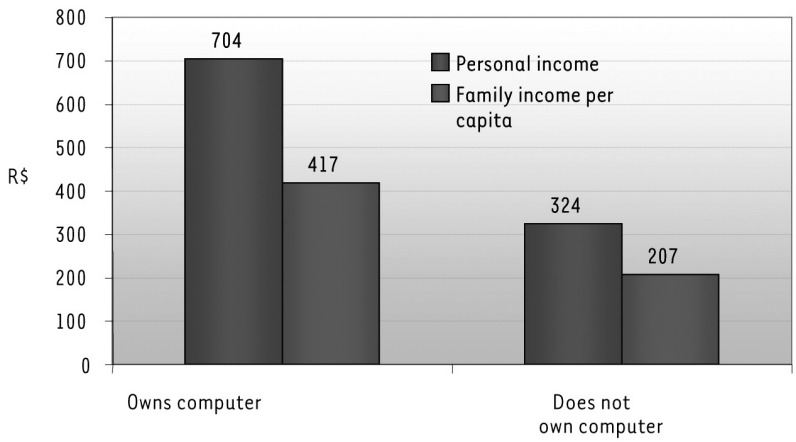
Graph 7: Percentage of computer users by age group



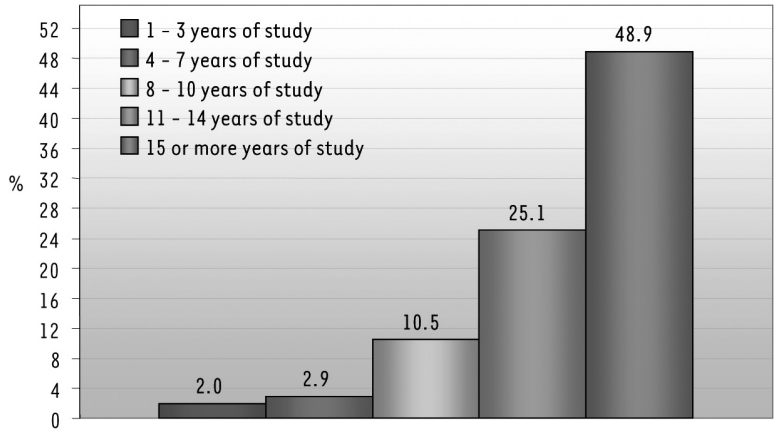
Note: The percentages were calculated in relation to the same group.

As could be expected, the following graphs indicate that there is a clear correlation between educational levels and computer ownership. Educational levels are fundamental: among those who have studied for one to three years, we find two computers per 100 homes; among people who have studied for more than 15 years, computer ownership reaches 48.9 per 100 homes:

Graph 8: Average personal and family income per capita in relation to computer ownership in favelas in Rio de Janeiro city



Graph 9: Percentage of home computer owners and number of years of study in favelas in Rio de Janeiro city

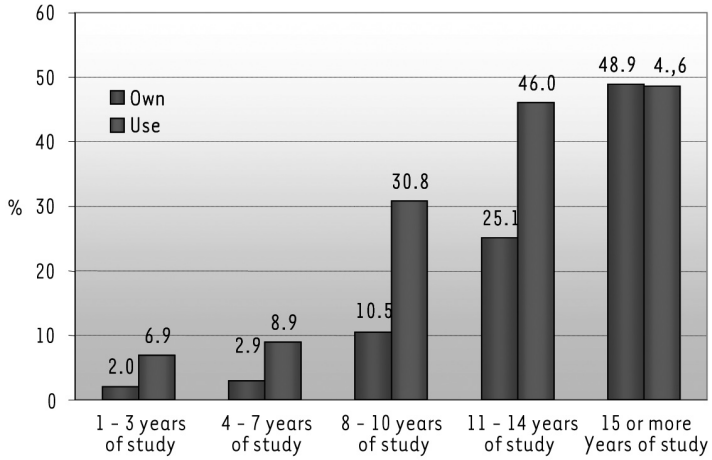


But the fact that it is the workplace and not the home that is the main point of access for computers and the internet (and the main place to learn to use computers as well as to become motivated to do so) implies important changes not only in the number of people digitally included, but also has implications for the profile of the user.

As we will see, women – because they most commonly work as domestic help or in cleaning services – have the most to lose and present a level of digital exclusion that is higher than that of men in the poorest sectors of society. On the other hand, the black male population, which has an average of computer ownership per household that is much lower than that of the white population in *favelas,* finds a mechanism for social integration in work. Just as access to computers outside of the home has a general democratising impact, although unequal, this allows people with lower educational levels to enter in the world of computers.

Among computer users, within or outside the home, the pattern that associates educational levels with computer use is maintained, but the distance tends to grow smaller. This indicates that people with lower education levels find in computers outside their home a mechanism to equalise social status:

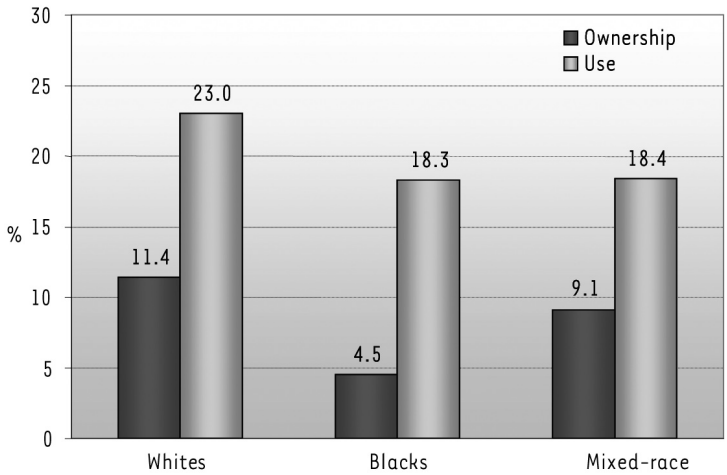
Graph 10: Percentage of people that own and use computers by years of study in poor communities in Rio de Janeiro city



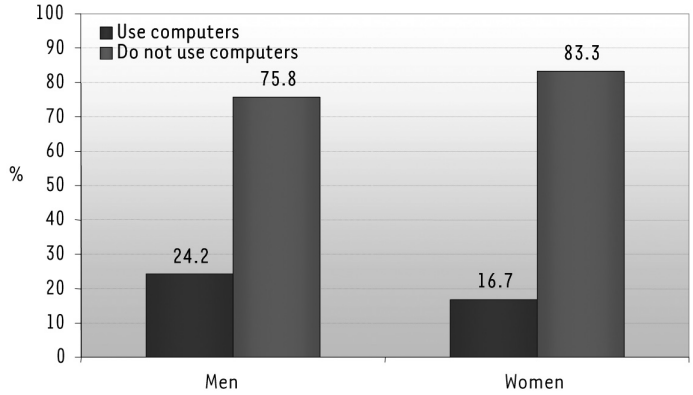
Note: The percentages were calculated in relation to the same group.
The same is true for income levels:

Graph 11: Family income per capita by computer ownership and use

As shown in Graph 12, the percentage of white people who own a computer is higher than the average (9.0%), the percentage of mixed-race people is equal to it, and the percentage of the black population that own computers is just half of the average.



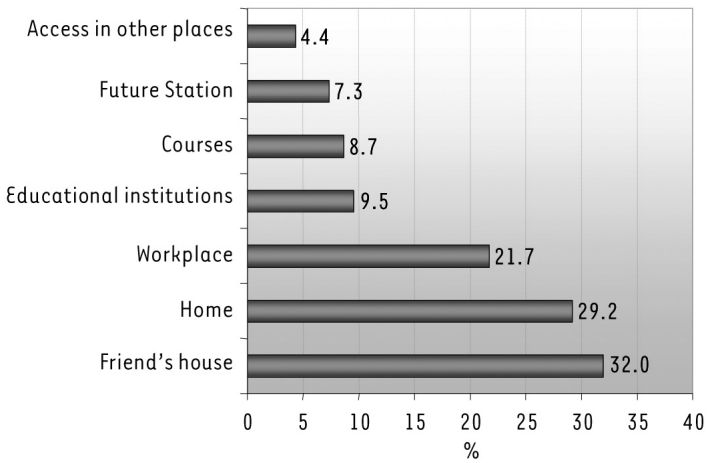
Graph 12: Percentage of home computer owners by ethnicity in poor communities in Rio de Janeiro city



Note: The percentages were calculated in relation to the same group.

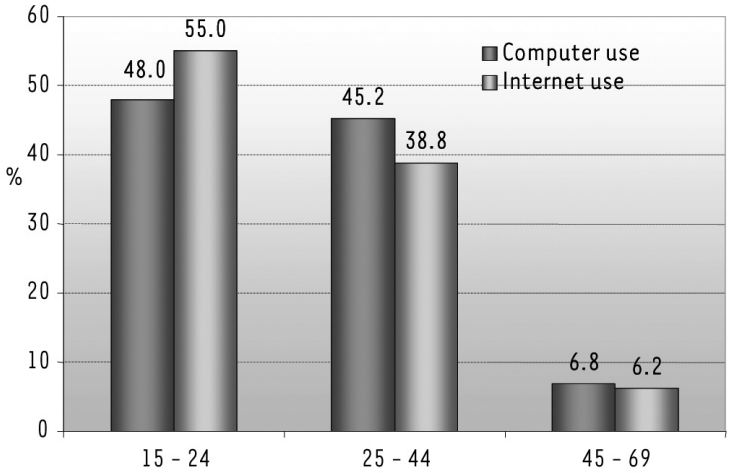
As indicated in Graph 13, this situation reflects the doubly unfavourable position of the black population in terms of income and education:

Graph 13: Comparison of average family income per capita and year of study



But in terms of computer users this difference tends to get smaller due to access to computers outside of the home:

Graph 14: Percentages of ownership and use of computers by ethnicity

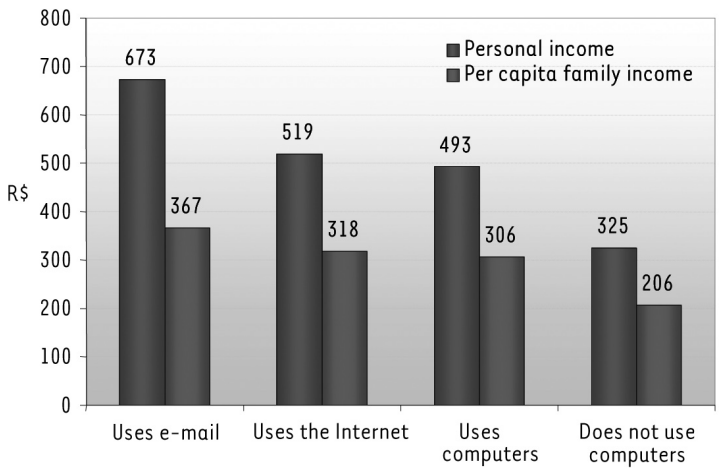


Note 1: The percentages were calculated in relation to the same group.

Note 2: In order to determine use, the universe of those who use computers (20.3% of the population) was used.

In other words, access outside of the home works as a factor to create opportunities for the black population. The opposite occurs with the female population:

Graph 15: Computer use by sex in poor communities of Rio de Janeiro city



Work acts as a factor that contributes to digital exclusion in the case of women and to increased social equality for blacks. The majority of women work in cleaning services or as domestic help, and do not have opportunities to use computers, while a greater number of men, including many who work as office boys, find themselves in an environment that invites and permits them to gain basic knowledge of computers.

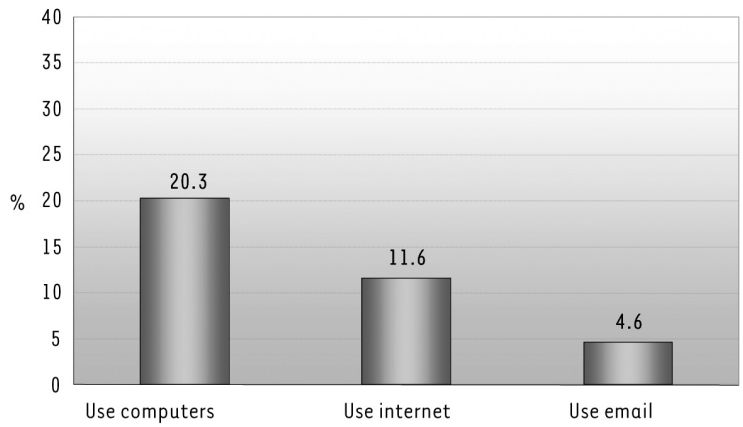
The tendencies related to computer use are reproduced with regard to the Internet, and are even more pronounced. Of the total of computer owners, only one-third has access to the Internet. Of the total of Internet users, just over 25% uses Internet in their homes, echoing the patterns for computer use mentioned above. That is, the principal source of access is found outside of the household.

Graph 16: Most common places to access Internet in low-income communities in Rio de Janeiro

Universe: those who use the Internet (11.6% of the population)

Age is a more decisive factor with regard to Internet use, as younger age groups are more likely to use the Internet:

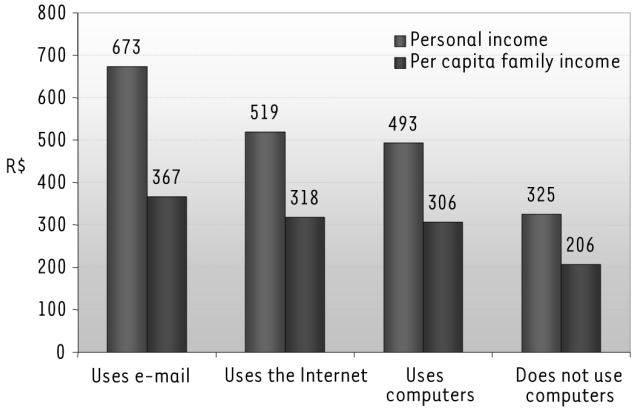
Graph 17: Percentage of Internet and computer use by age



Note: Percentages were calculated in relation to the same group.

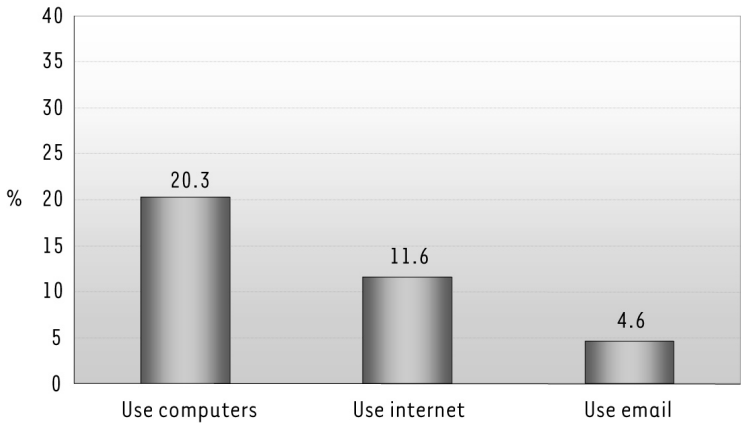
The income gap visibly increases when we look at Internet users instead of computer users. This is likely related to the cost and difficulty of accessing the Internet:

Graph 18: Household income per capita and personal income by level of digital inclusion



Finally, although a discussion on Internet uses is not included in this article, we cannot leave out an indication of the limits of ICTs uses for the lower-income sectors:

Graph 19: Percentage of e-mail use in relation to the use of computers and Internet among the total favela population



c) Quality of Access

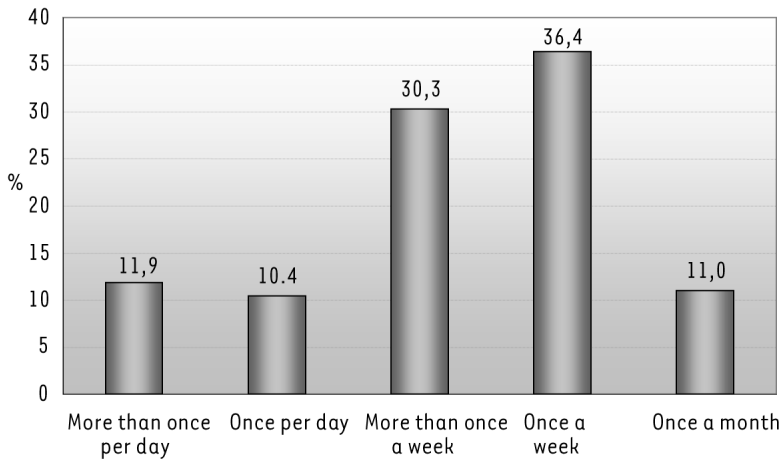
If the data presented above indicate that there are multiple paths to gain access to computers and the Internet, these all converge in the sense that they indicate the limitations of available time and quality of access for low-income users:

1) Those who have a computer and access to the Internet at home are limited by the quality of access (they have practically no access to broadband, for example) and the time they can stay connected (since they use dial-up access, and are required to pay for the time they occupy the phone line). The result is a low frequency of use.

Not being able to access fast Internet services at a fixed monthly rate, independent of the time of use, then, has two consequences. The information takes longer to access, but there is also less time available to stay on-line, because the user has to pay for the time he or she is connected through the phone lines.

As the following graphs will show, the intensity of Internet use among *favela* residents is still quite low. A study on digital exclusion, however, should be consider not only numbers of those who use computers and those who do not, but also the quality of access (low and high speed), as well as the time that is effectively available for such use.

Graph 20: Frequency of access to the Internet, in low-income communities of Rio de Janeiro city



Universe: those who use the Internet (11.6% of the population).

2) Those who use Internet and computers at their place of work can use these instruments within the limits of their duties and work schedule.

3) Those who use telecentres depend on the following: the existence of telecentres located near them, resources to pay for the service and availability of computers in the telecentre at the time they are interested in using them.

4) Finally, those who have access to computers or the Internet at their friends' or family's houses face similar difficulties because of the limited availability.

Although the preceding comments do not invalidate the relevance of several strategies to universalise access to computers and to the internet, we must also point out that inequalities between the various social groups continue, even among those which the statistics show as having good access to ICTs.

Conclusions: Public Policies and Digital Inclusion

In view of the findings of both this research and the international literature on digital exclusion, we can draw some firm conclusions on the objectives of making access to the Internet universal and of democratising information:

1) Policies to universalise access to the Internet in developing countries will only be successful if they are associated with other social policies, particularly those relating to education. In developing countries, where illiteracy rates are very high (in Brazil this rate is around 30%), the struggle to increase access to public services (education, sanitation, security, health, justice) require a complex vision of the struggle against digital exclusion. Obviously, this does *not* mean that we must wait until we are able to eradicate illiteracy in order to develop digital inclusion policies. The demands of the economy and of job creation require interrelated public policies that work with different social sectors and different rhythms to universalise public services. However, we cannot ignore the embracement of social policies. The final success of these depends on an integrated program to universalise various public services: there will not be universal access to new information and communications technologies without universal access to other social goods. In the short term, digital inclusion policies, which will necessarily have an impact on only the poorest part of the population, should clearly define their target priorities. We will return to this idea in point 4, below.

2) A similar perspective should be applied in relation to the objective of democratisation of information. The effective value of information depends on the user's ability to interpret it. A higher level of education is fundamental to maximise the potential offered by the Internet. The promotion of sites with content developed specifically for

lower-income populations, or in native languages, could have an important role in compensating for the difficulties in accessing contents produced for middle class publics or content in other languages. But in spite of recognition of the problem by institutions working for digital inclusion, advances have been limited. It is important to emphasise that highlighting the limitations of policies to democratise information (as the benefits of accessibility are unequal) does not imply that different groups do not have something to gain from using the Internet.

3) The development of telecentres – that is, places where the public can access the Internet – is fundamental in any type of policy to universalise services. In spite of the efforts of NGOs to develop community telecentres, these initiatives have had a quantitative impact that is practically residual, although they do fulfil an important function in demonstrating that they can also have an important effect in the communities where the operate. But making access universal is a fundamental concern of public policy and the markets. The latter has an important role in particular when the telecentres – using low-cost equipment and pirate programs, and administrated by family owners – are able to reduce costs, as seen in the Peruvian example. However, public policies are able to reach a scale that voluntary initiatives are not able to achieve. Public policies to universalise access to computers and to the Internet demand creative solutions for the poorest communities, including subsidised services, to be carried out by private companies, community associations, and/or NGOs.

4) It is fundamental to define priorities of target publics. This research indicates that in principle the telecentres in poor communities are used by sectors of society that already have a basic level of education and a relatively higher income. A policy to universalise access to the Internet should have as a primary objective the educational network, the only place that can effectively be reached by the total population. As the research indicates, the workplace is important factor in increasing digital inclusion. Digital inclusion policies should create incentives to increase the number of companies that use computers and the Internet. Companies should also offer computer and Internet courses to their employees.

5) To propose that schools be used in conditioning the new generations to use computers and the internet does *not* mean a) to transform ICTs in a privileged instrument for the educational system, nor b) to over-invest in exaggerated quantities of computers in each school. The research on the impact of the use of computers and Internet in schools is contradictory. The adaptation of professors to this new instrument is a long process that cannot be disassociated with the general improvement of professional development. Developing adequate software, adapting pedagogical systems, and developing critical teaching techniques on the use of ICTs will be a necessarily long process in the majority of

developing countries. Until that time, the role of ICT labs should be to introduce students to these instruments and their uses and provide them training on basic programs, in order to motivate them to use these instruments and facilitate their future insertion in the job market. Within these limitations, it is sufficient to offer ICT courses in just one year during elementary education, and eventually, once again during the secondary cycle.

In general we should remember that the struggle for digital inclusion is a struggle against the clock. New information technologies increase existing social inequalities, in such a way that the making access universal is nothing more than a struggle to re-equate the conditions for access to the job market.

Finally, we should indicate that in this article we have emphasised digital inclusion of individuals. Other aspects, however, must also be mentioned. In certain contexts, digital inclusion could be an important instrument to improve the collective quality of life in low-income communities, making available information and services of great cultural, social and economic utility.

A colour version of this article is downloadable with all chrats and graphs in colour is available at http://www.incommunicado.info.

Cisco Systems, the United Nations, and the Corporatisation of Development

Lisa McLaughlin

Introduction

Since the victory of neo-liberalism during the 1980s Reagan and Thatcher regimes, development agencies and nongovernmental organisations, along with "donor countries," have become increasingly unable or unwilling to provide or pursue financing for development through the mechanisms of the United Nations. Spurred on by Secretary General Kofi Annan's consent to voluntary and unmonitored initiatives led by the private sector, by the year 2000, corporations increasingly began to step into the breach as a way of exhibiting global corporate citizenship (or corporate social responsibility). Private sector investment, arranged through public-private partnerships, has become a substitute for funding previously provided by national, regional, and international development agencies. The result is a corporatisation of development, the expansion of corporate influence within public sector environments, from the UN organisation to localised institutions such as public schools and community centres.

Individuals and agencies associated with the UN often differ in their ideas as to what constitutes effective approaches to development. Yet events such as the World Summit on the Information Society (WSIS) have made clear that the de facto official position of the UN is that the establishment of a "knowledge society" is imperative for economic survival. This is consistent with what frequently is said to be a transition from economies based in industrial manufacturing and agriculture to a global "knowledge economy," where human competencies in the production and use of new information technologies are understood to be critical resources for economic growth. Not surprisingly, then, technology, computer,

and electronics companies have been prominent among the corporate entities that have been courted by the UN as partners in development initiatives.

Ostensibly, information technology corporations engage in partnership initiatives with the UN, various governments, other companies, and nongovernmental organisations (NGOs) as a way of addressing the "digital divide" (which is, in fact, a development divide). Public pronouncements regarding strategic partnership agreements often propose that new levels of democratic inclusiveness will result from information technology (IT) projects. Yet, the more visible result is an acute corporatisation of development driven by the IT sector. In the ensuing pages, I focus on UN-brokered partnerships with Cisco Systems in order to illustrate this phenomenon. The corporation is the dominant player among networking hardware manufacturers as well as one of the most prolific corporate partners in UN development initiatives. As a signatory to the UN Global Compact in 2000, Cisco Systems joined a relatively small number of US corporations (approximately one dozen) to enter into a partnership with the UN during the Compact's first year. Few corporate citizenship efforts have received the degree of attention afforded to Cisco Systems' partnerships with the UN and other entities, which have been initiated in support of Gender and Least Developed Countries Initiatives. Yet, at the same time, there is a dearth of public knowledge about the corporation and the specific details of the projects that it undertakes in collaboration with the UN. This raises questions about corporate accountability and transparency. Moreover, it suggests that the "knowledge economy" does not facilitate the circulation of useful knowledge about the role of information technology companies in the corporatisation of development.

Cisco Systems and Public–Private Partnership Initiatives

Cisco Systems: a brief background

Cisco Systems specialises in making routers and switches, the devices that move "packages" of information throughout the Internet. The corporation also develops and sells the software used to manage networks. Cisco Systems' primary customers include large corporations, educational institutions, government and intergovernmental agencies, and telecommunications service providers, which utilise large, complex Internet networks. However, since March 2003, when Cisco Systems acquired Linksys, a rising competitor in the switching and routing business, the corporation has also begun to penetrate the small business and home networking markets. Despite some ups and downs in respect to its market share among router industry competitors (e.g.: Juniper Networks), Cisco Systems remains ahead of its competitors in revenue and earnings, and, at present, has

approximately 70 percent of the global market share in routers. Most analysts attribute this to its aggressive approach to mergers and acquisitions. As of early 2005, the corporation had made its 100th acquisition. Recently, Cisco Systems was rumoured to be making a bid for Nokia, the mobile phone maker (TechNewsWorld 2005), while the journal *Corporate Control Alert* is predicting that Cisco Systems will take over Nortel within the next year (Jaffe 2005).

The Nokia rumour confirms that, as wireless and wired networks have begun to quickly merge, Cisco Systems is moving into the business of wireless network applications. The corporation acquired Wireless LAN switch start-up company Airespace in 2005. Cisco CEO John Chambers has predicted the dawn of a "New World Network" that will spread from the internet and computers to include personal communications devices and home applications (Business Week Online, September 13, 1999). As the corporation's 2004 Annual Report notes, Cisco Systems, while continuing to make routers and switches, has expanded its "key growth areas" to include home networking, IP telephony, optical networking, security, storage area networking, wireless technologies, and the service provider market. In the area of network security, Cisco Systems in now competing with Microsoft, a former ally (Reardon 2005).

The corporation also is expanding its operations and holdings worldwide, with a specific focus on investing in Asia and acquiring Asian start-up companies. Cisco Systems has set up venture capitalist operations in Bangalore, the "Silicon Valley" of India, and has built a large research and development centre in Shanghai, China. It is estimated that, as a cost-cutting measure, the corporation will begin to manufacture 40 percent of its products in China within the next few years. CEO Chambers has said that China has been singled out as a country in which to invest because it has an excellent IT education system and a huge population from which to enlist workers (China Daily, June 17, 2005). Still, the intense interest in China as a source for both labour and customers has been accompanied by the creation of approximately 200 networking academy programs around the country in partnership with the Chinese government and a number of universities.

Partnerships and Initiatives

Partnerships with technology companies often are focused on supporting technical training in new media applications and hardware manufacturing. Cisco Systems partnerships constitute no exception. The majority of its corporate citizenship initiatives involve offering the Cisco Networking Academy Program (CNAP) in least developed countries and emerging economies. The CNAP, a two-year training program in which students are trained

to design, build, and maintain computer networks, was initiated in the US in 1997. Since 1997, CNAPs have spread throughout much of the world and, at present, are operating in over 150 countries. Over 10,000 academies exist worldwide with approximately one quarter of a million graduates. Nearly half a million students worldwide are enrolled in the CNAP at this time. Cisco describes the CNAP as "the largest e-learning laboratory in the world." According to Cisco, the CNAP "embraces the spirit of learning in the Internet economy" (http://www.cisco.com/asiapac/academy/overview/benefits.shtml).

The curriculum is delivered through schools, technical schools, colleges and universities, and community organisations. At the end of program, each student who passes the CNAP exam receives certification as a Cisco Certified Network Associate (CCNA). While Cisco-trained instructors supervise classroom learning and "hands-on labs," the curriculum is web-based and features online testing for industry standard certification. A person who becomes a Cisco Certified Network Associate is equipped with foundational knowledge of small office/home office (SOHO) networking. The two-year program results in the student having "apprentice knowledge" of networking, with the CCNA having acquired the ability to install, configure, and operate LAN, WAN, and dial access services for small networks and to use a variety of internet protocols (http://www.cisco.com/en/US/learning/netacad/index.html).

The Cisco Systems Gender Initiative and Least Developed Countries Initiative (LDCI) were both launched in 2000, the same year in which the corporation signed the Global Compact, in recognition of both the gender gap and the digital divide in the IT field. The objective of these initiatives is to extend student training through the CNAP to individuals in the "developing world," with a specific emphasis on empowering women by training them to be IT workers. The LDCI, the corporation's most prominent effort associated with the DOT Force Initiative, involves a strategic partnership forged between Cisco Systems and the United Nations Development Program (UNDP), the US Agency for International Development (USAID), the United Nations Information Technology Service (UNITeS), United Nations Volunteers (UNV), and the International Telecommunication Union (ITU), which joined in 2002. The stated purpose is to enhance technology skills development and to empower countries to accelerate progress, attain sustainable development, and fully integrate into the world economy. The Gender Initiative, which was launched two months prior to the LDCI, is intended to "increase female participation in the internet economy" (http://www.cisco.com/en/US/learning/netacad/digital_divide/gender/index.html). The United Nations Development Fund for Women (UNIFEM) has been a key partner in this effort. The ITU is also a significant partner due, in part, to its ongoing partnerships relationships with both Cisco Systems and UNIFEM, the latter of which shares a "Memorandum of Understanding" with the ITU, one which pledges to work toward closing the

gender gap that exists within the "digital divide."

In May 2001, when the ITU launched the Internet Training Centres Initiative (ITCI), Cisco Systems became the "pioneer partner" in the endeavour to "provide students and professionals in developing countries access to affordable and relevant technology training" (http://newsroom.cisco.com/dlls/prod_101503b.html). The ITCI has a specific gender component, which requires a minimum of 30 percent female enrolment and supports the training of female instructors. According to the Cisco Systems web site (http://www.cisco.com), there are 53 ITCs established worldwide, with more than 3,332 students enrolled, nearly 30 percent of whom are women. The number of graduates of the program is reported to be 621. On December 11, 2003, during the World Summit on the Information Society, Cisco and the ITU signed a Memorandum of Understanding to create 20 more Internet Training Centres in developing countries.

The two most prominent events related to the Gender Initiative both occurred in 2002: the establishment of the first women-oriented Cisco Learning Academy/ITC in the Department of Women and Gender Studies (DWGS) at Makerere University in Kampala, Uganda and the "Achieving E-Quality in the IT Sector" program which was launched in Jordan. Both the Makerere and the Jordan programs appear to offer women the usual four-semester CNAP, along with a few of what are vaguely described as "gender training" courses. The ITU and Cisco Systems are the leading partners in the Makerere project, although the program is also supported by the UNDP and USAID. In order to qualify to "host" an ITC, the Department of Women and Gender Studies had to solicit additional support from the Carnegie Corporation, the Norwegian Agency for Development Cooperation, USAID, the African Development Bank, the Swedish Development Agency, and Makerere University itself (International Telecommunication Union 2002). The Department offers CNAP training through both all-female classes and "gender balanced" classes at bachelor and master levels. The stated goal of the program is to increase the number of women in the IT workforce, along with integrating women into decision-making and policy-making positions. According to the Department's web site, "Apart from the traditional ICT training, DWGS offers additional skills in gender training, women leadership and self-advancement that are crucial in today's competitive world" (http://www.makerere.ac.ug/womenstudies/ict.html). This approach is consistent with the "Achieving E-Quality in the IT Sector" program, launched in Jordan in January 2002 as a partnership between Cisco and UNIFEM. In the "E-Quality" program, IT training is supplemented with what UNIFEM describes as "soft skills" training meant to improve women's self-presentation and communication skills, which, along with IT skills, are "the necessary market-required skills" (http://www.un.org.jo/UNIFEM.html).

Who Benefits from Public–Private IT Initiatives?

Utting (2003: 3) writes that "Genuine partnership involves not only different actors or stakeholders coming together to pursue a common good, but also mutual respect, transparency, balanced power relations, and the equitable distribution of benefits, responsibilities and risks." Judging from its claims, Cisco Systems' approach to partnerships would seem to fall into realm of "best practices." The stated goal of the CNAP is to create an "education ecosystem" through alliances among Cisco Systems, governments, educators, businesses, and community organisations. Students are said to benefit by acquiring critical thinking and problem solving skills, along with "exciting careers in IT and the Internet." Educational institutions benefit from having access to a "ready made" program that "reduces administration time and increases productivity." Businesses are provided with "a large pool of skilled networking graduates" who are industry certified and will "need no further training" (which would seem to contract Cisco's claim that the program is oriented to building "life-long learning skills, which are critical to the success of every graduate in the future"). The CNAP develops "a brand-loyal customer base built of over 400,000 students, 20,000 instructors, and 10,000 academies." Each partner is provided with "a potential of nearly 250,000 future IT professionals worldwide being trained in the implementation and service of their technology." For their part, governments acquire "IT manpower" that "reduces the need for foreign labour," "boosts the growth of economics," "attracts foreign investment," "enhances e-learning and networking development at little or no cost," and "bridges the digital divide from country to country, rural to urban, young and old, and regardless of gender." Non-profit community organisations are able to be a part of "an effective collaboration" and to "develop human capital through connecting and sharing." Finally, Cisco Systems is able to both "fulfil its social responsibilities of giving back to the community" and gain "access to highly skilled IT manpower" (http://www.cisco.com/asiapac/academy/overview/benefits.shtml).

The CNAP is described as a "win-win situation for everyone involved." CCNA certification is described as "a global passport for students to work anywhere in the world." But, where is the proof for such claims? Thus far, there have been few efforts to monitor or evaluate Cisco/UN partnership initiatives. Consequently—and despite Cisco's having claimed that the Least Developed Country Initiative in particular would elicit "measurable results"—many reports that issue from Cisco-involved development initiatives are presented in the form of the company's accounts of its efforts and successes in the area of corporate social responsibility, a handful of testimonials from CNAP instructors and students who have completed the CNAP certification, and a few "best practices" cases offered on the Cisco website, all of which appear to define a "best practice" as the mere

offering of the CNAP to women and others in the Global South and elsewhere.

