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African Information Ethics in the context of the global Information Society

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Editorial: On IRIE Vol. 7

The 7th volume of IRIE (01/2007) is dedicated entirely to the publication of the proceedings of the first African Information Ethics Conference (<http://www.africaninfoethics.org/>) that was held in February, 5-7, 2007 in Pretoria, South Africa. It was co-organized by the University of Pretoria, the University of Wisconsin-Milwaukee and the ICIE - International Center for Information Ethics and fully sponsored by the South African Government.

Under the heading 'the joy of sharing knowledge' and the patronage of UNESCO it brought together some 80 policy makers and academic minds from Africa and around the world to discuss the impact of the use of modern Information and Communication Technologies (ICTs) on the African continent and formulate a specifically African perspective on the challenges involved - locally and globally.

In addressing the ethical challenges of the information society on the African continent the conference was inspired by the Geneva Declaration adopted by the Geneva World Summit on Information Society (WSIS) of 2003. It was explicitly conceived as part of the implementation of Action Line C10 of the Geneva Plan of Action.

Besides the intercultural dialogue between scholars from Africa and around the globe that can be referred to in the proceedings published in this issue the conference produced some tangible results:

- The Tshwane Declaration as adopted by the participants of the conference as a genuine African contribution to the Code of Ethics for the Information Society
- The ANIE - African Network for Information Ethics to give African scholars a platform to exchange and realize their ideas in the field
- The claim to implement Advisory Boards to African Governments to give advice to policy makers on the continent regarding the ethical implications of ICTs.
- The African Reader on Information Ethics - consisting of a selection of useful articles of this issue translated into main African languages.

The contributions to the conference published in this issue can be divided into 3 categories:

1. African Information Ethics in the context of the global Information Society (articles 1 - 15)
2. Information Ethics issues in Africa (articles 16 - 31)
3. Action Items for the road ahead (articles 32 - 39)

We hope you will appreciate this very special issue of IRIE as a valuable input for your academic and professional work.

Yours sincerely,

the Editors

Rafael Capurro

Information Ethics for and from Africa

Abstract:

This paper deals in the first part with some initiatives concerning the role of information ethics *for* Africa such as NEPAD, UN ICT and AISI particularly since the *World Summit on the Information Society*. Information Ethics *from* Africa is a young academic field. Not much has been published so far on the impact of ICT on African societies and cultures from a philosophical perspective. The second part of the paper analyses some recent research on this matter particularly with regard to the concept of *ubuntu*. Finally the paper addresses some issues of the *African Conference on Information Ethics* held in Pretoria, 3-5 February 2007.

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 - Localizing the Internet. Ethical aspects in intercultural perspective. R. Capurro, Johannes Frühbauer, Thomas Hausmanning, (Ed.), ICIE Vol. 4, Munich: Fink Verlag 2007

Introduction

On behalf of the participants of the African Conference on Information Ethics let me thank President Thabo Mbeki and the South African Government for sponsoring this outstanding event. Let me also thank the Department of Information Science at the University of Pretoria, the School of Information Studies at the University of Wisconsin-Milwaukee and the members of the International Center for Information Ethics for their commitment in organizing this meeting. This paper deals in the first part with some initiatives concerning the role of information ethics for Africa such as NEPAD, UN ICT and AISI particularly since the *World Summit on the Information Society*. Information Ethics from Africa is a young academic field. Not much has been published so far on the impact of ICT on African societies and cultures from a philosophical perspective. The second part of the paper analyses some recent research on this matter particularly with regard to the concept of *ubuntu*. Finally the paper addresses the issues and outcome of the *African Conference on Information Ethics* held in Pretoria, 3-5 February 2007.

The theme of this conference, namely "The Joy of Sharing Knowledge," echoes the core ideas of the *World Summit on the Information Society* (WSIS), as stated in the Geneva Declaration of Principles as well as becoming a part of the Tunis Agenda for the Information Society. Let me recall you the statement of the Geneva Declaration concerning the "Ethical dimensions of the Information Society":

"56. The Information Society should respect peace and uphold the fundamental values of freedom, equality, solidarity, tolerance, shared responsibility, and respect for nature.

57. We acknowledge the importance of ethics for the Information Society, which should foster justice, and the dignity and worth of the human person. The widest possible protection should be accorded to the family and to enable it to play its crucial role in society.

58. The use of ICTs and content creation should respect human rights and fundamental freedoms of others, including personal privacy, and the right to freedom of thought, conscience, and religion in conformity with relevant international instruments.

59. All actors in the Information Society should take appropriate actions and preventive measures, as determined by law, against abusive uses of ICTs, such as illegal and other acts motivated by racism, racial discrimination, xenophobia, and related intolerance, hatred, violence, all forms of child abuse, including paedophilia and child pornography, and trafficking in, and exploitation of, human beings." (Geneva Declaration of Principles 2003)

The participants of the Tunis summit shared the Geneva vision with the following words:

"2. We reaffirm our desire and commitment to build a people-centred, inclusive and development-oriented Information Society, premised on the purposes and principles of the Charter of the United Nations, international law and multilateralism, and respecting fully and upholding the Universal Declaration of Human Rights, so that people everywhere can create, access, utilize and share information and knowledge, to achieve their full potential and to attain the internationally agreed development goals and objectives, including the Millennium Development Goals." (Tunis Commitment, 18.11.2005)

President Mbeki reaffirmed this commitment from an African perspective in his statement to the second phase of the World Summit on November 16, 2005:

"Our country and continent are determined to do everything possible to achieve their renewal and development, defeating the twin scourges of poverty and underdevelopment. In this regard, we have fully recognized the critical importance of modern ICTs as a powerful ally we have to mobilize, as reflected both in our national initiatives and the priority programmes of NEPAD, the New Partnership for Africa's Development.

We are therefore determined to do everything we can to implement the outcomes of this World Summit on the Information Society and appeal to all stakeholders similarly to commit themselves to take action to translate the shared vision of an inclusive development-oriented information society into practical reality." (Mbeki 2005)

The idea of this conference emerged in October 2004 during the international symposium "Localizing the Internet. Ethical Issues in Intercultural Perspective" held in Karlsruhe (Germany) organized by the International Center for Information Ethics and

sponsored by Volkswagen Foundation. All the leading international experts in the field of information ethics were invited to participate. It was the first of its kind, dealing with information ethics from an intercultural perspective. Themes discussed included issues such as the impact of the Internet for social, political, cultural and economic development, addressing particularly questions related to privacy, access to information, intellectual property rights, quality of information, security, advanced capitalism and the digital divide. All participants were aware of the intercultural challenge of such a meeting at which some fifty scientists from all over the world participated. During this symposium it became clear that the African continent was not well represented. There was one representative from South Africa, which happened to be Johannes Britz, one of the initiators of this conference, as well as Willy Jackson, a representative from Cameroon, and Issiaka Mandé, Burkina Faso (the latter two both live in Paris). There were of course many reasons why more African scholars were not present. Some were unknown to other international scholars, and lack of funding to attend international events was and still remains a serious stumbling block.

The participants of the ICIE symposia were well aware of the urgent need to thoroughly research the ethical challenges that the introduction of information and communication technology poses for the African continent. They include the problem of development, particularly the eradication of poverty, the protection and promotion of indigenous knowledge, the archiving of African websites, and especially rights to communicate and to access knowledge in a digital environment so that Africans can become part of the emerging knowledge economy. We can summarize these issues under the label information ethics *for* and *from* Africa.

Information Ethics for Africa

At the celebratory opening of New Partnership for Africa's Development (NEPAD) offices at the South African Council for Scientific and Industrial Research, CSIR President and CEO, Dr Sibusiso Sibisi emphasised the unwavering commitment to the work done by NEPAD. Dr Ivy Matsepe-Casaburri, Minister of Telecommunications of South Africa said on this occasion:

"In this era of the Information Society, ICTs are regarded as tools for development. It is incumbent on us to commit ourselves to use these tools to create a better life and a more humane

world (...) I have faith in NEPAD because it is a home-grown, ambitious but realisable project of the African Union. Gone are the days when people solved our problems for us and not with us," (Matsepe-Cassaburri 2005)

The Presidential Commission on Information Society and Development (PNC on ISAG) has made major contributions to attain this goal in South Africa. It explicitly adheres to the WSIS vision of an information society as one

"where everyone can create, access, utilize and share information and knowledge, enabling individuals, communities and peoples to achieve their full potential in promoting their sustainable development and improving the quality of lives." (ibid.)

Another important promoter of a humane information society is the South Africa NGO Network SANGONeT, founded as Worknet in 1987 and devoted to involving civil society in the ICT process.

Since the *WSIS*, African societies have been keenly aware that sustainable socio-economic development requires appropriate information and communication technologies. This awareness was already evident at the African Information Society Initiative (AISI) launched in 1996 and coordinated by the UN Economic Commission for Africa (UNECA). Its goal is to create a pan-African ICT network giving Africans the means to improve the quality of their lives and fight against poverty. AISI's focus areas aim at promoting sectoral applications of ICT for eradicating poverty and improving quality of life.

This implies:

- E-Strategies: IC Infrastructure at national, sectoral, village and regional level, Scan-ICT programme
- Information & Knowledge: indigenous capacity to aggregate and disseminate information
- Outreach & Communication: involves all societal actors

AISI has already achieved some of these goals. It provided support to 28 African countries to develop their own national ICT infrastructure. There are periodic consultations starting with the Global Connectivity for Africa Conference which took place in Addis Ababa in 1998, and the evaluation of ICT impact (Scan-ICT Project). AISI organized a Media Training Workshop at Addis Ababa as well as a

forum on ICT's, Trade and Economic Growth in Addis Ababa in March 2006. Workshops on regional information and communication infrastructure have taken place since 2004 in Nairobi, Tangiers, Dar es Salaam, and Kigali.

The UN ICT Task Force published a report in 2003, edited by Joseph O. Okpaku (2003). His Excellency Kofi A. Annan, former Secretary-General of the United Nations stated in his contribution, "Communication Technologies: A Priority For Africa's Development":

"Clearly, if we are to succeed, the process must engage all stakeholders: donors, the private sector, civil society organizations, governments, and especially those in the developing world itself." (Annan 2003, xvii)

In the contribution to this report by Emmanuel OleKambainei, Chief Executive and Program Director for the African Connection Centre for Strategic Planning and Mavis Ampah Sintim-Misa, former Chief Executive Officer of this Centre, write:

"(...) there is a need to promote general ICT diffusion and raise awareness and appreciation as well as e-literacy among our populations, especially children and youth. This should be coupled with efforts to demystify and de-demonise ICT for people to accept it as an everyday tool and not an end to itself. (...) This can be done by targeting and ensuring that basic education and literacy change from the traditional "3Rs" (reading, writing and arithmetic) to a higher standard that can be referred to as "LNCI" or Literacy – reading and writing, Numeracy – working with numbers, Communicacy – communicating effectively, Innovativeness/Initiative. Success in this (...) will give Africa's education, human resource development, as well as research and development the ability to "cheetah-pole-vault" so as to catch-up with the rest of the global community." (OleKambainei and Sintim-Misa 2003)

Africa needs, indeed, a "cheetah-pole-vault" ICT strategy and not just a leap-frog one.

Joseph O. Okpaku, President and CEO of Telecom Africa Corporation, writes in the introduction:

"To a large extent, wealth has a vertical structure in African society, with most families consisting of the entire range, from the well-off to the most needy. The structure of family obligations in traditional Africa makes the pursuit of the collective advancement of the entire com-

munity a norm. The disruption of this model, through "modernization", has been a threat to reaping the benefits of this tradition for contemporary African development." (Okpaku 2003, 11)

Okpaku offers a vision of a society in which everyone has a central role to play. This vision corresponds to the original structure of African society based on the pre-eminence of the "extended family and its mutuality of care, concern and support." (Okpaku 2003, 13). In other words, Africa's scholars and politicians must retrieve their own social traditions in order to create a humane and authentic African information society. Some first steps have already been taken. The Africa preparatory conference for the WSIS in Tunis that took place in Accra in February 2005 specified that the goal of the African information society community must include all stakeholders:

"Building the information and shared knowledge society will contribute to achieving the Millennium Development Goals to improve quality of life and eradicate poverty by creating opportunities to access, utilize and share information and knowledge." (Accra 2005)

The African Internet Service Provider's Association envisaged in February 2005 the following actions:

"Given that Africa is the most unwired continent in the world, and yet is part of the Information Society, action should be taken (...):

- *A regional multi-stakeholder coordination body be mandated to co-ordinate and ensure collaboration among the numerous existing projects in Africa under the New Partnership for African Development (NEPAD)*

- *Regulators adopt an open and transparent licensing and regulatory regime that propels the access to and building of ICT infrastructure.*

- *The private sector participates in the technological dynamics of the development and also provides hard investment.*

- *Civil society creates interest in consumers to demand and ensure service delivery quality and return for money.*

Donors support this development by providing and facilitating access to soft financing and expertise where necessary for PASSIVE infrastructure

- Finally, that all the stakeholders above subscribe to the horizontal layering of the communication system in the manner of physical layer (infrastructure), followed by the logical layer, applications layer, content layer, etc." (*AfrISPA 2005*)

A recent study on "Ethics and the Internet in West Africa" by Patrick Brunet, Oumarou Tiemtoré, and Marie-Claude Vettraino-Soulard, based on field surveys of five nations in West Africa two Anglophone, The Gambia and Ghana, and three Francophone, Burkina Faso, Côte d'Ivoire, and Senegal, raises key ethical issues that, once identified, should ensure the adaptation of Internet technology and its integration into the development of African nations (Brunet, Tiemtoré, Vettraino-Soulard 2004). According to the authors, certain technologies such as the cellular phone might more readily and efficiently be developed in Africa and can contribute, for example, to the dissemination of medical information and to South-South cooperation. In order to avoid the digital gap within African societies, African governments could democratize telecommunications to ensure access for the most disadvantaged people. But, as the authors emphasise, the Internet is no panacea. Their work shows why information ethics matters, politically, socially and academically. It matters not only for Africa but from it.

Information Ethics from Africa

Information Ethics in Africa is a young academic field. Not much has been published on the role that African philosophy can play in thinking about the challenges arising from the impact of ICT on African societies and cultures. Most research on ICT from an ethical perspective takes its departure from Western philosophy. Let us review very briefly some recent works on African philosophy that are relevant in a negative or positive sense to the subject of this conference.

African oral and written traditions of philosophy have a long and rich past, going back as far as 3000 BC with the Egyptian Maat-Philosophy of ancient Egypt, the Afro-Hellenic tradition of Greek and Roman Antiquity and the early Middle Ages (Amasis, Plotinus, Philon, Euclid, Apuleius, Tertullian, Augustine), the Afro-Islamic tradition (Al-Farabi, Averroes, Ibn Battuta), the colonial break with contributions in the *amharic* language (Zara Yoqob, WaldaHawat, Amo, Hannibal), the anti-colonial philosophy (DuBois, Garvey, Césaire, Senghor), the ethno-philosophy of the 70s (Kagame, Mbiti), Afro-

socialism (Nkruma, Nyerere), universalistic theories (Houtondji, Wiredu, Towa), and contemporary representatives of different schools such as hermeneutics (Okere, Ntumba, Okonda, Serequeberhan, Kinyongo), Sage-philosophy (Oruka, Kaphagawani, Sogolo, Masolo), and feminism (Eboh, Oluwole, Boni, Ngoyi), to mention just a few names and schools. These traditions have been recently analysed by Jacob Mabe in his book on oral and written forms of philosophical thinking in Africa (Mabe 2005, 276-278; Ruch/Anyanwu 1981; Neugebauer 1989; Serequeberhan 1996). He has also edited the first comprehensive lexicon on Africa in German (Mabe 2001 and 2004), with more than 1000 keywords including "media" and "Internet" (Tambwe 2001).

The Department of Philosophy at the University of South Africa has published a comprehensive reader *Philosophy from Africa*, edited by Pieter Coetzee and Abraham Roux (Coetzee/Roux 2002). Of the 37 contributors 33 are Africans speaking for themselves on the topical issues of decolonization, Afrocentrism in conflict with Eurocentrism, the struggle for cultural freedoms in Africa, the historic role of black consciousness in the struggle for liberation, the restitution and reconciliation in the context of Africa's post-colonial situation (Eze 1997), justice for Africa in the context of globalization, the pressures on the tradition of philosophy in Africa engendered by the challenges of modernity, the reconstitution of the African self in its relation to changing community, the African epistemological paradigm in conflict with the Western, and the continuity of religion and metaphysics in African thought. The second edition contains themes on gender, race and Africa's place in the global context. Although the book addresses a broad variety of themes there is no contribution dealing specifically with information and communication technologies from an ethical or even philosophical perspective, although Paulin Houtondji addresses the problem of "Producing Knowledge in Africa Today" (Houtondji 2002). The terms "information" and "communication" are absent, not even listed in the index.

Is there a specific African philosophic and ethical perspective with roots in African languages, social experiences and values as analyzed for instance by John Mbiti, (1969), Chyme Gyekye (1996), Mutombo Nkulu (1997), Luke Mlilo and Nathanael Soédé (2003) and Jean-Godefroy Bidima (2004)? Yes there is, if we follow Mogobe Ramose's contribution to this reader (Coetzee/Roux 2002) that bears the title "Globalization and *ubuntu*" (Ramose 2002), but also, for instance, Kwasi Wiredu's contribution on the "conceptual decolonization in African culture"

through an analysis of African languages and terminology (Wiredu 1995; Weidtmann 1998). I am not making a plea for ethnophilosophy as criticized for instance by Houtondji (1998), but for a dialogue between both cultures and languages, and the global and the local as envisaged in the 2004 symposium of the International Center for Information Ethics (Capurro, Frühbauer, Hausmanninger 2007). My position is related to Wiredu's and Oladipo's interpretation as a "third way in African philosophy" (Oladipo 2002) as well as to Oruka's "sage philosophy" (Oruka 1990). My view aims at a critical analysis of the oral and/or written African traditions, as analyzed for instance by Anthony Appiah in his article for the *Routledge Encyclopedia of Philosophy* (Appiah 1998). I explicitly acknowledge modern reason without assuming that its manifestations are inviolable, particularly when they serve the purposes of colonialization. I locate ethical discourse between the particular and the universal. My aim, following the Kantian tradition, is universality, but I am aware, with Aristotle, that moral and political utterances are contingent, subject to different interpretations and applications based on economic interests and power structures. They are also objects of a critical analysis that envisages the good and seeks a humane world free from the dogmatic fixations of norms that *merely* reflect, implicitly or explicitly, particular points of view. In other words, ethics reflects on the *permanent* flow of human life and its modes of empirical regulation that make possible, on the basis of mutual respect, manifestations of humanity in unique and multiple forms. We are all equal, and we are all different.

According to Ramose, *ubuntu* is "the central concept of social and political organization in African philosophy, particularly among the Bantu-speaking peoples. It consists of the principles of sharing and caring for one another." (Ramose 2002, 643). Ramose discusses two aphorisms "to be found in almost all indigenous African languages," namely: "*Motho ke motho ka batho*" and "*Feta kgomo tschware motho*." The first aphorism means that "to be human is to affirm one's humanity by recognizing the humanity of others and, on that basis, establish humane respectful relations with them. Accordingly, it is *ubuntu* which constitutes the core meaning of the aphorism." The second aphorism means "that if and when one is faced with a decisive choice between wealth and the preservation of life of another human being, then one should opt for the preservation of life." (Ramose 2002, 644). Following this analysis we can ask: what is the role of *ubuntu* in African information ethics? How is the intertwining of information and communication technology with

the principles of communalism and humanity expressed in aphorisms such as "*Motho ke motho ka batho*" which can be translated as "people are other people through other people"? What is the relation between community and privacy in African information society? What kind of questions do African people ask about the effects of information and communication technology in their everyday lives?