The vast majority of commentary and research on Cisco has been commissioned and sponsored by the corporation and/or has been offered by neo-liberal supporters of its mergers and acquisitions and market strategies. Not surprisingly, these are glowing accounts. Most of the books about Cisco Systems suggest that the entire world—or at least the entire business world—is in awe of the corporation because of its acquisitions strategies. Joy Tang of AcrossWorld Communications, a venture-funded Silicon Valley-based company that claims to "act as the link between Silicon Valley, the World Bank, and the developing world," suggests that, in addition to offering the "best know-how" in empowering women through ICTs, corporations such as Cisco Systems can also "reform" civil society through interacting with both nongovernmental organisations (NGOs) and the World Bank (http://www.acrossworld.com/AW_partners.html; Tang 2004).

Over the past two years, Cisco Systems appears to have intensified its efforts to assess the outcomes of the initiatives with which it is involved; yet, the research remains either partially or fully sponsored by the corporation itself. Tariq Mohammed, working as a UN Volunteer for United Nations Information Technology Services (UNITeS), spent one year in Uganda preparing an impact assessment of the Least Developed Countries Initiative. The assessment, sponsored by UNV, the UNDP, USAID, and Cisco Systems, is based on unstructured interviews with what seems to be a very small percentage of the "stakeholders" involved in the LDCI. Although Mohammed points to problems in recruiting and retaining women at Makerere University, he ultimately concludes that the LDCI offers an example of how ICTs are transforming lives in the developing world (Mohammed 2004).

Using a more systematic research approach, Michelle Selinger, a former academic turned education advisor and strategist for Cisco Systems, has gathered data through a web-based questionnaire made available to Cisco Academy Students located in Europe, the Middle East, and Africa (2004). The questionnaire responses were supplemented by interviews with 300 students and 100 instructors from 57 academies in 11 countries. The results of the study offer an underwhelming assessment of the CNAP. One problem is that, although the original sample size was approximately 1600, the response rate on the web-based questionnaire was 4.5 percent of students and 1 percent of instructors. This, coupled with the geographic limitations of the study, suggests that no firm conclusions can be drawn from the research. In addition, the research appears centred, not on an assessment of the program, but on the cultural differences that get in the way of successful delivery of the CNAP. Selinger's conclusion that local CNAP instructors are important in helping students to "adapt to the style of the material" seems paradoxical: it is either a throwback to approaches of the 1950s and '60s in which modernisation is to be achieved through assimilating populations to new innovations or it is an example of

new marketing techniques in which cultural differences are examined in order to package the same product in ways that are attractive to specific cultures.

All in all, assessments of Cisco Systems neglect to address the breadth and depth of the education, the classroom environment, the numbers of graduates who have secured meaningful employment, and the conditions in which individuals work once they have secured employment. Independent assessment and monitoring of Cisco Systems and other multinational IT corporations has the potential to address these areas of concern.

Yet, as made clear by the International Chamber of Commerce (ICC), the corporations that have signed on to the Global Compact would have refused to do so if required to agree to mandatory reporting and monitoring of their activities or to supply indicators of the success of their initiatives that extend beyond "best practices." In this sense, Cisco Systems is acting in a manner consistent with business approaches to partnerships with the UN in general.

Cisco Systems and other high-tech corporations enjoy an advantage over other corporate actors in avoiding critical scrutiny of the effects of their projects on the persons who are the targets of their initiatives. First of all, Cisco Systems is a beneficiary of a neoliberal climate in which technology is not only emphasised as central to social, political, and cultural change, but in which an economistic vision of information and knowledge has established market-driven approaches to development as the only viable option within policy discussions and initiatives. Such an economistic approach also advances a notion of social actors as consumers of commodified information and "knowledge workers" whose livelihoods depend on the degree to which they are capable of becoming flexible labour (Preston 2001). "Knowledge work" becomes the most important dimension of the culture of labour and a focus on the creation of "human capital" in order to meet the demands of an information society. Development becomes a matter of teaching technical skills to persons in order to create a workforce that is able to engage in commerce through new media networks.

Second, public-private partnerships involving Cisco Systems are brokered within an environment where—caveats to the contrary—technological determinism prevails. United Nations statements on information and communication technologies for development (ICT4D) often seem to approach technology as empowering in itself. For example, UNIFEM's and the ITU's Memorandum of Understanding devotes a great deal of attention to "unleashing the power" of African women through entrepreneurial endeavours, with a particular emphasis on training women to operate "e-boutiques." Consistent with Article 19 of the Universal Declaration of Human Rights, official pronouncements from the International Telecommunication Union Civil Society Secretariat during the WSIS (http://www.itu.int/wsis 2003) have stressed that its focus is "not technical but related to the advent

of a globalised society in which the emancipation of the human being is in part related to the possibilities of communication and exchange of information." References to the "advent of a globalised society" and "the information society" are tale-tell signs of the technophilic, techno-determinist vision that binds the UN to its high-tech partners. The instrumentalist view that technology equals progress ("instrumental progressivism") ignores the ways in which technology constitutes, and is shaped by, established values and power relations (Robins and Webster 1989).

Critical Issues to Address

To observe that the discourse surrounding "corporate social responsibility" in the IT sector is fraught with contradictions appears to be stating the obvious. Still, it is necessary to expose the contradictions that have allowed the corporatisation of development to not only exist but to thrive. In the broadest sense, the corporatisation phenomenon is produced through the wide-ranging acceptance that there are no longer alternatives to a neoliberal imperative based in privatisation, deregulation, and liberalisation. It seems unquestionable that corporations are calling many of the shots and reaping enormous benefits from public-private partnerships. Partnerships enable corporations to influence the direction of policy in governments and the UN system, to improve their public image through an association with the UN's reputation for social accountability, to promote their own products through partnership with the UN, and to advocate for their issues to remain at the top of the UN agenda (Paine 2000).

There is no conspiracy to unveil. Rather, the corporatisation of development is advanced through both ideological and pragmatic mechanisms: the widespread ideological commitment to the notion that the growth of benevolent markets within neoliberalised economies is the key to reducing poverty and creating financial prosperity, coupled with the need to survive economically within this omnipresent environment. Within the terms of the neoliberalism, issues of the quality of communications, human rights, social development, self-realisation, self-determination, and the ability to make alternative choices are not so much *subsumed* under the imperative for economic growth as they are *assimilated* within the neoliberal imperative. They become useful for neoliberalism.

Although I cannot reconcile here the contradictions which are foundational to the corporatisation of development, in this final section, I wish to consider the areas of concern that would need to be integrated into an independent and uncensored (although not unbiased) evaluation of Cisco Systems partnership initiatives, and, by extension, those of other IT corporations.

It has become endemic within vocational education to make reference to liberal-progressive language such as "student-centred approaches," "experiential learning," lifelong learning," "values," "responsibility," "critical thinking," and "problem-solving." This is illustrative of the paradoxical alliance between the instrumentalism of vocational education and the progressivist ideals of liberal education, a phenomenon that may be understood as a product of a neo-Fordist system in which there exist new flexible and decentralised forms of production, new class segmentations, and new forms of social control, all of which subordinate education systems to the changing needs of business and industry. Within this context, education becomes more linked to economic policy than to social policy. It is increasingly common for secondary (high school) students and college and university students to be trained so that they are workforce-ready rather than to be prepared with knowledge that would lend itself to the nurturing of citizens (Robins and Webster 1989). Cisco Systems' CNAP is both cause and effect of this "new vocationalism," as schools in the US and elsewhere struggle both to survive and to respond to the imperative to prepare students for the workforce, one that is increasingly dominated by jobs in the technology sector. All in all, this represents an extraordinarily limited approach to technological literacy. Moreover, we should ask whether the expansion of CNAPs within the Global South is indicative of a trend in which instrumental progressivism is based in a North-South divide, where research and development mostly remains in the Global North and vocational education is utilised in order to provide low- and semi-skilled labourers in the Global South, all based in a hierarchy organised along lines of gender, ethnicity, nation, and region.

From a feminist perspective, Cisco Systems presents an especially compelling case because it is perhaps best known for its efforts to overcome a gendered digital divide. While a great deal of scholarly research reveals that corporations now consider women to be a good training investment—they are stereotyped as docile, compliant, flexible labourers who are willing to settle for low wages—in this case, the appeal also lies in Cisco Systems' capability of financing internet training centres and providing educational curricula meant to teach women in 'developing countries' how to assemble, use, and maintain information hardware and software for network systems. A number of women who have entered the labour force in the Global South have noted an increase in empowerment that comes with the freedom to work for one's own income. Still, others have reported suffering gender-related abuses in the workplace and receiving lower wages than men because employers do not consider them the "breadwinners" of the family. In respect to Cisco Systems' offering of the CNAP at Makerere University's Department of Gender and Women's Studies, women may feel empowered by technological know-how, but what do lessons in making routers and network troubleshooting have to do with the

study of women? The Cisco "Gender Module" provides information that would take minutes to communicate, the key message being that there is a shortage of females working in the IT sector and that women should not capitulate to the gendered stereotypes of their respective cultures. Mohammed (2004) has written about brokering a partnership between the DWGS and the Ugandan grassroots, non-profit organisation Conservation Through Public Health (CTPH), which is meant to improve public health and improve conservation; yet, there is no mention of how the partnership may empower women or enhance women's studies in Uganda. Perhaps the most important question is when, as claimed, gender and development courses are offered at Makerere University, do they address options other than the corporatisation of development?

We must also ask—particularly in regard to locations in which populations are underserved in both education for basic literacy skills and the need for electricity—if Cisco Systems offers much beyond a curriculum. Although the corporation supplies free of charge the equipment necessary for the handful of regional academies, local academies—where the lack of resources is most stark—are required to purchase Cisco equipment. The instructor for the CNAP must be a Cisco Certified Academic Instructor (CCAI). In respect to the Gender Initiative, the curriculum that appears to be offered is simply the CNAP plus one gender module. In addition, there is the question of what is the impact of initiatives that serve a relatively small number of people. Most of the CNAP programs require that the student be English-speaking and have at least a 10th grade education. This means, for example, that the majority of African peoples, certainly the majority of women in rural Africa, are not "qualified" to enter Cisco Systems' academy programs, a situation which seems inconsistent with an Academy of Educational Development (AED) report, sponsored by the corporation, in which it is advised that Cisco engage in more recruitment activity that targets low-income women (Taggart and O'Gara 2000).

Cisco Systems is now in a position to guide the US Department of Commerce and the US Department of State in writing policy. A case in point is the "Digital Freedom Initiative," which was launched at the Whitehouse on March 17, 2003. The "Digital Freedom Initiative" created a coalition to focus on tactics to bridge the "Digital Divide": including "promoting pro-growth regulatory and legal structures to enhance business competitiveness" and "leveraging existing technology and communications infrastructure in new ways to help entrepreneurs and small businesses better compete in both the regional and global market place." The coalition includes Cisco Systems, Hewlett-Packard, the US Department of Commerce, USAID, the US Freedom Corps, and the US Peace Corps. The *Tech Law Journal* maintains that the DFI equates freedom with the free market. One excerpt from this journal observes that "Participants at the administration's launch event and press conference afterwards identified freedom in terms of free markets, free enterprise and

property rights. However, there are other concepts of digital freedom that the participants did not identify as components of this initiative. For example, there was no discussion of freedom from trade barriers [and] no discussion of the freedom of internet users to access web sites, to publish on the web, or to communicate via the Internet." The DFI avoids mention of "jamming and monitoring of individual activity on the Internet, surveillance of e-mail messages, message boards, and the use of particular words 'stealth blocking' individuals from visiting websites and the development of 'black lists´ of users that seek to visit these websites; and the denial of access to the Internet." The *Tech Law Journal* further finds that "The United States Government has thus far commenced only modest steps to fund and deploy technologies to defeat Internet censorship." When asked about the use of firewalls and proxy servers by governments seeking to block access to certain web sites, Cisco Systems Board Chairman John Morgridge responded that the "Digital Freedom Initiative" does not address this, while asserting that "the tighter you control [internet access], the less it means to you as an asset" (*Tech Law Journal*, March 4, 2003). At the very least, this statement seems disingenuous given Cisco Systems' collaboration with China's Internet filtering regime and work with the US Office of Homeland Security.

The fixation with ICT4D detracts from attention to ICT4W, or ICT for War. In his message delivered to the Business Council for the UN conference on "the New World Order: Bridging the Global Digital Divide (2003) Kofi Annan refers to Cisco Systems Networking Academy Program as an example of the beneficent uses of information technology as a "powerful force that can and must be harnessed to our global mission of peace and development." Yet, in May 2000, Cisco Systems made an alliance with defence contractor Lockheed Martin, to incorporate Cisco's "technology solutions" into its government bids. Cisco Systems has an Army division and a Global Defence and Space Group. The Lockheed-Cisco partnership is meant to develop approaches to "net-centric warfare." And still, "Cisco Systems " avoided mention when Lockheed advocated for the Iraq War (as when the company's former VP Bruce Jackson co-chaired the Coalition for the Liberation of Iraq prior to the invasion). Cisco has been instrumental in the US Army's Warfighter Information Network-Tactical (WIN-T) program, under a Lockheed Martin bid (Federal Computer Week, August 12, 2002). WIN-T is meant to create a "war infosphere" to support US dominance in the Middle East and elsewhere. Although it is not expected that WIN-T's rewards will be realised until several years from now, the Iraq War is a sort of test case for this project involving the "leveraging of technology" in wartime.

Conclusion

Cisco Systems, along with many other neoliberal actors, may interpret their efforts as supporting human rights, gender equality, and so on. But, they are representing a particularly contradictory element that is characteristic of these neoliberal times, where human/communication rights discourse is available to everyone and has become useful for corporations precisely because it is useful for neoliberalism. No doubt, one factor in UN agencies' attraction to Cisco Systems is its perceived potential to offer solutions for meeting at least three out of the eight Millennium Development Goals set out by the UN in 2000. Through its Gender Initiative and Least Developed Countries Initiative, the corporation is able to lay claim to promoting women's equality and empowerment (particularly in respect to education), reducing poverty, and participating in partnerships for development that "make available the benefits of new technologies" (http://www.un.org/millenniumgoals/). Nevertheless, if human development is to take precedence over market-driven solutions, the UN, as Cisco System's partner, along with individual governments and civil society organisations, must address a set of issues that implicates not only this specific corporation but also the current environment in which the UN, most of its member-states, and some members of civil society have become global emissaries for neo-liberal economic orthodoxies.

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Knowing in Your Bones that You're Being Watched

Shuddhabrata Sengupta

I'm going to work a little on the dark side, partly because I have a heresy to offer you. From the point of view of thinking about the technologies of surveillance and other such matters, "knowing in your bones that you're being watched", the technological periphery is actually the most developed part of the world, and has had a history of that development. We talk a lot about what happened after 9-11 - and a lot of things did happen after 9-11 -, but if you examine each of the policies that are now in place, whether they're the founding of the National Security Agency, the Homeland Security initiative in the United States, or similar initiatives in other countries, they were all being planned deep in the heart of the 1980s, if not before. 9-11 was a wonderful opportunity to make them present on an everyday level, and I think that governments all over the world took that opportunity to translate into action what would otherwise have been almost everywhere unacceptable, such as the idea that email could be opened the way postal mail could be opened.

It so happened that the postal networks were put in place at a time much before 9-11, internet networks were still coming into place in many parts of the world, populations were still coming online, so habits of usage, in a habitual acceptance and "knowing in your bones" that you can be watched could be put in place much more easily with electronic surveillance.

I am interested in this as a kind of shadow, or an echo of a much earlier reality. If you look at any of the technologies digital surveillance involves - biometric scanning, iris scanning, fingerprinting technologies -, they are all the inheritance of the late nineteenth century. In fact, they are the inheritance of gigantic laboratories in what are the peripheries of the metropolitan world.

Take the example of fingerprinting. The first serious consideration of finger-printing began in the 1850s - in 1856, to be precise - in Bengal, when William Herschel, who

was a District Magistrate in Hougli, started examining the possibility of palm-prints for identification purposes. The first police usage of fingerprinting technologies was done in Argentina in 1891 by a Croatian social scientist that had emigrated to Argentina. The first systematic development of a kind of codex of the classification and transmission of classificatory understandings of fingerprinting technologies happened again in Bengal in 1893, when two police officers of the Calcutta police developed a mathematical analysis for differentiating fingerprints, and then a telegraphic code to transmit this information.

It is only later that these experiments became generalised. In the middle of the 1880s, a Scottish missionary called Henry Falls developed fingerprint analysis in Japanese leper colonies. So examine this geography: Argentina, India, Japanese leper colonies, and gradually moving towards the centre.

What's interesting is that if you look at the histories of the other technologies, if you look at the history of face recognition and anthropometric scans, again, it is in places like Australia, Southern Africa, India that craniometrical scanning becomes an obsessive enterprise. There is a widespread trade in skulls, for instance, in the nineteenth century. The Phrenological Society of Scotland used what was called a National Skulls Register where skulls were classified by race, and people donated skulls. So there was a large harvest from India, of course, when thugs and other criminals were decapitated and their skulls were sent off across the seas.

Similarly, retinal scans, iris scans. There was a German anatomist called Gustav Frisch, who in 1904 went around the world collecting eyes, collecting irises from recent corpses. He visited the Andaman Islands, another great zone for the harvesting of bodily information in the nineteenth century, and in 1904, collects 56 irises from the penal settlement. And that is considered to be a fantastic arrangement because the penal settlement in the Andamans is a laboratory where people from all over South Asia, from Afghanistan to Burma, are present, and they can be classified according to a racial typology. Very few places in the world could Gustav Frisch have collected, in the space of four days, 56 irises across 16 different racial categories.

He produces a book called 'On the Construction and Significance of the Human Retina' in 1908, and it is interesting to see that these books are now actually being read. Because iris scanning, finger-printing technologies suddenly have taken on a life of their own, an interesting example of how the past revisits the present, and also of how the transfer of technology, or the development discourse inflects a direction that is actually the opposite of what we have been accustomed to hearing.

Which brings me to my second point: I think we must be careful about the idea that spaces of inequality and deprivation are necessarily spaces of technological absence. The

experience of many parts of the world suggests that spaces of inequality and deprivation are actually spaces of heightened technological presence and control. There is, of course, the urban squalor of all major metropolitan cities, there are also prison populations, populations of institutional confinement, and these are places where technologies often make their first appearance because the resistance to technologies cannot be articulated in a formal sense. The language of citizenship is often not available to these populations to subject the presence of these technologies to a formal critique, saying 'this is an invasion of privacy' or 'this is a curtailment of our dignity as human beings'.

So I think we have to be careful in the ways we talk about the relationship between societies and technology, as if cities and third world countries, or as if the Bijlmer suburb of Amsterdam - which is where immigrants live - are the places where technology doesn't exist. It may not exist for people to use according to their own means, but it certainly exists for them to be controlled.

A recent report from Delhi, where I live, suggests an expansion of CCTV camera systems. There are almost 500 to a 1,000 cameras being placed on a monthly basis - the security industry in India is a good place to buy stocks right now -, and there are problems, for instance there are monkeys, monkeys habitually damage electronic cameras, but the Delhi police is working on a solution. Monkey-resistant electronic cameras.

I'd like to end with a little slide show of something I am particularly fond of, which is the Ministry of Home Affairs' Multi-Purpose National ID Card System, probably the largest single collection of biometric data the world will ever see. The Chinese were going to do a similar biometric system, but they stopped using fingerprints - the Indian system will of course include fingerprints and retinal scans. According to industry people, the Chinese stopped using fingerprints because the companies developing fingerprint technologies are actually Indian companies. There would be security issues, and they have postponed - for the moment - fingerprint scanning.

This is the reason: "illegal immigration has assumed serious proportions, and there should be compulsory registration of citizens and non-citizens in India." It is certainly a calculation of the Indian state that as the economy grows, cities like Bombay or Delhi become attractive cities to live in. Already, there is a whole politics of the presence of illegal Bangladeshi immigrants in Delhi, and these are very much being used to create a language of the outsider in cities and places where the language of the outsider was never inflected in the precise language of carrying identity cards.

So what will the card do? It covers everything in life, from health and medical services, gender issues, the public distribution system (where we get below-poverty line and above-poverty line registers), admissions to schools, colleges, and hostels, and of course anti-terrorism. Often, the language that is used is one of entitlement. I think

that particularly those of us who come from NGOs must scrutinise the fine print of what I called e-governance projects to show why the language of entitlement has always got to be tagged onto the language of identity. Because if you are a human being, you are entitled to health, security, food, and whatever else, but why should that entitlement have to be verified according to a matrix of identity? This is a question I often find very intriguing that no one asks about, because the card scheme is being pushed onto the population in terms of entitlement: when you have this you will be entitled. However, the incidental fall-out is that we will be able to keep a watch over you. This is a linguistic debate that we need to think about - how these two terms get collapsed so easily.

Identity cards of this nature have a very interesting history. They have been determined to be not a pre-condition, but a necessary factor in many situations of violence, the most spectacular being of course the killings in Rwanda. Again, technological interventions in the nature of multi-purpose identity cards existed in Rwanda and were the means by which to carry out the Rwandan massacres of the 1990s. Incidentally, the Rwandan government was advised against identity cards in 1991. But identity cards continued to be used, and in 1994 they were used in a spectacular way.

You look at places like India, like Argentina, like South Africa - these were the places were the pioneers of biometric technologies would actually enact their fantasies. And probably issues of technology transfer - where from our spaces we think of information technology for everyone else as people here in Amsterdam - and how that technology transfer will then begin impacting on societies all over the place. There is a South African company called Surface Technologies, which for instance is now developing a technology for heat-resistant fingerprint identification, for two reasons: one, in hot countries, people sweat a lot, so finger-prints can be smudgy; and secondly, as it says on their website, people often don't have manicured fingers, so fingerprints can get a bit confusing. These technologies will make the question of what surveillance technologies are all about a much more interesting field.

Transcript of an interview with Shuddhabrata Sengupta at Incommunicado 05.
Video available at http://www.incommunicado.info.

Migration Management:

Exporting the IOM Model in the Name of EU Security

Roy Pullens

The freedom of movement is a contested common right. Understood as a form of grassroots globalisation, migration is contained, managed and restricted by a top-down process of trans-nationalization. And with an increase in mobility and migration, irregular migration is being perceived as a threat to the world-order and to the integrity of the nation state. The 'Project Nation State' is challenged by an unregulated globalism, and as more and more people move across physical and virtual borders (pushing the frontiers by the use of new communication technologies), states and intergovernmental agencies try to enforce control of these flows.

Borders are an attempt to limit and privatise freedom of movement as a common right. Wherever physical migration occurs, new border regimes are erected where one is 'processed,' 'profiled,' 'sorted,' 'filtered,' 'contained,' or 'rejected'. The border is a site of unequal power relations where one's identity is constantly negotiated; where a selection is made between the useful and unwanted in relation to market demands; where an allocation of unequal risk to various populations, groups and individuals is made. The dominant rhetoric is mobilizing resources to fight a global war against unregulated forms of globalization, and one of the sites of conflict is the border as a regulatory enclosure. The post- cold war military-managerial apparatus is yearly costing the lives of many who are trying to cross borders in spite of the latest technological adcances in security, surveillance and control. These people are suffocating in containers, drowning in rivers and seas, exploding on mine fields, or being shot by border guards. And as during the cold war, developing countries are forced to police and restructure their borders to comply with an international migration management system.

In the name of 'development' and 'capacity building', the EU model is moving towards the eastern European new member states, into transit countries or 'countries of origin',

part of the ongoing 'first-world' intervention in 'second-world' and 'third-world' countries. While the EU is working towards 'One Europe', the 'Project Nation State' is continued outside EU borders. New borders are created; existing borders are transformed to exclude refugees and unwanted migrants from Asia, Africa, and South-America from Europe. New laws and technologies are implemented according to western 'best practices' and conforming to 'international standards.' Working towards the global control of movement, this process is about network building, policy and capacity development, and knowledge sharing, but is not about promoting opportunities, facilitating empowerment, or reducing poor people's vulnerability. This is info-development not as an expansion of people's capabilities but that of the state's capabilities.

Drawing on the efforts of Statewatch, Human Rights Watch, Amnesty International, and the NoBorder-network, this essay briefly surveys the state of migration management in Poland, Romania, Ukraine and Libya, and links these to the EU program PHARE as well as the activities of the International Organization for Migration (IOM).

Poland

The eastern border of Poland needed a drastic facelift before the country would receive permission to enter the EU in 2004. The small Polish-Belarus and Polish-Ukrainian checkpoints were replaced by gigantic border-crossing constructions. New fortified watchtowers, built every 15 to 20 km, were equipped with the latest electronic and optical gadgetry. Border troops were transferred from the Polish-German border to the new high-risk zones in the east; new mobile optical surveillance devices were provided by Zeiss, communications technology by Motorola. The technology upgrade also included new helicopters for 'aerial reconnaissance' as well as training by German, British, and Dutch border guards. New fibre optic cables are transferring data between new computers operating on software which links Poland's eastern border control units to the central administration, the Warsaw Central Foreigners Register - a computerised collection of positive and negative asylum decisions, a databank established in 1995 for various statuses of residency, orders to leave the country, and notices to be rejected at the border.[1] Larger border guard offices have had online access to the register since 1998/99 but the data has also become directly accessible to other authorities (justice,

1 See Helmut Dietrich's contribution to Statewatch Bulletin Vol.13, January-February 2003: 'The New Border Regime at Bug River: The East of Poland and the PHARE Programmes.' Also at http://www.ffm-Berlin.de/english/publik/publikindex.htm .

customs, various police offices etc.) with the Polish Reformed Aliens Act of July 2001. Decentralised terminals along the eastern border are connected to the register as well as the online-databases of the Schengen Information System (SIS) and Europol (for the exchange of personal data). The Automated Fingerprinting Identification System (AFIS) represents the Polish link to the pan-European fingerprinting database EURODAC (for the exchange of biometrical data of asylum seekers).

The EU is the main sponsor of this transformation, which is part of the EU enlargement procedure and the PHARE-project. PHARE stands for Poland and Hungary Assistance for the Reconstruction of the Economy. It was established in 1989 and Iwas later extended to include other EU candidate countries. Its main goal is to consolidate partnership between the old and new EU members with a focus on capacity building programs, institution building and economic and social cohesion. Until 1997 the German government laid down the regulations when it came to Poland's borders. Germany shaped the infrastructure of the western Polish border, provided police equipment, and helped with the set-up of detention and deportation camps. Within the EU enlargement procedure, this militarization of borders shifted from western to eastern Poland, and the modernization and extension of the eastern borders fell under the EU program PHARE. Throughout this period Warsaw's policy towards migration gradually altered. In 1997 Warsaw tightened immigration criteria for Ukrainians. Although they still did not need a visa, they now had to provide a sufficient amount of cash and a reliably-documented reason for travel. This had devastating socio-economical effects on the informal cross-border economy between the border populations of Poland and Ukraine. Since 2000 Poland's employment offices, border guards and police have been hunting down undocumented Ukrainian workers, staging spectacular deportation actions, while the Ukraine spiraled into financial (and later political) crisis.[2] In 2001-2002 Poland decided not to renew agreements on visa-free entry with 54 more states once they expire. Following the collapse of the 'iron curtain' a new curtain was erected on the borders of the European Union, and the Polish government wants to cooperate with neighbouring states and the EU in the fight against unregulated migration, trying to keep those unwanted outside EU borders.

Romania

The ten new member states the EU admitted in may 2004 – Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Slovakia, Slovenia and Poland – were confronted with the

2 Id.

challenge of becoming final destination countries for asylum seekers, without having the means and the experience to deal with the increased number of refugees. Moreover, these countries had themselves long been considered refugee-producing and transit countries for asylum seekers making their way to the EU.[3] Romania, now a direct neighbour of the European Union, is likely to become an EU member in 2007. Having been declared by EU member states a 'safe third country', it is building up its capacity to handle and process asylum applicants in time for accession. PHARE is not only financing the development of Romania's 'migration management system', it is also setting the pace.[4]

Following Romania's accession, Romanian authorities should be able to fully participate in the EURODAC system. Romania should be connected to SIS and have acquired the institutional and operational capacity of migration and asylum management in line with existing EU standards and best practices of EU member states. At the end of 2002 new centres were set up in the east and west of the country for asylum applications processing. The National Refugee Office (NRO) got the IT system for a 'modern refugee status determination procedure' at headquarters and territorial level. The entire documentary background on interviews and decisions taken by NRO is by September 2004 electronically stocked up and accessible by all the decision officers. The analysis, assessments and forecasts can be completed more quickly. Interoperability at the national level will be enhanced though the new IT-network as well as through the participation in the EU IT (EURODAC, SIS, etc.). PHARE contributes 1,67 mill. Euro for design and development of the IT network as required for the implementation of the EURODAC regulation as well as for the Metropolitan System of the Ministry of Administration and Interior – an integrated information system which connects all the ministry's subordinate bodies. This includes procurement, installation and testing of software and equipment according to the EURODAC Masterplan and specialised training in development and maintenance of the software.

The Romanian asylum system has already been praised for its short processing times. The PHARE report (see below) speaks of a very advanced 'model' but notes that for a better migration management, an increased capacity and an improved return procedure are also necessary. And according to the report, a growing number of migrants will need to

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3 See the Human Rights Watch report Human Rights Overview – European Union at http://hrw.org/english/docs/2005/01/13/eu9851.htm , accessed 9/4/2005.

4 See the PHARE report on Romania, PHARE 2004 Standard Project Fiche "Strengthening the Institutional and Operational Capacity of Migration and Asylum Management" at http://www.sida.se/content/1/c6/03/40/01/RO04%20JH%2010%20-%20Asylum%20and%20Migration.doc , accessed 11/4/2005.

be returned to their countries of origin. This is where the International Organization for Migration (IOM) is offering its services. 'Assisted Voluntary Return' is one of its fields of experience. Within PHARE, IOM gives advice to the EU and its accession countries in police-political matters and on the new personal data collection projects, and helps implementing its model of migration and border management.

IOM

Founded in 1951 as the Intergovernmental Committee for European Migration, the International Organization for Migration (IOM) now has 109 member states. This global service agency and intergovernmental think tank commits itself to the idea that humane and orderly migration benefits migrants and society. Based on a neo-liberal ideology, IOM's 'properly managed migration' makes an economically-based distinction between desirable and undesirable migration. Its migration policy is closely related to population policy or labour market policy. People for whom there is no demand on the labour market are rejected. Contrary to the UNHCR (the UN High Commissioner for Refugees) its work is not based on humanitarian principles. Unlike than the UN, which is based on international law and agreements, the IOM has not signed any international conventions (e.g. Geneva Refugee Convention). It is not accountable to any democratically elected body but rather to its member states - and they define its politics.[5]

A number of IOM member states are parties to the Convention on the Rights of Migrant Workers and their Families, and most are parties to the 1951 Geneva Convention relating to the Status of Refugees or its 1967 protocol. More than half are members of the Executive Committee of the UNHCR, and all but three are parties to the International Covenant on Civil and Political Rights.[6] But in the IOM these states find an alternative agency that allows them to avoid their human rights obligations. Even though literally millions of people worldwide participate in IOM-sponsored programmes and projects, the IOM has no mandate to monitor human rights abuses or to protect the rights of migrants and other persons. It has no standard for accountability when rights violations occur in the course of its operations.[7] Human Rights Watch refers to IOM in a critical statement

5 See http://www.iom.int and http://www.noborder.org/iom/ April 2005.

6 So say Amnesty International and Human Rights Watch in a joint statement on December 2002. See http://www.hrw.org/press/2002/12/ai-hrw-statement.htm , accessed 2/4/2005.

7 See Statement by Human Rights Watch for IOM Governing Council Meeting, 86th Session, November 18-21, 2003 Geneva: http://www.hrw.org/backgrounder/migrants/iom-submission-1103.htm

in 2003 in the cases of 'Nauru' and Papua New Guinea's 'Manus Island.' HRW concludes Australia violated its international obligations to protect boat-refugees in 2001 by denying them access to Australian territory and transferring them to other countries where they were detained pending processing of their asylum claims. IOM managed the 'migrant processing centres' on Nauru and Manus Island, the final destinations of these refugees. HRW reports about poor detention facilities, lack of access to legal assistance or an independent appeals body to review their asylum claims, and the fact that no NGOs were allowed access to the centres.[8]

The Afghan, Iraqi and Iranian detainees of Nauru and Manus Island were at first being held for an unknown timespan. Then came the order to cooperate in a 'voluntary' return program (a no-choice situation). To cooperate meant a return to one's 'country of origin' and accept a gentler form of assistance. To not cooperate meant staying detained in insecurity of one's forecasts or a forced dep0ortation and the risk of arrest upon arrival. HRW states 'the IOM has no mechanism – neither internal nor external – to evaluate whether decisions to return are, in fact, made under duress or under circumstances that are directly or indirectly coercive, or to assess that conditions in certain countries are safe enough to allow for returns. Moreover, there is no mechanism in place to hold the agency accountable for returning individuals to places where their lives or freedom could be under threat due to persecution.'[9]

IOM sees voluntary return as an integrative part of every migration management system. It is part of a wider framework that covers 'Labour Migration,' 'Mass Information and Integration,' 'Migration Health Services,' 'Migration Research,' 'Emergency and Post-Crisis,' 'Migrant Movement Processing and Assistance,' and 'Technical Cooperation on Migration.' Within the field of 'Technical Cooperation on Migration,' or TCM, IOM offers advisory services on migration issues to governments, intergovernmental agencies, NGO's and others. IOM assists them in the development and implementation of migration policy, legislation and management; preventing illegal migration, facilitating regular beneficial migration and providing assistance in various aspects of migrant processing.[10] In partnership with host countries new laws are being developed, new policies and

, accessed 2/4/2005.