One of the few detailed analysis of the relationship between *ubuntu* and information ethics, or more precisely, between *ubuntu* and privacy was presented by H. N. Olinger, Johannes Britz and M.S. Olivier at the *Sixth International Conference of Computer Ethics: Philosophical Enquiry* (CEPE 2005). They write:

"The African worldview driving much of African values and social thinking is "Ubuntu" (Broodryk, 2004). The Ubuntu worldview has been recognized as the primary reason that South Africa has managed to successfully transfer power from a white minority government to a majority-rule government without bloodshed (Murithi, 2000). The South African government will attempt to draft a Data Privacy Bill and strike an appropriate balance within the context of African values and an African worldview." (Olinger/Britz/Olivier 2005, 292)

According to the authors, *Ubuntu* ethical principles have been applied in South Africa in the following areas:

- Politics (the African Renaissance)
- Business (through collective learning, teamwork, sustainability, a focus on local community, and an alternative to extractive capitalism)
- Corporate governance (though the attitudes of fairness, collectiveness, humility)
- Restorative justice (through the use of dialogue, collective restitution and healing)
- Conflict resolution and reconciliation (through the Ubuntu ethos of the Truth and Reconciliation Commission, TRC) (Olinger/Britz/Olivier 2005, 295).

The authors emphasise the specificity of the *Ubuntu* worldview as a community-based mindset, opposed to Western *libertarianism* and *individualism* but close to *communitarianism*. The Nigerian philosopher Simeon Onyewueke Eboh has written a profound study on "African Communalism" (2004). Olinger, Britz and Olivier remark critically that the population

of southern Africa has to rediscover *Ubuntu* because many have not experienced it, and also because many live in two different cultures, practicing *Ubuntu* in the rural environments and Western values in the urban environments. If this is the case, not only in South Africa but in other African countries then there is a lot of theoretical and practical work to be done!

The authors translate the aphorism "*Umunto ungununtu ngabanye abantu*" (Nguni languages of Zulu and Xhosa) as "A person is a person through other persons" (Olinger/Britz/Olivier 2005, 293). According to Broodryk (2002), *Ubuntu* is an African worldview "based on values of intense humanness, caring, respect, compassion, and associated values ensuring a happy and qualitative human community life in a spirit of family." This means that personal privacy – being a key ethical value in Western countries – might be considered as less important from an *Ubuntu*-based perspective, even if we accept that there are several conceptions of privacy in both the West and the East (Ess 2005, Capurro 2005). In a comparative study of ethical theories in different cultures, Michael Brannigan addresses African Ethics with the utterance "To Be is to Belong" (Brannigan 2005). An analysis of this thesis could lead to a foundation of African information ethics based not upon the abstract or metaphysical concept of Being of some classical Western ethical theories, but upon the experience of Being as communal existence. The task of such an analysis would be to recognize the uniqueness of African perspectives as well as commonalities with other cultures and their theoretical expressions. This analysis could lead to an interpretation of ICT within an African horizon and correspondingly to possible vistas for information policy makers, responsible community leaders and, of course, for African institutions.

Johannes Britz chaired a session on ICT in Africa at the *Ethics and Electronic Information in the Twenty-First Century* (EE21) symposium at the University of Memphis (Mendina/Britz 2004). He said that an important condition of Africa's finding a place in the twenty-first century is a well-developed and maintained ICT infrastructure. Both Britz and Peter John Lor, former Chief executive of the National Library of South Africa, think that the present north-south flow of information should be complemented by a south-north flow in order to enhance mutual understanding. They plea for a shift toward the recognition of the "local" within the "global," following the idea of "thinking locally and acting globally." In ethical terms, this means respect for different local cultures and strengthening their active participation in inter-

cultural dialogue (Lor/Britz 2004, 18). Although Africa is still far from a true knowledge society, there is hope of success on certain fronts, such as investment in human capital, stemming the flight of intellectual expertise, and the effective development and maintenance of IT infrastructure (Britz et al. 2006). Dick Kawooya (Uganda Library Association) stresses the ethical dilemma confronting librarians and information professionals in much of sub-Saharan Africa, namely concerns about general literacy, information literacy, and access to the Internet on the one hand, and "dwindling budgets" for educational institutions, particularly libraries, on the other (Kawooya 2004, 34). Michael Anyiam-Osigwe, chief executive of the Africa Institute for Leadership, Research and Development, stresses the importance of ICT towards attaining sustainable democracy in Africa (Anyiam-Osigwe 2004). According to Coetzee Bester, a former member of parliament in South Africa and co-founder of the Africa Institute for Leadership, Research and Development, the problem of ICT in Africa includes all stakeholders.

He writes:

"A program to reconstruct communities as holistic entities is necessary. This should include leadership, followers, agree-upon principles and values as well as effective interaction among all these elements." (Coetzee Bester 2004, 12)

A value-based reorientation implies personal awareness, an understanding of information, effective interactions between leaders and their communities without limitations of time and space, and mutual confidence in representative leadership.

In the already mentioned study on "Ethics and the Internet in West Africa" (Brunet/Tiemtoré/Vettraino-Soulard 2004) the authors identify six types of ethical issues related to the development of the Internet in Africa but also relevant for other countries, namely:

- Exclusion and inequity
- Culture (Internet Content)
- Internet costs and financing
- Sociotechnical aspects of Internet integration (resistance, uses)
- Political power
- Economic organization

There is no such thing as a morally neutral technology. This is not to say just that technologies can be used and misused, but to express the deeper insight

that all technologies create new ways of being. They influence our relation with one another, they shape, in a more or less radical way, our institutions, our economies, and our moral values. This is why we should focus on information technology primarily from an ethical perspective. It is up to the African people and their leaders to question how to transform their lives by these technologies. African educational and research institutions should also reflect critically on these issues.

As Bob Jolliffe, senior lecturer in computer science at the University of South Africa, has pointed out there is an implicit connection between free software, free culture, free science, open access, and the South African Freedom Charter (Jolliffe 2006). A major task of information ethics in South Africa as well as in other African countries, is to align such ideals with concrete social, political, economic and technical processes. ICT in Africa should become a major contribution for opening "the doors of learning and culture" to use the wording of the Freedom Charter. The space of knowledge as a space of freedom is not, as Jolliffe rightly remarks, an abstract ideal. It has a history that limits its possibilities. It is a space of rules and traditions of specific societies, in dialogue with their foundational myths and utopian aspirations. We are morally responsible not only for our deeds but for our dreams. Information ethics offers an open space to retrieve and debate these information and communication myths and utopias.

The main moral responsibility of African academics is to enrich African identities by retrieving and re-creating African information and communication traditions. From this perspective, cultural memory is an ethical task if we want to create a humane community based not just on the number of people but on the relations between them, as the German Egyptologist Jan Assmann remarks following Friedrich Nietzsche in his *Genealogy of Morals* (Assmann 2000, Nietzsche 1999, vol. 5, 294-300). Cultural memory must be re-shaped again and again to build the core of a humane society. This means no more and no less than basing morality on memory and communication, thereby establishing information ethics at its core. The function of cultural memory is not just to express what belongs to the *collective* memory of a community, but to engage the will of its members to connect themselves through the task of creating it. Cultural memory is *connective*. It is related to our myths and to our dreams. We remember Nietzsche's ambiguous warning: "You want to be responsible for everything! But not for your dreams!" (Nietzsche 1999, vol. 3, 117). I call this

warning 'ambiguous' because Nietzsche, no less than Sigmund Freud, was well aware of the limits of human will and our tendency to repress or forget what we consider painful. The Egyptian god Thot is a symbol of cultural memory as a social task. He is the god of wisdom and writing as well as messenger of the gods, particularly of the sun god Re, and is associated with the goddess Maat, the personification of justice. Thot, the Greek Hermes, was represented as an ibis- (or a baboon) headed man with a reed pen and a palette, known in the Western tradition through Plato's criticism of writing in his *Phaedrus*.

I think that retrieving the African cultural memory with regard to information and communication norms and traditions is the main information challenge for African information ethics. It should recognize the different strategies of social inclusion and exclusion in the history of African societies, including traumatic experiences such as slavery and apartheid. Since the emergence of the Internet, this challenge is discussed under the heading of the digital divide. But African information ethics implies much more than just the access and use of this medium. The problem is not a technical one, but one of social exclusion, manipulation, exploitation and annihilation of human beings. It is vital that thought about African information ethics be conducted from this broader perspective.

Prospects

The final goal of ethics is not just to speak about the good but to do the good and to dream about it. We owe this insight about the relation between ethical thinking and action to Aristotle, the founder of ethics as a scientific discipline in the Western tradition. Our conference brings together scientists and politicians to discuss what could and should be thought and done to create a good African information society. This conference is unique in several respects. First, it deals with information ethics in Africa from an African perspective. Second, it encourages African scholars to articulate the challenges of a genuine African information society. Third, our conference is devoted to fundamental ethical challenges as listed in our programme:

Topic 1: Foundations of African Information Ethics

- Respect for human dignity - information based rights
- Freedom of expression
- Freedom of access to information

- Information wrongdoings, information corruption, information injustice

Topic 2: Cultural Diversity and globalization

- Protection and promotion of indigenous knowledge
- Global security, human security, privacy, transparency
- E-Government and related topics
- Cultural diversity and development

Topic 3: Development, Poverty and ICT

- Using ICT for a better life in Africa: case studies
- Internet and exclusion (socio-political and economic exclusion)
- North-South flow of information and information imperialism
- Flight of intellectual expertise from Africa.