8 Id.

9 Id.

10 See the website for IOM in Bosnia and Herzegovina, http://www.iom.ba , accessed 13/3/2005.

regulations. Management structures are created based on international 'best practises' and specific national 'needs.' These initiatives are often combined with training and operational system improvement.[11]

IOM's TCM activities should improve operational systems which underpin and enable effective migration management. These can include travel document issuance systems, data systems related to migration, and border management technologies. In Georgia, for example, IOM works with the government in establishing a computerized system for traveller and document inspection at its border checkpoints. The programme assists the government in establishing and maintaining the central data structure. It rolls out the system to air, land and sea borders. Software and hardware are upgraded, staff training components are designed and delivered. Other examples of IOM's activities in less developed countries: information systems in Cambodia are being improved to tackle irregular migration. Ecuador is getting a new machine-readable passport. Key ports of entry of Jamaica are getting new technical equipment and training of technical and end-user staff. A technical capacity building program is underway in Pakistan drawing on expertise from within the region, from Western Europe (including EU member and candidate countries) and from IOM. The ultimate goal is to built 'internationally standard capacities.'[12]

Ukraine

For projects covering Central Asia, IOM has its Technical Cooperation Centre for Europe and Central Asia (TCC), based in Vienna since 1996. Countries participating in projects of the TCC are Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Russian Federation, Tajikistan, Turkmenistan and the Ukraine.[13] Former Soviet states have their borders adjusted to the EU model, which is implemented by IOM step by step. The IOM starts off with some research. A report is published afterwards pointing to the problems identified such as the size of an illegal population. These are often neighbouring citizens who live and work in a bordering country, where they are not necessarily perceived as a problem because of the historical and cultural links between countries. Once the problem has been constructed, the IOM comes in and offers policy-advice, support with the design and implementation of new politics, and finally training in new

11 See http://www.iom.int/en/who/main_service_areas_technical.shtml , accessed 13/3/2005.

12 Id.

13 See http://www.tcc.iom.int , accessed 28/3/2005.

migration control technology.[14]

IOM reports about large groups of women that fall victim to traffickers in the Ukraine. Women are being smuggled out of Ukraine, or using the country as transit station, and are being forced into sex work in the EU or in Balkan states. IOM is involved, or finances, projects in support of victims or in projects conducting prevention work. But the counter-trafficking program, run by IOM itself, puts migrants as a whole into the corner of criminal or victim. Many women make a conscious decision to migrate and are not automatically the victim of evil human traders. Autonomy and independence, the wish for an individual income often motivates female migration.[15] [16] In IOM's *Glossary on Migration* the 'feminisation of migration' is mentioned as 'the growing participation of women in migration ... women now move around more independently and no longer in relation to their family position or under a man's authority.' Moreover, IOM states that roughly 48 percent of all migrants are women.[17] While acknowledging this fact, IOM keeps running a counter-trafficking information campaign that is met with critique for stereotyping and creating prejudice against women migrants.[18]

IOM's service area 'Mass-Information' should be seen in the context of preventing migration. It likes to provide potential migrants with 'a more accurate picture of migration realities, including the pitfalls of irregular migration.'[19] On October the 29th, 2003 Lukas Moodysson's film *Lilja 4-ever* was screened in Kyiv's Centre of Arts in the Ministry of Interior for an audience of public representatives, policy makers and governmental officials. The 'portrait of the misery endured by a 16 year-old girl from the former USSR, who finds herself sold into sexual slavery in Sweden' was supposed to attract their attention.[20] This initiative was supported by the Swedish embassy, the UN development programme, and IOM.[21] The ongoing screening of the film together with IOM's brochures,

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14 Taken from the site of the No Border Network. http://www.noborder.org/iom/display.php?id=244 . accessed 1/4/2005.

15 http://www.noborder.org/iom/display.php?id=141 , accessed 8/4/2005.

16 There is also still a taboo lying on sex work as being an autonomous, adult decision made by many women, as well as men, who find repression because of their choice of labour.

17 See IOM's Glossary on Migration pag.24: http://www.iom.int/documents/publication/en/glossary.pdf , , accessed 9/4/2005.

18 See the earlier link to the HRW report on IOM of 2003.

19 See http://www.iom.ba , accessed 13/3/2005.

20 The tragic story of the girl Lilja could also be read as an accusation towards our capitalist society as another example of 'disposable labour.'

21 See http://www.osce.org/item/7869.html , accessed 26/3/2005.

posters and television campaigns should counter the expectations raised by the images of cross-border television, the possible worlds accessed through internet-cafés and long-distance phone shops; a counter discourse which legitimates migration control using humanism, despite the fact that only restrictive migration politics opens up the field for smugglers.

In setting priorities for the Ukraine, efforts to combat the trafficking of women more effectively were accompanied by projects to better control illegal migration. Since the late nineties IOM has been involved in designing the framework for a 'better' management of migration in the Ukraine. Pilot projects as in Kharkiv, a major transit area for illegal migration, consisted of elements of monitoring, detention and checkpoints procedures at the border itself. These pilot projects identified the national measures, which needed to be developed. First priorities were an enhanced communication system and enhanced monitoring and detention capacities. A sophisticated radio communication system was provided as well as infrared radar, which allows the operator to detect a person in the dark within seven kilometres, and various other monitoring and detention technologies. A delegation of about eleven high-level Ukrainian border guard officials was taken to the US to study the systems and the procedures that had been developed on the border with Mexico.[22] And like the passageway from Mexico to the US, the western and eastern borders of the Ukraine were shut down. IOM wanted to demonstrate its capabilities and got sufficient donor funds as a result to develop other projects in this area, as in Moldova.

Fortress Europe

"Strengthening border management and security: Developing a more strategic and coordinated approach to technical assistance" – During an international technical experts conference on border management and security in Vienna September 2004, Charles Harns, head TCM at IOM, set out the priorities for intensified action in the coming period: "All countries should have adequate data systems at all international checkpoints. For some states this requires establishing the basic system, and for others there is a need to upgrade old systems to facilitate data capture and analysis, and links to other systems and databases. The 'home-grown systems', implemented by national authorities, can be appropriate but must be designed with a great deal of forward thinking, and with outward

22 Taken from an interview with Steve Cook, IOM Kiew. See http://www.noborder.org/iom/display.php?id=155 accessed 26/3/2005.

compatibility to other systems."[23] The low costs and the fact that it's tailor-made to the available technical expertise in the country, is praised by Harns. The 'turnkey' systems, which are produced for the international market, have their initial costs and their on-going maintenance as a disadvantage. On the other hand they are complete and up-to-date, and can be activated on short notice. According to Harns, "A government can go from having no system at all to having a world-class system in a very short time".

These border data systems record people's entry and exit, and check personal documents against watch lists. These measures should reduce security threats. The 'watch list' system, or 'lookout' system, contains a state's official list of people who should be prevented from entering the country or who should be arrested upon arrival. It is typically an inter-agency project, which receives input from all law enforcement, intelligence, and migration agencies. Border-control officials routinely check these lists when making decisions about granting visa or allowing someone to enter the state.[24] More often, political activists find themselves to be personae non-grata at a state border. Activist Milos Milenkovic of former Serbian youth movement Otpor is prohibited to enter the Ukraine for a time span of 1000 years. An explanation for his prohibition was not given, but Otpor, now the 'Centre of Non-violent Resistance', had contact with Ukrainian student groups, training them in non-violent resistance against authoritarian regimes.[25] Political activists put in the corner of 'terrorists' find their movement restricted on a regular basis. The whole Schengen Agreement is flexible when a summit of 'world leaders' is organized within EU borders, prohibiting the 'trouble makers' from entering the host country of the specific summit. Human rights treaties are temporarily suspended within a constructed 'state of exception' legitimised by a discourse of fear spread by governments and mainstream media.

Post 9/11 rhetoric of the 'war against terrorism', which infuses the insecurity discourse of 'terrorists' existing 'outside of our societies,' create fear around the possible import of terrorism; terrorism as a consequence of unregulated globalism. The urgency and the level of threat from an abuse of borders also have changed for IOM. As put by Harns, this urgency has given rise to higher national and international standards of inspection, and the need for much expanded and expedited cooperation on data sharing and the pursuit of trans-national crime cases. Additionally, it pushed the needs for much improved capacity

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23 See for the full text of Charles Harns' presentation: http://www.iom.int/en/PDF_Files/tcm/IOM_OSCE_UNODC_BorderSecurity_Sept04.pdf , accessed 13/4/2005.

24 For the explanation of the 'lookout system' see IOM's Glossary on Migration at http://www.iom.int/documents/publication/en/glossary.pdf , p. 39, accessed 24/4/2005.

25 'Inreisverbod... voor 1000 jaar' in Trouw, 11/12/2004.

for the migration sector departments to contribute to the investigation and analysis tasks undertaken by other departments when pursuing criminal cases and analysing trends in the security sector (see note 22). So control measures focusing both at organised crime and individual migrants are increasingly influenced by security concerns at both levels, particularly where these concerns are related to terrorism.

In workshops for policy makers, IOM states it does not consider it appropriate to link migration and terrorism too closely, or in causality; however, it also feels migration systems and structures should not be left outside the overall 'response framework.' It is a new challenge to migration management. It means implying new policies, laws and operational systems and developing new technologies, skills and forms of inter-state collaboration. In short this means developing new capacities for all countries concerned, to be built all along the chain of movement. Particular attention will go out to countries that lack resources to invest adequately in this sector.[26]

With the ongoing 'war on terror', IOM can assure itself of greater donor interest and funding to address the 'weaknesses' in other states' systems. It feels supported by an increasingly harsh rhetoric and threats of the EU vis-a-vis third countries to adapt EU standards for migration control, using aid and trade measures as leverage to enforce EU interests. One of the latest EU initiatives is the creation of a 'circle of friends' of EU 'neighbours', including Russia, Ukraine, Moldova and Belarus plus the Western Newly Independent States (WNIS) of Croatia, Bosnia-Herzegovina, Serbia and Montenegro, Macedonia and Kosovo. They also include the southern Mediterranean states of Algeria, Egypt, Israel, Jordan, Lebanon, Libya, Morocco, Palestine, Syria and Tunisia (but only Ukraine and Moldova are seeking accession to the EU). The plan is to create a 'friendly neighbourhood of prosperity and peace,' the underlying motivation being to protect the EU from trans-border threats of terrorism, crime and migration.[27]

Fortress Europe creates its 'buffer states' but these new neighbour states will in turn create new buffer states. The EU border form is exported to the periphery and beyond, and the fortress is extended. The refugee 'problem' is being passed to the states of Europe's periphery or out of Europe altogether, pushing off the 'burden' to countries like Libya.

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26 See the IOM document Workshops for Policymakers: Background Document Capacity-Building In Migration Management, 86th session, November 5, 2003 at http://www.iom.int/DOCUMENTS/GOVERNING/EN/MCINF_265.PDF , accessed 23/4/2005.

27 See Statewatch article: Ref No# 6920, 'EU Bufferstates and 'Processing' Centers' in Statewatch Bulletin, vol. 13, no.2, March-April 2003 or http://database.statewatch.org/protected/article.asp?aid=6920 , accessed 26/4/2005.

North Africa

Currently optical and radar technology is being tested all over the Mediterranean to detect refugees crossing the sea border. The Spanish *Guardia Civil* has rediscovered the surveillance tower. From above, the visual and electromagnetic identification technique can continuously and automatically scan the Straits of Gibraltar and the Moroccan Coast. Tests are developed that link all accessible data in real time in order to identify and follow all ships in the controlled area. This technology, known as SIVE (Sistema Integrado de Vigilancia Exterior), is now being exported to the Greek Islands. The Italian air force is practising the use of predator drones, purchased from a Californian arms company. The (unmanned) aircraft will be used against terrorism as well as against irregular migration. Testing of the new technologies at the south European 'front' is co-ordinated by the so-called "ad hoc centres" of the EU preceding the future EU border agencies. Two sea surveillance centres are based in Spain and Greece, and there's an air surveillance centre in Italy. The intensified search with technical equipment in the Straits has already forced boat people to use more dangerous waters to come to Europe. Whoever can afford it arrives by plane with a false passport. Only the poor come on wooden boats.[28]

Meanwhile the North African coast is being militarized. The main sponsors are the German and Italian governments. Following a deal with Italy in 2003, Libya is currently purchasing boats, jeeps, radar equipment, and helicopters for border surveillance. Tunisia received communications and radar equipment for around 1 mill. EUR. And in 2002, Algeria received surveillance systems at a value of 10,5 mill. EUR. The EU countries state that *al-Qaeda* and the boat people use the same North African networks. Search units are being formed whose remits are to fight both enemies together. There also seems to be a more economic agenda. Besides Russia, Libya is the most important non-European oil supplier for Germany, whereas Germany is the most important goods supplier to Libya after Italy.[29] Shell now has access to oil and gas fields in Algeria. The country has one of the biggest gas reserves on the planet, which will be largely used for exports to Europe and the US.[30]

The technological impulse is extended to the building of off-shore detention camps on the North African coast. At the European periphery migrants arrive in the camps on the

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28 Taken from Helmut Dietrich's article The Desert Front – EU Refugee Camps in North Africa?. See http://www.statewatch.org/news/2005/mar/12eu-refugee-camps.htm , accessed 25/4/2005.

29 Id.

30 'Shell mag in Algerije naar olie en gas zoeken' in Volkskrant, 11/4/2005.

Greek Islands, Malta, or the Canary Islands, to be transported later to the Italian *Centri di Permanenta Temporanea e d'Accoglienza* (CPT) or the Spanish *Centros de Internamiento de Extranjeros* (CIE) (the waiting zones for asylum seekers). Another possibility is to be deported back to the country of origin or just to a destination outside the EU, beyond any legal or societal control.

In March 2003 Tony Blair made a proposal to institute 'Transit Processing Centres' in key conflict areas such as Asia and Africa. Refugees should be held at a standstill in or near their regions of origin and kept (detained) in 'safe havens'. These would include offshore detention camps on the North African coast. In the same year Statewatch signalled some turmoil between UNHCR and IOM. UNHCR was trying to fend off IOM in bidding for cooperation with the EU on the creation of the so-called 'safe havens' (camps which do not have to meet EU standards) in 'neighbour states' (e.g. Ukraine or Libya) and 'region of origin' (e.g. West Africa).[31] In March 2004, the European Parliament Committee on Citizens' Freedoms and Rights expressed concern that offshore centres could violate an individual's right to seek asylum and could shift responsibility for migrants and asylum seekers to developing countries with scarce resources and poor human rights records.[32] Blair's plan, a "new vision for refugees", went down in a storm of protest but was quickly picked up again in the summer of 2004 by the German Interior Minister Otto Schily and his Italian colleague Giuseppe Pisanu. Their proposal implied that boat people coming through the Mediterranean were to be returned to camps located in Arab states – in collective procedures and without an individual check on their nationality, their flight route, or reasons for flight. This practise is called 'refoulement' and is explicitly prohibited by the Geneva Refugee Convention.[33]

Amnesty International states in a report on April 14 2005 that it appears that EU member states are developing bilateral dialogue and co-operation with Libya on illegal migration already in the absence of any formal framework (e.g. on the basis of the Barcelona Process). It questions the ad hoc co-operation mechanisms and the non-transparent practises that may also be in flagrant contradiction of the EU human rights policies.[34] In August 2004 bilateral agreements between Germany and Libya, and Italy

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31 See http://database.statewatch.org/protected/article.asp?aid=6920 , accessed 26/4/2005.

32 From the Human Rights Watch Report World Report 2005: Human Rights Overview – European Union, see http://hrw.org/english/docs/2005/01/13/eu9851.htm , accessed on 18/4/2005.

33 See Helmut Dietrich's article The Desert Front – EU Refugee Camps in North Africa?

34 Immigration Cooperation with Libya: The Human Rights Perspective, an Amnesty International briefing ahead of the Justice and Home Affairs Council, 14 April 2005. See http://amnesty-eu.org/static/documents/2005/JHA_Libya_april12.pdf , accessed 25/4/2005.

and Libya, were signed on combating illegal migration from Libya to Italy and into the EU. This was followed by an EU agreement to lift the eight-year arms embargo on Libya. In September the IOM sent a special team to Libya to consult with the government on the management of illegal migration. Human Rights Watch states that the timing of the visit, coming on the heels of proposals to establish off-shore detention centres for the processing of asylum seekers in North African countries, gives rise to concerns that IOM will be involved in advising Libya and the EU about the establishment and management of such centres in the future.[35]

Libya has not ratified the 1951 Convention relating to the status of refugees and its 1967 protocol, has not signed a cooperation agreement for a formal relationship with the UNHCR, or developed an asylum system in compliance with international standards. There is a lack of official acknowledgement of the presence of refugees and asylum seekers in Libya and Libya has an appalling human rights record with respect to its own citizens. The EU Informal Justice and Home Affairs Council considered in October 2004 five pilot projects proposed by the Commission to improve immigration and asylum regimes in Tunisia, Algeria, Morocco, Mauritania and Libya. But in the same month Italy already expelled several hundred persons to Libya without a proper assessment of their asylum claims or any access to fair asylum procedures.[36] Two months later Italy deported again hundreds of foreign nationals that had recently arrived in Cortone, in the south of Italy. This was followed by the news that Libya itself deported dozens of refugees recognized by the UNHCR, who were originating from Ethiopia, Somalia and Liberia. AI expressed concerns that the deportees may face persecution upon return to their home country.[37]

AI further states that in recent years the Libyan authorities have routinely violated international standards as well as the existing legal safeguards in Libyan law regarding arrest, detention and trial. These violations have disrupted the lives of hundreds of real and suspected political opponents as well as those of migrants and possible asylum seekers (the 'counter-terrorism' argument is used as a new justification for an old practise, enshrined in Libyan law, of repression of all political dissent). AI met in February 2004 with seven Eritrean nationals who had reportedly deserted the Eritrean army at different times during 2002 and fled from Eritrea to Sudan and then to Libya. They were arrested on August 11 2002 as they attempted to cross the Mediterranean, heading for Italy where they planned to ask for asylum. They were subsequently convicted of illegal entry into

35 See the Human Rights Watch Report World Report 2005: Human Rights Overview – European Union.

36 Id.

37 See the Amnesty International briefing of 14 April 2005.

Libya but not released after the expiry of their three-month sentences on November 19 2002. After being granted refugee status in March 2004, the UNHCR called on the Libyan authorities to release the seven men. At the time of writing (AI report: 27/4/2004), they remained in detention. AI reports of the men being beaten with sticks, and in one occasion with a wire while being detained. About the Libyan prison system in general the AI report mentions cases of death and 'disappearance' in custody, detention after expiry of sentence, arbitrary detentions of Libyans returning from abroad, and prolonged incommunicado detention, where detainees are at risk of torture and ill-treatment.[38] Deporting the 'boat-people' collectively to Libya is not only a further erosion of the right to seek asylum but also an indication of EU member states creating their own extraterritorial law free zones while publicly speaking out against America's Guantanamo Bay(s).

Future Priorities

At the ministerial conference '5+5 Dialogue on Migration in the Western Mediterranean,' hosted by IOM, the countries Algeria, France, Italy, Libya, Malta, Mauritania, Morocco, Portugal, Spain and Tunisia, came together. After three conferences –Tunis 2002, Rabat 2003, and Algiers 2004 – the agenda was set for action. In a step by step-process the importance of regional dialogue was pointed out, a multilateral response on migration created, and actions indicated. At the last conference recommendations were made for countries of the south: Encourage the emergence of competent structures in the field of research and analysis of data on migratory flows.[39] The south should open itself up for the IOM approach which starts off with research, i.e. constructing a problem, before bringing in the assistance to build the proper migration management systems. At the OSCE Mediterranean Seminar of November 2004, Charles Harns, head Technical Cooperation Service of IOM, presented IOM's vision on the region:

"First governments should view highly-articulated migration management systems, such as border checkpoint data systems, and passport and visa issuance systems, as tools both for improved facilitation of movement, including expanded tourism and trade, as well as tools for improved security. The same systems can be supportive of both goals; they are

38 See the Amnesty International report Libya: Time to Make Human Rights a Reality of 27/4/2004. See also http://web.amnesty.org/library/Index/ENGMDE190022004 , accessed 25/4/2005.

39 See the Summary of Conclusions by the Presidency at the 5+5 Dialogue Third Ministerial Conference on Migration in the Western Mediterranean, Algiers, 15-16 September 2004, at http://www.iom.int/en/know/dialogue5-5/algiers_en.shtml , accessed 27/4/2005.

the normal tools of management in the migration sector in most developed democracies. It is not necessarily the case that, in order to facilitate migratory movement, controls and security must be weakened. The world has turned a significant corner in relation to migration management post September 11th and the trend is unmistakably toward more sophisticated systems to manage movements – including movements toward, within and out of special 'free movement / open border' areas."[40]

Second, building management systems and policy and legal frameworks should be seen as an essential part of nation-building and improved governance. Further, migration management should not be an unusual feature in development planning frameworks. IOM likes to see development programming include improved migration management capacities in their priorities. It should figure prominently in multi-year development plans. Third, IOM underlines the necessity of intense intra- and inter-governmental cooperation and every useful opportunity should be taken to integrate migration into relevant on-going regional initiatives. And fourth, IOM favours a projectised approach in which specific initiatives can be fairly priced, implemented in a timely manner and evaluated clearly. IOM's TCM service will help in strengthening border systems, improving travel documents, implementing the use of biometrics, staff training, enhancing immigration service and law enforcement. It will offer its assisted voluntary return programmes, enable technical cooperation and policy planning between and among the involved states and provide the technical support to the development of new policy, legal and regulatory frameworks.[41]

40 See the IOM presentation Maximising the Potential of Migration in a Security Sensitive Environment by Charles Harns during the OSCE Mediterranean Seminar, November 2004, 'Addressing Threats to Security in the 21st Century,' at http://www.iom.int/en/PDF_Files/tcm/IOM_OSCE_Seminar_1104.pdf , accessed 27/4/2005.

41 Id.

Last Word

Heading towards a global control of movement, there are more players on the field of migration management than the US. The EU may use the approach of 'development' and 'capacity building' for the sake of its own neo-liberal and neo-colonial agenda. At the borders of its periphery, the EU is fighting its own war against irregular migration, choosing its own friends for its combat and creating its own 'ghost detainees' held incommunicado outside of the public eye. The green light is given for the expansion of IOM's projects that are pushing NGOs or the UNHCR out of the field. To cope with the larger demand for its services, IOM has to subcontract multinational security companies for the management of detention camps. A trend similar to the larger prison system, or comparable to the private military contractors in Iraq: not accountable to the public and one notices a lack of distinction between policing, military operations and corporate business. And as migration is simply commerce for most human traffickers, it's also a growing industry in which multinational corporations are poised to make huge profits. One can speak of a global market boom in databases, biometric readers, data mining programs and other new technologies of control, in the newest toys in the field of surveillance, and in building and running detention and deportation camps. While capital flows freely the movement of people is restricted and freedom of movement remains the privilege of a few.

Recommended sites

http://www.iom.int - IOM
http://www.tcc.iom.int - IOM Technical Cooperation Centre for Europe and Central Asia
http://europa.eu.int/comm/enlargement/pas/phare - PHARE program
http://www.statewatch.org - Statewatch
http://www.hrw.org - Human Rights Watch
http://www.amnesty-eu.org - Amnesty International EU Office
http://noborder.org - NoBorder Network
http://ThisTuesday.org - Logs on Migration, Labor, Transnational Organizing
http://www.december18.net - Portal for the Promotion and Protection of the Rights of Migrants

Brazil and the FLOSS Process

Alexandre Freire

This paper, more than presenting a case study, introduces the context in which digital and electronic culture, and the ideology that surrounds these cultures in Brazil, were able to influence the programs of the Brazilian Ministry of Culture. We will present the story of a project named Pontos de Cultura (cultural hotspots). We will describe how this project aims to diffuse a collaborative and free thinking/production ideology.

Today, Brazil is a world known Free/Open Source Software supporter. The current Government of president Lula da Silva has a public position on the adoption of Free/Libre Open Source Software (FLOSS) in its administration, having criticised the previous administration about the amount of money paid annually in royalties to international software companies. Two huge government programs claim they will bring FLOSS to the masses, PC-Conectado and The $100 Laptop. The first will provide $500 computers with FLOSS and subsided Internet access to the general public. The second aims to design and produce $100 laptops for distribution to schoolchildren. The Brazilian government is planning to migrate its entire infrastructure to FLOSS.

Despite all the hype in the media, these intentions have so far hardly translated into government actions. Some migrations have occurred, but only a few projects were successful. Most of the managers in the technological sector of the government are out of touch with current developments. Since they have been occupying a public job that gives, after a few years, the tenure and its safety of not being fired. As the choice for a different kind of software would force them to recycle their whole technical formation, they tend to resist these migrations.

These factors made the political position of the government contradict governmental practice. Most projects are still on paper and few efforts, in practice, have bee made to promote adoption of FLOSS in government agencies. There are some successes at local

level and there have been many telecentre efforts to present FLOSS to the population. The most remarkable is the City of São Paulo experience where the amount of people contemplated with Internet access and possibilities of computer usage was very impressive: more than half a million registered users in a network of over a hundred telecentres. The Cultural Hotspots project is being implemented throughout Brazil without bringing much attention to itself.

Pontos de Cultura, Forging a Group from a Collective Process

Gilberto Gil, a famous Brazilian pop star, is involved in the Ministry of Culture in Lula's government. During its first months in function, the Ministry of Culture helped fund an event in Sao Paulo named Tactical Media Brazil. In this event, Claudio Prado, an old friend of Gil's, exchanged some ideas with Gil. Claudio would like to present a project to the just-installed Ministry of Culture. At this event Richard Barbrook and John Perry Barlow were also present. Barlow's presence was key, since he decided to spend some time in Brazil, keeping a strong contact with the Minister, and influencing many of Gil's positions in respect to technology.

Gil already had an interest for the subject, and went deeply into it. He declared himself a hacker. Hermano Vianna - an anthropologist interested in technology and cultural production - also influenced his positioning. Claudio Prado met some members of the staff of the organisation of Tactical Media Brazil and invited them to his house to establish a line of action. Claudio Prado then went to Brasilia and hacked into a project named BAC (Culture Access Bases). Two months after the Brazilian Tactical Media Lab, Claudio Prado went to the second government-organised workshop on digital inclusion. Claudio presented some papers which he referred to as a "confidential project", architectural plans of a building to be occupied, with a theatre, studios, a library, a coffee-shop and other things, it was the plans for a BAC.

Directly after the 4th International Workshop on Free Software in Porto Alegre, he invited some people that were interested in the BACs project to his apartment in São Paulo to discuss new ideas that could be incorporated to the Cultural Access Bases. In this meeting, young activists, hackers and artists gathered to discuss what the BACs could become, although nobody really understood what this crazy grey-headed hippie, speaking on behalf of the ministry, really wanted.

Even so, the possibility of creating a way to materialise their ideas on a national scale served as a catalyst that brought together a great group of actors of distinct origins, coming from different collectives that in some way were working with similar goals.

Some of them already had experience in collaborative projects and in networked social action, but never on a federal scale. Quickly, collaborative tools became a need and an e-mail list named Articuladores was created, connecting people from different regions of the country. Some time after, a wiki was created, through which most of the project was discussed and written: from its structural and architectural design, to the technical specifications of software and hardware that would be used in, from the rules of global management to the way the relation between Internet users should be.

Civil society practically rewrote the BAC project. This all happened with no central planning, even without selection of the people that were getting into it. The mailing list and the wiki made it easy for anyone that heard about the project to join and participate. The group became a mix of people that had never meet face to face and, even in this chaotically dynamics the list and the wiki were very productive. Production was done in this collaborative-based system, built according to principles of equality of voice and wide freedom of opinion. Many people that became part of this group already engaged in movements, collectives and projects related to media, art, technology, what made most of them previously prepared to be in this kind of collective authoring production situation.

There was a general sense of excitement and expectation. The exchange rhythm online was overwhelming. Lots of e-mails were exchanged, and many pages in wiki and meetings were making the whole project more and more dynamic. The more dynamic it got, the more people were joining: people with varied profiles and interests, volunteers that wanted to see a government project that would really use FLOSS to reach people. It was pure creativity. Everybody was looking to consolidate a proposal that would allow the reproduction on a national scale of a collaborative style of production only tried by those individuals in small groups outside of the state structure. They were talking about the creation of coordinated and de-centralised HackLabs, multimedia production and hardware re-appropriation.

All the work at the wiki and the list, after some time, consolidated two great proposals named BAC (Culture Access Bases) and BIC (Brazil, India and China). The BACs were thought to be great centres of production, distribution and exhibition of free knowledge and the formation of thinkers inside a collective and horizontal perspective of production. The BIC project was an attempt at integrating technology and production in south-south cooperation in order to create an approximation between rising economies and consolidate a new order against the current model of established info-politics, sustained by government of a country known for its endemic corruption and inefficiency.

Grassroots: from top-down revolution to spread guerrilla action

Unfortunately, these projects never became real. The projects were sent to the Ministry, but the politicians behind it simply ignored the result of all the collective work.

The BAC project's idea of building big centres in big Brazilian cities was too expensive and would have demanded a huge infrastructure of equipment, security and technical personnel. The secretary responsible for the project, after ignoring all the information that we sent him as a free civil-society consultancy, was accused of corruption. Gil fired him, and the project was put aside.

Yet the energy that resulted in the BAC and BIC projects remained in the air. The people that helped build the idea wanted to see it trough. Soon, another project took the place of the BACs in the Ministry. A new idea, an idea thought to reach every little corner of the country: a decentralised network of cultural producers exchanging experience about the most diverse Brazilian cultural context. This new project was called Pontos de Cultura (Cultural Hotspots), and this time the politician behind it came into contact with the people that had helped re-formulate the BAC project.

A Cultural Hotspot simultaneously produces and consumes culture. It can be a house, a room, a warehouse; any physical structure placed strategically anywhere where there is local cultural production. The purpose of the project is to gather this cultural production, and irradiate its content to all hotspots around the country (there are already 262 selected spots and they turn into more than 400 by the end of 2006), also, to give a basic infrastructure to allow people to produce cultural artefacts using FLOSS, and to distribute these artefacts in the hotspot's network, all trough Creative Commons and Copyleft licenses, allowing remixing and collaboration with the other hotspots.

The Hotspots project also aims to reach places of social exclusion and poverty, this means that many projects just can't afford any hardware or software that they might need to do their cultural production. The need for hardware can be solved applying the idea of MetaReciclagem: using used computers to build useful ones, recycling e-waste. The need for software can be solved by adopting FLOSS, not only because it's free (as in beer), but also because it's free (as in freedom). We expect that every user will be a potential producer. No barrier should forbid the user to look inside the systems and learn/understand how it works. People in Cultural Hotspots can exchange their cultural production, be it as songs or movies, or as software.

FLOSS, Meta-Recycling and the Brazilian Culture

Most of the people that were thinking the BAC project where excited to be a part of the Pontos de Cultura project. This could be explained by many reasons, most of them related with the practical point that this was the only way to see some of these ideas becoming reality. The group of people that started all this collective thinking/working effort, if

analysed closely, has no strong commitment to the government goals or its ideology. Most of these people just want to see the thing done. One important issue was always the continuity of the whole thing.

One of the strongest characteristics of this new project, and, perhaps, one issue that had made many people keep up their support to the idea, was the faith that once the whole process started, the network built between the hotspots and its participants all over the country would be self-sufficient, without the need of government support for its maintenance. This belief in the self-sustainability of the whole thing, even after a Government change, is based on two strong points: the nature of the Brazilian way of network social action, along with an element of the Brazilian culture known as "jeitinho brasileiro".

Cultural production, once dealing with digital media, is mainly based on information. Today, information can be shared and copied at very low cost. Entire movies can easily be downloaded from p2p networks, bypassing the whole entertainment industry infrastructure. Since we are dealing with GPL or CC licences, intellectual property rights governing these digital cultural goods are not an issue and the authorial rights are preserved.

Social Networks have some defining characteristics. When we talk about a network, we are referring to a social structure that has no "head" and no centre, a structure that is reduced to nodes and connections. Connections between nodes are only possible if a communication protocol is established between them in a way to make a long-term relationship (more in Castells, 2003). When we talk about Social Network protocols we are not talking bout TCP/IP or X-Modem, Social Network Protocols are the chosen media of communication and action methodologies.

Collective work is only possible if all the members committed to the work know how to collaborate in a productive way. To build this reality, a methodology (that should be adaptive and flexible to local realities) needs to be established between the members of the community. The elaboration process for the BAC and BIC projects, detailed above, was possible, even without community member's preparation because most of the people acting in that step of the process already knew a common protocol, a same way to act and interact.

Besides a protocol, commitment is needed. It is a well-known fact that commitment to collective action requires a sense of usefulness, a belief that the whole thing will result into something. Three structural features are common in many of the case and can be regarded as the basic features required of any successful online community. These features are ongoing interaction, identity persistence, and knowledge of previous interactions (Kollock, 1999:235). In other words, people must see the community happening before a mass commitment takes place.

This happened because by cooperating in this kind of communities, people define their

own identity (Foina, 2005). This is likely to be one of the reasons for the rapid spread of the Pontos de Cultura project, as it enables people able to define their own local cultural identity by means of active dialogue within a national context (what some people call the Interactionist perspective - see Mead, 1982), and sharing within different cultural contexts and locations in Brazil. The first step, the construction of the network itself, was the key to start the whole process. Once fully functional, this network will connect cultural producers, digital artists, FLOSS developers and computer technicians in a way to create a self-sustainable social structure. The physical infrastructure is being implemented together within this structure; knowledge and resources for maintenance and, if necessary, replacement can be found inside the social network itself.

Replacement is what brings us to the second issue pointed earlier in this paper as a Brazilian characteristic. Brazilian culture is not the issue here, but one strong national urban identity is based, beside of some other issues, in the ability that most of the Brazilians have (or believe they have) of finding practical solutions in the most adverse situations, mainly improvising with the available resources. This is called "Jeitinho Brasileiro" - "the Brazilian way". In academic terms, this means that we keep finding creative ways to convert an abundant resource, time, in a very rare resource, materials.

Applying this idea to the hardware infrastructure of the social network that the implementation of the Pontos de Cultura project is building, results in the fusion of the MetaReciclagem methodology to the whole thing as a way to guarantee the functioning of the communication channels and computer infrastructure after a possible lack of governmental funding. This cultural characteristic named as "jeitinho brasileiro" is not only applied to hardware, but also, once applied to FLOSS, it seems very similar to the Levy (1984) and Stallman (2002) concept of hacking.

We have hacked a project in the Brazilian government, and we believe that this project has a chance to succeed. Now, we need even more people to help us. We need to find more knowledge in these types of action, we need to learn, to teach. We need bandwidth and computers, and we need funding. But most of all, we need to collaborate with other groups that are interested in ICT4D, now that despite all the hype, only local and focused action can have a real social impact.

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The University of the Future:
Software Development in Revolutionary Cuba

Kim van Haaster

Introduction

In May 2005 I visited Cuba to carry out a research for a new university called *la Universidad de las Ciencias Informaticas*, the University of Informatics Sciences. 'La UCI' is a huge project, meant to boost the Cuban software industry.

This article is meant to introduce to you 'la UCI'. By telling you stories of practices and realities of current day-to-day life at UCI, against the background of how the project is being propagated and set up by the ones in charge, I want to give you a picture of a revolutionary project in the making, an example of an extraordinary ICT4D programme.

According to UCI promotional material, it aims to teach thousands of software developers who will be working all over the country to serve the *Informatisation of Cuban Society* programme, and a new a technology park is being created to produce software for the national and international market. The director of international cooperation assured me that the national and international markets are equally important. Furthermore, the projects' objectives are explained (in both Spanish and English) in a folder, that is one of the few written pieces of information that can be found on UCI:

UCI will play a decisive role in the development of the Cuban software industry, and in the execution of projects tied to the nationwide computerisation programme.[1] The university is developing and producing software for sectors like health care, education, and services for the public and the government, through the use of a modern technologi-

1 This program is part of the 'Informatisation of Cuban Society' that was initiated in 1997. For a detailed description read Hoffmann (2004).

cal infrastructure and novel organisational methods (Folder UCI)[2].

UCIs future role in Cuba's educational system is important; UCI will become a place were new forms of education are created, that are to be used at other Cuban universities in the future as well:

> 'This university will soon become the country's largest centre of higher studies and will undoubtedly constitute a new alternative for the formation of human capital in informatics and the accelerated development of products and services, based on a flexible process of teaching and production, in which teachers and students are directly linked to the demands of society in the midst of a process of computerisation and an ever more demanding market'
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> *- (ibid)*

UCI was set up within half a year: "It was conceived by Fidel Castro in March 2002, approval would be sought immediately, and construction would begin by May 2002, with the first student intake by September 2002!" (Eisenstadt 2004).

UCI is meant to be a strategic centre from which the Cuban software market will have to be organised and directed in the near future. In the beginning of the 90s Cuba was undergoing a major economic crisis, right after the collapse of the Soviet Union, which also had consequences for the software market. The Cuban government started to allow foreign companies to invest in the Cuban economy. As a result, a lot of joint ventures where created. But starting in 2004, Cuba is closing down its free trade zones, and foreign companies are being sent away. *Softel*, for example, a formerly Cuban-Canadian company is now part of UCI and the Canadian part has been dismissed. Currently, the whole software sector is being pulled into the technology park of la UCI. A rumour says Cuba wants to conquer 1% of the world market on software production, which seems to be bold, taken the fact India, the fastest growing software industry in the last decade, currently accounts for 3.3% of the global outsourcing market. [3]

From the words 'public' and 'government' in the quotation above, we can derive

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2 This folder is meant for promotional purposes and was given to me by the director of international cooperation, but I was not allowed to spread [share] it at *Incommunicado 05* or anywhere else.

3 Zeng (2005).

that the Cuban model of ICT for development is focused at a national and collective level. Development should be generated by legal political state-owned institutions, of which UCI is the most prominent one. It is important to note that la UCI is a subsidiary of the ministry of Information and Communication (MIC), a political organism that was created in 2000. The Cuban government chose to join the Internet in 1996 "with a turn to a pro-active NICT policy aimed at putting the new information and communication technologies at the service of the country's development while maintaining political and social control"(Hoffmann 2004: 210-11). The creation of MIC was: "[t] he most widely visible signal of the change in [NICT] policy" (ibid: 211). MIC is the organism has been responsible for the informatisation of society since then (ibid.). MIC is the decision maker of everything that is happening at UCI. However, the exact functioning of the political organisation and its workings in everyday realities at UCI, have yet to be researched and described in more detail.

UCI Facts

By talking to students, teachers and the director of international cooperation, I mainly discovered that la UCI is being closed off from the outside world. However, I did manage to reveal some of its secrets. From the rumours and stories of the people involved, I have constructed everyday realities at UCI. They give you an idea why UCI is being 'protected', or closed off from the outside world by the Cuban authorities.

UCI currently houses and teaches 6.000 students and approximately 1.000 teachers and is scheduled to expand to 10.000 students and 5.000 teachers by the year 2007, people say. According to the director of international cooperation, this will be the year when the university will be officially opened to the public. UCI is located in a former Russian military base that is situated 22 kilometres southwest of Havana. The students come from all provinces in the country and a lot of them will go back there to work in their province. Another part will stay at la UCI to teach, and yet another group will stay to work at the technology park.

The authorities want to create a small community in the university area; there are as many men and women at the university to create a 'natural environment', according to the director of international cooperation. UCI has the equipment and surroundings that fit ones imagination. It's built to be a small city with apartments, banks, stores, a hospital and computers, thousands of computers (Pentium 3 and 4 processors). All students and teachers have computers in their rooms with access to the intranet. This is a big difference with all the other educational institutions in Cuba. Furthermore, it is

important to know that private computers and Internet connections are illegal in Cuba, so the students and workers at UCI are privileged to have personal computers. Apart from this luxury, the students have many leisure possibilities: there's a sports area, a swimming pool, and occasionally concerts are organised. Altogether, the place is very attractive to the Cuban youth, because generally there is very little to do for them these days. They are being told to get a good education at la UCI, so what could be a better place for them to be?

All students and teachers are being given a monthly pack of products, which is called an *estímulo*, like shampoo, soap, detergent, oil and washing powder, so they don't *have* to buy these goods. They don't have money to buy these themselves, because they are being paid 60 Cuban pesos, which is a little less than 2.5 dollars a month. Instead, the students and teachers are given the basics they need to live. The people studying and working at UCI are in a privileged position compared to the rest of the Cubans who have to engage in illegal practices in order to earn their dollars since these can't be earned legally. But the word *estímulo* can also be interpreted as a gift that is meant to keep someone happy and motivated.

The Cubans live with four students in an apartment sharing a kitchen. They have air-conditioning in the rooms, which is another luxury in Cuba, but one of the teachers told me the air-conditioning is only working one day per week. They often cut off the electricity in many places in Cuba. Therefore, Cuba is well known for its electricity savings. Billboards along the roads state that people should save electricity, and everyday the power is cut off in different areas of the Cuban towns.

Secrets to be Controlled

What we know of la UCI so far is that it has to be developed secretly, as I found out during my visit to Cuba. Separating three levels of information flow helps to explain this. Firstly the national: The students and teachers cannot leave the campus without official permission. They have to stay there on weekdays. Their relatives cannot visit them and the school offers them a paid visit to their family twice a year. Furthermore, there is little information in the Cuban media on UCI. Secondly, there is little information on an international level; there is an article by Marc Eisenstadt, he is one of the authors of *Corrante*, "the world's first blog media company", as they like to call themselves.[4] Eisenstadt went to Cuba to attend a conference and was invited to visit UCI and authorised to publish an

4 For more information see: http://www.corante.com/about.php

article at the website, that has some interesting comments that include heavy critiques of a Cuban student on UCI, that is compared to other Cuban universities.[5] The other piece of written information is the folder I mentioned earlier. The website of UCI is written down in this folder, but it is not on-line. The ministry doesn't allow anyone (tourists, journalists and researchers) to enter just like that; one needs the permission of MIC. Thirdly, there is limited information available on the plans of la UCI within the institution. To give an example, students have signed a contract without knowing for how long they will have to be working for UCI after graduation. The students have agreed to sign in for as long as they are needed to 'serve the revolution'. Normally students have to do a *servicio social* of two years (that is working for the state for a low wage that can be seen as a pay back for their education). Outsiders think they will have to work there for five or some think even for ten years, and others say it will be same as in other universities. UCI students up to this day don't know how long their *servicio social* will be.

Figure 1. Security gate at la UCI.

Actions of students and staff are being 'watched' continually. The control is every-

5 Eisenstadt (2004).

where, from the entrance gates up to the lunchrooms. Students all have an UCI-ID that they need to enter the different UCI-areas and they have to carry it at all times. They also have to keep quiet about the things happening inside la UCI, they don't have the right to act and speak freely. One of the students replied to my question on this issue through e-mail: "About the security of information, one is not allowed to speak directly about what we do at UCI, I did never tell you anything either, this is called *ética de la universidad* (university ethics)... I am sorry." (translation KH).

Unravelling UCIs Secrets

The following information on the development of UCI will give us some explanation about the secrecy of the project. I will talk about the organisation, the educational programme and the revolutionary character of the project.

Organisation and education

The university is divided into approximately ten faculties that are related to the different Cuban ministries (tourism, healthcare, education etcetera). UCI is tightly interwoven with the Cuban state apparatuses and intervenes in all sectors of Cuban society in order to computerise them. The university's faculties don't have names yet, and a few are still under construction. So in this stage the faculties have not been determined. This has been reflected in the answers of my UCI informants; they don't know exactly which faculty has what name, and yet someone else says they are still numbered. One says there are five faculties; someone else says there are ten faculties. Number and name are not clear. Although there might be determinate plans with the faculties that are still under construction, these have not been made clear to the students and workers at UCI.

Students are being taught math, database, computers, physics, web design, programming languages, foreign languages, and they can do extra courses like 'searching on the web' and an introductory course in the use and application of Linux. Both Linux and Microsoft software is available on thousands of computers. Of course Microsoft is being used more than Linux. Not all students know how to (or don't like to) use Linux and prefer Microsoft. The authorities want all students to use OSS in the future, because they need to work with free software in order to sell their software on the international market. The introduction of OSS is slow (at the time of my visit there was a project running, but courses on Linux were still optional).

Students work for national and international projects at the technology park during their studies. Until recently all students have to be in production from the second year

on. During the first two years of UCI's existence, they only chose the best students for projects because not all students were ready to work in projects at that time.

Some projects have been done in collaboration with or by order of foreign companies from countries like Venezuela and Brazil. There are some co-operations in the making with foreign companies and with foreign educational institutions in Spain, Brazil and probably also with Venezuela. According to the director they invite foreign lecturers. Then they are establishing business relationships with the same countries, as well as with China and some European countries. It is hard to get information on the existence and content of projects as long as the authorities keep everything quiet.

Because UCI is a subsidiary of the Ministry of Information and Communication (MIC) and thus is *not* a subsidiary of the ministry of higher education, the governmental institute doesn't have to follow the current structures of education and has room to experiment with their educational programme while they justify it as an educational institute; they have integrated activities at the technology park into education and 'employ' educated workers (students) at national and international software production projects. UCI differs a lot from the other universities, which partly has to do with the fact that production is the main objective of the project. In the UCI folder the alternative form of education is explained as:

> 'All of the students will have educational and professional experience in secondary fields, and this has lead to adopt novel methods of teaching and a flexible approach, meeting with the highest international standards of research and development'
>
> *- folder UCI*

The director of international co-operation has told me that they are still experimenting a lot and have not yet developed these 'novel methods', whatever these may be. This is also one of the reasons the school is not officially open, she says. As long as they have not determined their educational programme, they will not be official. Furthermore, because UCI belongs to MIC, I suppose there will possibly not be much money for research and it will be hard to work on these novel methods and reach international standards, but these are speculations, and need more investigation to become facts.

Cheap workers (students!) produce a lot of profits for the Cuban industry. They are paid little or no money for good work and sometimes they get rewards like laptops, cars, and houses (according to the vastness and income of the project). These, like the

estímulos I mentioned earlier, are ways of paying that are very characteristic of the Cuban political economy; they are not given money, but are being rewarded with things, they are paid in-kind.

It looks like UCI is set up not only to be serving as an academic think tank on ICT for development for the government, but it is also functioning as a large national (revolutionary) and profitable production centre where real software is being created.

Quantity Beats Quality

UCI clearly has to succeed on an international level, and Fidel Castro likes to impress with vast projects and numbers. UCI has to put Cuba on the world map as a socialist country that is still going strong. But because the project is so massive, the quality of the education at UCI is failing according to people who have completed a study at a Cuban university and compare UCI to their own education.

The first two years everybody could enter UCI after finishing high school, because thousands of students were needed in a short period of time. Many students went there, also the ones that did not necessarily have an interest in software production, but who might have been attracted by the good conditions. The university has been in existence for three years now and only since the third year of existence there has there been an application procedure, including an exam.

Like students, many teachers were needed in a very short period of time; so many graduates from Cuban universities were sent to teach at UCI. These people have hardly got any teaching skills. UCI has also taken away many good teachers from the Cuban universities.

All the students have to graduate and therefore the level and quality of knowledge has diminished. The exams are adjusted to the achievements of the students. And the attitude of the students, who have entered easily, is negatively affected by low examination standards. A lot of students there, who are friends of my informants, are not very dedicated to their studies and don't like to sit behind computers so much. Also because of the workings of the Cuban economy, the students know they will not be paid for their work and this will diminish their motivation, as happens in its other sectors. This is a general problem in Cuba.

The project thus gives priority to quantity (which is very characteristic of socialism) and not to quality, therefore the quality of education can hardly be compared to that of other Cuban educational institutions that are famous for their good reputation internationally.

Serving the Revolution

La UCI is a governmental institution and thus everybody working there is serving the government. The direction, teaching staff and especially the students stay and work for as long as needed and have to be present at all occasions the authorities want them to be. Personal development is related to the objectives of the collective. Students haven't elected their own faculty, but have been placed on healthcare, tourism or another, and will have to work in the projects where they are needed. Working hard will of course help them to make a better career with possibilities to work abroad for example. Besides this, students and workers have to attend revolutionary events like processions, art projects, sports contests and the like.

Figure 2. Receiving the president of China in front of one of the college buildings.

A characteristic of UCI being a state-owned institution is that they will only allow politically correct students with a clean dossier. I expect all students have gone through some 'revolutionary filter' during admission, but I have no evidence of this. I can only base this on rumours of Cubans, from all social backgrounds, talking about UCI, and on

stories of Cubans who have had similar experiences with admission to and working for state institutions. People are only employed at important state-jobs when they are politically correct. Having a relative abroad, a religious background, family history with reported anti-socialist behaviour are serious disadvantages. If a personal dossier includes any of these things the chance for admission will diminish increasingly, if not become impossible. One of the students quit his studies at UCI while I was there, he didn't like the political atmosphere at the school. He felt like being imprisoned and wanted to escape.

UCI functions as an international status symbol for Cuba. Every important formal visit to Cuba is being taken to UCI to be shown how great a project UCI is. The university is also used for other purposes; Venezuelans who had to be treated for a certain disease in Cuba were lodged in the campus buildings.

Restrictions in Internet Access

A very important restriction on the information flow that I have not mentioned yet concerns the use of Internet. UCI of course has to work with [the] Internet, a medium that is very hard to control and thus very difficult to handle by the tools of 'the revolution'. The ways they control it lead to very contradictory situations. Firstly, UCI teaches info related skills like surfing the net, without allowing teachers and students free-access. An example: for one of the teachers it turned out to be impossible to get a room with an Internet connection, in order to teach students how to search the web. Secondly, students are being restricted in the use of the Internet. The students at UCI, like students in the rest of the country, don't have access to Internet unless they work in a project, then his or her *correo* (e-mail address at the intranet) is activated for use outside the university. When a student does have access, this is seriously controlled and regulated; students only have a certain amount of MB they can download per month. They will need this amount and time to complete their assignments. They cannot surf to pornographic sites and sites that carry out politically sensitive messages. Thirdly, the use of Internet is being controlled, this counts for both down and uploading. For example, students can search, make and put on-line everything they want, theoretically speaking, but authorities always revise the content.

Thus the use of Internet in la UCI and in all of Cuba is strictly controlled and focuses on collective use like educational projects and not on individual use. The authorities put a great effort into keeping the students close to the revolutionary ideology by restricting and controlling flows of information and by organising revolutionary activities, because UCI can't afford to lose them.

Fragilities

The revolutionary ideology of the project, which in practice means everything (education, software production and Internet use) happens for the sake of the country, makes la UCI very fragile. Decisions are made for students and teaching staff and no one is paid for his/her work, whereas students know that in other countries they would get paid (which is information they get by working with foreign companies and by the use of ICTs like the Internet). The people at la UCI have no freedom of speech and no unlimited access to information.

During their studies, students will find ways to use the ICTs at UCI for other purposes than permitted at UCI. Students make use of e-mail and chat, where they meet mostly Spanish speaking people. The students search illegal connections to the Internet in their apartments, by trying to connect to machines in the computer labs in other UCI-buildings. I heard a story of an ex UCI-student who is being kept in prison. He worked in the sales of (politically) sensitive information and was employed by a Spanish company while studying at UCI. Another example of the students' illegal activities: pornographic pictures of UCI students are circulating on portable hardware through the country.

As I learned from people already working on the software market, they have a lot of informal jobs to earn the dollars they need. This is what many graduates will be doing after they leave UCI. Once they are working for the government they won't be earning the dollars they need, so they will have to go and earn these elsewhere. They need personal computers and Internet in order do to these jobs, but computers and Internet are illegal goods. What they really want is to get paid for their legal work, but they don't, so they organise things for themselves. They will start *inventar*, or try to leave the country, a very common situation young Cubans find themselves in[6].

Conclusion

La UCI is an exceptional developmental project that has been directed by the Cuban state from the beginning, existing on the base of political control at all levels. It is a project in which political, economical and educational interests of Cuba are interwoven. But why is development generated in secrecy?

This is because Cuba has been taking many risks with large investments and they have

6 Inventar means to invent; the verb refers to the act of organising ways to earn dollars illegally.

many problems with proprietary software, the educational programme, the establishment of international relations, the Internet, and illegal actions of students are a threat. These factors make the future of UCI very insecure. Because UCI is this closely related to the state and deals with technologies like the Internet, it is a real challenge for Cuba to maintain a very intense surveillance of students' actions (Internet use, their activities outside the university). For the same reasons they are not giving information about the future plans for UCI to the people involved, and they make sure outsiders get a positive view of the university by its promotional activities. At the same time they need to avoid negative publicity on their acts of control in order to create a good reputation at the international (political) software market (to conquer their 1%). Their biggest struggle is that they need to limit information exchange in order to be able to develop their project secretly, but at the same time they need to exchange information in order to develop the educational programme and keep up with the knowledge of the fast developing ICTs. There are many questions for the development of this so-called 'university of the future'. Still it has many secrets that need to be revealed and hopefully this can be done (legally) in 2007.

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Digital Divide Cartogram

Country size is inversely proportional to level of **Internet usage.**

Product of the Information Technology and International Cooperation Program.

Amsterdam, The Netherlands.	April **05**
Analysis_ Koen Martens, sonologic.nl. **Design_** Marieke van Dijk, anderemedia.nl. **Data source:** internetworldstats.com	SSRC

Diaspora Incomunicados – IT, Remittances and Latin American Elites

Scott S. Robinson

An increasingly strategic population of migrant workers spread around the globe remain incommunicado, or at best marginal to the exploding offerings of digital tools for money transfer and VoIP telephony. In Latin America, where remittance-driven economies predominate, the reasons for this situation are not hard to find. Unsurprisingly, national elites, in power since colonial times, have helped themselves first to IT tools and services, and now are reticent to fund public policies to benefit their own poor beyond the cities. "Let the market decide" seems to be the orthodox *modus operandi.* The design and operational rollout of several constrained and problematic national connectivity programs throughout the region reflects this self-serving arrogance as well. Today, these same groups fuel a limited growth in the IT services market among themselves, corporate and upscale customers, with the exception of prepaid wireless telephony. While the lack of job opportunities and the recent, ruthless pace of privatisation of State assets and public services has forced millions to leave their homelands, often as undocumented migrants in the USA and in Europe, information technologies have become valuable tools for social and political control in the hands of the contemporary descendants of the colonial elites.

There is a bitter double irony in this situation, whereby the prodigious remittance funds sent home by hard-working emigrants abroad now provide macroeconomic stability for national foreign exchange balances while at the same time subsidising local

elites' demand for low cost dollars or euros. Remittance transfers are paid in national currencies; probably 90% of funds received are devoted to consumption by the poor and nowadays middle class families whose sons and daughters have left, probably for good. As long as this highly profitable remittance transfer business continues to grow, along with expensive telephony and international interconnection charges, there are few incentives for governments to mandate lower remittance transaction- or communication costs. Too much money is now being made by the relatively few companies serving the respective Diasporas and the lucrative remittance economies they feed. Telecommunications and financial regulatory bodies, largely staffed and controlled by lawyers trained by corporate interests, members of these elites bar none, are understandably reluctant to rattle the status quo that contributes to the bottom line of their main constituency.

Neither is innovation in ITC public policy forthcoming from the regulatory bodies, nor sadly from the traditional political parties, and neither from elite think tanks at private universities throughout the region. Crocodile tears are occasionally shed in public by politicians and policy wonks about the "digital divide", but it is certainly not a priority issue. With cybercafés to be found now throughout the region, including small villages, and remittance inflows stabilising family subsistence budgets, a social Darwinist ethic prevails. One can read between the lines of political and business leaders who applaud the "noble migrants' sacrifice" and all the money they now send home (without mentioning the millions spent on phone calls). Mobile telephony coverage is not quite universal, but the available technology now allows for smart or stored value cards to be loaded via new cell phones, or at reader/recorders in cybercafés. Encrypted stored value messages sent to remittance recipients at cybercafés and telecentres, as well as state of the art cell phones, could significantly lower transaction costs while inducing the unbanked to use the financial system. But this low cost mechanism is opposed by the commercial banks plus Western Union, Moneygram and other companies who presently profit from this massive market. Why should the regulators open avenues for new digital tools that would remove legacy players from these succulent markets? Few NGOs address these issues in the national or the regional arenas.

In Mexico, where I live, migrants to the United States will send home close to US$ 20 billion this year, 2005 (US$ 45 billion for all of Latin America in 2004). This is the country's second source of foreign income, now close to 70% of petroleum export proceeds; and it may be the first in smaller states. Yet, paradoxically, it is easier to consult the net in a Mexican village than it is for an undocumented worker who may need to do so inside USA. The government has an extensive 3.5 million plus database of all citizens granted a *matrícula consular* or consular identification document, issued by the 46 Mexican consulates spread around the United States, serving the 11 million Mexican citizens

that are now there. This document is recognised as legal identification by banks, police departments, and municipal and some state government agencies. However, there is no programme to locate low cost points of access to digital services near where this massive migrant population is located, data available to the Mexican consular system. Several Latin governments either issue a kindred document or are planning to do so soon, but there is no single or integrated policy of offering digital services for this large population spread throughout the US whose resources sent home are now so strategic for family welfare and economic stability. One must ask: is this a deliberate policy of neglect or simply a function of ignorance and lack of strategic vision? Providing convenient and low cost, easy-to-use remittance transfers and communications services could literally save migrants and their families billions. This is a policy waiting to happen, but there are powerful vested interests resisting these innovations.

Where will the leadership on these issues come from? To my mind, it will be the migrant federations or hometown associations (HTAs) who are increasingly assuming leadership roles in policy and political debates, on both ends of the respective national Diaspora circuits. These HTAs are a new political entity, outside the purview of the historical elites back home and unbeholden to them as well. With the vote being reluctantly granted to Diaspora members from Latin America, HTA members will assume key roles in the political process, as determining swing votes at home as well as inside USA, as dual citizenship and voter registration grows. Today, HTA leadership is relatively incommunicado, scrambling to build political coalitions with partners from other Latino Diasporas. Few in leadership positions understand the power of the emerging digital tools, largely because those over 30 left town or the village for the Norte before the cybercafé opened. But their sons and daughters are already online, as well as their nephews and nieces left behind, and this key generation will transform the politics of the Diasporas, at home and abroad. And this is an ongoing process the historical elites cannot control.

The Biggest Interactive Event in History

Glen Tarman

On 2 July2005, Paul McCartney stepped onto the Live8 (http://www.live8live.com) stage in London's Hyde Park to sing the opening lyric from Sergeant Pepper's Lonely Hearts Club Band. So began what had been billed as 'The Biggest Interactive Event In History'. The line from the Beatles classic - "It was 20 years ago today" - not only marked a period of political evolution since Live Aid. It also underlined a technological leap since the day Geldof delivered the landmark response to the Ethiopian famine a generation ago.

Back in 1985, Live Aid was the largest scale satellite link-up and TV broadcast of all time. The 'global jukebox' mega media event had an estimated 1.4 billion viewers watching the live broadcast, generating well over $100 million for the relief effort – the largest amount then collected from a charitable event and the single biggest event witnessed simultaneously by the human race.

The relays that then connected the London and Philadelphia gigs and worldwide audiences seemed so incredible at the time yet part of a strange proto-global village period for those old enough to reflect back now. "We just about had computers 20 years ago, posh people had faxes and very few people had cell phones," said Geldof at the Live8 press launch. The term "cyberspace" had only been coined the year before and the world was still a decade away from the mainstream world wide web.

The Live8 gigs were set up to support the aims of a huge campaign, with 72 national platforms already formed by July 2005, under the banner of the Global Call to Action Against Poverty (http://www.whiteband.org) (in the UK called 'Make Poverty History' (http://www.makepovertyhistory.org). The Internet is key to the strategies aimed at building massive political pressure on Western leaders to make major policy changes on aid, debt and trade – an economic justice platform at the centre, in contrast with the charity of Live Aid.

The Global Call to Action Against Poverty had its first global focus on the geopolitical window of the G8 Summit in Gleneagles (6-8 July). Since the inception of the global campaign, popular mobilisation has been seen as critical in connecting activists and campaigning groups in the campaign's vision of success. Celebrities and public figures have been recruited to connect a wider voting public with the long-time campaigners politicians expect to have to deal with as they seek to stage-manage the next phase of corporate globalisation.

One example has been the 'Click' film in which famous actors, pop stars and TV personalities click their figures every 3 seconds to represent the death of a child from extreme poverty (http://www.makepovertyhistory.org/video5.html). The TV and cinema ads end with the campaign website address and have been part of the viral environment generated to recruit an 'email army'. In Britain, Make Poverty History had achieved a subscriber base of over 500, 000 by the G8 summit. Mailed each week with options for action, the response rate of those that receive the emails is higher than that of most NGO activist lists. The public have shown they want to take email actions at levels hitherto unseen in global poverty campaigns.

To extend the profile of the campaign further Live8 partnered with corporate online media. AOL (http://www.aol.com) webcast the concerts. AOL CEO Jon Miller said: "We have seen the internet emerge as an incredibly powerful force for good in the world... with Live8, we have the chance to help eradicate global poverty, not by raising money, but by linking people from around the globe, so that their collective voices can be heard loud and clear. Nothing like this has ever been done on this scale before."

AOL promised to deliver ways to 'learn more about global poverty'. Many have and will argue that the corporate group, like most others, could already have done so much more in providing an outlet for content relating to global poverty issues on its platforms and that this effort needs to be part of a new start if the commitment is to be genuine and ongoing and not just about brand profile and one-off support to a cause.

By most accounts, AOL delivered on the entertainment offering - more than five million people watched the concerts on the web, with 175,000 simultaneous streams at any one time. "By far the biggest internet event in history", declared AOL vice-president Ruth Sarfaty[1]. AOL's educational coverage on poverty issues, however, was dismal. Although they did add traffic that extended the petition that resulting in over 26.4 million names presented to the G8 (most names came through the Live8 site where traffic peaked at

1 And one that helped AOL position itself in the free music and video marketplace as part of its strategic plan to move to an advertising-oriented operation rather than depend on subscription sales.

over 13,000 hits per second).

Technorati stepped in to provide 'blog central' for the Live 8 concerts (http://live8.technorati.com) after approaches from Joe Trippi (http://www.joetrippi.com), Howard Dean's former campaign manager, and John Hinderaker of the conservative outfit Powerline. David Sifry and the Technorati team created tools to 'track the conversation' going into the G8 Summit. And so the blogosphere, both right and left wing contributors cranked up the global debate and increased awareness.

Those horrified by 'corporate media bonanza' around Live8 should acknowledge that there was a pragmatic need to reach out to mass audiences that would never likely subscribe to activist lists or check out meetings in local halls on policy issues pertaining to global justice. Equally, Live8 organisers must accept that the venture become excessively and unnecessarily commercial with various sponsorships undermining the message.

As the policy platform unpacks throughout this year, corporate globalisation and regulation will move further up the public agenda when the focus moves to the World Trade Organisation (WTO, http://www.wto.org). Hong Kong ministerial and the unjust trade rules that favour big business over poverty eradication come into the spotlight.

Campaigners are aiming for massive global engagement as audiences and active citizens plug into a high profile mobilisation spreading deeper worldwide month by month. That includes support for the Make Poverty History call that governments should 'make laws that stop big business profiting at the expense of people and the environment'. That demand is not in the small print or part of a hidden agenda. It sits, with stopping forced liberalisation and ending dumping caused by the West's export subsidies, at the very top of the Trade Justice calls of Make Poverty History.

Technology, media and other companies are called upon to support and not impede an accountability agenda that goes beyond voluntary corporate social responsibility (CSR) to binding international standards for business. Equally roles in corporate lobbying against the interests of the poor in world trade talks will be increasingly exposed.

Companies trade, not governments. So it is impossible to talk about Trade Justice without considering the impact of business on people and the planet. If trade is to be a driver of poverty reduction, then companies must be responsible and accountable for their impact on society and the environment, and communities and workers must have access to justice when that impact is negative.

Trade Justice campaigning has already been targeting ICT companies as part of the new build up to campaigning on corporates and trade. For example, a CAFOD (http://www.cafod.org.uk) campaign against inhumane working conditions in the electronics industry saw three leading computer manufacturers launching an industry-wide code of conduct aimed at improving their factory conditions.

Commercial companies do have a positive role to play in uses of technology to facilitating new ways of responding to social need. For Live8, one innovative example was how tickets to the London event were allocated. Those wanting to attend were asked to text the answer to a question to a dedicated number. Each text cost £1.50 with monies going to cover the costs of staging the event with any profits going to the Band Aid Trust. By the end of the first day over 1.5 million texts had been sent.[2]

Live8 was not the same entity as Make Poverty History. The UK coalition cautioned against an event designed to raise awareness for the campaign having excessive corporate involvement. Steve Tibbett, head of policy for ActionAid (http://www.actionaid.org.uk) and a member of the Make Poverty History co-ordination team urged the concert organisers "to be careful about which brands are chosen and how they are associated with the campaign."

Corporate Watch (http://www.corporatewatch.org.uk) has highlighted that O2's involvement raises the issue of mobile phone companies and the conflict in the Democratic Republic of Congo being exacerbating due to the fight over control of the coltan that ends up in mobile phone pinhead capacitors. Corporate Watch's Lucas Christodoulou said: "If corporations participate in this sort of event, they will do so to hide their real record in plundering Africa." O2 head of sponsorship Paul Samuels has stated: "We are only involved in the music event - that is where we stop."

The London Times newspaper also noted about another company involved in Live8: "An entertainment giant with £5 billion revenues last year, Clear Channel is not noted for backing not-for-profit, liberal political activism. The Texas-based company dominates American radio, where it removed Howard Stern from stations for indecent behaviour and donated airtime to pro-military campaigns."

When asked before the Live8 announcement about a repeat Live Aid event, Geldof said: "How can we match that achievement in an era in which satellite broadcasting makes global communication a routine, easy, everyday experience? In 1985 to see all the biggest bands in the world in one go was a unique event. Today you can see them all any day on MTV."[3]

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2 O2, the mobile phone operator that is organising the allocation on behalf of the other UK mobile networks as an example of how they 'use mobile technology for social good' had to fix a cost-only price structure after a public outcry when phone operators profited from text donations to the Asian tsunami appeal.

3 Ironically, as it turned out, Live8 saw MTV screw up so badly with commercial interruptions and VJ banality over the music, the level of complaints meant they had to rebroadcast the shows uncut and ad free.

Live8 was not Live Aid 2. It did not seek to match what unfolded on 13 July 1985. It was another international mass action on a major scale. But Live8 sought to be fundamentally different and part of something far greater. The concerts were a strategic intervention to promote a campaign that has been building for years before New Year's Day 2005 and takes as many lessons from previous global campaigns as possible many of which, like debt and trade, it joins together in a 'meta-campaign'.

The concerts took place for maximum impact just days before the G8 (and their announcement was a 'land grab' on the global attention economy). Protest infected popular culture and vice versa. Live8 cross-pollinated with a simultaneous manifestation of 250, 000 people forming a human 'white band', the symbol of this global anti-poverty movement, on the streets of Edinburgh and other actions worldwide. The day before, White Band Day 1, saw millions of people around the world wearing a white band as a symbol of their demands to world leaders to tackle poverty with major buildings and landmarks also 'wrapped' in a white band.

When the eight most powerful men in our world met at the G8 they were surrounded physically, virtually and morally. They had the chance to take the necessary steps to end the criminal injustice of poverty. Make Poverty History had become an unprecedented movement of passion, energy and solidarity. Never before had so many people in the world come together, fully united in demanding action to end poverty, with a roar for justice that they felt was impossible to ignore.

Yet the G8 chose not to do all that campaigners insist is necessary to free people trapped in the prison of poverty. Far from enough urgent action to bring about real change for the world's poorest people was taken. The people of the world showed they are already on the road to justice. Their expectation that their leaders should be with them was all too evidently unfulfilled despite significant steps on aid, debt and AIDS.

Live8, for all its imperfections, will undoubtedly leave a legacy of hundreds of thousands of committed citizens taking action on global economic issues that otherwise would not be inclined to do so. Even on the day of the Live8 concerts national campaigns received a massive boost. The ONE campaign web site (http://www.one.org) in America received over 700, 000 visits. The number of people who were signed up to the Canadian Make Poverty History (http://www.makepovertyhistory.ca) campaign database doubled in a day. The web site of the Deine Stimme Gegen Armut campaign in Germany (http://www.weltweite-aktion-gegen-armut.de) had one million page impressions in the 48 hours around Live 8. In Japan (http://hottokenai.jp) the campaign came onto the map with the attention generated by the Tokyo gig.

The G8 was always a staging post along a long list of decision-making in 2005 including the global moment of the UN Summit (http://www.un.org) in New York in September

– the point when world leaders reviewed their shameful lack of progress on the Millennium Development Goals (MDGs) they promised to deliver. As Kofi Annan has said, we have the technology, money and political framework to meet the MDGs - what is needed now is the political will to make it happen.