The expected outcome of the conference can be summarized as follows:

- To agree on the **Tshwane Declaration on Information Ethics in Africa**.
- The establishment of the **Africa Network for Information Ethics** (ANIE) ANIE will cooperate with international partners such as the International Center for Information Ethics (ICIE), the International Society for Ethics and Information Technology (INSEIT) and the University of Wisconsin-Milwaukee. ANIE will be housed at the School of Information Technology, Department of Information Science at the University of Pretoria, South Africa. It will act as a platform for exchanging information about African teaching and research in the field of information ethics. It will provide the opportunity for scholars around the world who have a shared interest in African information ethics to meet each other and to exchange ideas. It will provide news on ongoing activities by different kinds of organizations that are involved in African information ethics and related areas.
- The establishment of the **Information Society and Development Advisory Council** to advise the South African government and other stakeholders on ethical issues

pertaining to the development of an African information society.

- To publish a **Reader on Africa Information Ethics** that can be used as a textbook for students and scholars. It will contribute to the development of a distinct field of African information ethics.
- To ensure that **African scholars** in this field are part of the international scholarly community. This outcome will be achieved by the creation of a **virtual research network** linking disparate scholars. It will be coordinated and maintained by the African Center for Information Ethics.
- The initiation of **research projects with the focus on grant proposals**. During the conference scholars and practitioners from around the world will have the opportunity to meet in smaller groups to discuss and identify possible research opportunities in the field of African information ethics. It is envisioned that foundations such as the Gates and Ford foundations will be approach for funding. The focus of the research will specifically be on the practical implications of the ethical challenges associated with the use of information and knowledge sharing on the African continent.
- The establishment of a **Summer School** on Information Ethics that will be hosted at the School of Information Studies at the University of Wisconsin-Milwaukee. The main purpose of such a Summer School will be to train African practitioners and scholars on relevant issues pertaining to African information ethics.
- To publish the **proceedings** of this conference in the *International Review of Information Ethics* (IRIE).

There is a short and a long history of information ethics in Africa. In the second part of my presentation I have pointed briefly to the short one. The long history concerns Africa's rich oral and written traditions throughout many centuries about different kinds of information and communication practices using different moral codes and media based on dynamic and complex processes of cultural hybridization. Critical reflection on this history promotes greater awareness of Africa's cultural legacy, which provides the foundations of the digital information and communication technologies that will create unique and genuinely African information societies. An information ethics opens a space of critical reflection for all stakeholders on established moral

norms and values, it provides the catalyst for a social process, and is a space for retrieving the rich African cultural memory necessary to our field. This cultural memory permits to reshape African identities and contribute to the world's information and communication cultures.

Let us start this fascinating debate on information ethics for and from Africa with a well-known insight of Sir William Arthur Lewis: "The fundamental cure for poverty is not money but knowledge" Information and communication technology can, certainly, contribute to the goal of sharing knowledge in Africa. Let us think together about how to share knowledge using ICT in Africa for the sake of African people. I am convinced that the best way to do it is in a mood of joy. By this I mean the kind of joy that is uniquely African. The South African Coat of Arms, written in the Khoisan language of the /Xam people, has a wonderful phrase in its motto:

!ke e: /xarra //ke

The /Xam people did not use abstract words such as 'unity' or 'diversity.' The motto can be translated as "diverse people unite" (Smith 2006). It addresses each individual effort to harness the unity between thought and action in and for an African community: Today, the /Xam language that once was spoken in a large part of Western South Africa no longer exists. Fortunately, it was recorded by a German linguist, Dr. Wilhelm Heinrich Immanuel Bleek, who was born in 1827 in Berlin. Dr. Bleek wrote the famous *Comparative Grammar of South African Languages* published in London in 1862 and 1869 (Bleek 1862/1869). By appointment of Sir George Grey, Governor of the Cape, Dr. Bleek was elected as curator of the South African Public Library in 1862. He occupied this position until his death in 1875. Thanks to Dr. Bleek the /Xam language survived in 12,000 pages taken down word-for-word from some of its last speakers, who gave us the gift of their myths, beliefs and rituals. Let us follow the example of Dr. Bleek by retrieving, saving and re-shaping the rich African cultural memory so necessary to our field.

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References

- Accra: Accra Commitments for WSIS Tunis 2005*
www.uneca.org/aisi/docs/AccracommittmentsEN.pdf (retrieved March 25, 2007)
- Annan, Kofi. A.: *Communication Technologies: A Priority For Africa's Development*. In Joseph O. Okpaku (Ed.): *Information and Communication Technologies for African Development. An Assessment of Progress and Challenges Ahead*. New York, 2003
<http://uncttaskforce.org/perl/documents.pl?id=1151;p=1> (retrieved March 25, 2007)
- Anyiam-Osigwe, Michael C.: *Africa's New Awakening and ICT: Toward Attaining Sustainable Democracy in Africa*. In Tom Mendina, Johannes J. Britz (eds.): *Information Ethics in the Electronic Age. Current Issues in Africa and the World*. North-Carolina, McFarland 2004, 36-46.
- AfrISPA (African Internet Service Provider's Association) Press Release 2005.
<http://www.itu.int/wsis/docs2/pc2/contributions/afrispa.doc> (retrieved March 25, 2007)
<http://www.afrispa.org> (retrieved March 25, 2007)
- Appiah, K. Anthony: *African Philosophy*. In E. Craig (Ed.): *Routledge Encyclopedia of Philosophy*. London, Routledge, 1998
<http://www.rep.routledge.com/article/Z018> (retrieved March 25, 2007).
- Assmann, Jan: *Religion und kulturelles Gedächtnis*. München, Beck 2000.
- Bidima, Jean-Godefroy: *Ethik*. In Jacob E. Mabe (ed.): *Das Afrika-Lexikon*. Stuttgart, Metzler 2001, 157-159.
- Bleek, , Wilhelm Heinrich Immanuel: *A Comparative Grammar of South African Languages*. London, Trübner & Co. Part I and II. See, 1862/1867
http://en.wikipedia.org/wiki/Wilhelm_Bleek (retrieved March 25, 2007)
- Brannigan, Michael C.: *Ethics Across Cultures with PowerWeb Ethics*. New York, McGraw-Hill 2005.
- Britz, Johannes.J.: *Africa and Its Place in the Twenty-First Century: A Moral Reflection*. In Tom Mendina, Johannes J. Britz (eds.): *Information Ethics in the Electronic Age. Current Issues in Africa and the World*. North-Carolina, McFarland 2004, 5-6.
- Britz, Johannes J. / Lor, Peter J. / Coetzee, I.E.M. / Bester, B.Coetzee: *Africa as a knowledge soci-*

- ety: A reality check. *The International Information & Library Review*, 2006, Vol. 38, Issue 1, 25-40.
- Bester, Coetzee: *The New Morality and Democracy in Africa. The Role and Responsibilities of Leadership and Governments for ICT Development in the African Union*. In Tom Mendina, Johannes J. Britz (eds.): *Information Ethics in the Electronic Age. Current Issues in Africa and the World*. North-Carolina, McFarland, 2004, 7-14.
- Broodryk, J.: *Ubuntu: Life lessons from Africa. Ubuntu School of Philosophy*. Pretoria, 2nd. Print. National Library of South Africa 2002.
- Brunet, Patrick / Tiemtoré, Oumarou / Vettraino-Soulard, Marie-Claude: *Ethics and the Internet in West Africa*, Africa World Press, IDRC. 2004. http://www.idrc.ca/en/ev9437-201-1-DO_TOPIC.html (retrieved March 25, 2007)
- Capurro, Rafael: *Privacy. An intercultural perspective*. In *Ethics and Information Technology*, 2005, Vol. 7, No. 1, 37-47.
- Capurro, Rafael / Frühbauer, Johannes / Hausmaninger, Thomas (Eds.): *Localizing the Internet. Ethical Issues in Intercultural Perspective*. ICIE Series Vol. 4, Munich, Fink 2007.
- Coetzee, Pieter / Roux, Abraham: *Philosophy from Africa. A text with readings*. Oxford University Press (2nd edition) 2002.
- Eboh, Simeon Onyewueke: *African Communalism. The Way to Social Harmony and Peaceful Co-Existence*. Onuganotu Lectures Vol. 3. Iko. 2004
- Ess, Charles: "Lost in translation?": *Intercultural dialogues on privacy and information ethics (Introduction to special issue on Privacy and Data Privacy Protection in Asia)*. *Ethics and Information Technology*, Vol. 7, No. 1, 2005, 1-6.
- Eze, Emmanuel Chukwudi: *Postcolonial African Philosophy: A Critical Reader*. Cambridge: Massachusetts: Blackwell Publ. 1997.
- Gyekye, Chyme: *African Cultural Values: An Introduction*. Philadelphia: Sankofa Publ. Co. 1996.
- Houtondji, Paulin J.: *Producing knowledge in Africa today*. In Pieter Coetzee and Abraham Roux (eds.): *Philosophy from Africa*. Oxford University Press, 2nd Ed. 2002, 501-507.
- Houtondji, Paulin J.: *African Philosophy: Myth and Reality*, Trans. Henri Evans, London, Hutchinson Univ. Library for Africa 1983.
- Joliffe, Bob: *Aligning the ideals of free software and free knowledge with the South African Freedom Charter*. In: *First Monday*, 2006, Volume 11, number 7. http://www.firstmonday.org/issues/issue11_7/joliffe/index.html (retrieved March 25, 2007)
- Kawooya, Dick: *The Digital Divide: An Ethical Dilemma for Information Professionals in Uganda?* In Tom Mendina, Johannes J. Britz (eds.): *Information Ethics in the Electronic Age. Current Issues in Africa and the World*. North-Carolina, McFarland 2004, 28-35
- Lor, Peter Johan / Britz, Johannes J.: *Information Imperialism. Moral Problems in Information Flows from South to North*. In: Tom Mendina and Johannes Britz (Eds.): *Information Ethics in the Electronic Age. Current Issues in Africa and the World*. McFarland Publishing 2004, 15-22
- Mabe, Jacob Emmanuel: *Mündliche und schriftliche Formen philosophischen Denkens in Afrika. Grundzüge einer Konvergenzphilosophie*. Frankfurt am Main, Peter Lang 2005.
- Mabe, Jacob Emmanuel (Ed.): *Das Afrika-Lexikon. Ein Kontinent in 1000 Stichwörtern*. Stuttgart and Wuppertal, Metzler and Peter Hammer 2001 and 2004.
- Mabe, Jacob Emmanuel: *Das Kleine Afrika-Lexikon. Politik, Wirtschaft und Gesellschaft*, Stuttgart and Bonn, Metzler and Bundeszentrale für Politische Bildung 2002 and 2004.
- Mabe, Jacob Emmanuel: *Die Kulturentwicklung des Menschen nach Jean-Jacques Rousseau in ihrem Bezug auf die gesellschaftlichen Entwicklungen in Afrika*. Stuttgart, Metzler 1996.
- Matsepe-Cassaburri, Ivy: *Celebratory opening NEPAD offices at CSIR*. 2005. http://www.csir.co.za/plsql/ptl0002/PTL0002_PG_E038_ARTICLE?ARTICLE_NO=7175975 (retrieved March 25, 2007)
- Mbeki, Thabo: *Statement from the President of South Africa, Thabo Mbeki, at the World Summit on the Information Society*. Tunis, 16 November 2005
In: <http://www.itu.int/wsis/tunis/statements/docs/g-southafrica/1.html> (retrieved March 25, 2007).
- Mbiti, John S.: *African Religions and Philosophy*. Nairobi: East African Educational Publishers 1969.
- Mlilo, Luke G. / Soédé, Nathanael Y. (Eds.): *Doing Theology and Philosophy in the African Context*. Frankfurt am Main: IKO, Verlag Interkulturelle Kommunikation, Vol. 17, 2003
- Mutombo, Nkulu: *The African Charter on Human and People's Rights: An African Contribution to the Project of Global Ethic*. 1997