The point to be made about a series of events dubbed as 'the biggest interactive event in history' is not that it lasted a single day or even as long as an international summit. It is that through 2005 and beyond the momentum to connect citizens across the planet in one common purpose, through global campaigns like that Live8 set out to support, never stops until we have achieved our aims. In our age, only though using information and communication technologies (ICTs) can the critical mass of popular public pressure, combined with global justice activism and local grassroots community action, be realised to bring about political and fundamental change.

Now, in this year, we also have the technology, campaigns and networks to bring our voices together to force the necessary political will so that action is taken to make poverty history.

The band plays on. Anyone can join. Connect the cause.

As Nelson Mandela has said: "Like slavery and apartheid, poverty is not natural. It is man-made and it can be overcome and eradicated by the actions of human beings. Sometimes it falls upon a generation to be great. You can be that great generation. I ask all humanity now to rise up."

Developmentalism Redux?

Ravi Sundaram

In the crowded landscape of the 1990s, when globalisation hit India like a dazzling and often confusing concentration of exhilaration and displacement, surely one of the oddest discourses that re-emerged was that of 'development'. This was remarkable, as many had confidently predicted the burial of the project after the great social-ecological movements of the 1970s and the 1980s. These movements had exposed the violence, quiet terror, the arrogance and the consequent multiple disasters of the development decades. What was even more remarkable about the revival of the development discourse, was that the post-independent political elites who had enthusiastically promoted developmentalism in India after 1950, were by the 1990s in considerable crisis, battered by a rising political coalition of the Hindu right and backward caste movements.

Why then the revival of a discourse, that by all accounts was an embarrassment to the states that had championed it, and the multi-lateral institutions like the World Bank that promoted it enthusiastically? In a sense, judging from the global rhetoric, we can already guess the answer. Development has been rehashed as *info-development*, and the steel mill and the dam, long rusted and out of favour have been replaced by the computing gadget. Social or sustainable development has been replaced by that ghastly phrase of the *digital divide*, and we have the WSIS in place of the old developmentalist advocacy group UNCTAD.

In this essay, I want to examine the correspondences of these two forms of developmentalism. I will suggest that like *Development I*, ICT for development will prove a costly and disastrous exercise. The two strands of developmentalism share the rhetorical strategy common to discourses that accelerate time and space. I will use examples from

the Indian experience to develop my argument. It is illustrative to go back to the early moment of developmentalism in India, just after independence in 1947.

The main problem for the nationalist elite after India's independence was to secure two key things: sovereignty and citizenship. In many ways the Indian elite followed a strategy no different from any other state: it performed, even enacted the discourse of sovereignty. If we look back, Indian nationalism's response to colonial rule was marked by a series of important innovations. As the writer Partha Chatterjee points out, nationalist thinkers distinguished between the outer realm of state and politics that was a colonial monopoly, and an inner sphere of culture, in which they proclaimed their sovereignty. Freedom consisted in grafting the nationalist sovereignty in the inner sphere of culture to the domain of the state and politics. In the immediate post-independence period, the nationalist invention was to re-work the colonial governmental techniques in line with new imperatives. Facing a multitude of entities, the task was now to accomplish what Etienne Balibar has called the "delayed nationalization of society", which means successfully produce a fictive ethnicity from a population with diverse interests. The key sites were the law and the economy.

New institutional sites of cultural intervention were marked: those of a national language, national and regional art and culture sites (the Lalit Kala Academy), a new regime of censorship and control over the popular film industry. The key reworking of the cultural sphere lay in the realm of the economy and the language of developmentalism.

From the 1950s the space of the 'global' underwent a certain imaginative closure. The strategy of import-substitution and its consolidation was a necessary pre-condition for a systematic incorporation into the world economy. The 'national economy' became shorthand for *the nation itself.* The imaginative representation of this national-cultural space was the dam and the steel mill. The state-funded Films Division produced documentaries that eulogized, Soviet-style, the achievements of India's development projects.

What about citizenship? The development decades were not just about 'catching up' with the west by a combination of Soviet style planning and capitalist accumulation, but also a way of generating knowledge about populations whose social world was often ambiguous and puzzling to the Westernised elites who ran India immediately after independence. Here it is useful to quickly revisit Foucault's notion of 'governmentality'. It may be valuable to see how problems posed by the concept of governmentality actually worked themselves through the parallel histories of development and technological modernism.

Very briefly, Foucault had argued that with the passage of power from the body of the prince to that of the population, a new mode is opened up with the governmentalisation of the state, not so much the unification of society.

Governmentality is the practice of modernity beyond old-style sovereignty, the man-

agement of bodies and things, and the whole population. Governmentality is a form of pastoral power, aimed at the welfare of each and all that functions, by a concern with techniques of calculation and knowledge of bodies, technologies of well being of the population and their amelioration. The "social body" is regularly assessed, calculated and treated for its insufficiencies. Governmentality is a technology of intervening in, and producing a citizen-population. In separate works, the historians Ann Stoller and Gyan Prakash have noted Foucault's peculiar blindness to colonialism in his framing of bio-power. In the colonies, governmentality took on a different shape. Says Prakash, "Colonial governmentality was obliged to develop in violation of the liberal conception that the government was part of a complex domain of dense, opaque, and autonomous interests that it only harmonized and secured with law and liberty. It had to function also as an aspect of coercion, that is, instituting the sovereignty of alien rulers". (1999:124) Within this despotic framework colonial governmentality put in place a colonial complex of "men and things", where the population of subordinate subjects and the population's economic, cultural, and demographic properties were surveyed, and classified.

In a sense developmentalism was about generating forms of knowledge about populations, through both political, technical and social technologies. Thus technology policy, media policy was about producing a kind of citizen, unmarked by social differences, innocent of politics and shiny-eyed about the future.

This is what I have elsewhere called developmental modernism, where the claims of economy, culture and nationalisation of society were organised in a new regime of governmentality. Developmental modernism was as much about the closure in discourse of alternative ways of seeing and doing, as about a form of knowledge through which the elite *saw* its people.

In a sense this process reminds us of an argument in Timothy Mitchell's important book *Colonizing Egypt*, where he looks at European representations of other societies. Mitchell's goal is to explore "the peculiar methods of order and truth that characterize the modern West" (1988, ix) and their impact on nineteenth-century Egypt. Mitchell suggests that the setting up of the world as a picture canvas, in the model of the world exhibitions of the last century, is at the core of these methods and their politics. For the European subject, this meant that they would experience the world almost separated from the physical, if s/ he were a visitor at an exhibition. The observer inevitably "framed" external reality in order to make sense of it; this framing took place according to European categories. What emerged was a regime of objectivism in which Europeans were subjected to a double demand: to be detached and objective, and yet to immerse themselves in local life, the world they colonised. This experience as both a participant and an observer was made possible by eliminating from the picture the presence of the European observer; in more

concrete terms, observing the (colonial) world as object "from a position that is invisible and set apart" (Mitchell 1988, 28). The technologies of life and the life of technologies under India developmentalism also enabled the ruling elites to look at their own populations with a similar mixture of detached bemusement, pleasure and power.

This secure world went into rapid crisis from the 1970's that intimated the long transition to the current phase popularly known as globalisation.

The story is well known: the crisis of development, the political defeat of the Congress party which had ruled India since 1947, and the increasing inability of the state to govern in the old ways. This was our own entry into the crisis of sovereignty, what obtained was a *longue duree* political paralysis in the state that has lasted well until this day. One of the key ingredients in this mess has been the dynamic rise of what Partha Chatterjee calls the political society, where populations outside the realm of liberal citizenship use the political to make claims on power. Classic post-independence techniques of governmentality were based on the conceptual division between citizens and populations where the latter were empirical categories of people that were the recipient of administered welfare policies, while citizens were part of an abstract nation. The relations between populations and the state was increasingly mediated through the domain of political society which was implicated in a series of complex social arrangements and political mobilisations, which could not be formulated within the classic state-civil society relationship. So everyday politics, small mobilizations, fixing, the sleazy, shifting world of surviving the crisis of development and planning, is what constituted this new world and made old 'ungovernable' in the classic liberal sense. This is a world that Solomon Benjamin has powerfully documented in his own work and this is also the world that the old elites, increasingly with their backs against the wall by the early 1990's, abhor and detest. For them this was a space of corrupt politics and deal making, where formal rational laws and civic life have been destroyed. This was the context of the decade of globalisation, where different players were jockeying for space.

Globalisation

Though the South Asian subcontinent has been linked to the capitalist world economy since the 16th century, the new phase of globalisation in the 1990's has in many ways marked a clear rupture with the post-independence order.

This was also a decade where the experience of urbanisation was nothing less than a series of shock experiences, mediated through the phenomenon called globalisation. The introduction to the Sarai Reader 2, *The Cities of Everyday Life*, captures this period well:

Globalisation, with its mixture of enforced commodification, spatial transformations and urban ruin, excavated the city from margins of academic and literary writing to a new public discourse that suddenly assumed the given-ness of urban space. As elites quarrelled over pollution and decay of public order, new fusions were taking place between the media and the fabric of urban life. "Newness", the old battle cry of modernity, (which often had a noumenal existence for most ordinary citizens in post-independence India) was now fused into the sensorium of urban life. The emerging urban constellation in the 1990s was marked by a rapid tempo of sensations transformed by a plethora of signs indicating the arrival of new forms of mechanical and digital reproduction. One cannot overemphasise the experience of shock, compressed temporally, which marked urban space in the past decade. The cultures of distraction, of exhilaration and mobility, of loss and displacement were by no means new - they had been narrated by 1920s' European modernism. What was different was as if in this new modern we were deprived of the ability to think, our 'social body' emptied out, prised open, "bodies without organs" as Deleuze and Guattari have argued, no time to reflect as in the old modernisms. It was as if we were forced kicking and screaming into a new space of flows with the rhetoric of smoothness and non-linearity. However the "place of spaces" was not, as some have argued, superseded by the space of flows. Along with the "smoothness" and the "placelessness" of the shopping mall, the airport and multiplex, new localities were produced both as sites for work and imagination. Urbanity became the site of new disruptions by those rendered placeless in the Smooth City. New struggles and solidarities emerged, once again lacking the mythic quality of the old movements, but adapting, innovating and gaining knowledge through the practice of urban life.

This paragraph captures to some extent the atmosphere of the 1990s that resulted in both a "visual frenzy" as also an experience where commodities that were explicitly artificial became preponderant in daily life.

In Delhi and in India generally, a significant part of this media experience came from networks that were part of a culture of the copy, a world that I have called pirate modernity. Pirate modern culture transformed production and circulation of commodities using the non-legal media copy as a general form for producing and reproducing objects in the city. In Delhi the T-Series music company was a classic example where initial non-legal production and circulation set up a modal form for most media production units (cable television, music, video,) that contributed to the emerging transformation of daily life in the city. Urban experience began to be marked by a pirate electronic culture, delivered through local shops, informal outlets. Pirate modernity is unconcerned with modernity's classic search for originality, and it is a phenomenon that is neither oppositional nor critical in the classical sense. To put it crudely, pirate modernity brought new media to

South Asia, unlike the software elites who concentrated on the export markets in Europe and the US. Worse still to the horror of the left and the old elites, pirate culture resembled political society; only pirate modernity was worse, unconcerned with either representation or citizenship. It was a world of commerce outside classic property relations; something that vexed all who made public discourses in India.

If we can resort to a crude heuristics we saw in the 1990's three broad streams: the state yet to recover from political crisis and the failure of the developmental decades, the cultural and social elites who were increasing withdrawing from politics and moving into running technology and service industries, and lastly new entrants like backward and lower caste social movements who made claims on political power. The world of pirate culture operated at the realm of the everyday and was quite unconcerned with the language of claim making or group discourse; it simply circulated media objects in the non-legal world.

In this context ICT for development or the new developmentalism was a major step by the elites to intervene in the management of technological culture. The thrust was given by an interesting coalition of software industry captains, NGO activists, and bureaucrats. The apparent thrust was to bridge the digital divide and to provide access for all. This was the stated aim at least. In fact this plan was interpolated in a series of complex discourses that can be summarised as follows.

1. First, unlike the old developmentalism, ICTFD posed a public-private partnership, where the state had to be nudged, or even pushed by private initiative.

2. Second, like the first developmentalism, ICTFD assumed a rhetorical strategy with a high-pitched media management, which tied the plan to one of comparative advantage in the world economy, and competition with China. This skilful use of global and national rhetoric in the media was a significant innovation; it marked the new form from all previous state centred discourses in the 1950's and the 1960's.

3. The significant innovation of the new discourse was its investment in the discourse of globalisation and consumption along with classic enlightenment strategies of knowledge building and moving into the future.

4. The main feature of this new developmentalism is a notion of the civic (not public) cleaned of politics. It is this civic which interpolated classic liberal discourses on rights and rationality and has been used to manage populations and spaces in everyday life. This is the Indian elites version of a world that is purged of politics and stake a sovereign space in public life from which it can issue technocratic discourses on managing 'society'.

5. Like the European of the 19th century who saw the colonial exhibitions and sought assurance in liberal subjectivity and racial superiority, the advocate of ICTFD can see his or her own landscape of e-governance and smile, smugly. It is as if the vast world

of everyday life and the chaos of political society and pirate culture have been cleanly excised, for this is a world that lacks representational subjectivity.

It is the notion of a civic space innocent of politics and daily life that has proved to be main reasons for an early demise of developmentalism. As the social claims run hollow the strategy has been pushed into an increasingly corrupt alliance with the state: demanding markets in the case of the Simputer and free software, while turning a blind eye to the increasing discourse of surveillance and national security. Strangely, the rights discourses in the civic imaginary of the ICT for development advocates never included the classic libertarian notions of privacy and a critique of censorship.

In this sense when the collapse of the Twin towers in New York in September 2001 opened a global crisis of both empire and war, it dealt a shattering blow to the already doddering ICT for development. Technological cultural strategies after 2001 cannot remain outside politics. The impossibility of this shall prove to be the epitaph of developmentalism 2 well before its swan song.

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The Mirage of South-South Cooperation in ICT4D:

Reflections from the African Civil Society

Nnenna Nwakanma

Background

The Africa Civil Society for the Information Society – ACSIS has recognised that Information and Communication Technologies (ICTs) play a significant role in development efforts and poverty alleviation. ICTs open up new horizons for the creation and exchange of knowledge, for education and training and for the promotion of creativity, cultural development and intercultural dialogue. They come in as useful tools in all areas of development. The challenge of the people in Africa, therefore, is to seize the opportunities of ICTs and to apply and integrate these into a wide range of activities. This includes the improvement of information literacy, improvement of ICT infrastructure, enhancement of access to ICTs, and the application of ICT in all development aspects.

Locating the "South" in Africa

There is a big haze around the "South" in Africa. Paradoxically, there is a country in the continent that bears the name of The Republic of South Africa. Is that the "south"? Maybe yes, maybe no. A quick check:

South Africa

The Republic of South Africa is not found in the list of the Least Developed Countries. For the past ten years, it has known a healthy democracy as well as a buoyant economy. South Africa, home country of Mark Shuttleworth[1], is on the forefront of ICT policies and implementation in Africa.

Senegal

The Republic of Senegal is part of what the French President, Jacques Chirac calls *Prochains Pays Emergents*[2]. The actual president, Abdoulaye Wade, heads the ICT commission of the Africa Union. He is also the father of the Digital Solidarity Agenda, which has already given birth to the Digital Solidarity Fund.[3]

Cote d'Ivoire

The Republic of Cote d'Ivoire, as at five years ago, was listed in the Developing Countries. That was before the war broke out. Even the review of that list still left the country in the same list. On the ground, civil society entities can affirm that the situation in the country after five years of political instability has gone bad. The National ICT policies and plans have outgrown their original lifetime without application.

Niger

Niger certainly figures in the list of LDCs. What with the locusts and famine? This country, paradoxically, has finished a sound National Information and Communication Infrastructure (NICI[4]) Plan. There is a vibrant engagement of the civil society in the national ICT4D debate with the recent creation of a national youth alliance.

With this quick check, it might be permitted to say that the "south" in ICT4D may not necessarily follow the UNDP development report. One challenge here may be to formalise on what grounds a country may or may not be referred to as being south. In the same optic, we may know which countries are "southerner" than others, if such thinking may be permitted to exist.

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1 Mark Shuttleworth is the first African in space and an Open Source pioneer.

2 During the France-Africa Summit in Yaoundé, Cameroon, the French president spoke of some countries that he preferred to call "Next Emerging Countries", believing that such countries already have the needed elements to be developed.

3 http://www.dsf-fsn.org

4 See list of African countries with NICI plans on http://www.uneca.org/nici

The Africa You Know

Sources of information on Africa need to be checked. The information that we have concerning the continent generally does not come from the right places, possibly because the right places do not have the means to produce the right information. Information on Africa coming from Western media has done more harm than good. One challenge in south-south cooperation will be to get the right information and get it right. I personally do not believe that one reporter or correspondent for a media house is capable of giving a balanced image of a country where millions live.

Africa and ICT4D

The notion of the 'Information Society' with the accompanying use of ICTs for development (ICT4D) should not and cannot be divested from the current society in which we live. The Information Society is not another society, it is the very same in which we live. All the same, ICTs are here and are here to stay. The question, therefore, is what can ICTs change? ICT4D has helped relaunch the debate on FX – Freedom of Expression and the Article 19 of the United Nations Declaration of Human Rights. In Africa, this has been followed with a renewed interest in media freedom.

The Internet has made a lot of information available. The speed and the geographic coverage are also of great interest. The ubiquitous availability of content enables people to share, exchange, swap, buy, sell, and steal. Yet some other basic elements have not changed. These include Patents and copyrights, unbalanced ownership of content, globalisation, extreme capitalisation and American imperialism. The thorny question of language and cultural diversity with the accompanying inferiority and superiority complexes still abides.

Africa, the WSIS and Multi-Stakeholder Partnerships

During the African Civil Society preparatory meeting in Abuja, it was clearly stated that the Multi stakeholder Partnership is a concept not yet really understood, notably by civil society. The African understanding so far is that it relates to collaboration between three sectors to implement projects: government, private sector and the civil society. It can be understood as collaborative framework cooperation that is being institutionalised, notably since the organisation of the World Summit on Sustainable Development and of

the World Summit on the Information society. Each of the three sectors has its "natural" expertise, and put together they have complementary competences. Collaboration between them should therefore bring about sustainability and inclusiveness. However, MSPs are not an end in themselves.

Issues in Cooperation

In multi-stakeholder partnership, civil society appears to be the weakest actor. The civil society is also too much financially dependant on private sector and government and therefore is not seen as a credible actor. Civil society appears only as a critic in the eyes of the governments and the private sector. Therefore, it has been suggested that civil society should learn to become a negotiator. However, civil society has not yet established real partnerships with private sector in the process of the WSIS or out of that process. Partnerships in general can threaten civil society independence and ethic values. Civil society is not very organised and very professional, and does not have a good image. Civil society is more supported at the international level than at the national level in most cases.

Issues in South–South Cooperation

With time the Information Society has come to be accepted as meaning the Internet Society. This is not the reality in Africa. ICTs are tools, a means to an end. We need to be able demystify the technology and get it in line with the day-to-day problems of people in developing countries. The information society is not any different from the present social order (those who can and those who can't afford). The worst thing in ICT4D is to think that the Internet includes everybody! The first line of the declaration principles of the WSIS talks about a people-centred Information society, but the reality is that we are focusing more things on people. Outcomes are set well before execution and no other outcomes will be acceptable, even if they are the ones that reflect the reality on the ground.

Moving Forward

The African civil society needs be better organised at national, regional and continental levels; in order to become a credible partner to the government and the private sector, it has to become more professional in the implementation of its activities. There is also need for partners to create development institutions that could support civil society activities. The African civil society could be given the means to collect and document positive MSP experiences. Civil society's negotiation skills/capacities need to be strengthened; capacity building should be at multiple levels (both national and regional). The African civil society needs get more and more involved by governments, in governance initiatives at the national, regional and international level, and monitoring systems should be established. Overall, the African society is willing to establish an effective partnership with all partners, but always on the condition that its independence and ethical values shall be respected and upheld.

Why Civil Society is not Embracing FOSS

Loe Schout

Free and open source software (FOSS) is affordable and easy to obtain. It reduces dependence on commercial parties, and empowers the user. It stimulates cooperation and knowledge exchange. FOSS is flexible and easily adaptable to local needs. It even claims to provide a better protection against computer viruses and other intruders.

Due to these characteristics, FOSS appears to be well suited for adoption by civil society organisations (CSOs). After all, CSOs are active in the public space between the state and its citizens. In many cases, they work with public funds, which means that they are accountable to the taxpayer. They are expected to cooperate with other parties. CSOs have an interest in effective networking at the national and international levels in order to attain their goals. Worldwide, tens of thousands of CSOs form a bridge between, or provide a voice for culturally and linguistically diverse local communities and peoples.

Ample reasons for CSOs and development organisations to embrace FOSS as their technology of choice for a successful marriage between open source technology and civil society. Indeed, during the WSIS in 2003, CSOs presented the manifest "Shaping Information Societies for Human Needs," in which FOSS was seen as the tool to overcome the global digital divide.Nonetheless, FOSS usage is spreading less rapidly than its advocates wish, and less rapidly than one would expect given the aforementioned advantages. There are a number of reasons.

The first concern is that the CSO community often does not speak the same language as the FOSS community of developers and FOSS-producing companies. These are two different worlds: the world of development cooperation, with its jargon of poverty reduction indicators and MDGs, versus the world of software development, with its "techies" and a jargon that is just as difficult for outsiders to follow. Those two worlds will have to communicate more often and in a more intensive way for this to lead to a winning match.

There is lots of talk about partnerships these days, so why is it that we see so few partnerships between FOSS companies and development CSOs?

The second obstacle is that the community of software developers, and particularly the FOSS community, is strongly male-dominated. It is embarrassing and a completely outdated fact that meetings on OSS attract an almost exclusively male audience, and that FOSS spokespeople are almost without exception, men. Of course, there are a few excellent exceptions, such as the women from Women's Net and Gender Changers, who organise computer workshops for and by women*. But it stands beyond doubt that many more of this type of initiatives should be given a chance. And far more attention should be paid to gender concerns when it comes to the use of FOSS.

A third problem is that the largest advantage of FOSS - flexibility and freedom for everyone to modify the software to his or her own needs and wishes - sometimes becomes the largest disadvantage. There is an abundance of new FOSS-applications and tools. This is encouraging of course and diversity is one of the much-celebrated added values of FOSS. But the user-friendliness and the standardisation of FOSS leave much to be desired. This is also the case for the documentation and support possibilities for users.

Many different FOSS-based CMS (content management systems) for websites and for knowledge sharing compete with each other. These all claim to be the perfect solution for NGOs and CSOs working in development and civil campaigning areas for the publication of their local content and towards real ownership for the users. Much knowledge and time are being invested to find the ultimate solution, in many cases reinventing the OSS-based software wheel. OSS claims to be based on collaborative values, but in the reality of OSS software production this collaboration is often completely lacking. There is nothing wrong with competition. But working for public goals and often with public funding, one would expect more cooperation and partnerships.

Perhaps the largest problem of all with the level of adoption of FOSS in the world of CSOs and NGOs is the lack of a true political debate over the importance of FOSS. For example, by the end 2003, Microsoft and the UNDP came to a 1-billion dollar agreement in which the UN committed itself to the Gates empire. This agreement passed without as much as a stir in the slipstream of the WSIS in Geneva, and the CSO-community that had gathered there let this happen. This agreement means that respectable public organisations and the governments that support them endorse the relentless expansion of Microsoft, while the slow advance of FOSS is nipped in the bud. Another example is the difficulty that local NGO and FOSS activists have encountered in obtaining support for their lobby to prevent their governments from becoming involved with Microsoft. Another example yet, is the overwhelming silence surrounding another deal, again involving Microsoft, with an NGO in South Africa, which earlier had won different development prizes for its

locally developed, low-cost ICT solutions in all of Africa. How long will these solutions remain low-cost if the software is no longer open, but owned by Microsoft? These types of projects signify the end of local computer and software development companies in Africa and elsewhere.

Perhaps this is an overly pessimistic view. After all, the advance of FOSS in particular in Asia demonstrates that FOSS is here to stay. But it would be unfortunate if CSOs and NGOs would not make use of it on time. They would be missing opportunities to realise their goals in the areas of poverty alleviation, democracy and the realisation of an "information society for all". So let's establish more FOSS and CSO partnerships, let's encourage more women to 'hack' their way into currently male-dominated FOSS communities and technologies, let's standardise and make OSS software tools more user friendly. Above all, let's make sure that the critical debate on technology choices and their developmental and political implications continues to flourish and grow!

Formatting the Net:
Trusted computing and digital rights management to accelerate the proprietary seizure

Heimo Claasen

The following threads are intertwined in what I perceive of as a fundamental change of - and threat to - the Net and "net culture":

1. Proprietary formatting encroaches more and more into the very cognitive bases of communication, i.e. the ability to present, and the capacity to recognise, meaningful content of transmitted volumes of bits;

2. This follows (a.) the general pattern of penetration of monetarised, economically measurable formalisation of social exchange, and (b.) it goes together with the introduction of "new" technical means - the "ICT", comparable to techniques of book-keeping and banking in the course of monetarising - and the establishment of tendentially monopolistic gatekeepers: Roberto Verzola's "cyberlords", the rentiers who control this "intermediary" technology;

3. While these conditions have been built up and are in place by now, there was a crucial lack of means to control the sources/processes for effective rent-inning - communication (exchange of information) between at first, stand-alone PCs, later the Internet (originally a "peer-to-peer" arrangement) was indeed pure anarchy. "Trusted Computing" and "Digital Rights Management" are devised to close the gap, and will subject each and every exchange of digitised information to checks of formal "legality", that is, of "rightful" use of the privatised means of presenting and recognising meaningful content: through the proprietary formats;

4. There is a miserably underdeveloped awareness even among defenders of the Internet "commons", proponents of FOSS, or "civil society organisations" of all sorts for the implications of this process for their very 'raison d'être'. Sadly and especially, many of the "development" oriented NGOs function in their day-to-day practice as sheer purveyor belts of the monopolistic usurpation (and usury) pattern of Net use control by

the (Northern) "cyberlords".

5. The demands for "rights of expression" and for maintaining "cultural identity" addressed to the WSIS seem rather futile if allowance has to be obtained, by the license fees to be paid for, from Microsoft and Adobe Corp. for the digital formats used in order to make them known at all. Thus, fundamental demands in WSIS must be for public standards and the legal base for the use non-proprietary means of communication.

I'll try to unravel and substantiate these theses a bit more verbose, and as prepared for the contribution in Amsterdam.

Roberto Verzola introduced the "intermediary", the role of ICT owners as rentiers - the cyberlords - of the globalised planet.[*] I'd like to expand this analytical concept along another, so-to-say "inner" dimension - namely, how this works even inside the realms of the ICTs' homelands -, and to add, here and there, some more pointers to implications for North-South relations in this field, and mediated by its means.

Certainly, the ITC business has a same economical role even in the very environment that profits most from it, and where the cyberlords indeed have their castles, the "industrialised" countries of the OECD. And certainly, the nominal share of their rent is grossly underestimated in the usual calculations of GNI and the like (OECD counts the GNI share of ICT at an average of around 7 per cent only: but the sampling of this data is simply ridiculous [1]).

For everyone of you working with the stuff it's quite obvious how far ICT has invaded everyday "economically active" life (and beyond); and it's clearly visible how more and more of its growing share of "costs" goes not so much to hardware but ever more to licenses and "services" of all sorts which feed the cyber rentiers. Some time ago I did a small survey among a number of NGO offices in Brussels which revealed that their ICT costs had clearly passed costs for their core "business" of lobbying, all physical mobility and costs for face-to-face meetings. Or to take an actual macro-economic number: According to the Shuttleworth Foundation (which is engaged in the Linux "Ubuntu" distribution of fame), while software expenses already surpass hardware costs, 80 per cent of the South African yearly total expense for software (more than 600 m EUR of a total of 760 m EUR, equiv.) is due to foreign right-owners.

But there is more to it.

All communication is "social" - an apparently trivial observation. However, look at it the other way 'round: if there were means to make this intermediary function of communication tributary to rent payments this could be an enormous source of extra profits - and this the more so the nearer you can set the point of taxation to a lowest possible level of so-to-say "human hardware".

In terms of the mechanics of communication this would be the very cognitive activity,

a person's capacity to recognise an external stimulus as a meaningful sign - to identify from the noise those phonems and sounds which make up spoken language and music, and to recognise among the pixel snow on a monitor screen the letters and signs which make up written text and meaningful visual impressions: Thus, if you allow to communicate the letter "a" only if the originator of a message using this letter "a" has paid a toll due for using it in a specific form or "format", in order to be allowed to communicate it; and at the corresponding side, if you make the letter "a" visible only after the receiver of the message likewise has paid an access toll.

Thus the real thing would be to get at the most abstract, and at the same time, the most basic layer - which is writing; and more elementary: the very form -- or format of typeset [2] -- of letters and signs which constitute the symbols of written content. Compare it to a (micro)payment for breathing.

But how do you make people subject to pay tribute(s)?

In the old days, forcing people to pay a levy was straightforward waylay: to visit a cousin in the neighbouring village was to meet the risk of getting robbed on the way through the woods or at the toll gates of the local baron.

In the digitalised environment, the club of the robber, or the axe of the bailiff, is the proprietary format.

It's not intended to start a debate here on the relative importance of audio vs. visual cognition; it seems clear though, that "written" language is dominant - even on the most technical level, where all sorts of contents indeed is "coded" in written form.

Face to face talk has natural limits though.[3]

But think what's involved in a gathering like this here: use of the microphone/headphone involves probably well over a thousand patent licenses which had to be served, and if there's just one of Intel's microprocessors involved in controlling the sound here, this would make it a good one hundred thousand. [4] Or another example for the fundamental importance of "writing": The explosion of GSM/cell phone use, and again, of "SMS" - but all that is still dispensable, still not low-level enough to be unavoidable.

But there had been some obstacles yet to exploit this taxation at an indeed basic level of communication.

In the early days of - more or less "personal" - computers it was the hardware manufacturers who had the say, and they had a strong position vis-à-vis the copyright holders of software. Neither was software turnover important: the once-off payment for the copyright for use of just one typeset did not weigh through in the total cost of BIOS chips, for instance, which then gave the one and only type used for reproduction on screen. "Line printers" had a rather restricted set of fonts; and printer manufacturers finally lost the battle over the fixed fonts and had to adapt to the software-driven

reproduction of pixel-dots.

Today we are almost there. The largest part - and this is a very circumstantial attribute - of all practically useable typeset for letters and signs are by now privatised "intellectual" property of two firms, Adobe and Microsoft. [4]

However, what was still missing hitherto was a watertight system for the control of use.

Sure, vendors of other composing software had to steer clear of suits and did duly pay their license fees if they wanted to deliver the most popular fonts within their program packages.

However, the widely open field to escape from the rent levy was the ease and near-zero cost of the digital copy. Thus each and every software package sold through so-called "legal" channels, nevertheless, was in itself a source of uncontrollable numbers of copies, which had not gone through the tollgate.

Stories about the "fight against software piracy" abound; I need not add any. What is less recognised, however, is the link between these types of artificial "illegality" with the "security" issue. Perhaps there's time to go more into the technical details of this elsewhere but it seems important here to point to the instrumental role of "Angst" and fear for insecurity, which was decisive to drive through the building of the control structure for digital copyright.

Work on it had been under way for some years, with finally the unfolding of the TCPA - the "Trusted Computing Platform Association" (1998) - and its centralisation into the TCG, the "Trusted Computing Group" (since 2003) with the restricted membership of only the most powerful cyberlords. By now we do _have_ the TPM - the "Trusted Platform Module" -, the chip or chip section welded into every mainboard sold; and, even more important perhaps, into "embedded" processing gear like handhelds, cell phones and all sorts of special purpose instruments.

What is less known too is that Microsoft's "Windows XP" operational system at the outset was intended to use "Trusted Computing", only that neither the hardware was ready nor the clients were ready to accept it - Intel provoked an outcry with its CPU-identification number which became part of the Pentiums-3 architecture in the mid-'90ies, and Microsoft experienced a major flop with its attempt to tweak the Internet into a "Microsoft Internet"; the present Mickey-".Net" is only a feeble resemblance of the original project.

But finally here comes the club for use by the cyberrobbers and cyberbarons:

From the end of this year on, the next M$ OS named "Longhorn" is to be installed on "all" PCs - M$ has announced to stop support for its present "Windows", even the "XP", after 2006.

The new operational software will, together with the TPM chip, allow to control _all_

input and output and check it against its "legality". According to the official announcement of "Longhorn" in April, this copyright watch is in the first instance designed to check all video and audio signals of "high" resolution and "high" quality which are produced following the most recent copyright protocols of the "content industry" and thus have built-in control features in their file formats.

So this is precisely that "Digital Rights Management" or "DRM" which had been pursued with the "Digital Millennium Copyright Act" in the USA since the pre-Bush era and with a series of recent "modernisations" of patent, copyright and broadcast laws in Europe. With the difference that this is not only a rule on paper but hardwired technically into the machine and its software.

Two things are quite clear from the first official Microsoft announcements:

Firstly, "external", "imported" source materials that lack any "Digital Rights Management" specification will be either reproduced in artificially reduced quality - or even not at all ! - with some of the interfaces to external devices. For instance, the most traditional and simple video and audio wired "line" connections will not be functional any more, if peripherals there do not have the least of the presently required anti-"copy protection".

Secondly, it is quite clear from the drawings that this "protected environment" for audio and video input and output does check the "rights" of just every "application" you want to run on future "Windows" machines. That is, just every software and program used must have some sort of "certificate" of origin so that the "protected" system allows it to run and to work with "protected" content.

To make this quite clear - even your own, handcrafted little program or script to read emails with accented letters will not be allowed to show this incoming mail if you did not use an "accredited" utility to write it.

The TPM finally will help to fight spam and evil hackers too, it is said. Email and just any packages arriving from the Internet will be checked against their "legitimate", unique identification signature of the originating machine.

And yes, so-called "older" PCs will not work so well with it, you have to buy new.[5] While some newer peripherals like TFT-monitors and DVD burners will only work with "Trusted Computing" activated, or not at all.[6]

What DRM implies:

A short recourse to basics again - the PC is fundamentally a stand-alone production unit (with the additional benefits it can draw from the Net.) Certainly, there was the precursor of the "dumb terminal", connected to the "mainframe" - but remember that for years, the primary means of exchange between units, between PCs was some media: at first the exchange of tape, then of various diskette formats, but in any case physical media exchange between separate, stand-alone units. The marriage with telecommuni-

cation, let alone networking, was not at all perceived in the beginning.

On the other hand, the origins of the Internet clearly stem from the other end of the spectre, i.e. interconnected mainframes; and the affinity of large telecom switchboards with the scaled-up switchboard architecture of computer "mainframes" was almost a matter of nature. There, input/output functionality and "human interfaces" were considered as marginally important. (Just remember those telex tapes and punched cards which served for input, and those monsters of IBM printing machines with the jumping bars of a full length of alphabetic letters which hammered on the paper from endless zigzag folded forms.)

This dialectic relationship between the two lines of development for today's networking should be kept in mind -- and, I think, should be maintained, seen the present push towards re-centralisation on a much more abstract level:

The individual, stand-alone and by now even mobile unit has been tweaked and seduced to become the vehicle for penetration of a pre-determined and lopsided type of communication, in an ever stronger push for centralisation of networking - imagine he hyped web "portals" as the dumb terminals of the mainframes of the cyberlords.

At the same time, the capability of the stand-alone unit as a production tool all by itself, so to say, of being its own mainframe, is the very means of resistance against that centralised control.

Anyway, in the course of events the traditional means of producing "communication" - and even more so, of traditional "mass communication" by broadcast, printed newspapers and the like - have been profoundly changed: Physical reproduction of "content" (and, by the way, its share in the costs) becomes completely de-centralised - "content" has not only to be re-produced but indeed it is re-constituted at the receiving site.

Hence, there is the demand, from the originator, for "control" over form and content of the original "product". This is doubtlessly a legitimate argument, from the point of view of a creator, but it has far reaching implications given the economic realities in the given conditions of networking -- it reinforces the push towards a "presentation" culture in communication(s), and demands total control over the reconstitution and (re-)presentation.

The intervening condition is that anything produced must be of economical value - or profit -, that is, at a price that has to be realised by successfully selling it. The inning, or collection, of the price is the salient point here - there must be a tight control that the buyer/taker doesn't run with the product without paying.

The only way to exercise this control is through the form, not through the "content": The idea of the letter "a" is too abstract, and too variable, to ever get a grip upon. Thus its holdfast form, the copyrighted "format" of its presentation is the hook with which

to catch that profit.

This is the "qualitative" angle to a tendentially totalitarian control of "formatting".

[Qualification: it's not the author/originator who is "totalitarian"; that one is simply "unique" in the choice of expression, and this is not a matter of pluralist decision or not. The element of total control comes with the procedure of (net-)distribution and (digital) re-construction of "copies".]

And then there is the quantitative angle to it:

A quick recourse again to technical history: the stand-alone, "individual" nature of the PC was the real "revolutionary" step in that whole computing history.

"Revolutionary" in that it created the material means for "anarchy" - before that, the treatment of masses of information was the privilege of administrative hierarchies, the army of bureaucrats of the powers that be (in business as well as in government, and likewise in the social hierarchy of academia); now it came at the reach of just "any" citizen.

[Maybe we can have it about the initial prices and the process of "innovation"[7] at another occasion - in this context here, it may be sufficient to point to the difference between real and false technical innovations: Criteria for false ones would be to restrict, instead of to enlarge, the use value of things. A typical example for false innovation would be the new version of M$ Void which cannot at all be accessed by the previous one; while a new car would certainly offer advantages in getting from A to B but would not rule out the use of a bicycle for the same purpose.]

So this created another problem for the "control" of whatever use of programs and data: the sheer number of individual units/users to control.

The successful way is not necessarily through a basic Operational System (OS) alone but through the installation of a yet more abstract set of "rules" (or "layers" or "protocols") which have to be served by OSs as well as by all application programs; so programmers as well as hardware manufacturers would do best to comply with these and support them.

That's exactly what M$-"Longhorn" does - but so does even Linux: work is in progress which will warrant the compliance of the very Linux "kernel" with the prescribed checks through using the TPM control chip. Thus, even the major "alternative" platform will precisely reinforce the scope of use of restrictive "rights".

Already the list of devices with "hardwired" copyright compliance check is impressive. To name but a few:

DVD drives;
FireWire encryption/decoding ("Digital Transmission Content Protection");
USB memory sticks ("Magic Gateway");

Serial ATA HD interface;
Audio SPDIF interface;
TFT displays (DVI interface);
TV analogue interface (even blocks copies from VHS video);
USB - for exchange media of all sorts (already implemented in:)
DVD video recorders.[8]

Along a quantitative dimension again, the expansion of Internet use created another "challenge" for centralised controls. The new quality of the Net (and the Web) was its very constituency of "peer-to-peer" units connected.

This is all too easily forgotten in the noisy row about the Napsters and the like.

Almost as eagerly _made_ forgotten is the role of the EU, and specifically the EU Commission, in privatising the WEB: The WWW development was done, and was in its entirety publicly financed through the European research institution CERN; and CERN is not even a common instance restricted to EU members. Nevertheless, it was the EU Commission - and specifically, its German member Bangemann - which pushed end steered for establishing a private "industry" consortium and thus enclosed the W3C from the public commons.

And even if the W3C tries to do its best to maintain WWW standards public, it cannot by structure and construction avoid inroads of its most important corporate members, allowing most importantly the expansion of the use of proprietary formats. Nor could it avoid the very structural change of the peer-to-peer NET of exchange to a commercially and server-push dominated "presentation" WEB; where exchange and "interactivity" has degenerated into mouse clicks.

Tim Berners-Lee, co-inventor of the WWW and still the W3C director, has some quite bitter words about this.[9]

Yet there are still some strong remains of the "public" - and P2P equality - nature of the WEB, with the TCP/IP (protocol), the command languages HTTP and CGI, and the mark-up language HTML as the public standard for page presentation.

One can share the widely hold scepticism against the ITU, the international standards setting body, and specifically the costs and exclusivity of that inter-governmental club. [Steve Cisler raised some very pertinent points in that respect.] However, the maintaining of HTTP/CGI as the crucial standard for interoperability on the Net is doubtlessly a merit of that bureaucracy.

I am a little less frightened than Lawrence Lessig about the hardware menace of the TPM chip; its use and some of the implications of its use can be avoided, perhaps, for so long as the basic public standards for interoperability are left in force.

But I am much more frightened by the eager stupidity with which all sorts of "public"

actors and instances embrace proprietary formatting and thus already have created the precondition for broadest DRM use.

Just any visit at the websites of public instances shows the symptoms of the condition - .PDFs, .DOCs, FLASHes all over the place, like the barbed wires of the privatised coastline at the Cote d'Azur. (And not to speak of the plethora of proprietary pixel and sound formats.)

Another short extempore here: There is indeed a public, ISO standard named "PDF/X", which came about in 2001 and 2002 after endless squabbles - Adobe is member of the pertinent standards committee but reportedly has been one major reason why standardisation is far behind of the present practices in the printing business; there, the recent version of the Adobe Acrobat tools is the business condition, and a number of its features are incompatible with the ISO standard for PDF.

And do not think that Adobe's so-called "free"[10] "Acrobat Reader" could access all the features of the original Adobe PDF file format. Sure, Adobe does publish most of the file specification (which in itself is apparently good business: you would not get the more than 1000 pages for nothing.) But no one can and does restrict the firm to use own, undocumented properties (sic), or to change them ad lib.[11]

No great wonder that none of the other available tools to treat PDF files can indeed offer the full feature set.

The problem is not confined to the files and their format as such, but extends to the "embedded" components in particular, especially the fonts to use. Note that seemingly standards conformant things, like HTML-formatted e-mail attachments, are soaked with proprietary elements, perfectly ready to be subjected to "Digital Restricted Management".

Some examples [12] taken from e-mails of the organisers of this very conference can show that even attentive people can all too easily fall victim to the built-in traps. In these three seemingly harmless, standards compliant "attachments", each time at least one, in case of the Apple-Mail produced, Microsoft-proprietary, "rich text format" a fully five proprietary typesets are required for reproduction of the originals. All these are to be subject to "legality" checks by DRM; and surely, to the license payment asked for their use.

In addition, even these much cut-down quotes give some hint to the enormous waste involved with this sort of "ICT" - the colour prescription in the last of the three is visibly telling.

One side effect, but one of some weight and of relevance here, is the bloated volume of proprietary formats and their role in the redistribution of profit from the built-in wasteful abuse of resources into the pockets of "Northern" cyberlords in the context of globalised North-South (tele)communication: I think it can be shown that this alone

by far surpasses the most "optimistic" marks of "official development aid" set for the so-called "Millennium Development Goals".

I cannot but mention my sad impression about the role of NGDOs, of "non-governmental development organisations", in this context.

Despite of their expertise in the fields they work in, despite of many of their well reflected and often thoroughly critical positions towards "Northern" exploitation of the "South", almost all their daily practice in their core activity - which is "communication" -, reproduces some of the worst forms of rent extraction for the cyberlords.

Just one example from a Brussels based network active with solidarity work and support for Sahel peasant farmers: Their own, excellent equipment was paid for with grants from the EU and the Belgian government - and their correspondent "partner" NGOs in Timbuktu and other places of the Sahel region have been forced ever since to lay out three quarters of their budget, or even more, for investment, maintenance and upgrading of the Apple made communication gear, just in order to share the wisdom of the Brussels experts.

Or I could invite you to have a look at the website of the umbrella organisation of all the EU's Development NGOs, national "platforms" and transnational "networks" all combined, <http://www.concordeurope.org>: Just to dial-in to their homepage from a hotel in Dar-es-Salaam or Abidjan could well produce a bill of 10 to 30 dollars or euros. And you wouldn't be anywhere yet without the very latest versions of proprietary software from Adobe and Microsoft on your laptop: because you would have no chance to "share" the quite excellent output presentation of Europe's development promotion elite.

Now you would go from your hotel - and I mean: go, _walk_, because there's no transport and you just spent the money for a taxi on the telco bill -, you go thus to your friends around the corner some long kilometres away at the university campus. Where the (luckily donated) Pentium-I with its black-and-white monitor sits dead in the corner of the institute, as the electricity had just gone again, and its robust old needle printer would have needed a new ribbon anyway. There you can explain to them the importance of a four-colour printout, including high-resolution photo illustrations, of the latest policy statement from the EU's most prestigious lobby of their development interests.

But back to realities here in the "North".

With the field well prepared, the critical mass has been achieved to close the trap: With "Digital Rights Management" installed on the majority of computers, each and every use of a "proprietary value" can be checked and tracked.

Arguably it will be just a matter of time and of the "securisation" of NET traffic - es-

pecially for micro payments - that this check-up of the "legality" of used copyrighted material (for which there is the license rent to be paid already for its instalment) will be extended to a pay-per-use mode, and with this will increase enormously the rent cashed in by the cyberlords.

The "security" issue is indeed the final argument used to justify "trusted" net-connected computing. The TCG reasons quite formally that their chip would allow the unambiguous identification of the "trusted" machine.

And M$'s "Longhorn", for its part, claims unambiguous identification of a "legitimate" user to that machine; besides of passwords for "secure start-up" of a Longhorn mad cow, M$ envisages number of additional identity checks, biometrical gadgets like finger prints or iris or voice recognition, as well as "smart card" readers.

The weirdness of this reasoning is that a "secure" network does and did exist long before the internet became a public space - the teller machines, or cash automats, rightly are connected through perfectly separately wired networks, and there's no need whatsoever to double this already existing infrastructure.

But the transposition of this "secured" concept of "trusted"[13] machines and their network into the public realm of the Internet sure has other, undeclared reasons. The implementation of DRM is definitely one of them, and the most important.

But I think there's more to it.

By attacking the very "nature" of the "public" net, and by attempting its enclosure, it even aims at the vulnerable heel of Free/Open Software, namely, its very dependence on this (Inter)NET: while FOSS development had depended on the Net as an "alternative" means of distribution, it has neglected the development of an alternative "plan B" for the case of the Net being hijacked by its adversary.[14]

So what is needed ?

To my dismay, I did not see much of an approach in the first phase of the WSIS to safeguard the very basics of standards for free, non-proprietary interoperability of the Net. Great declarations for "freedom of expression", and for "fundamental rights" of such, seem quite useless if they are subject to pre-paid licence fees for the use of the copyrighted file formats and typesets these declarations are posted and printed with.

Secondly, there seems no alternative to the ITU as an international regulatory body - and you may like or dislike its bureaucracy, not to speak of its subversion by the business lobby[15] -, if you want to pass binding, usable safeguards for least and public standards.

The few rules governing (sic) the basic technical functionality of the Net had been precisely that.

Thirdly, there is definitely a point to demand more "public" participation - i.e., beyond state bureaucrats and business-lobby - in ITU's procedures. AND for more opening of access to information of its work; just check how much of its (limited) "open" publication is subject to use of private proprietary formats.

One sub-theme of the formatting issue is completely neglected in much of the discussion, I think. It is a real "green" issue, and at the same time one of technical rationality: the aspect of wasteful use of resources built-in with (proprietary) formatting. I consider this very much an economic issue too - a good example was from statistics of the BBC, where they observed a rather linear increase in numbers of mails (linear in relation to people using PC/email) and an incredibly steep, "exponential" increase of volume (i.e. bits transported).

This goes entirely on the account of the pushing for lopsided, "presentational" software - which in itself changes the peer-to-peer "nature" of net communication - and which reinforces the business model of forced obsolescence.

I have mused about this from early on - e.g. when writing about the "browser war" almost a decade ago - in the context of forced obsolescence and false innovation; and it boils down to: (a.) intensified rent transfers, (b.) in fact kind of an auto-limiting factor for the expansion of ICT use - in that it perpetuates the threshold of access, artificially reduces "use value" [in comparison to market value, "prices"] of both hardware and software; and thus, turns the whole "technology" ever more intensively into a mechanism of rent-inning and creaming-off of surplus value.

A functionality thus which can be used only by the "elites", because of the maintaining of the high access threshold, and of the artificial destruction of more permanent use value. This makes _this_, presently imposed, _proprietary_ ICT fundamentally inappropriate for "development".

Or translated to sloganism: _This_ ICT digs the digital divide, and _this_ ICT would never "bridge" it.

[*] Roberto Verzola: Towards a Political Economy of Information Studies on the Information Economy. 2.nd ed.(2004) Quezon City: Foundation for Nationalist Studies, Inc. ISBN 971-8741-24-0

Endnotes

[1] The only official data at OECD level are from the end of the '90ies. I found a mentioning of 11 % of GNI in a more recent article, which compared to the 18 % for all "transport" - already somewhat nearer to reality (but there was no useful definition either). With present macroeconomical counting methods, it seems hopeless to arrive at a realistic assessment of the "ICT content in revenue" from all the other branches: equipment and management of steering systems with airplane construction, of airline companies or travel agencies would be counted anywhere else but under "ICT", for instance. Not to speak of the arms industry and their military clients; of banks, insurance companies, and state services of all sorts - you name it.

[2] I have no quantitative assessment but those publishers I could ask were unanimous in that since Adobe has eaten up Linotype and Agfa Monotype, there is practically no independent alternative to the two corporations, Microsoft or Adobe. One "insider" of this highly secretive market told me that these two firms have a near 100-% control of the commercial market which in itself, would cover more than four fifth of total typeset use. I have no means to check this.

Certainly there are quite a number of different founts available but their appropriateness for broad use seems rather limited, and indeed you see a somewhat unfamiliar type at best in fine arts catalogues or advertising. In any case, almost all of the marginally used founts are copyrighted too.

There had been extremely few new founts developed over the last decades. One of the difficulties seems to be that the copyrighted and "classical" typesets, like the Times, Garamond or Helvetica families apparently cover quite well the centre field of printing which is easy to read; which in itself is rather astonishing, seen the wide range of variation in which we are able to discern the abstract symbol of a letter sign (most evidently with handwriting.) And then it seems rather difficult to develop a new fount without getting too near to any of those rights-protected typesets - some well-known legal cases dragged on over decades and definitively caused a chilling effect in the trade.

[3] Though there is the marvellous example of the African "griot" tradition for transmission of knowledge from person to person over centuries: it took an enormous (and unfinished) academic effort to come to the same results and precision for the identification of historic events of some 13- to 15-hundred years ago. Or another "traditional" transmission method of "demonstration" which Basil Davidson has documented with projecting live images of cult dances over ancient drawings - but here again, the social

texture dissolves which carried the cultural "content", and the movements are on the way to oblivion.

[4] "'There are something like 100,000 patents on today's CPUs,' said [Intel-spokesman Chuck] Malloy". WIRED 17.12.03

[5] "Microsoft pushes 512MB RAM, "modern CPU" for Longhorn Channel - Vole steers folk towards Longhorn Ready programme By INQUIRER staff: Thursday 28 April 2005, 11:12 [...] It looks as though Microsoft wants the PC vendors to brand their machines, starting from the end of this year, with a Longhorn Ready PC logo, and the Vole is eager that people don't postpone buying a machine until the release of Longhorn. Microsoft states that "computer purchases in the near term will retain their value after the availability of Longhorn protecting investments". [...] Microsoft claims in the document that "Longhorn will run fine" on 256MB systems but believes that "512MB or more of RAM provides really good multitasking performance". [...] And what is a "modern CPU"? The Vole says that the "majority of current CPUs will be fine and the new multicore CPUs promise better multitasking performance". [...]

[6] Complaints are accumulating already from to-day's PC users that they cannot access their own audiovisual production on their own machines; indeed the presently sold DVD and VCD players do have that primitive "legacy" rights "protection" incorporated, which makes for lots of problems with operability, both with legally bought CDs/ DVDs as with own properly burned disks.

[7] Because of the peculiar relation between meaning ("content") and form ("format"), "innovation" in the field of "information technology" gets another quality: There is a "hard link" between these two which does not exist in other techniques (or "technologies") of, say, mobility - for instance, the introduction of a new model of a car does not exclude the use of an earlier model, or another make, to travel from A to B; it may diminish the relative but not the absolute use value of the older model. In ICT, changes of form or "format [version]" can absolutely exclude use value of "incompatible" predecessors for a same function.

This has intrinsic cross-links with the very "nature" of the patents and proprietarisation issue. Only the ideological construct of a private "right" for appropriation of something given by nature - i.e., discoveries (in contrast to inventions) - allows to establish the "legality" of installing the waylay practice of the cyberlords. Roberto Verzola's analysis ("Towards a Political Economy of Information" ISBN 971-8741-24-0, Quezon City: Founda-

tion for Nationalist Studies, 2: 2004) for the first time clearly seized this process as a key element for understanding the role of seemingly just "technological" developments for an advanced theory of society.

[8] German computer magazine "C'T", # 15/02 (17.5.2002).

[9] The Web's co-inventor himself, Tim Berners-Lee, now President of the World Wide Web Consortium W3C, reminds us of the basic motivation from the beginnings - he has publicly answered to many "frequently asked questions" to him: http://www.inti.be/hammer/tbleefaq.htm

[10] As "free" as the proverbial "free lunch" or Rockefeller's historical lamps for China. Firstly, running the Adobe "Reader" depends on proprietary and commercial OS and hardware conditionality; secondly, for some key features like printing-out, only the full version will do. And contrary to the ISO definition, Adobe-formatted files can be locked completely for this purpose.

[11] I was told by a British colleague that perfectly "public" material of the British governments of the earlier 90's by now is not accessible any more, since they all have been produced and stored in a PDF format which Adobe has long since abandoned. The files were still there, he was told, but there was no means to access and print them any more.

[12] Some examples, equal and with variations: The Arial, Garamond, Times New Roman, Book Antiqua, Helvetica or Lucida typesets appearing here and there are all copyrighted by Microsoft companies.

[13] It needs to be repeated over and over again, where this term of "trust" comes from: from the very military, and from its inverted logic of military speak - "trusted" is some (subordinate) individual there only if there is absolutely nothing s/he could hide: That is, there's nothing to be "trusted" in, with that subject, as literally everything, including most individual behaviour and motivation, is under external/superior control. This is in fact a rather "science"-fictious concept of humans as robots; contrary to the never ending SF-theme of robots, or "androids" gaining unpredictable, i.e. "human", traits.

[14] While FOSS in general, and "(GNU/Linux OS-) distributions" had set out to be available for precisely the non-"bleeding edge" hardware platforms, there's hardly any access left without using quite recent hardware. Already CD "distros" get rare, most are

on DVDs now, and I know of none that use diskettes for a first installation. Thus, while GNU-Linux started off with the stated purpose to offer an alternative to the business model of forced obsolescence, the hallmark of the Microsoft & Co. practice of the "distros" duly perpetuates the latter.

[15] Indeed, quite some of the official ITU delegations are simply composed of national lobbies, e.g., state telco or equipment firm representatives being part of the government delegation - but not public interest or civil society groups.

What's the Matter with ICTs

Steve Cisler

ICT has become a commodity in the developed world, but the course of international development and its attendant failures appears to have locked more recent computer technology projects into a similar wasteful pattern. The problems of information and communication technology intiatives are problematic because of the simplistic framing of the issues, the complexity of the networks in environments with immature technological systems, the unreasonablde demands for sustainability, and the genesis of many projects outside the human environments most affected by them.

Development Since 1945

'Disappointment is the most widely shared experience in the field of development'

-Gilbert Rist, History of Development

To think about the problems of using networks of computers and other related devices as a way of developing a neighborhood, a town, country, or whole region, it will help to look at a few of the historical theories and practices of the development industry which came to life after the Second World War. In the wake of destruction in Europe initiatives arose out of a concern for security with the Marshal Plan in Europe and Japan and then the Point Four program in what came to be called underdeveloped and later developing countries. It became a part of the greater Cold War strategy for both the West and the Soviet Bloc. Gilbert Rist traces the history and philosophy of development and its critics in the 1997

work History of Development. Rist sees development akin to a modern religion.

> 'Promises are tirelessly repeated and experiments constantly reproduced. So why is it that each failure leads to another reprieve? Just as Christians know all about the numerous crimes committed in the name of their faith, yet continue to uphold it, so do the 'development' experts increasingly recognize their mistakes without questioning their reasons for soldiering on.'
>
> *- Rist, p. 23*

and...

> 'Development (as a programme for collective happiness) no longer exists except as virtual reality, as a synthetic image in the full-length film of globalization. It is like a dead star whose light can still be seen, even though it went out forever long ago.'
>
> *- Rist, p. 230*

The ICT Development Industry

From provincial capitals in war-torn Uganda to school districts in Silicon Valley and from individual families in Jordan to governments such as Ethiopia and Mexico, people and organizations continue to make huge investments in money, time, and other resources to acquire computers, software, and network connections. This aggregation of equipment, code, and connections is known in the international development industry as information and communication technologies or ICT. Computer technology in the early mainframe days was so expensive that even some manufacturers thought the demand would be limited to a handful of customers and as many machines. The military was frequently the early adopter (and the institution financing the development), then came large business, and other government agencies such as the census bureau. As smaller but still expensive minicomputers came on the market, other customers found uses for them as well as

the money to buy or lease them. Among some computer experts there was the desire to introduce this technology to people who could not afford it. The National Urban League opened a computer terminal space in a Los Angeles community center following the 1965 Watts riots, in the hopes of introducing new skills to youth struggling in the ghetto. Bob Albrecht co-founded the Peoples Computer Company which published techno-populist tracts. Albrecht traded programming skills with Digital Equipment Corporation for a mini-computer with terminals installed in a few public places in what became known as Silicon Valley. Berkeley Community Memory, a technology collective, offered a free form access to a public database in centers around this counterculture town. (Freiberger 1984) The 1980's saw the spread of telecenters in rural parts of Scandinavia, and this has served as a model for the centers that have multiplied by the thousand in the rest of the world. ICT is now embedded in projects involving every sort of human activity including human rights, agriculture, microbanking, education, health, and government. However, it is being deployed and adopted at wildly different rates, due to waxing and waning trends among donors and because of varying rates of adoption.

Rates of Adoption and the Digital Divide

When Everett Rogers (1995) began working in the 1940's with farmers and agricultural extension agents who were promoting the use of a certain hybrid corn, he observed the different adoption rates among the farmers. Out of these observations grew the study of technology diffusion through which groups were characterized by their attitudes toward innovation. Different sectors of society adopted parts of this ICT domain in many variations: small business, education, law enforcement, libraries, social activists, medicine, organized criminals, religious groups, as well as the general population in their dual roles as consumers and citizens. The axes of time, cost, perceived need, gender, education, culture, organizational structure and geography all determined acquisition and adoption rates for ICT. Within each group was a range of attitudes labeled by Rogers as innovators, early adopters, early majority, late majority, and laggards. The last category has a pejorative connotation but as Rogers explains, this group has rational reasons for not adopting a technology even though they are more traditional, isolated, and many times in an economic class that exercises caution about expenditures whether it's for seed, medicine, or computer access.

'Politicians are the same all over. They promise to build bridges even when there are no rivers.'

- Nikita Khrushchev

In the 1990's these five categories were reduced to two in order to frame it as a simple problem. A newspaper editor at The New York Times coined the phrase, digital divide, to show the cognitive distance between a husband using computers all the time and the wife who did not. The binary phrase was adopted by the Department of Commerce National Telecommunications and Information Administration to express a gulf they said existed between those who used this technology and those who did not (for many reasons). Public statements, grant applications, and calls to action were buzzword-compliant if they included the term digital divide. The phrase found its way in development industry literature even as its domestic use was receding at the end of the Clinton administration in the U.S.

The deployment and use of technology has plateaued in different environments for different reasons. Some, like water and steam power are replaced by newer ones such as electricity. Pool found that the economic consequences of the Great Depression reduced the numbers of rural U.S. homes with telephones.The number was higher in 1920 than in 1940, partly due to the flight from farms and the adoption of the radio. Probably the most extreme example of a gap was the military technology buildup by the U.S. under Reagan which the Soviet Union could not afford to match, thus contributing to the demise of the so-called Second World. Info-war technology (sensors, surveillance, robotics, hardened networks) has not plateaued but the ability or willingness of NATO members to match the U.S. expenditure is unlikely. This is repeated in less violent but no less contentious business environments. Wal*Mart the world's largest retailer is acknowledged to have harnessed (and pioneered) many kinds of ICT at all points in the supply chain from consumer to relations with suppliers, the largest group of which will spend over $2 billion to implement the use of RFID technology. RFIDs are being used in more than supply chains. Libraries have adopted them as a substitute for bar codes. RFIDs are embedded in casino chips to track the gambling habits of high rollers, and tracking of currency flows is more efficient through the RFIDs in 500 Euro notes. Is this inexorable drive to apply computer technology to every phase of business and life necessary? Perhaps for the manufacturers if not for their enterprise customers.

Does *IT* Matter?

In 2003 Nicholas Carr published a very controversial article entitled 'IT doesn't matter' in which he argued that for enterprises information technology (IT) had become a commodity that did not give companies a competitive advantage any more. Capital expenditures had risen from 5% in 1965 to almost 50% by 2000. He claimed that past technologies from the steam engine to the railroad, telephone, and telegraph followed the same pattern: the scarcity of the technology offered advantages to forwardlooking companies. After the build-out and over-investment, the advantage was lost as the technologies became commodities. Carr says we have overspent and redundant infrastructure in many places. This commoditization of technology is one reason why companies try to hold on to proprietary innovations because they offer a long-term advantage whether it's a drug, popular book, or industrial technique. Carr does admit that at the country level the commoditization and hoped-for ubiquity of infrastructure will benefit industry. Not having it at the national level can be harmful.

International development rhetoric makes this point repeatedly in advocating state-supported or market-driven network projects. The early grand efforts originated in more developed urban areas in Europe, Asia, and North America. Thus the emphasis on naming regional technology initiatives from Singapore's Intelligent Island in the 1980's to a rash of 'smarts': smart island, smart valley, smart communities, smart Toronto, and even Smart Alabama. Variations included the Washington, D.C. area Potomac Knowledge Gateway and Kuala Lumpur's Multimedia Corridor. Even after the Internet bubble burst Silicon Valley, which lost more than 200,000 hightech jobs since 2001, was seen as a Mecca for urban and national development officers from as far away as Lithuania (the last to visit) who made the Hadj to discover the ingredients needed to carve out an oasis of innovation, wealth, and connectivity for their own local space-of-flows, to use Castells' term.

This activity and excitement was not lost on the groups of program officers and politicians controlling foreign aid for charitable foundations, bilateral aid groups, and international organizations like the ITU, World Bank, the regional banks, and United Nations. The Association for Progressive Communications was formed in 1990 and, being ahead of this later curve, linked up progressive ISPs in many countries. The Internet Society began in 1993 to host annual network training for students from developing countries, many of which were not yet connected to the Internet except through a dialup line, an electronic bulletin board system, or a UUCP connection. Hundreds of newly trained students and administrators returned home in the 90's and took the knowledge to make direct network connections to the Net (with Bhutan being one of the last in 1999).

In 1996 Rockefeller Foundation convened a meeting where a number of the large fam-

ily foundations invited technical experts who advocated the funneling of donations into technology projects for the arts, education, poverty alleviation, medicine, and community projects. At that time the Open Society Institute had the most experience, and Jonathan Peizer bridged the two groups of funders and ICT advocates. W. K. Kellogg Foundation followed in terms of integrating technology components in some of its sector plans. There were other larger events to catalyze interest and awareness of the developments where ICT was being promoted and deployed in both pure technology projects as well as others where it was a means to reach some other development goal. The World Bank and other agencies sponsored Global Knowledge for Development, a world forum in 1997 (USAID boycotted this event and even prevented grantees from using money to attend it) on ICT. President Museveni, the darling of the World Bank's President Wolfensohn, spoke, as did chief economic advisor Joseph Stiglitz, and different agencies showcased their poster children projects from Poland, ITU telecenters, and other grass roots and astro-turf efforts.

While there had been a number of technology projects (automation in offices and the use of satellite television services) in developing countries before that, the rush to fund ICT projects was on, and it coincided with the explosion of consumer interest in rich countries in the Internet from 1994 on. Most of the projects concentrated on access, training, infrastructure expansion, and governance, with a goal of establishing independent national regulatory agencies. Access included several of the following components: equipment, software, appropriate content, support, and connectivity.

Evaluation and Failures

While a program officer or local manager could always extract an inspiring story from these pilot projects, evaluations, if they existed at all, benefitted the donors and investors more than the target audience. Problems were more frequently raised in private email or in down time during the myriad conferences on ICT and development that have been going on for more than a decade. Consultants kept their criticisms to informal conversations.

However, Richard Heeks (2002, 2003) has a large body of papers about the taxonomies of failure in developing country ICT projects. According to Heeks, a project is a total failure if it never gets off the ground, a partial failure if major goals are not met or there are undesirable outcomes. One that plagues many projects is the short life cycle which is usually defined as a problem of sustainability. A successful project meets expectations of stakeholders and continues on.

In other project literature and PowerPoint slides, problems are called 'challenges' or 'issues' or 'lessons learned.' The word 'failure' is rarely used to describe the outcome of an aggregation of problems during a project. Projects do not stop; instead they are in "hiatus." The definition of failure as well as the consequences of it vary from one culture to another. One of my own mistakes in making technology grants to libraries and community networks while working at Apple computer was to think that the support I had for taking risks was present in the organizations and locales where the projects were initiated. In Silicon Valley there was a forgiving attitude by my supervisor, within the company research group, the company as a whole, and of course within Silicon Valley. Failure was accepted, even expected. In American Indian reservations or a research library or a small town it was quite different. This affects actors' willingness to take risks in a new project.

Problem One: Framing the issue

Framing the issue as a gap or divide between developed countries and developing countries and stating the solution is to close the gap by 'leapfrogging' or 'catching up' using ICT. This comparison has been going on since the declaration in 1974 about the New International Economic Order (NIEO):

> '...the benefits of tech. progress are not shared equally by all members of the **international community. ...the** gap between the developed and the **developing countries** continues to widen...'
>
> *-Rist 1997*

If anything, gaps are increasing. At the national level Rist notes country disparity was about 1:2 in 1700, 1:5 in 1900, 1:15 in 1960 and 1:45 in 1980. Easterly (2001) has slightly different statistics. Countries will rarely catch up with another. Exceptions are Korea and Malaysia which seem to be closing the gap and Zimbabwe where the gap is widening. For more discussion see Wright(2000). If we narrow the area of discussion to ICT consider that most of the development of both hardware and software is outside the developing world. Donald (1999) notes that "less than one percent of global research and development is currently spent on technological innovations for poor countries." All the major PC operating systems, even Linux, are based on the West Coast of the United States. While there are oases of manufacturing in some countries and software development in even more places, most of the activity is not taking place in developing countries, open

source projects notwithstanding. The corporations developing electronics, computers, and telecommunications exist to benefit the shareholders or the principals. There is less competition in smaller markets, different trade regulations and consequently the prices are usually higher in Lusaka, Quito, and Vientiane than in New York, Berlin, or Tokyo. The databases, large research libraries, and sources of codified knowledge are located in the developed countries, and access to them is more problematic as distance grows. The Open Society Institute's Electronic Information For Libraries foundation is trying to remedy this access issue. While corporate responsibility may manifest itself in company grants, public-private partnerships and community affairs projects, the major activities and driving forces of the companies ideally result in profit. Thus the recent interest in 'emerging markets' and 'selling to the bottom of the pyramid.'

Framing the problem as a North-South dichotomy ignores the disparities within cultures, towns, and even households throughout the world. There are great disparities between sectors using ICT within each country and in each town. Large enterprises have more resources to invest in ICT as well speculation about the future trajectory of ICT. The forecasting services available to the military and business firms are myriad. Besides in-house strategic planning groups they includes the Economist Intelligence Unit, MIT Media Lab, divisions of large accounting and consulting firms, and independent entrepreneurs and experts scrying the future for hefty fees. The British government has recently engaged an American forecasting firm to do ten, twenty, and fifty year forecasts for ICT. This sort of expenditure is almost nonexistent for a social agency, small NGO, or village organizing committee, nor do they have access to the forecasts.