- http://astro.temple.edu/~dialogue/Center/muto_mbo.htm (retrieved March 25, 2007)
- Neugebauer, C.: *Einführung in die afrikanische Philosophie*. München/Kinshasa, Presses Univ. Africaines 1989.
- Nietzsche, Friedrich: *Zur Genealogie der Moral*. In *ibid.*: *Kritische Gesamtausgabe*. Edited by Giorgio Colli and Mazzino Montinari. Munich, dtv 1999, Volume 5, 245-412.
- Nietzsche, Friedrich: *Morgenröthe*. In: *ibid.*: *Kritische Gesamtausgabe*. Edited by Giorgio Colli and Mazzino Montinari. Munich, dtv 1999, Volume 3, 9-331.
- Okpaku, Joseph O. (Ed.) (2003). *Information and Communication Technologies for African Development. An Assessment of Progress and Challenges Ahead*. New York. <http://unictaskforce.org/perl/documents.pl?id=1151;p=1> (retrieved March 25, 2007)
- Okpaku, Joseph O. (2003). *Information and Communication Technologies as Tools for African Self-Development. Towards a Re-Definition of Development*. In Joseph O. Okpaku (Ed.): *Information and Communication Technologies for African Development. An Assessment of Progress and Challenges Ahead*. New York. <http://unictaskforce.org/perl/documents.pl?id=1151;p=1> (retrieved March 25, 2007)
- Oladipo, Olusegun (ed.) (2002). *The Third Way in African Philosophy: Essays in Honour of Kwasi Wiredu*. Ibadan: Hope Publications.
- OleKambainej, Emmanuel / Sintim-Misa, Mavis Ampah: *Info-communication for Development in Africa. The African Connection Initiative*. In Joseph O. Okpaku (Ed.): *Information and Communication Technologies for African Development. An Assessment of Progress and Challenges Ahead*. New York 2003. <http://unictaskforce.org/perl/documents.pl?id=1151;p=1> (retrieved March 25, 2007)
- Olinger, H.N. / Britz, J.J. / Olivier, M.S.: *Western privacy and ubuntu: influences in the forthcoming data privacy bill*. In Philip Brey, Frances Grodzinsky, Lucas Inrona Eds.: *Ethics and New Information Technology*, CEPE 2005, Enschede, The Netherlands, 2005, 291-306.
- Oruka, H. Odera: *Sage Philosophy. Indigenous Thinkers and Modern debate on African Philosophy*. Nairobi, Acts Press 1990.
- Odera Oruka, H. / Masolo, D.A.: *Philosophy and Culture*. Nairobi, Bookwise Ltd. 1983.
- Ramose, Mogobe B.: *Globalization and ubuntu*. In Coetzee, Pieter / Roux, Abraham (2002). *Philosophy from Africa. A text with readings*. Oxford University Press (2nd edition), 2002, 626-650.
- Ruch, E.A. / Anyanwu, K.C.: *African Philosophy. An Introduction to the Main Philosophical Trends in Contemporary Africa*. Rome, Catholic Book Agency 1981.
- Serequeberhan, Tsenay: *African Philosophy: The Essential Readings*. St. Paul, Minnesota, Paragon House 1996.
- Smith, Ben: *The Linton Panel. The /Xam people and their language*, 2006. <http://www.sahc.org.au/lintonpanel.htm> (retrieved March 25, 2007)
- Tambwe Kitenge bin Kitoko, Eddie: *Internet*. In Jacob E. Mabe (Ed.): *Das Afrika-Lexikon*. Stuttgart: Metzler, 2001 and 2004, 260-261.
- Tambwe Kitenge bin Kitoko, Eddie: *Medien*. In Jacob E. Mabe (Ed.): *Das Afrika-Lexikon*. Stuttgart, Metzler, 2004, 386-387.
- Weidtmann, Niels: *Der gemeinsame Weg der Kulturen zu größerer Wahrheit. Eine Einführung in das Denken von Kwasi Wiredu*. 1998 In: *polylog*, 2 <http://them.polylog.org/2/fwn-de.htm> (retrieved March 25, 2007)
- Wiredu, Kwasi: *Conceptual Decolonization in African Philosophy. Selected and introduced by Olusegun Oladipo*. Ibadan, Hope Publishers 1995.
- WSIS – Tunis Commitment WSIS-05/TUNIS/DOC/7-E, 2005 <http://www.itu.int/wsis/docs2/tunis/off/7.html> (retrieved March 25, 2007).

Johannes J. Britz

The joy of sharing knowledge: But what if there is no knowledge to share? A critical reflection on human capacity building in Africa¹

Abstract:

This article focuses on the current trends and initiatives in human capacity building in Africa. It takes as its starting point that human capacity development is essential for Africa to become an information and knowledge society and therefore an equal partner in the global sharing of knowledge. Four knowledge areas are identified and discussed. These are education, research and development, brain drain and information and documentation drain. The paper concludes that there is a clear understanding in Africa that its future lies with education and that most African leaders have a strong political will to invest in human capacity building on the continent. It is also clear that much has been done, particularly primary education. Africa will most definitely benefit from this in the long run. Problem areas remain however. These are in the needed growth of research and development and how to address the brain and information drain phenomena.

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¹ Part of this research is based on a doctoral thesis by the author (2006).

From Karlsruhe to Pretoria: The eye of the (knowledge) hippo

In October 2004 an international symposium on Information Ethics was held in Karlsruhe Germany. It was organized by the International Center for Information Ethics and sponsored by the Volkswagen Foundation in Germany. Leading international experts in the field of information ethics were invited to participate and it was a first of its kind in the world. The symposium focused on the new and challenging ethical question raised by modern information and communication technologies within the paradigm of globalization and knowledge economies. Themes discussed included issues such as privacy, access to information, intellectual property rights, quality of information, security, spamming, advanced capitalism and the digital divide which included the question of the information rich versus the information poor. (ICIE)¹

It became clear to all present that the African continent was not well represented at the symposium. There were only a few Africans in attendance, most of them expatriates. There were of course many reasons why the African scholars were not present. Some relate to the mere fact that they are unknown to other international scholars. Lack of funding to attend international events is also a stumbling block, and last but not least, not much research has been done on the African continent on this very important topic. It seems, in terms of scholarly publications, that African scholars did not have much to offer to their global counter parts on the ethical challenges facing Africa in the era of globalization. Rafael Capurro did a search on publications related to African Information Ethics by African scholars and came across a limited number of publications (Africainfoethics.org)².

There is therefore an urgent need to integrate leading African scholars into the international ethics debate on the impact of new information and communication technologies in Africa. This led to the organization of the first ever Africa Information Ethics conference which was held in February 2007. The event took place in Pretoria (South Africa) and

was attended by scholars from more than 21 countries, most of them from Africa. The theme of the conference was very appropriate: "The joy of sharing knowledge".

This lack of contribution by African scholars to the debate on information ethics presents, figuratively speaking, only the eye of the hippo, as it is symptomatic of a larger 'knowledge problem' facing the African continent.

To a large degree, as I will argue in the rest of this paper, Africa is knowledge poor since most of its knowledge wealth is still imbedded in its people. It is not made explicit and it is not shared with the rest of the world. The following two examples will illustrate this point: Only 1% of the global scholarly publications originate from Africa – most of these are from South Africa. Also, roughly 60% of all adults living in Africa are still illiterate. This makes Africa, in terms of its own development, vulnerable and dependent, and according to the African Union, Africa still lacks in many respects the intellectual capacity to address its own problems in a scientific manner (Commission for Africa Report, 2005)³. Related to this question is the mere fact that if Africa does not invest more in education and specifically in relevant research and development (R&D) activities, this continent will not only fall further economically behind, but will also run the risk of being excluded from the global innovation networks. Nearly ten years ago the rector of the United Nations University, Hans van Ginkel commented that if Africa does not invest heavily in its own knowledge sector it will remain in a dangerously dependent position (United Nations University, 1998)⁴.

Human capacity building needs therefore to be a top priority of any agenda dealing with Africa's road of becoming an information and knowledge society. It is evident that most of the political leaders on the continent share this view. This explains why the Africa Union explicitly stated that one of its highest priorities is to make Africa part of the global infor-

¹ ICIE. International Center for Information Ethics. Website: <http://icie.zkm.de/>

² [Africainfoethics.org](http://www.africainfoethics.org). Website: <http://www.africainfoethics.org/bibliography.html>.