Problem Two: unequal technological systems as a measure of underdevelopment. Historian Thomas Hughes (1989) writes such systems:

> 'In popular accounts of technology, inventions of the late nineteenth century, such as the incandescent light, the radio, the airplane, and the gasoline-dirven automobile, occupy center stage, but these inventions were embedded within technological systems. Such systems involve far more than the so-called hardware, devices, machines and processes, and the transportation, communication, and information networks that interconnect them. Such systems consist also of people and organization. An electric light-and-power system, for instance, may involve

> generators, motors, transmission lines, utility companies, manufacturing enterprises, and banks. Even a regulatory body may be co-opted into the system. During the era of technological enthusiasm, the characteristic endeavor was inventing, developing, and organizing large technological systems--production, communication, and military.'

When technological systems are not mature, there is a greater chance of failure. Yet, this is lost on planners who introduce some components of a system and find later that it does not work because another part of the system is not functioning or is totally missing.

Problem Three:
Funders and implementers underestimate the complexity of the projects. This is related to the previous problem. As Heeks (2002) points out ICT designs represent the world view of the stakeholders who plan the project rather than the target audience or participants. A cabina publica in Lima, Peru, may not work in an Amazonian village. The Wi-Fi hot spot in San Francisco may not even be permitted in Oaxaca. ICT in development projects is frequently introduced in places without a mature technological system. The sensible choices made in hardware, software, staff, training, and even community support are trumped by other parts that are flawed or nonexistent. That these elements are interdependent is ignored by some technocrat planners and is not even on the radar of many community organizers who believe that access to a computer, printer, and modem on a phone line will bring about radical changes in daily life. An activist may return from a European workshop on wireless networks only to discover that regulations prevent off-the-shelf hardware being used in her country.

Problem Three: Financial costs
ICT projects in developing countries are usually more expensive than those in places with developed technological systems. The hardware must be imported at a higher cost, the software (unless it is pirated or open source) will be more costly as will support and consulting fees, especially if the funders rely on outside experts. If a local entrepreneur is undertaking the project his or her cost of money in the form of a loan is much higher than a counterpart in the U.S. Local labor and rental space will usually be less expensive.

In Uganda the Ministry of Education and USAID set up pilot computer labs with Internet connections in eight primary training colleges around the country, including two in areas

plagued by the Lords Resistance Army.

Connectivity is only through expensive satellite links and not fiber. Electricity is very unreliable and expensive. Most schools have backup generators. Uganda is landlocked and fuel must be trucked in through Kenya. Electrical fees to power the large monitors and PCs, and cool the equipment down with air conditioners proved to be even more expensive than the Internet connection or the salary for a trainer/system administrator, and this had not been anticipated by donors, consultants, or school directors. (Cisler 2003). Few planners try to calculate the total cost of ownership (TCO) of an ICT project, because this process is complex and difficult and may, in itself, require yet another consultant to make rational choices. (Scrimshaw 2002).

Problem Four: Sustainability.

Many of us in the development industry equate sustainability with financial stability, even if we give lip service to community, political, and technological sustainability. Assuming that the project is implemented, how can those in charge keep it going after the seed funds are used up? The problem begins long before this point. The rules of the donor/lender agency usually require the applicant to explain how they will ensure the sustainability of a proposal. It is assumed that creative planning can find sources of money in places where little exists, or that project leaders can acquire skills to mine other donors or investors for support. Some recipients have never had to write a business plan, nor was their survival dependent on having a plan. What is evident is that many foundations and aid agencies have never had to think about their own sustainability as they require it of applicants. For some this requirement is part of what venture capitalists call 'the exit strategy.' How do you walk away from a project without damage to your reputation? How can you declare victory and move on? Many planners outside of the commercial sector do not consider that the vast number of new businesses in a strong economy like the United States fail within a few years, yet they have expectations that a network of technology centers in Argentina or a ministry automation project in Amman will have a sustainable future. The Gates Foundation has invested more than $250 million in gifts of public access computers mainly in American libraries and lesser amounts outside of North America. Their own study shows that twenty-eight percent of the libraries in the first ten states do not have money to upgrade software and hardware. (Gordon 2004) The other irony is that demands for sustainability in local ICT projects come from government ministries that rely for their their own budgets on European and American donors. Uganda is a prime example.

Problem Five: Genesis of ICT Projects

For all the talk about participation, many ICT projects do not originate with the target populations, whether they are a village without connectivity or a clerical staff in a ministry about to automate some complex process. Many projects begin with technology advocates sketching out a way of deploying advanced ICT in situations where other options are not considered. After President Clinton visited Africa in 1998, $500 million was pledged for infrastructure projects. (Entebbe Summit for peace and prosperity. March 1998 Presidential documents) USAID officials earmarked funds for African education projects. The Connect-ed project grew out of discussions among staff from USAID subcontractors and U.S. Embassy officials in Kampala. Contrast this with another project in Uganda, the Reflect ICT project in western Uganda where through village consultation and the formation of Reflect groups, information needs were expressed and when methods of access were ranked, radio and oral transmission held the first and second position while the Internet and email were in 11th and 13th slots. Beardon (2003). Kasente (2002)undertakes a fine-grained study of how men and women view poverty very differently in both poor and very poor Ugandan villages. None of the expressed needs even mentioned ICT or traditional media such as books, newspapers, or radio. Pal (2005) used traffic analysis in a large network of telecenters in Kerala state, India, and found that email and general information content use ranked far below chat, entertainment, and (involuntary) spyware traffic. Other projects originate with technology company executives who want to expand their markets as well as increase the good will towards the corporation as a result of a donation. "Doing well by doing good" was the mantra of the satellite firm for which I consulted during the Internet and telecomms bubble. For a history of product placement in educational ICT projects see Cisler (2003).

At most ICT conference someone will make the statement, "It's not about the technology; it's about the people." Yet many projects are undertaken to showcase a relatively new technology, and the people have to fit into the technology plan. As Verzola (2004) points out, government and donor support for traditional or appropriate technologies such as radio are minimal compared to resources devoted to computer networks.

Remedies

Possible remedies are alluded to in each of the problem statements, but a consequence is that the projects will be more time-consuming, more expensive because of the additional research, less cutting-edge because the technology solutions may not be state-of-the-art in the country context but still very useful, and this may make partnerships with technol-

ogy companies more difficult because they will usually want to showcase their highest profile software, servers, computers, and peripherals. The demand for sustainability may result in more modest projects, ones that a village or ministry in a poor country, or a rural school can afford more readily than lavish telecenter such as the controversial LINCOS project in Costa Rica and Dominican Republic or the ITU Multipurpose Community Centers in Uganda, Mali, and Tanzania.

In addition there needs to be a better forum to talk about failures in ICT without worrying about loss of face, loss of further funding, or loss of consulting work. Such transparency and frank discussion will continue to be rare occurrences in a world of constrained resources and professional reputations.

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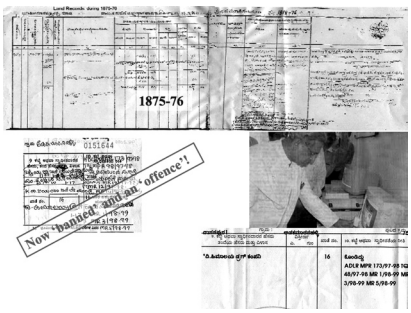
Exerpt from:

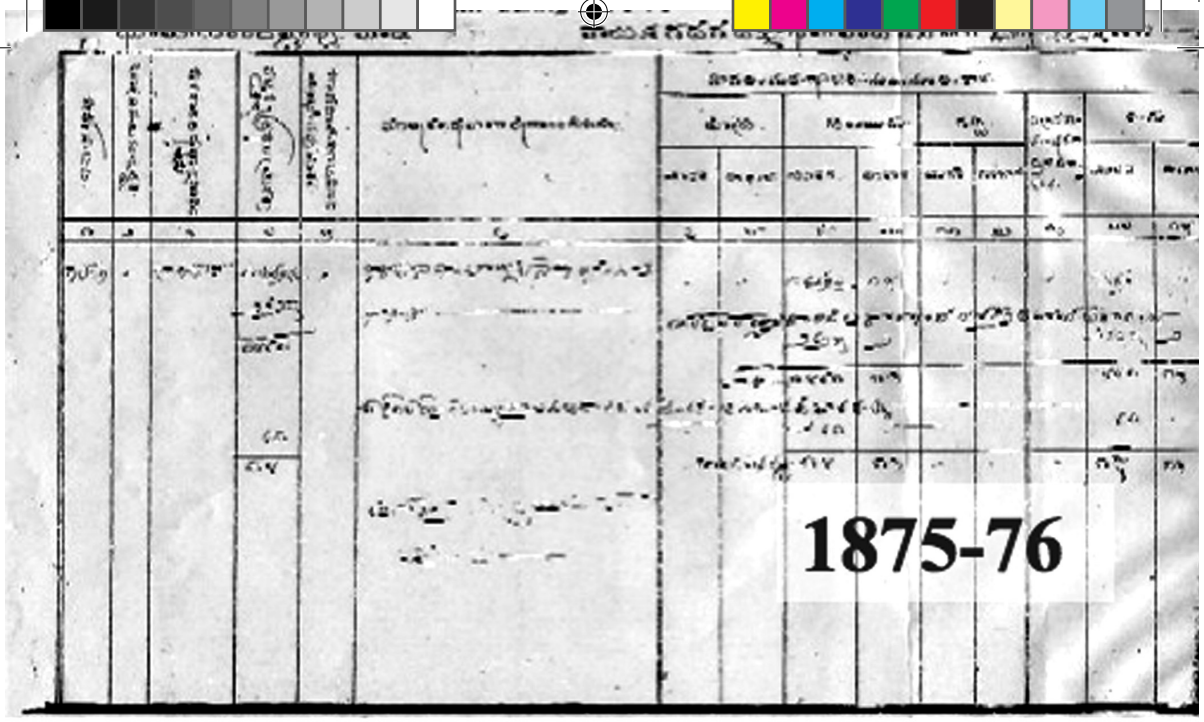
E-Politics of Urban Land

Solomon Benjamin



Solomon **Benjamin is an independent researcher operating from Bangalore, India. He** received his doctorate from the Department of Urban Studies and Planning at the Massachusetts Institute of Technology (MIT), and a Master's degree in housing and settlement design from the Department of Architecture at MIT. Dr. Benjamin focuses on issues of urban governance, economy and poverty. Over the last two years, Benjamin has focused on the way Indian cities are being re-structured by big business in collaboration with international capital. The specific focus here, in the case of Bangalore, is on politics of land and city administration as influenced by this city's IT elite. In particular he focused on the way e-governance has re-worked land titles to facilitate the entry of the corporate groups. At present he is working on the so-called urban reform agenda promoted by US-AID and the World Bank in particular. Benjamin's publications include 'Urban land transformation for pro-poor economies' in 'Differentiation in South Africa and Indian Cities' in Geoforum (Pergamon Press) Volume 35, Issue 2 (March 2004), edited by S. Oldfield, 177-187, and (2000-2001) Democracy, Inclusive Governance, and poverty in Bangalore as part of a series 'Urban Governance, Partnership, and Poverty'. IDD, School of Public Policy, University of Birmingham (2000-1).

See the following pages for image exerpts from Solomon Benjamin's presentation, titled '€-Politics of Urban Land', which he held at the Incommunicado 05 conference .



Now 'banned' and an 'offence'!

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Nobody touches hi-tech screens at registrar offices

TOI

By Bansy Kalappa/TNN

Bangalore: Touch-screen kiosks cry out for attention in sub-registrar offices across the state. No one uses these state-of-the-art computers that were installed amidst much fanfare in 2003 as an e-governance initiative. Touch-screen kiosks were installed at the sub-registrar offices to cut corruption by increasing transparency and to demystify the working of the department.

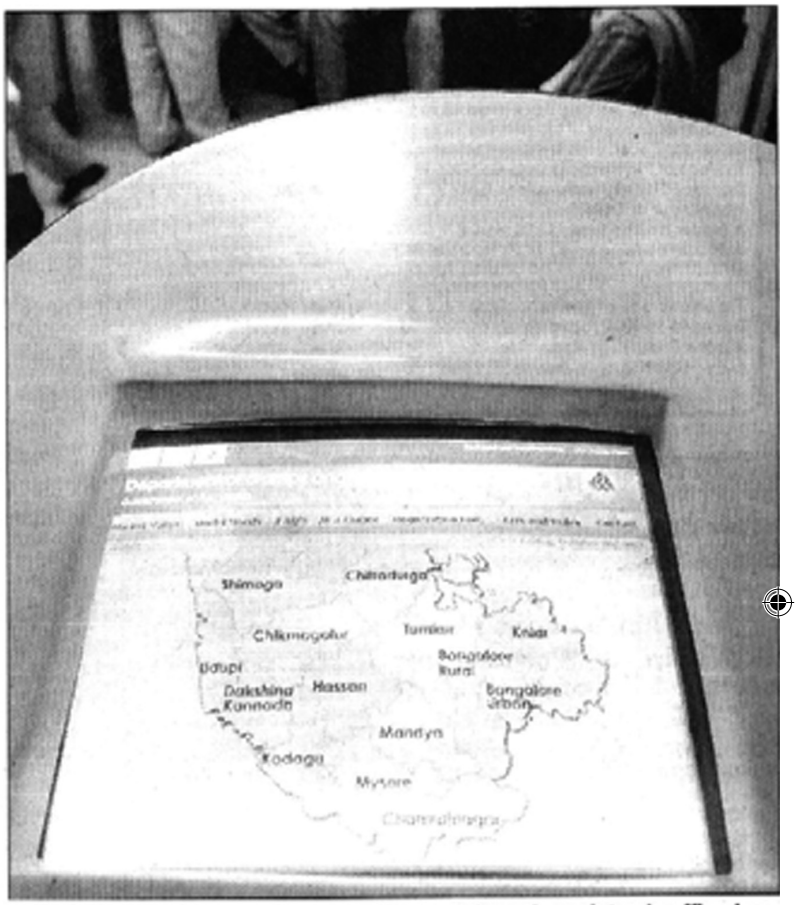
The kiosk at Gandhinagar was not working and only after a complaint by *The Times of India* to the PRO of the Inspector-General of Registration and Commissioner of Stamps, the computer was made functional. The engineer said someone had cut the power cables supplying power to these machines. And no one from the sub-registrar office had bothered to complain.

At Gandhinagar sub-registrar office, sub-registrar Chicka Pedanna blamed CMS Computers who had installed the machine and who are in-charge of maintenance. "Why should we complain, they should come everyday and ensure it is working well."

A maintenance engineer from CMS Computers said, "No one uses these machines."

That is the sad truth. No one uses them. Chickapedanna suggests, "The people are to be blamed for not using it."

In other places too — like



No takers for this touch-screen kiosk at the sub-registrar's office in Gandhinagar; it's still waiting to be used.

...All this comes with political

or misuse.

These computers contain a lot of information including the sale deed formats and different types of deeds, application forms, the market values across the entire state, registration fees, the Acts and rules and the actual process of registration.

Lawyer I.M. Devaiah, who handles about 50-100 registrations every month said, "No one uses

to take recourse to these kiosks."

Sources who did not wish to be named said, "Every registration carries a price. The sub-registrar's agents charge between Rs 2,500 to up to a few lakhs per deal depending on the value of the property and the type of violation. Most deals have a small degree of violation and both the payer and receiver are mutually happy. So where is

Lokayukta N. Venkatachala has a solution, "We must have someone who will help the information seeker get the information. This could be of some use. We will ensure that such a measure is taken up."

TOI Bangalore 11 Oct 2004

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LANDING IN TROUBLE: Landowners whose lands have been notified for acquisition by the galore Development Authority file their objections at the BDA office in Bangalore on Monday

Landowners protest at BDA office

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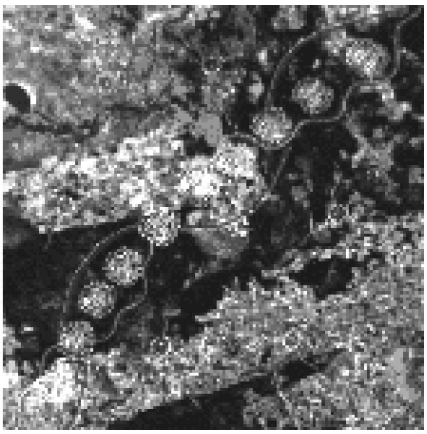

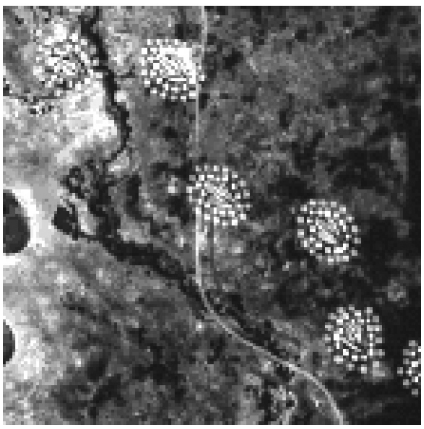


I DO NOT WANT MY HOUSE TO BE
WALLED IN ON ALL SIDES AND MY
WINDOWS TO BE STUFFED. I WANT THE
CULTURES OF ALL LANDS TO BE BLOWN
ABOUT MY HOUSE AS FREELY AS
POSSIBLE. BUT I REFUSE TO BE BLOWN
OFF MY FEET BY ANY.'

Cognitive Justice:
Cultivating the Diversity of Knowledge

Maja van der Velden

Art works by Lyn Moore and Tracey Andrews (2001)

In 2001, the UNDP published its Human Development Report under the title "Making new technologies work for human development". In the introduction we can read: "Technology is not inherently good or bad – the outcome depends on how it is used" (p. 27)

Many people and organisations working for social justice and international development agree with this position. Each in their own way, they describe how technology is ethically neutral. It is a tool that, in the hands of good people, can be used to resist, build and heal. In the hands of others the same tool can be used to control, hurt and destroy.

For many years I used the same argument. However, with the introduction of knowledge management and knowledge sharing for development, I began to question the assumed neutrality of technology, and my own role as a practitioner (van der Velden, 2002a; 2002b). With so much focus on knowledge for development and the increasing role of technology in managing and sharing that knowledge, I began to ask: *whose knowledge counts* in knowledge-for-development and *what knowledge fits* the databases and portals for sharing knowledge-for-development?

The information and communication technologies that we use to manage and share knowledge for development are the outcome of certain choices. These choices are social, cultural, ethical, and political. They represent the values and the way of knowing and understanding the world of the people who design, develop, and own these technologies. The result is that many ICT for development projects build forth on the idea that people in the so-called developing countries are poor because they are ignorant: their knowledge is incomplete, they lack information. Poor people are on the wrong side of the digital divide, they experience a knowledge gap. The focus is on what people lack. The problem is that this focus prevents us from seeing what people *do* know, why they know this and how they know. By making the contexts of other ways of knowing invisible, we don't see

how other people *do* knowledge and information (Verran, 1999; 2001). Making other ways of knowing visible is a first step in the struggle for global justice.

Technologies do have some inherent values, which some people perceive as good and others perceive as bad. If we are not aware of the values inscribed in technology, we will not be able to choose or to resist a technology. Nor will we understand how these inherent values might limit our appropriation of the technology. The question we need to ask is: What are the values inscribed in the computer code underlying ICT for development and its databases, Web pages, on-line communities-of-practice, and networks. Whose knowledge and what kind of knowledge counts in the technological design?

Palimpsest

The artwork presented at the beginning of this article is created by two Australian artists, Lyn Moore and Tracey Andrews (2001). It is a satellite image of the Lake Munro Region in Northwestern Australia. The coloured patterns on the image represent the tracks of Tracey Andrews' ancestors. Even though colonial maps and new information and communication technologies seem to have erased these Aboriginal tracks, they are still visible to the artist and her family.

Moore and Andrews call these artworks palimpsests. Originally, a palimpsest is a piece of papyrus or parchment, which is scraped clean in order to create space for a new text. Often traces of the older text still remain.

There is something in the idea of the palimpsest that speaks to the issue of visibility and invisibility. Because this particular artwork integrates new information technology, I think it has something to tell us about the questions we need to ask about ICT for development: Which histories, which knowledges, wich relationships, which needs, dreams, and imaginations are being made invisible by technology? How can we make them visible and readable again? Not as a token of tolerance, or a fashionable sort of diversity, but as equal forms of knowledge in the negotiation over the construction of our common future (Latour, 2002)?

My point is that some of the different ways of knowing our world are made invisible by information and communication technologies - not only in the way we use these technologies, but also in the technologies themselves. Other ways of knowing are made non-existent by the designs and architectures of our information and communication systems.

The majority of our information systems are designed around western/scientific and capitalist understandings of knowledge. Thus the knowledge-for-development we share in the databases and portals for development is understood as a global commodity and

a public good. Other ways of knowing – knowledge that is not produced by modern science, such as sacred knowledge, community knowledge, indigenous knowledge, women's knowledge, local knowledge - are delegated to the particular or the anecdotal (Santos, 2004). They are often rendered non-existent by the categories, file formats, information architectures, language modules, and other tools we use to organise and access the information stored in our systems. They are rendered non-existent – not just by big players such as the World Bank and its Development Gateway, but also by people such as you and me. We adopt and use many of the same assumptions about technology, and we seem to accept the implication that it will inevitably result in the elimination or exclusion of knowledges.

Cognitive Justice

> 'I don't want my house to be walled in on all sides and my windows to be stuffed. I want the cultures of all lands to be blown about my house as freely as possible. But I refuse to be blown off my feet by any.'
>
> *- Plaque on the wall of the Sabarmati ashram, Ahmadabad, India Photo Jan Öberg, © TFF 2001*

Most knowledge-for-development literature treats knowledge as an object that can be expressed and represented independently from the knower. This knowledge is undone from its context and ideology and is presented as neutral and universally good. In reality, knowledge is expressed in the act of knowing and involves a knower. Thus, all knowledge is local, situated, and partial (Haraway, 1995). This is not an argument for cultural relativism, or for a kind of naïve pluralism (Cohen, 1994), it is a statement of principle. The problem is how can we cultivate the diversity of knowledge? How we can make all these knowledges count?

A democratic politics of representation (Taylor, 1994) of peoples and their knowledges can begin when we start our negotiations over the construction of a common future on the basis of cognitive justice. Cognitive justice (Visvanathan, 1998) refers to the right for a plurality of forms of knowledge to co-exist and to be equally valid in these negotiations.

Cultivating the diversity of knowledge is not only an ethical position. Diversity lowers the chances for conflict and increases our capacity to survive. M.K. Gandhi (1958) argued for a communication of different ways of knowing that would make his "house"

more diverse, bringing it closer to other "houses", without losing its particular difference. In other words, diversity needs to be articulated in each of the entities or houses in order to make diversity a characteristic of the system as a whole. This interweaving of houses will also lower the chances for conflict, as each house becomes an intrinsic part of the system, making the survival of each house interdependent with the survival of the system as a whole. In the same way we can argue that diversity as a worldview is based on an understanding of the world as a meshwork of diverse knowledge systems. The diversity of human knowledge is based on the diversity of knowledge systems as well as the diversity of knowledge within each system. This deeper level of diversity results in less differences between the houses, but increased heterogeneity within each house (De Landa, 1997; see also Maruyama, 1978)

Democratisation of knowledge and technology

What are the characteristics of information and communication technologies that cultivate knowledge diversity? How can we build cognitive justice in our information and communication technologies?

> "I would like to propose four principles that can guide the design, ownership and use of technology "
>
> *- Van der Velden, 2005*

The principle of the democratisation of technology

The people who will use and operate the information and communication technologies are recognised as the designers of the technologies. They should be able to build their own information and communication technologies, based on the way they do knowledge and information. This means that the technology should be built from the ground up. The values and needs of the people who will use the system, or benefit from it, should be inscribed in the technology.

The principle of democratic representation

The people who are using the technologies or who are affected by them are recognised as the owners of information and communication technologies. Not only the technologies but also the organisations that develop and operate policies, standards, and tools, are locally owned or democratically controlled.[1]

1 A good example is Free Libre Open Source Software (FLOSS).

The principle of the cultivation of knowledge diversity

People are recognised as knowing beings. Our local, national, regional and global information and communication systems should be open and flexible in order to accommodate other *ways of doing knowledge and information*. Information and communication systems can cultivate diversity when the larger systems are flexible enough to adapt to smaller systems. Diversity is being compromised when smaller, more local systems adapt to the larger systems or are built to accommodate the larger systems.

The principle of autonomous self-organisation

People, as designers of technology and owners of the organisations that own and operate these technologies, initiate and control how they network and communicate to share their knowledge. People, not technologies, are the agents of survival, prosperity and change.

Finally, it should be pointed out that information and communication technologies for development involves struggles over knowledges (Goldman, 2001; Haraway, 2003; Visvanathan, 1998). These struggles cannot be settled solely with consultation or stakeholder meetings as long as these meetings are based on the assumption of the inequality of knowledge or the hegemony of one way of knowing. We can begin to address these struggles through negotiations (Latour, 2002), in the broadest sense of the word. Cognitive justice is a basis for the negotiations to begin in honesty and some measure of greater equity.

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Streamtime:
A year of Working with Iraqi Bloggers

Cecile Landman and Jo van der Spek

Streamtime started end of June 2004 with announcements of our streaming radio-transmissions, first from Halabja and later from Baghdad as well. By the end of August 2004, Streamtime transmissions from Iraq seemed almost impossible, and Jo, Salam and Michel came back to Europe. Locally training interested Iraqis in the use of the streaming software required more time than we had anticipated, so we decided to concentrate on creating networks with Iraqis in Iraq and the diaspora from Europe. Initial contact with the bloggers, in- and outside of this area, was made by linking them to http://www.streamtime.org. The bloggers were altogether informed about the linking, and were asked their opinion of Streamtime. The Iraqi bloggers soon proved to be incredibly interesting, since they offered insights, information and stories and shared them on their own initiative.

Streamtime soon began to repost an almost daily selection of the blogs. A few bloggers immediately started linking to Streamtime, affirming our existence, whereas others asked Streamtime to cooperate in their blogs with joint postings. They became 'correspondents', or even friends of Streamtime, while we tried to stay in contact with all of the bloggers as much as possible.

An unanswered e-mail can lead to frustration and feelings of loneliness for people in the 'connected' world, even more so perhaps inside Iraq, so our - emotional - involvement with Streamtime grew day by day. It is impossible not to worry about the safety of the people who are becoming your regular interlocutors. As is the case with many other 'projects' focusing on Iraq, it is not easy to measure success or failure. Besides, a year - especially under these circumstances and the given developments - is to be considered a short period. In this year, Streamtime has already played a role in expanding available platforms and networking opportunities, connecting blogs and relating to people and projects, while trying to make sense of what's actually happening in Iraq.

Streamtime continued to encourage exchanges between Iraqis, as was the case with Raed Jarrar, Iranian Niki and Iraqi 'Liminal Symbol'. They knew each other through the web, but Streamtime facilitated their face-to-face encounter. During the International Documentary Film Festival of Amsterdam 2004 some effort were made to arrange a meeting between Liminal and the filmmaker-poets Sinan Antoon and Bassam Haddad, who had produced the 2003 documentary 'About Baghdad'.

Making contact with the bloggers is sometimes difficult; distrust is as common as an acute awareness of the risks involved in online communication. Only a few blog under their real names, most bloggers use fake identities. Even though only about 5% of the Iraqi population speaks English, most write their blog in English, since blogging in Arabic is even more dangerous, and the Internet audience is still mainly a world of English speakers.

The comments left in blogs reveal that the Iraqi blogosphere is marked by quick, rough and banal aggression. Whenever even a subtle critique of American policy, or the US army is made, commentators demand to know whether the author would prefer that Saddam had stayed in power. Such comments, often coming from right-wing Americans, further narrow down the already limited digital space available for constructive and creative discussions. Yet blogging still turns out to be an ideal way of both taking advantage of the freedom of communication and protecting the security and anonymity of its contributors. Given Iraq's history of repressing diversity, the Iraqi blogosphere is incredibly diverse, and covers a wide spectrum of opinions.

This blogospere is in flux, adding new ones, while other bloggers cease to contribute. Some people created 'family blogs' across different generations and cities, linking Mosul and Baghdad. Some bloggers already stand out because of their beautiful or funny writings, or their engagement in a specific subject that results in in-depth articles. Although new, this network of blogs creates an information network in a country whose geopolitical position is in the heart of a war machine. This means that the individuals, their lives and their stories are rarely considered.

Now Meet Some of the Bloggers:

Liminal Symbol came to meet Streamtime after an extensive mail exchange. Earlier he had tempted to create the 'Iraqi Agora', a forum for all Iraqi bloggers with the purpose to stimulate information exchange and discussions between Iraqi bloggers on an open web-stage. He left the project, but following the assassination of Rafiq Hariri (some of his roots are in Lebanon) he started the Lebanese Blogger Forum, which quickly became a success, and Lebanese bloggers followed up on their cooperative digitizing with a face-

to-face meeting in Lebanon.

On instigation of Streamtime, Iraqi blogger Raed Jarrar was invited to The Netherlands by the Dutch Journalist Association. Together and in an exchange with Salam Pax, Raed was one of the earliest bloggers. Given that Raed lives in Amman, some plans exist to do workshops there with and about the streaming software used and developed by Streamtime's Dyne;bolic people of Dyne.org and Rastasoft, with support from the Sicilian Freaknet. Amman has a large Iraqi population, and more arrive daily... it could be a good idea to take Streamtime to Amman. Raed has done investigations throughout Iraq and created a counter of civilian casualties. And who doesn't remember General Tommy Franks, of the US Central Command who had stated: ''we don't do body counts''. Raed and his family (his mother and his two brothers' blog, Khalid from Baghdad and Majid from Canada) organized medicine transports to Falluja, after the last violent big boost that had gone through the town.

Baghdad Dweller comes from Baghdad, and lives in The Netherlands. He has visited Streamtime's activities in Amsterdam on more than one occasion. He also attended events with Iraqi Poetry or music, streamed by Streamtime. Irregular contacts and house-visits occus.

Abu Khaleel, writer of the blog 'Iraqi Letters' lives in Baghdad. Streamtime and Abu enjoy a good friendship, exchanging a mix of gossip, jokes, serious stuff and not-so-serious information. It feels like good friends. When at the end of January '05 Streamtime did a special 'elections-stream' from Amsterdam, with direct phone calls with Iraqis in Iraq and Diaspora, his telephone did indeed work for the first time since the invasion, but as it turned out, just for a few hours. Streamtime was the first to call him on that new working line: "Welcome to the world, Abu!". But Abu has given up blogging now, as can be read in his post 'Pit of despair' of July 17. 05, a post that goes from the London blasts to Iraq: "I felt anger, but it was an anger of another kind. What angered me most was that I have somehow found out that I had less compassion than I should for those people who suffered or lost their lives. Have I lost part of my humanity and capacity for compassion... or the ability to feel for the suffering of other people? It is a loss indeed. But it is also my loss... of part of my soul?"

Emigre in Australia more or less 'supervises' the Iraq Blog Count. All Iraqi bloggers are being linked to this site; it is the most complete existing overview. Emigre and the active contributors from time to time suffer from 'attacks' in the comment sections. Often serious rough talk and offences were made, with the names of contributors of IBC being hijacked and used which brought a lot of confusion. It looked as if Emigre and some others had completely freaked out, but then it turned out it wasn't her, but some 'troll'. Of course this heavily frustrates any attempt to converse or discuss.

The 'bad-comment-behaviour' happens just about everywhere in the blogosphere, and it does have consequences for the information being -therefore not- published. Some bloggers closed their comment sections, others avoid to ever reading the reactions on their blogs again, and again others get angry or disappointed and react accordingly.

For example the reactions on the pictures of a student graduation party on Hassan's blog Average Iraqi are very telling. One of the pictures shows an installation made by students on a square of a Baghdad university. It is a representation of the Twin Towers with the planes flying into them. It's clear that this attack didn't have so much to do with Iraq in the first place, but it was definitely a catalyst for toppling Saddam. And now Iraq is on the verge of a civil war, and news from 'the zone' consists mainly of bombs, more bombs and death and increasing separation between Sunni and Shia. The Twin Tower disaster as such was an event with major consequences for the Iraqi people (of course without forgetting the direct victims of the attack, or the never-ending mess in Afghanistan). Hassan is around twenty years. He grew up in Saddamized Iraq, probably never knew anything else. The comments on the pictures he published on his blog were, softly said, very rude, and no one who made them seemed to be capable of placing him- or herself in Hassan's place. After this, he closed the comment section of his blog, and is not blogging that much anymore.

Free Writer in Mosul has started to blog not so long ago, in English and Arabic. Soon contacts were created after he first asked us if he could translate a Streamtime interview with blogger Salam Pax into Arabic, after reading about it on IBC, but asked if we could publish stories he would write for Streamtime about Mosul and Iraq, in Arabic and in English. He is in trouble now because the Internet connection is too expensive, he has a lot of ideas and wants a lot, but only small things are being realized. One step forward, two steps back.

Salam Pax to our surprise had read all our mails, and kept an eye on Streamtimes' whereabouts. He had started blogging in 2002, and became the most famous blogger, not only of Iraq. (Not in Iraq). His writings are like oxygen to many. He was in Rotterdam during the International Film festival, where his film was shown; because in the meantime he had started video-blogging, or 'vlogging', for The Guardian and TV. Streamtime interviewed him in February '05. Pax: ''I would never actually say many of the things I say in my weblogs, I say on my video blogs or when I talk to you. I would never go on the street in Baghdad and stand on a box and say: this is what I believe in. I am too afraid! This is bad. Okay, it opened a little door, but it doesn't let me open it all. We still live within these confines, we still worry about how what we say is going to be taken. And that is why I am worried if I kind of go out of the Salam Pax persona. Because the things I said, the things I say, not many people are going to be happy about it. I don't feel that

brave to tell you the truth. And this is sad, this is really, really very sad.''

All the bloggers that were involved in the project, clearly have had to deal with incredibly severe problems, from kidnapped family members to problems with the blogging itself (no electricity or connectivity), identity worries, distrust and insecurity, to other daily problems like water supply, no freedom of movement, violence. And it is frustrating 'to play hide and seek with electricity and then afterwards also to write about it' (AnaRki13).

Continuing to work on the bloggers network is essential; they are the ones that by their own initiative make an indisputable movement towards 'other worlds', taking possession of modern means of communication that have only become available to them very recently. Probably Streamtime can find ways with bloggers in discovering how to transmit journalism, poetry, theatre plays, music, from Iraq, and its surroundings. Indeed we have just started linking with Bahraini, Kuwaiti, and Lebanon blogs.