³ Commission for African Report. 2005. [Online]. Available from: <http://www.commissionforafrica.org/english/report/introduction.html>. Accessed 19 October 2005

⁴ United Nations University. (1998). United Nations University: Higher education and knowledge. [Online] Available from: <http://www.unu.edu/africa/00sps-strengthen.html>. Accessed October 17 2005.

mation and knowledge society (NEPAD, Three Years of Progress, 2004)⁵.

The obvious reason being that knowledge forms the cornerstone of an information and knowledge society. Not only the use thereof, but more so the ability to produce and export it. Knowledge is the main facilitator of growth and economic development that allows people living on the African continent to reach their full potential and to achieve their human well – being.

Even though there is no lack of political will in Africa the question still remains: How much does Africa invest in its people not only to ensure growth and prosperity, but also to be able to become an equal partner in the sharing of the global body of knowledge?

From primary education to research and development: The size of (knowledge) hippo in Africa

In the rest of this paper I will try to answer the question. I will build my argument around the different 'knowledge initiatives' on the continent that are focused on addressing the challenges associated with human capacity building. My focus areas include the following:

- education;
- research & development (R&D);
- brain drain and
- information and document drain.

Education

Sheer numbers and statistics make a compelling argument that some African countries are making good and steady progress towards primary and secondary educational sectors. I highlight two relevant statistics in support of this argument:

Based on an analysis of the OECD countries (African Economic Outlook 2006)⁶ more that 90% of primary

school children are actually attending school in Africa.

In comparison to most develop countries a number of African countries, for example South Africa, Kenya and Lesotho, allocate more or less the same percentage of its GDP towards education (see table 1). A number of African countries, including Zambia and Mozambique, still fall far behind in terms of allocation of money to primary education. It is also important to bear in mind that although the percentage allocated to education might be equivalent to developed nations, the dollar amount is significantly lower.

COUNTRY	POPULATION	% GDP for education	TOTAL GDP
Ivory Coast	17 mil	4.6%	\$ 13.7 bn
Kenya	34 mil	6.2%	\$ 14.4 bn
South Africa	45 mil	5.7%	\$159.9 bn
Lesotho	1.8 mil	10%	\$ 1.362 bn
Namibia	2.03 mil	7.9%	\$15,14 bn
Mozambique	19.4 mil	2.4%	\$6.43 bn
Zambia	11.2 mil	1.9%	\$ 5.351 bn
Botswana	1.6 mil	2.1%	\$18.72 bn

⁵ NEPAD 2004. NEPAD: three years of progress. [Online]. Available from: http://www.sarpn.org.za/documents/d0000982/P1_091-NEPAD_3Years_Oct2004.ppt#256,1,NEPAD. Accessed 24 July 2005.

⁶ African Economic Outlook. 2006. OECD Publication. Paris: African Development Bank.

Tanzania	36.5 mil	2.1%	\$12.12 bn
Niger	14 mil	2.3%	\$3.43 bn

COUNTRY	POPULATION	% GDP for Education	TOTAL DGP
USA	300 mil	5.7%	\$10 949 bn
United Kingdom	60 mil	4.8%	\$1795 bn
Australia	8 mil	4.8%	\$522 bn
Finland	5 mil	6.3%	\$161.9 bn
Ukraine	48,5 mil	4.2%	\$49.5 bn
Korea	48 mil	4.9%	\$605.3 bn

Table 1: comparative statistics on allocation of GDP towards education

http://www3.nationalgeographic.com/places/continents/continent_africa.html

These statistics are supported by a strong political will in Africa to invest in its people and in education. It is important to quote Thabo Mbeki, the current president of South Africa, which is the most powerful nation in Africa.

"If the next century is going to be characterized as a truly African century, for social and economic progress of the African people, the century of durable peace and sustained development in Africa, then the success of this project is dependent on the success of our education systems. For nowhere in the world has devel-

opment been attained without universal and sound primary education, without an effective higher education and research sector, without equality of educational opportunity" (Mbeki, in Butcher, 2003:11)⁷.

This quote is taken from his opening address at the Conference on Education for African Renaissance in the Twenty First Century. Much of this sentiment is reflected in the priorities set by the New Partnership for Africa's development (NEPAD) in 2005. NEPAD is a vision and strategic framework for Africa's renewal. The NEPAD strategic framework document were developed from a mandate given to the five initiating Heads of State (Algeria, Egypt, Nigeria, Senegal, South Africa) by the African Union to develop an integrated socio-economic development framework for Africa⁸. Human development, and in particular education, is set as one of the top 10 priorities of NEPAD (NEPAD, Three years of progress, 2005)⁹. As part of the Human Capacity Development strategy NEPAD has also launched an e-school initiative focusing on teaching school children as well as teachers ICT skills (Commission for Africa Report, 2005)¹⁰. Some African countries also put their money where their mouth is and made remarkable progress in primary education. I list three examples:

Mozambique succeeded to double the number of school enrolment over a period of 5 years (2000 – 2005);

⁷ Butcher, N. 2003. Technological infrastructure and use of ICT in education in Africa: An overview. Working group on distance education open learning (WGDEOL). Paris: Association for the Development of Education in Africa.

⁸ The New Partnership for Africa's Development (NEPAD). Website: <http://www.nepad.org/2005/files/inbrief.php>.

⁹NEPAD 2004. NEPAD: three years of progress. [Online]. Available from: http://www.sarpn.org.za/documents/d0000982/P1_091-NEPAD_3Years_Oct2004.ppt#256,1,NEPAD. Accessed 24 July 2005.

¹⁰Commission for African Report. 2005. [Online]. Available from: <http://www.commissionforafrica.org/english/report/introduction.html>. Accessed 19 October 2005

Zambia is currently revisiting the current policy of free education up to grade 7 and to introduce free education up to grade 12;

Kenya introduced free primary education, successfully bringing back 1.2 mil children to school and

Tanzania build more than a 1000 new schools over the past couple of years and in addition 18 000 new teachers that have been recruited (G8 Gleneagles, 2005)¹¹.

Africa also faces some steep educational challenges. Many African countries simply lack resources to adequately address their educational needs According to the NEPAD Secretariat weekly newsletter (8 September 2005) there are more than 40 million children in Africa not in school and have never been exposed to any formal education. There is an estimated shortage of 3 million teachers on the continent. Furthermore Africa is the continent with the lowest average school completion rate – it is on average 60% or less and Africa has also the highest number of girls not attending school (23 million). Another example to illustrate the education crises in Africa is the fact that in the year 2000 Nigeria (the most populous country in Africa and one of the richest in terms of natural resources) had only the capacity to accommodate 12% of qualified candidates for higher education (Commission for Africa Report, 2005; World Economic Forum, 2003)¹². Another drawback is the low level of literacy (Britz, et al.: 2006)¹³. In the 2005 the average illiteracy rate on the African continent was 35%. One sign of hope is the fact that the average illiteracy rate of people between the ages of 15 and 24 is substan-

tially lower at 20% (African Economic Outlook, 2006:581)¹⁴.

Research and Development

Although Africa is still facing some serious educational challenges. One can argue that substantial progress is being made, particularly regarding primary education. Investing in children's education ensures that the next generation will be able to effectively generate and utilize knowledge that will foster economic growth and development. This leads me to the next important question: Who are the people in Africa that are actively involved in research and knowledge generation? In other words: what is the current status of R&D in Africa, and who are the knowledge creators on the continent and to what extent is Africa able to address and solve its problems by means of locally created knowledge?

It is clear that most African countries value R&D and understand that it is crucial to any economic development. According to a recent study by the Commission for Africa there are some excellent R&D facilities in Africa. Examples included the South African Council for Scientific and Industrial Research, the African Economics Research Consortium, the Bio Sciences Facility for Central and Eastern Africa as well as the Community and Individual Development Association (CIDA) City Campus in South Africa (Commission for Africa Report, 2005:138)¹⁵. Under the leadership of NEPAD the number of Academic of Sciences in Sub-Saharan Africa have increased to 10 (Schneegans & Amelan, 2006)¹⁶.

African political leaders are however weary of the fact that not nearly enough money is invested in R&D activities. In 2004 NEPAD for example organized a meeting of African ministers of science. At this meeting it was agreed that Africa should in-

¹¹ G8 Gleneagles. 2005. Policy issues. Africa. [Online]. Available from: <http://www.g8.gov.uk/servlet/Front?pagename=OpenMarket/Xcelerate/Showpage&c+Page>. Accessed 19 September 2005.

¹² World Economic Forum. 2003. Gearing Africa for the knowledge economy: African Economic Summit (2003). [Online]. Available from: <http://www.weforum.org/site/knowledgenavigator.nsf/Content/Gearing%20Africa%20>. Accessed 13 October 2004

¹³ Britz, J. J., Lor, P. J., Coetzee, E. M. I. & Bester, B. C. 2006. Africa as a knowledge society: a reality check. *International Information and Library Review*, 38: 25-40.

¹⁴ African Economic Outlook. 2006. OECD Publication. Paris: African Development Bank.

¹⁵ Commission for African Report. 2005. [Online]. Available from: <http://www.commissionforafrica.org/english/report/introduction.html>. Accessed 19 October 2005

¹⁶ Schneegans, S. & Amelan, R. 2006. The shifting fortunes of global science. *A World of Science*, 4(2): 2-7.

crease its spending on R&D to at least 1% of GDP in the next decade. The current spending is less than 0.1% (Science and Development Network, 2004)¹⁷. This will compare, at least in terms of percentage, more favourably to the European Union's 1.93% of the GDP. Japan and the USA invest more than 2% of its GDP on R&D. This call for African countries to increase their spending on R&D to at least 1% of the GDP by 2010 was reiterated in 2007 at the meeting of the African ministers of Science and Technology (IISD report, 2007).

Alarming however is the fact that nearly 60% of all R&D activities in Africa are centered in South Africa and according to the Commission for Africa Report there is in the greater Congo basin virtually "no science at all" (Commission for Africa Report, 2005: 138)¹⁸.

African political leaders also realized that there is a lack of an indigenous base for science and technology that hampers the development of Africa. This led to the establishment of the African Ministerial Council on Science and Technology (AMCOST) in November 2003 under the auspices of the New Partnership for Africa's Development (NEPAD) and the African Union (AU). AMCOST is a "...high-level platform for developing policies and setting priorities on science, technology and innovation for African development (IISD Report, 2007)¹⁹. The main purpose of AMCOST is to provide political and policy leadership for the implementation of Africa's Science and Technology Consolidated Plan of Action (CPA) which was decided upon in 2003. The CPA "...articulates Africa's common objectives and commitment to collective actions to develop and use science and technology for the socio-economic transformation of the continent and its integration into the world economy" (IISD Report, 2007). With this initiative it seems as if Africa is now trying to

find answers from within and not relying as much on answers and solutions from abroad to address the unique problems of Africa. Finding answers from within implies also that one needs to find the researchers from within. This leads me to address the next knowledge challenge facing Africa, namely the brain drain.

The migration of the (knowledge) hippo from Africa: Brain drain

The economic reality of the brain drain in Africa hits the African governments very hard. Based on statistics, as well as initiatives to reverse this brain drain, it is clear that Africa's political leaders understand the seriousness of this condition. The migration of Africa's well educated people to the developed world is one of the major stumbling blocks for Africa to become an information and knowledge society. The alarming fact is that the monetary value of the exodus of people out of Africa exceeds the value of all the development aid that African countries have received from the developed world (Britz & Lor, 2003: 165)²⁰. It is estimated by the World Bank (2002) that more than 70 000 highly qualified African scholars leave the continent on a yearly basis to work abroad (World Bank Report, 2002)²¹. Many of them never return and it is estimated that Africa spends more than \$4 billion annually to replace these lost skills (World Market Research Center, 2002)²².

Some African countries have introduced some radical measures to retain and/or to benefit from Africans in the diaspora. I list a few of these initiatives:

¹⁷ Science and Development Network. 2003. African nations agree on science spending targets. [Online]. Available from: <http://www.scidev.net/News/index.cfm?fuseaction=readNews&itemid=1095&language=1>. Accessed 19 October 2005.

¹⁸ Commission for African Report. 2005. [Online]. Available from: <http://www.commissionforafrica.org/english/report/introduction.html>. Accessed 19 October 2005

¹⁹ IISD Report. 2007. [Online] Available from: <http://www.iisd.ca/africa/amcost/>. <http://www.iisd.ca/africa/brief/briefing0702e.html>

²⁰ Britz J. J. & Lor, P. J. 2003. A moral reflection on the flow from south to north with specific reference to the African continent. *Libri*, 53(3): 160-173.

²¹ World Bank. 2002. *Globalisation, growth, and poverty: building an inclusive world economy*, a co publication of the World Bank and Oxford University Press. New York: Oxford University Press.

²² World Markets Research Centre. 2002. *The brain drain: Africa's Achilles heel*. [Online]. Available from: http://www.worldmarketanalysis.com/InFocus2002/article/africa_braindrain.html. Accessed 9 July 2005.

Intellectual diaspora networks. More than 40 countries in Africa are part of these networks (Meyer, Kaplan & Charum: 2001)²³. The main aim is to maximize the use of the skills and knowledge of expatriates in such a way that they can contribute to the particular country's development. This initiative is based on the idea that a pool of knowledge must be potentially available without the expatriates having to permanently return to their home countries (Brown, Kaplan & Meyer, 2001)²⁴.

Transfer of Knowledge through Expatriate Networks (TOTKEN). This program was initiated by the United Nations Development Program (UNDP). This program is closely related to the above mentioned initiative and the main aim is to promote the greater use of well-skilled expatriates to train Africans at home. The focus is however on short term service in economic and social development. (TOTKEN Program, 2006)²⁵.

South African Network of Skills Abroad (SANSA). In South Africa, a similar programme, known as the South African Network of Skills Abroad, has also been initiated. The basic idea is to encourage expatriate South Africans to make their body of knowledge and skills available to continue contributing to South Africa's development without having to return permanently to South Africa (S.A. National Research Foundation, 2002)²⁶. According to the South African National Research Foundation contributions can include the activities such as the participating of South African scholars in training or research with South African counterparts abroad; the transmitting of knowledge and information and results of research which are not locally available as well as the

facilitation of business contacts abroad (SANSA, 2006)²⁷.

Another initiative to change the threat of brain drain into an opportunity is the "Renewing the African University" project. African universities, in association with the Association of African Universities and the Association of Commonwealth Universities played a leading role in initiating this project and the main aim is to enhance higher education in Africa. Renewing the African University is a ten-year partnership programme and the cost is estimated at \$500 million per annum. The G8 Commission on Africa Report strongly recommends that the international community support this initiative (Renewing the African University, 2005, Commission for Africa Report, 2005:138)²⁸.

These initiatives by Africans and others abroad to not only counter the brain drain, but also to change this threat into an opportunity must certainly be applauded. However, the successes of these initiatives are not yet determined and very little data is available reflecting the achievements (success or failure) of these projects. The Renewing the African Universities project is also very ambitious and costly and it is uncertain where the necessary funding will come from to ensure the success thereof.

The starving of the (knowledge) hippo in Africa: Information and documentation drain

Another contributing factor to Africa's inability to share in the joy of sharing knowledge relates to the international trade in information and documentation. By information and documentation trade I specifically refer to the international flow of scientific and scholarly publications. It is a well known fact that only a small proportion of the world's scholarly and scientific literature published in high-ranking journals and indexed in key research tools originate from developing nations. Africa, for example, is

23 Meyer, J. B., Kaplan, D., & Charum, J. 2001. Scientific nomadism and the new geopolitics of knowledge. *International Social Science Journal* (168): 309-321.

24 Brown, M., Kaplan, D. & Meyer, J. B. 2001. Counting brains: measuring emigration from South Africa, Southern African Migration Project. Kingston, Ontario: Queen's University.

25 TOTKEN Program, 2006. [Online]. Available from: <http://www.tokten.org/index.cfm>. Accessed 1 September 2006.

26 S. A. National Research Foundation. 2002. SANSA: South African network of skills abroad. [Online]. Available from: <http://sansa.nrf.ac.za/interface/AboutSANSA.htm>. Accessed 1 September 2002.

27 SANSA South African Network of Skills Abroad. 2006. [Online]. Available from: <http://sansa.nrf.ac.za/Default.aspx?Instruction=AboutSANSA>. Accessed 1 September 2006.

28 Renewing the African University. 2005. [Online]. Available from: <http://www.aau.org/gc11/adocs/pdf/eng/aau-acu-sauvcaprog.pdf>. Accessed 13 October 2004.

responsible for the publication of only 1% of the world's scholarly publications (Britz & Lor, 2003; Gibbs, 1995²⁹ and de Koker, 1995³⁰).

A contributing factor to this lack of publications is the fact that the majority of African scholars and scientists are facing obstacles when they wish to contribute to the international body of scientific and scholarly knowledge. Based on the finding of a previous article that I published with Peter Lor (2003) I summarize a number of these barriers.

Scientific research that is done in African countries is sometimes viewed as of lesser quality or inferior. Apart from prejudice, it is unfortunately also true that some of the research undertaken by African scholars is indeed of poor quality. A number of factors contributing to this state of affairs include poor training/education and/or a lack of equipment and an inability to command English and/or French. Much of the research done in Africa therefore end up being published in the grey literature and can, due to poor bibliographic control amongst other factors, remain inaccessible to the global scientific community. What aggravates this problem even further is the fact that the number of academic journals in Africa is declining, and academic libraries around the world are reluctant to subscribe to these journals because of the fact that they are poorly managed (Rosenberg, 2002:51, 54, 55)³¹. Most of these journals are also not indexed in the major indexing databases. This has furthermore led to the perception that these journals are not up to standard and that the content is of a lower quality.

The fact that local journals from Africa are not always well managed and in many cases not indexed in the prestigious international indexing and abstracting databases led to an inclination by many African authors not to publish in their local journals (Britz & Lor, 2003:164)³². This trend poses further-

more a serious threat to the survival of African based journals. Many scholars and scientists from Africa furthermore choose to publish in high ranking international journals because it is more advantageous to their own professional development and careers (Fernandez,1999:23³³; Cao and Suttmeier ,2001:968³⁴).

The inadequate flow of scientific literature from the developed world to Africa makes it also difficult for researchers in Africa to gain access to the cutting edge of research in their respective fields. One of the main reasons for this inadequate flow is high costs. Access to high-quality scientific journals is very expensive and most research libraries in Africa cannot afford to subscribe to these journals.

These factors have led to asymmetric power relationships. For many African scholars and researchers to access and use their own scholarly and scientific knowledge they need to access the international indexing and abstracting services. These services are mostly situated in the developed countries thereby making scholars residing in African countries dependent on these countries to access their own scientific knowledge.

Closely related to the above mentioned issue is what Peter Limb referred to as the so-called document drain (Limb, 2002:52³⁵). Document drain refers to the initiatives by some major research libraries in the developed world (mostly the West) to purchase materials published in Africa and other parts of the developing world. These well resourced libraries include the Library of Congress; the Melville J Herskovits Library of African Studies, Northwestern University, Evanston, Illinois; the Centre for African Studies Library at Leiden University, the Netherlands; and the School of Oriental and African Studies Library, University of London, England (Britz & Lor,

ence to the African continent. *Libri*, 53(3): 160-173.

²⁹ Gibbs, W. W. 1995. Lost science in the Third World. *Scientific American*, 272(2): 92-99.

³⁰ De Koker, B. 1995. August editing science. *Scientific American*, 272(2): 95-96.

³¹ Renewing the African University. 2005. [Online]. Available from: <http://www.aau.org/gc11/adocs/pdf/eng/aau-acu-sauvcaprog.pdf>. Accessed 13 October 2004.

³² Britz J. J. & Lor, P. J. 2003. A moral reflection on the flow from south to north with specific refer-

³³ Fernandez, L. 1999. Scholarly communication in the science: a Third World perspective. *Internet Reference Service Quarterly*, 4(4): 19-27.