The need to assist Iraq's civil society in developing media for cultural and social expression and interaction, to realize its potential for building a democratic and communicate environment and to regain a decent level of human livelihood and dignity has far from disappeared in the last year. But the limits for action have been narrowed down, and the engagement of the international (donor) community has decreased to next to nothing. Streamtime is confident that it remains both important and possible to continue its tactical interventions to promote freedom of communication in and with this part of our world.

On Streamtime

http://streamtime.org is the visible heart of Streamtime. It is both a showcase of what we feel open publishing and freedom of expression is about. But it is also a platform for building contacts and a network of people and groups who share the desire to create alternative media and fear-free cultural spaces in Iraq.

The daily updated central column, which is designed as a collective blog, is edited by Jo van der Spek, Cecile Landman, and Salam Khedher. Contributors with direct access are Michel Pauli, Federico Bonelli, Eleonora Oreggia and Chaalan Charif. Around 620 entries have been posted (March 6th 2005). We regularly receive original stories from Baghdad, Basrah and Mosul. Content focuses, in chronological order, on streaming from Baghdad, discussion on the nature of resistance and the occupation, the kidnappings, the situation in Fallujah, updates on communications, the elections and the position of women in Iraq. The challenge is to moderate between different perspectives: our editorial guideline is that unarmed resistance is justified and that the current "depleted democracy" needs

to be harnessed.

The audio content on the site consists of an archive of all the streams that we produced: from Halabja, Baghdad and Amsterdam, plus a collection of recordings of Merbed 2004, recordings from Baghdad (report on the Tigris, interview with theatre director Hazim Kamaledin, and on making Radio) and Suleimaniya and Holland: interviews with bloggers Raed Jarrar and Salam Pax. And of course we offer links to other streamers like Radio Lora, the Election Monitor (produced from Berlin and Amman) and the local Arabic program on OOG radio (Groningen) of poet Mwaffk A-Sawad.

However, because of various orchestrated digital crack-attacks, the site has been down at crucial moments. This is also the reason why at this moment the audio of the streaming transmissions from Halabja, Baghdad and Basra are not online, nor are the interviews, or the poetry. It is as well the reason why the comment section was closed during the summer of '05. But it will all be back online again as soon as possible.

Streamtime has undergone changes since the summer of '05. Although not directly visible, it has grown enormously behind the screens. During the summer months, unique visitor numbers rose to nearly 40.000 p.m. Daily contacts with the bloggers have grown with that. In whatever ways available they contact Streamtime to tell us about 'what happened in Baghdad or elsewhere in Iraq today', about impossible loves that require in the first place huge amounts of patience and complex ways for encounters, so simply to let us know that they posted an article.

Streamtime remains, be definition, an unpredictable project. It is a big handicap that opportunities to be on the ground still have not opened up, on the contrary have narrowed. But a network is really existent, new plans are being thought out and made. Streamtime is floating with and on the moods of Iraqi bloggers and the waves of what takes place 'on the ground'.

Hassan Karuffa of the blog 'An Average Iraqi': "Streamtime is one of the very few blogs that specialises in a certain cause. Making their main source of information the Iraqi bloggers, Streamtime is a place were you would go to see various view points of the people in the events. By linking to almost every Iraqi blogger, in the blogosphere, and/or having relations with them, either by email, or live chat, Streamtime works not just as a collector of information, but as a real network." It seems a special case that Streamtime has won the trust of many Iraqi bloggers; contacts have become more rooted and are based on a near-daily intensive exchange of information in *both* directions. Through their blogs and daily chats with the Iraqi bloggers, the value of their position as sources of information from Iraq is growing. (We proudly admit that we feel great when told - in the course of hour-long online conversations - that some bloggers refuse contacts with CNN or other big mainstream media networks.)

It is worrying though to hear in the chats or otherwise that bloggers choose to stop blogging. The peak of what could possibly happen in Iraq seemingly isn't reached yet, and fear continues to rise. The search for ways out of Iraq is becoming a frequently recurring subject, as people lose faith in the possibility of positive change and are simply annoyed by having to write about the same subjects again and again - no energy, no water, no connections, difficulties to move around, lack of safety, terror around every corner, rising numbers of deaths - or simply because the world doesn't seem to be willing to even understand what the developments of the last three years have done to the inner world, and the identity of the Iraqi people.

A Blogger in Baghdad, September 14. '05, a day that was called as violent as the first days of the invasion: "Explosions - today is filled with em - I cancelled stuff." A Blogger: "Well the situation isn't clear to all, many things are confusing. Plenty of groups, local, regional and international have a free hand to do what they like in Iraq. We don't know friend from enemy. I was really disturbed today to see some French and Italian websites collecting donations for what they call the 'Iraqi resistance'. I can understand people being anti-war and anti-American but supporting people who kill Iraqi civilians is a whole different matter..." A blogger: "There are numerous forces bent on igniting sectarian strife. Fortunately ordinary people are not interested... but these people are well funded with money, arms and people willing to do their bidding. They keep trying hard. Now it has become my vocation to try and help people who need me to combat these forces. [..] I can't say much in public though. It is serious business and I feel surrounded by blood and violence. I don't know for how long I can endure the stench. For example, at the moment I am involved in an 'incident' where 19 men were abducted from their village... 18 of them were killed. The evidence was arranged so that a neighbouring tribe of the other sect was accused. After investigating the incident carefully, I was able to prove that a third party did that horrible act. I could not blame that party in public. You may realize how difficult all this is!"

One of the latest developments is that Streamtime is making proposals to the bloggers to encourage collective posting on one subject on the same day. Thus taking up a subject from various angles. The subjects of course have to be chosen by the bloggers themselves. They have a far better idea of what is important. There have also been enthusiastic responses from the bloggers to the suggestion to use phone calls with them, through Skype or so, to create weekly web-transmissions. These projects would prove we have created a network that can bring the Iraqi voice out with people from different backgrounds. Cyberspace offers possibilities. It is up to us to expand them.

Appendix:
solaris call, incommunicado program, ppplist call

Solaris Call

While the Incommunicado website and mailinglist were created in the context of WSIS, in part to continue and build on the work of organizing efforts like 'We Seize/Geneva03', it is certainly not the first, nor the only, project dedicated to a critical exploration of info-developmentalism. One of its predecessor projects was Solaris (2001-2004), co-launched by Geert Lovink and Michael Gurstein. We here reproduce the original call as it was distributed in December 2001.

Invitation to join the Solaris Electronic Mailinglist
An Initiative for Critical Issues of Internet and Development

Dear All,
We would like to invite you to join Solaris, a new electronic mailinglist on IT and "Development" related issues in the once and future/post "non-Western world".

The discontent amongst many of us with the conventional discourse around "IT & Development" has gradually grown over the last few years. So far there has not been an on-line institutionally independent forum to discuss critical topics concerning the full range and use of new media and their cultural/creative, political, social and economic contexts in the (for lack of a better term) "Developing (aka Third, Less Developed, Underdeveloped) World" and in lagging regions and among digitally excluded populations in "Developed" Countries.

The existing lists in the "IT & Development" or "Digital Divide" fields are too closely tied to funding bodies, Not for Profits, international institutions or governmental agencies with their own world encompassing assumptions to promote. Despite their efficiency they seem to have too narrow a policy and theoretical focus. We would like to see more

independence, a neutral forum where critical and lively multi-disciplinary and intercultural exchanges can take place.

Current mailing list culture seems to have little interest in debating more fundamental issues of exclusion in a digital context, the new power relations of digitally enabled economies, digitally enabled security from below rather than above, community e-commerce development, Napsterism and other post "E" development strategies, the new terms of trade and sophisticated accumulation in the Real World of IP, OS (Operating System) wars and regional insurgencies, and determining if WTO director Mike Powell was right and the Digital Divide really is about fancy German cars in low income neighborhoods.

This call for a critical discourse comes from 'within' and is not meant to spread a new form of techno-cultural pessimism. The last thing we need is a moralistic analysis of the Internet as a 'US-American imperialist tool'. An engaged form of research is necessary which overcomes dry economism and its spiritual counterpart, techno-determinism (the all too often heard notion that technology will automatically bring salvation and result in prosperity for all, worldwide).

"Solaris" is born out of a felt need for a lively and diverse independent ICT and development discourse and particularly one which recognizes and reinforces the perspectives of those who see ICT as a base for liberation and creativity--with eyes wide open for the chilly reality. There is a need to analyze the agendas of all the agents, from globe spanning UN or G8 Task/Dot Forces, US-American foundations (Markle, Soros, Rockefeller, Ford, etc.), charity/marketing input from IT companies, government ICT/DD development programs, NGOs and media activists.

Information technology hasn't solved world poverty. It arguably has contributed even further to the growing income inequality on both a global and national scale while the all too easy rhetoric of UN initiatives, and DotForce and other Digital Divide programs appear to be recycling outdated neo-liberal dotcom models. The 'organized positivism' around successful projects is often used against those who rightly ask questions while mysteriously never seeming to manage the morphing into on-going "sustainable" programs. There is an "end of history" culture in the making driven by the almost religious belief that technology plus business results in democracy and prosperity.

The bandwidth gap is widening on any level at an accelerating pace. With Linux stagnating as an alternative to Microsoft, limiting its role as an operating system and server software, Solaris would like to raise the question in which areas strategic software could be developed. Information technology does not come with 'out of the box' solutions. At the time there is an amazing amount of talent around to prevent and reverse the expensive import of hardware and software. The overall picture is a complex, often paradoxical one.

There is no longer a need for 'technology transfer' from North to South. "Everyone is an expert." IT-specialists are everywhere. However, there are numerous economic blockages explaining why software production from below hasn't taken off. It is now time to stress the structural obstacles-and NGOism could be one of them (not just the more obvious WTO).

The use of information technology worldwide is causing paradoxical, sometimes contradictory and confusing effects, with occasional miracles and widely spread new forms of exclusion. Still, the overall sense is one of empowerment - and surprise. The primal drive to discover, adapt, mutate and further develop technologies is a truly global phenomenon, one that cannot be overrun by a culture of complaint or the desire of corporate interests to create and capture markets.

These are just some of many topics which could be discussed.

The Solaris initiators would like to emphasize the complexity of the picture and involve all those who feel attracted to a rich multidisciplinary form of digital story telling beyond dull politics, sterile academicism, paper tiger task forces and self-reflexive policy conglomerates. It is time to get rid of the almost dead phrase "IT is about people, stupid" and move it beyond the massing ranks of the Digital Divide industry.

Solaris is co-founded by Michael Gurstein (mgurst@vcn.bc.ca), community Internet maven based in New York and Geert Lovink (geert@xs4all.nl), media theorist and Internet critic, based in Sydney. The list is hosted by Sarai, the New Media Initiative in Delhi, India which has been a source of inspiration while starting up Solaris.

Please forward this invitation to your friends-and enemies-who you think would/should be interested in joining Solaris.

To start, the Solaris mailinglist will be open and unmoderated. There will be a (growing and rotating) team of facilitators from different continents and backgrounds who will initiate debate and bring in material. In order to prevent spam only members will be able to post and from the e-mail address where they receive the list. When there are around 50 subscribers the list will go live. Please be careful not to publicly circulate this announcement, especially in the beginning.

To (un)subscribe write to solaris-request@sarai.net with 'help' in the subjectline for further instructions or go directly to: http://mail.sarai.net/mailman/listinfo/solaris
Post to: solaris@mail.sarai.net (list members only)
List archive: http://mail.sarai.net/pipermail/solaris/

Incommunicado Program

Incommunicado 05: information technology for everybody else
June 15: Opening Night
June 16-17: Working Conference
De Balie, Amsterdam
Organization: Institute of Network Cultures, Waag Society, Sarai.
Supported by: Hivos, Netherlands Ministry of Foreign Affairs and IICD.
Information and registration: http://www.incommunicado.info/conference
Wiki: http://www.networkcultures.org/wiki/

::Wednesday, June 15::

Opening Night
20.00-22.30 Main Hall
Chair: Tracey Naughton (Chair WSIS Media Caucus, South Africa)
Situating the workshop agenda in the broader context of the UN Summit on the Information Society (WSIS) as well as the controversy over an emerging international civil society, the public event on Wednesday night will introduce the topics of the work conference to a broader non-specialist audience. Offering a working definition of info-development/ ICT4D, the public event will raise some of the key conference issues, including the extent to which this field is indeed characterized by a shift from North-South to South-South alliances and the role played by info-development NGOs.

With contributions by:
Soenke Zehle and Geert Lovink, introduction to the Incommunicado project
Nnenna Nwakanma (Africa Civil Society for the Information Society, Nigeria) : The mirage of South-South cooperation in ICT4D
Jeebesh Bagchi (Sarai New Media Initiative, India): Forgetting Development: Cybermohalla Practices and Information Networks
Bernardo Sorj (University of Rio de Janeiro, Brazil): Internet in the Slums
Anthony Mwaniki (One World, Kenya): Mobile Technology - A Tool For Development?
Partha Pratim Sarkar (Bytesforall, Bangladesh): ICTs at the grassroots and intermediaries: who empowers whom?
Anriette Esterhuysen (APC, South Africa)

::Thursday, June 16::

Plenary Lecture 1: Introduction and Overview
10.00-11.00 Main Hall
Chair: Geert Lovink (INC, NL)
ICT4D is widely considered a key element in processes of democratization, good governance, and poverty alleviation. This plenary will situate the rise of ICT4D in the context of the transformation of development as a whole, and outline individual workshop agendas.

With contributions by:
Roberto Verzola (sustainable agriculture campaigner, Manilla): The emerging information economy. Respondant: Heimo Claassen (researcher, Brussels)
Monica Narula (Sarai New Media Initiative, Delhi): The Delhi declaration, a new context for new media

Workshop A1: NGOs in Info-Development
11.30-13.00 Main Hall
Chair: Anriette Esterhuysen (APC, South Africa)
We have become used to thinking of NGOs as 'natural' development actors. But their presence is itself indicative of a fundamental transformation of an originally state-centered development regime, and their growing influence raises difficult issues regarding their relationship to state and corporate actors, but also regarding their self-perception as representatives of civic and grassroots interests. Following a survey of some of the major info-development NGOs and networks, this workshop will address questions related to the politics of representation pursued by these actors: why should they sit at a table with governments and international agencies, and who is marginalized by such a (multistakeholder) dynamic of 'inclusion' dominated by NGOs?

With contributions by:
Loe Schout (HIVOS, NL): Internet connects world citizens, but does it breed new ones, too?
Maartje OpdeCoul (One World, NL): Evaluating ICT4D projects
Michael Gurstein (New Jersey Institute of Technology, USA): Civil Society or Communities: The Contradiction at the Core of the Information Society
Maja van der Velden (University of Bergen, Norway): Cognitive Justice
Toni Eliasz (Ungana-Afrika, South Africa): What CSOs bring to ICT Policy Processes

Workshop A2: After WSIS: Exploring Multistakeholderism
11.30-13.00 Salon
Chair: Neeltje Blommestein (IICD, NL)
For some, the 2003-5 UN World Summit on the Information Society (WSIS) is just another moment in an ongoing series of inter-governmental jamborees, glamorizing disciplinary visions of global ICT governance. For others, WSIS revives 'tricontinentalist' hopes for a New International Information and Communication Order whose emphasis on 'civil society actors' may even signal the transformation of a system of inter-governmental organizations. Either way, WSIS continues to encourage the articulation of agendas, positions, and stakes in a new politics of communication and information. Following the effort to actively involve civil society actors in WSIS activities, the idea of an emergent 'multi-stakeholderism' is already considered one of the key WSIS outcomes. This workshop will take a critical look at different approaches to the idea of multistakeholderism.

With contributions by:
Lisa McLaughlin (Mass Communication and Women's Studies, Miami University-Ohio, USA)
Introduction: Issues in Multi-stakeholderism.
Ralf Bendrath (University of Bremen, Germany): Experiments in Multi-Stakeholderism—Lessons learned from WSIS.
Beatriz Busaniche (Fundacion Via Libre, Argentina): WSIS and Multistakeholderism: Could we call them "best practices"?
Ljupco Gjorgjinski (Center for Dialogue and Democracy, Macedonia): multistakeholder partnerships—cybernetic Governance for the information society
Stijn van der Krogt (IICD, NL): The Polder model applied to ICT4D in the South-- lessons learned from IICD's multi-stakeholder processes
Sally Burch (ALAI, Equador)
Paul Maassen (HIVOS, NL): Civil society as a stakeholder: the dilemma of constituency
Ned Rossiter (University of Ulster, UK): Post-Representation & the Architecture of Net Politics
Nnenna Nwakanma (Africa Civil Society for the Information Society, Nigeria): Partnerships and Networks: the African Civil Society Perspective

Workshop A3: Open Source, Open Borders
11.30-13.00 Cinema
Chair: Jo van der Spek (radio maker, NL)
Some of the organizations active in the WSIS process lost their accreditation because participants used their visa to say goodbye to Africa. Widely reported, the anecdote suggests that media and migration form a nexus that is nevertheless rarely explored in the context of ICT4D. In this session, we will survey some of the work on migrant and refugee media. It will also introduce the agenda of the wireless bridge project, a sister event of the incommunicado work conference that will take place in Tarifa (Spain) later in June.

Presenters:
Florian Schneider (kein.org, Germany)
Roy Pullens (researcher, NL): IOM and border control as info development
Nnenna Nwakanma (Africa Civil Society for the Information Society, Nigeria): An Anecdote of a would-be illegal immigrant.

14.00-16.00 Open Sessions

Main Hall:
14.00-15.00 Solomon Benjamin (urban researcher, CASUM-m, Bangalore
India): case study on ICT and real estate in Bangalore (including video documentary, produced for Incommunicado 05)
15.00-15 .30 Francois Laureys (IICD) in conversation with Sylvestre Ouedraogo (Burkina Faso)
15.30-16.00 Sally Burch (ALAI, Ecuador): Social movements, communication and ICTs

Salon: E-Waste
14.00-16.00
E-Waste: Special session on electronic waste, organized by Waste, advisors on urban development and development.
In this session, a highly diverse group of people from the development, ICT, recycling, finance, insurance, and waste management worlds consider strategies and approaches in relation to preventing, reusing or recycling WEEE, or waste from electronic and electrical equipment in
the Netherlands. The impulse behind the session comes from a twinning project between Stichting WASTE, in the Netherlands, and the NGO ACEPESA, in Costa Rica. The goal of the session is to arrive at ideas for interventions in both the Netherlands and Costa Rica.

Session organisers: Anne Scheinberg, Kiwako Mogi, Stichting WASTE, Gouda (http://www.waste.nl).
Session chair: Jeroen IJgosse, WASTE.
Confirmed Discussants:
Portia Sinnott, Micro Services Plus, California, Joost Helberg, Vereniging Open Source Netherlands, Stephan Wildeboer,OS-OSS, Angela Jonker, Flection Netherlands
dhr Herben, Province of Limburg, Netherland

Cinema:

14.00-14.20 Kim van Haaster (INC researcher, NL), The University of the Future: Software Development in Revolutionary Cuba.
14.20-14.40 T. B. Dinesh (BangaloreIT.org, India): Observations on the impact of IT on Society, in Bangalore.
14.40-15.00 Toni Eliasz (Ungana-Afrika, South Africa): on lacking ICT capacity among small development organizations and networks
15.00-15.20 Enrique Chaparro (Fundacion Via Libre, Argentina): on the hidden prices for ICT4 aid.
15.20-15.40 Oliver Vodeb and Jerneja Rebernak, art & ICT4D, a presentation of the Memefest 2005 competition.
15.40-16.00 Jo van der Spek and others: info solidarity with Iraq (http://www.streamtime.org)

Plenary Session 2: After Aid: Info-Development after 9/11
16.30-18.00 Main hall
Chair: Ravi Sundaram (Sarai, India)
What is the status of aid in the promotion of ICT4D, and how have ICT4D actors responded to the politicization and securitization of aid, including the sale of security and surveillance technologies in the name of info-development? To what extent does info-development overlap with new info-infrastructures in the field of humanitarian aid (ICT4Peace)? Are global trade justice campaigns a response to classic development schemes?

With contributions by:
Enrique Chaparro (Fundacion Via Libre, Argentina),
Glen Tarman (Trade Justice Campaign, UK): Join the band: ICTs, popular mobilization and the global call to make poverty history

Steve Cisler (librarian, USA): Outside the Church of ICT
Shuddha Sengupta (Sarai, India): Knowing in your Bones: Politics, Anxiety and Information in Delhi, 2005

20.30: Screening, co-curated by De Balie

::Friday, June 17::

Plenary 3: ICT4D and the Critique of Development
10.00-12.00 Main Hall
Chair: Kees Biekart (ISS, NL)
The critique of development and its institutional arrangements - of its conceptual apparatus as well as the economic and social policies implemented in its name - has always been both a theoretical project and the agenda of a multitude of 'subaltern' social movements. Yet much work in ICT4D shows little awareness of or interest in the history of such development critique. Quite the contrary, the ICT4D debate, whose terms are reproduced in the members-only loop of a few major NGO networks like APC, OneWorld, or PANOS, along with a small number of states and influential donor organizations, remains surprisingly inward-looking, unable or unwilling to actively challenge the hegemony of an ahistorical techno-determinism.

Even many activists believe that ICT will lead to progress and eventually contribute to poverty reduction. Have development skepticism and the multiplicity of alternative visions it created simply been forgotten? Or have they been actively muted to disconnect current struggles in the area of communication and information from this history, adding legitimacy to new strategies of 'pre-emptive' development that are based on an ever-closer alliance between the politics of aid, development, and security? Are analyses based on the assumption that the internet and its promise of connectivity are 'inherently good' already transcending existing power analyses of global media and communication structures? How can we reflect on the booming ICT-for-Development industry beyond best practice suggestions?

Contributions by:
Ravi Sundaram (Sarai New Media Initiative, India): Post-Development and Technological Dreams: An Indian Tale
Solomon Benjamin (urban researcher, CASUM-m, Bangalore India): E-Politics of the New Civil Society
Jan Nederveen Pieterse (University of Illinios, USA): Digital capitalism and development

Tracey Naughton (Chair WSIS Media Caucus, South Africa): Putting Lipstick on Pigs

Workshop C1: ICT corporations at the UN
13.00-15.00 Main hall
Chair: Soenke Zehle (Incommunicado, Germany)
The controversial agreement between Microsoft and the UNDP, issued at a time when open source software is emerging as serious non-proprietary alternative within ICT4D, is generally considered in terms of a public-private partnership, to be assessed on its own terms. But it should also be considered in the broader context of rising corporate influence in the UN system, from the almost-no-strings-attached Global Compact, widely criticized as multilateral collusion in corporate 'bluewashing', to the Cardoso Panel on UN-Civil Society Relations and its controversial definition of civil society.

With contributions by:
Lisa McLaughlin (University of Illinois, USA): Cisco Systems, the United Nations, and the Corporatization of Development
Michael Gurstein (New Jersey Institute of Technology, USA): Critiquing Apple Pie: What We Can Say and Not Say About the UN These Days
Manuel Acevedo (consultant, Spain): ICT4D partnerships at face value: experiences from the multilateral trenches
Steve Cisler (librarian, USA): PPPP: problems of public-private partnerships

Workshop C2: FLOSS in ICT4D
13.00-15.00 Salon
Chair: Paul Keller (Waag Society, NL)
Pushed by a growing transnational coalition of NGOs and a few allies inside the multilateral system, open source software has moved from margin to center in ICT4D visions of peer-to-peer networks and open knowledge initiatives. But while OSS and its apparent promise of an alternative non-proprietary concept of collaborative creation continues to have much counter-cultural cachet, its idiom can easily be used to support the 'liberalization' of telco markets and cuts in educational subsidies. What is the current status of OSS as idiom and infrastructural alternative within ICT4D?

With contributions by:
Dorkas Muthoni (Linux Chicks Africa, Kenya): Chix Presence: A strategic partner in increasing the efficiency of FOSS for the benefit of society

Felipe Fonseca (MetaReciclagem, Brazil): MetaReciclagem: technology re-appropriation and collective innovation"
Ednah Karamagi (Brosdi, Uganda)
Bill Kagai (FOSSFA, Kenya)
Nnenna Nwakanma (Africa Civil Society for the Information Society, Nigeria)
Enrique Chaparro (Fundacion Via Libre, Argentina): ICT are not (just) tools
Seppo Koskela (Applied Linux Institute, Helsinki): Free Software, ICT4D and Finland - the Short Story.
Sylvestre Ouéadraogo (executive President of Yam Pukri Burkina Faso)
Alexandre Freire (Digital Cultures/Ministry of Culture, Brazil)

Workshop C3: Culture and Corporate Sponsorship in the ICT4D Context
13.00-15.00 Cinema
Introduction: Solomon Benjamin (Bangalore)
Open informal discussion.
What is the aim of Western cultural organizations in the context of ICT4D projects? Think of the hip design event Doors of Perception in Bangalore and Delhi, our own Waag-Sarai Platform, Beijing and its new media arts inside the Millennium Dome, or the German media festival in Chiang Mai (Thailand). What is the agenda of these organizations? Is the 'electronic art' they are exporting merely paving the way for the big software and telecom firms to move in, or should we reject such a mechanic, one-dimensional view?

Workshop D1: New Info-Politics of Rights
15.30-17.00 Main Hall
Chair: Richard Rogers (GovCom/University of Amsterdam, NL)
Recent framings of ICT as an object of civil society politics have resulted in the coupling of ICT with the notion of "rights": issues of the spread, use and adaptation of these technologies are increasingly defined in terms of human, civil, communication and information rights, et cetera. This session questions the choice, perhaps the tactical optionality, of making ICT-related issues into matters of rights. The rights-frame formats ICT for particular modes of the institutional processing of issues. At the same time, ICT and the discourses knitted around this object themselves can be seen to spread the rights frame. Considering that counter-cultural engagements with new media were previously framed as tactical undertakings, the question is whether the rise of "rights" does not thwart the potential of a creative, aesthetic, affective politics of the tactical. Or is the case that networks have a better use for rights than institutions? This is the context in

which we ask: what are rights for, how are they used by NGOs, when does the coupling of ICT with rights work, and when does it fail?

With contributions by:
Soenke Zehle (Incommunicado, Germany): Politics of Info-Rights meets Tactical Media
Jodi Dean (HWS Colleges, USA)
Noortje Marres (University of Amsterdam, NL): Why is this happening to ICT? Info-rights as a special case of issue hybridisation
Magela Sigillito (Third World Institute, Montevideo, Uruguay)
Thomas Keenan (Bard College Human Rights Program, USA): On some dilemmas in claiming rights: persistence, elasticity, instrumentality
Ned Rossiter (University of Ulster, UK): organised networks and the situation of rights

Workshop D2: Digital Bandung: New Axes of Info-Capitalism
15.30-17.00 Salon
Chair: Ravi Sundaram (Sarai, India)
Open informal discussion
We are witnessing a shift from in the techno-cultural development of the web from an essentially post-industrialist euro-american affair to a more complexly mapped post-third-worldist network, where new south-south alliances are already upsetting our commonsensical definitions of info-development as an exclusively north-south affair. One example of this is the surprising extent to which a 'multilateral' version of internet governance has been able to muster support, another is the software and intellectual property rights reform (WIPO Development Agenda). info-development, that is, has ceased to be a matter of technology transfer and has become a major terrain for the renegotiation of some of the fault lines of geopolitical conflict - with a new set of actors. But does this really affect the established dependencies on 'northern' donors, and if so, what are some of the new alliances that are emerging? What is this new 'post-Bandung' movement?

Workshop D3: Nuts and Bolts of Internet Governance
15.30-17.00 Cinema
Chair: Reinder Rustema (Internet Society, NL)
One of the few areas where WSIS is likely to produce concrete results is internet governance (IG). The IG controversy revolves around the limits of the current regime of root server control (ICANN/US) and possible alternatives, but it is also significant because it signals the repoliticization of a key domain of a technocratic internet culture that long

considered itself to be above the fray of ordinary info-politics. The sense that IG has info-political implications and should be subject to discussion beyond expert fora is, however, much more widespread that actual knowledge of the techno-cultural dynamic actually involved in governing the internet. This workshop with be a nuts-and-bolts session for non-techies.

With contributions by:
Enrique Chaparro (Fundacion Via Libre, Argentina)
Danny Butt (Independent Consultant; Researcher, New Zealand): Cultures of Internet Governance: From global coordination to trans-cultural dialogue"

Plenary 4: Closing Session
17.30 – 18.30 Main hall
Moderated by Soenke Zehle and Geert Lovink
Plus: WSIS Awards, Dutch nominations, announced by Jak Bouman

Video Session
Rethinking 'underdevelopment or revolution' through ICTs.
Live videoconference with San Francisco, coordinated by Sasha Constanze Chock

18:30-19:00 Cinema
This session is focused on appropriation of ICTs by social movements that don't fit into the public private development industry framework. Rather than consider the success or failure of strategies to patch ICTs into a 'development' framework that means binding peripheral locations and populations more tightly to service of the metropole, we'll discuss ICTs and revolutionary activity in Brazil, Korea, Bolivia, and elsewhere. With remote participation from, amongst others, Dongwon Jo from MediACT in Seoul, Dorothy Kidd from University of San Francisco, Pablo Ortellado/Indymedia Brazil and members from ERBOL and CMI Bolivia.

A New Listserv on Public–Private Partnerships in ICT

Call for Participation

<ppp-l@pppwatch.org> <mailto:ppp-l@pppwatch.org>

This is an invitation to join a new listserv that focuses on public-private partnership initiatives in the field of information and communication technologies, with a particular emphasis on the economic and political dynamic usually referred to as 'development'.

Following the growth of private-sector involvement in public infrastructure projects across the globe, corporate investments have often become a substitute for public funding formerly provided by intergovernmental agencies, international aid organizations, and governments. Usually considered in terms of a pooling of private and public resources, public-private partnerships aim at a cooperative provision of services and products to exploit synergy effects. Public institutions are expected to become more 'proactive' in terms of their engagement with private actors, the development process as a whole more equitable and sustainable.

Such official pronouncements aside, assessments from the ground tend to give the relatively new tool of PPP a much more ambivalent review. While major info-corporations are indeed offering themselves as "partners in development" and support ICT development as vehicles for "effective service delivery" and "e-governance", they also take advantage of the newfound enthusiasm for Public-Private Partnerships to stake out their own commercial claims, crowd out public-sector alternatives, and actively discourage alternative forms of development cooperation.

Multi-Stakeholder-Partnerships (MSPs) are offered as such an alternative form of development cooperation. Unlike PPPs, based on the primacy of an ambiguous private/public distinction, MSPs focus on whoever has a stake in a given process. Because the position and identities of 'stakeholders' are largely self-defined, MSPs are, at least theoretically, open to individual and collective actors that may be left out of PPP processes usually assumed to involve only state and private sector actors. Beyond the contractual relationship of PPPs, MSPs prioritize overlapping interests; emphasizing trust and transparency, they could also play an important role in the development of new accountability mechanisms. More importantly, perhaps, MSPs affirm that the idea of 'partnerships' is itself in flux and open to contestation.

The idea to launch a project committed exclusively to PPP-in-ICT arose during a two-day conference, Incommunicado 05: From Info-Development to Info-Politics, held in Amsterdam, the Netherlands in June 2005. Incommunicado 05 attempted to offer a

critical survey of the current state of 'info-development', generally known by its catchy acronym 'ICT4D' (Information and Communication Technologies for Development), but also created an interest in more focused follow-up projects that would engage specific dimensions of the info-development process. After PPP in ICT had already became a topic of debate during the conference, members of the incommunicado network suggested that PPP-in-ICT should be one of these projects.

What we envision is a lively exchange of research and reports from the ground, a sharing of experiences both via a mailing list and - later on - a collaborative weblog.

Given that PPPs in ICT involve a complex set of actors - including intergovernmental institutions, states, local authorities, transnational corporations, small- and medium-sized enterprises (SMEs), and nongovernmental organizations (NGOs) - the scope is both specific - PPP in ICT - yet broad enough to address related developments and processes, including the joint development of a code of conduct for PPP/MSP that addresses the specificity of ICT.

A great deal of 'research' is done outside the institutional loops of the academy, research labs, or development consulting, so we hope that the framing of this topic will be of interest to whoever wants to engage in a substantial PPP-in-ICT exchange, regardless of whether or not they consider themselves researchers, community and/or media activists, etc.

On PPP-in-ICT and PPP-Watch

The domain currently used for this project is pppwatch.org. In the context of software, 'pppwatch' refers to a small demon used to monitor the PPP connection. In the more general context of info-political efforts, the idea of a 'watch' also suggest common cause with other 'watch' projects that attempt to create a modicum of transparency in processes - regardless of whether they involve public or private actors - where there is none. Both offer apt metaphors for a project that intends to keep an eye on the evolving dynamic of 'partnerships' in the field of ICT.

We are hoping that you will participate in this project. The listserv will "go live" once an initial threshold of 50 subscribers has been reached. To subscribe (online subscription will be enabled once ths list has gone live), please contact Soenke Zehle (s.zehle@tmsp.org) or Lisa McLaughlin (mclauglm@muohio.edu). Site and list are currently maintained by http://kein.org.

This cd-rom contains a selection of the interviews conducted during the Incommunicado 05 conference.

The following people were interviewed:

Jon W. Anderson / Solomon Benjamin / Enrique Chaparro / Jan P. Nederveen Pieterse / Richard Rogers / Roberto Verzola / Thomas Keenan / Anriette Esterhuysen / Ednah Karamagi / Sylvestre Ouedraogo / Muthoni Dorcas / Beatriz Busaniche / Steve Cisler / Felipe Fonseca / Shudda Sengupta / Bernardo Sorj / Tracey Naughton / Ravi Sundaram / Ned Rossiter / Michael Gurstein / Sally Burch / Monica Narula / Nnenna Nwakanma / Ralf Bendrath / Maja van der Velden / Geert Lovink / Soenke Zehle

Please feel free to copy and distribute the contents, that are also available online at http://www.incommunicado.info.

The term incommunicado generally refers to a state of being without the means to communicate. Incommunicado currently implies not only being out of touch, but also being readied for violation, or potentially so -- contact is withheld; protective authorities are out of reach. In extra-judicial places across the world, access may be blocked and reporting may be late, but information still seeps out. The Incommunicado Reader aims to be part of this information collection, and provides reflection on where the discussion could begin anew.

Institute of network cultures