³⁴ Cao, C. & Suttmeier, R. P. 2001. China's new scientific elite: distinguished young scientists, the research environment and hopes for Chinese science. *China Quarterly*, 960-984.

³⁵ Limb, P. 2002. Ethical issues in southern African archives and libraries. *Innovation: Appropriate Librarianship and Information Work in Southern Africa*, 24: 51-57.

2003)³⁶. The implication of this trend is again clear: Scholars from Africa and other developing countries will find more comprehensive and better preserved collections of their own body of knowledge in these libraries than in their own countries.

Africans and also the larger international research community are aware of the scale of this problem and some initiatives have been to make scientific and scholarly research more accessible to African researchers. I will discuss two of these initiatives. The first relates to a local African initiative and the other is an international effort to make health care information more accessible.

The local African initiative is the African Journals Online Project (AJOL). It was launched in 1998 as an effort to make Africa's own body of scientific and scholarly knowledge more accessible to, not only Africans, but also the rest of the world. As a service AJOL displays the tables of contents of African journals and provides an article delivery service to scholars. This is done free of charge for African scholars. The project is run on Open Source software, is now managed from South Africa in partnership with National Inquiry Service Center (NISC). It covers currently over 220 titles. The NISC also launched the NiPAD database that provides access to more than 2 million African records in 40 databases, some with full text links (NISC, 2006)³⁷.

The international project aiming to make research on healthcare more accessible to African scholars is the Health InterNetwork Access to Research Initiative (HINARI).

HINARI is an initiative of the World Health Organisation (WHO). Its main focus is on the distribution of health information to developing countries, in particular Africa. As a service it provides free or highly subsidised access to major journals in biomedicine and related fields to non-profit organisations such as universities, medical libraries, hospitals, and government offices in developing countries that meet eligibility criteria based on per capita gross domestic product (GDP) (HINARI, 2005). African countries

such as Ethiopia and the Sudan are eligible for free access but South Africa, as a richer nation based pays a fee based on GDP (Aronson, 2003)³⁸.

Six major international journal publishers joined HINARI in 2001. These were Blackwell, Elsevier Science, John Wiley, Springer Verlag, Wolters Kluwer International Health Science and Harcourt Worldwide STM Group. More publishers joined during the last couple of years and the current number stands at 70. The total number of titles available currently exceeds 2000 and includes some full text articles.

Conclusion

In this paper I looked into the current status of the knowledge sector in Africa. I asked the question, "To what extent is Africa able to become an information and knowledge society to thereby being an equal partner in the sharing of global knowledge?" I focused particularly on four knowledge categories namely education, research and development, brain drain and information and documentation drain. In my analysis I came to the following broad conclusions:

There is a clear understanding in Africa that its future lies with education;

Most African leaders have a strong political will to invest in human capacity building on the continent;

Much has been done, particularly with primary education, and African will most definitely benefit from these efforts in the long run;

There seems to be very few short or medium term solutions that will successfully address the lack of local R&D activities in Africa;

Brain drain is a reality. It must be accepted and the current initiatives to reach out to Africans in diaspora must be supported to ensure success;

The information and document drain can be partially turned around if enough resources are made available and if the distribution cost of information products and services can be substantially reduced.

³⁶ Britz J. J. & Lor, P. J. 2003. A moral reflection on the flow from south to north with specific reference to the African continent. *Libri*, 53(3): 160-173.

³⁷ National Inquiry Service Centre (NISC). 2006. Africa wide: NiPAD. [Online]. Available from: <http://www.nisc.co.za>. Accessed August 31 2006.

³⁸ Aronson, B. 2003. Improving online access to medical information for low income countries. *New England Journal of Medicine*, 350(10): 966-968.

References

- Africainfoethics.org. Website: <http://www.africainfoethics.org/bibliography.html>.
- African Economic Outlook. 2006. OECD Publication. Paris: African Development Bank.
- Aronson, B. 2003. Improving online access to medical information for low income countries. *New England Journal of Medicine*, 350(10): 966-968
- Britz J. J. & Lor, P. J. 2003. A moral reflection on the flow from south to north with specific reference to the African continent. *Libri*, 53(3): 160-173.
- Britz, J. J., Lor, P. J., Coetzee, E. M. I. & Bester, B. C. 2006. Africa as a knowledge society: a reality check. *International Information and Library Review*, 38: 25-40.
- Brown, M., Kaplan, D. & Meyer, J. B. 2001. Counting brains: measuring emigration from South Africa, Southern African Migration Project. Kingston, Ontario: Queen's University.
- Butcher, N. 2003. Technological infrastructure and use of ICT in education in Africa: An overview. Working group on distance education open learning (WGDEOL). Paris: Association for the Development of Education in Africa.
- Cao, C. & Suttmeier, R. P. 2001. China's new scientific elite: distinguished young scientists, the research environment and hopes for Chinese science. *China Quarterly*, 960-984.
- Commission for African Report. 2005. [Online]. Available from: <http://www.commissionforafrica.org/english/report/introduction.html>. Accessed 19 October 2005
- De Koker, B. 1995. August editing science. *Scientific American*, 272(2): 95-96.
- Fernandez, L. 1999. Scholarly communication in the science: a Third World perspective. *Internet Reference Service Quarterly*, 4(4): 19-27.
- Gibbs, W. W. 1995. Lost science in the Third World. *Scientific American*, 272(2): 92-99.
- HINARI. 2001. Publishers statement of intent. [Online]. Available from: <http://www.who.int/hinari/statementofintent/en/index.html>. Access 4 September 2006.
- HINARI. 2005. Health InterNetwork Access to Research Initiative. [Online]. Available from: www.healthinternetnetwork.org/. Accessed 15 September 2005.
- ICIE. International Center for Information Ethics. Website: <http://icie.zkm.de/>
- IISD's report of the Extraordinary Conference can be found at: <http://www.iisd.ca/africa/amcost/>
- <http://www.iisd.ca/africa/brief/briefing0702e.html>
- Limb, P. 2002. Ethical issues in southern African archives and libraries. *Innovation: Appropriate Librarianship and Information Work in Southern Africa*, 24: 51-57.
- Lor, P. J. & Britz, J. J. 2005. Knowledge production from an African perspective: international information flows and intellectual property. *International Information and Library Review*, 37(2): 61-76.
- Meyer, J. B., Kaplan, D., & Charum, J. 2001. Scientific nomadism and the new geopolitics of knowledge. *International Social Science Journal* (168): 309-321.
- National Inquiry Service Centre (NISC). 2006. Africa wide: NiPAD. [Online]. Available from: <http://www.nisc.co.za>. Accessed August 31 2006.
- The New Partnership for Africa's Development (NEPAD). Website: <http://www.nepad.org/2005/files/inbrief.php>.
- NEPAD 2004. NEPAD: three years of progress. [Online]. Available from: http://www.sarpn.org.za/documents/d0000982/P1091-NEPAD_3Years_Oct2004.ppt#256,1,NEPAD. Accessed 24 July 2005.
- Renewing the African University. 2005. [Online]. Available from: <http://www.aau.org/gc11/adocs/pdf/eng/aau-acu-sauvcaprog.pdf>. Accessed 13 October 2004.
- Rosenberg, D. 2002. African journals online: improving, awareness and access. *Learned Publishing*, 15(1): 51-57.
- S. A. National Research Foundation. 2002. SANSAN: South African network of skills abroad. [Online]. Available from: <http://sansa.nrf.ac.za/interface/AboutSANSAN.htm>. Accessed 1 September 2002.
- SANSAN South African Network of Skills Abroad. 2006. [Online]. Available from: <http://sansa.nrf.ac.za/Default.aspx?Instruction=AboutSANSAN>. Accessed 1 September 2006.
- Schneegans, S. & Amelan, R. 2006. The shifting fortunes of global science. *A World of Science*, 4(2): 2-7.
- Science and Development Network. 2003. African nations agree on science spending targets. [Online]. Available from: <http://www.scidev.net/News/index.cfm?fuseaction=readNews&itemid=1095&language=1>. Accessed 19 October 2005.

TOTKEN Program, 2006. [Online]. Available from: <http://www.tokten.org/index.cfm>. Accessed 1 September 2006.

United Nations University. 1998. *United Nations University: Higher education and knowledge*. [Online] Available from: <http://www.unu.edu/africa/00sps-strengthen.html>. Accessed October 17 2005.

World Bank. 2002. *Globalisation, growth, and poverty: building an inclusive world economy, a co publication of the World Bank and Oxford University Press*. New York: Oxford University Press.

World Economic Forum. 2003. *Gearing Africa for the knowledge economy: African Economic Summit (2003)*. [Online]. Available from: <http://www.weforum.org/site/knowledgenavigator.nsf/Content/Gearing%20Africa%20>. Accessed 13 October 2004

World Markets Research Centre. 2002. *The brain drain: Africa's Achilles heel*. [Online]. Available from: http://www.worldmarketanalysis.com/InFocus2002/article/africa_braindrain.html. Accessed 9 July 2005.

A.K. Wafula-Kwake and Dennis N. Ocholla

The feasibility of ICT diffusion amongst African rural women: a case study of South Africa and Kenya

Abstract:

This study explores whether ICT use is feasible in the rural areas of South Africa and Kenya by using largely survey research method. The survey involved interviewing 400 women aged between 16-60 from both Kenya and South Africa. The multistage sampling data was obtained from Census household data of the magisterial districts of Umlalazi i.e. Eshowe, Amatikulu, Gigindlovu and Mtunzini (South Africa), and from the subdivisions of the Kaplamai Division in Trans-Nzoia district, i.e. Kimoson, Sinyerere, Sitatunga and Makutano (Kenya). The survey results signify that problems of access and exclusion are still predominant. For instance, while a meagre average of 11(5.4%) of the respondents in South Africa use modern technologies such as the computer/internet, more than half (115: 57.5%) of the respondents faced problems ranging from affordability to distance and time. Additionally, there is a marked correlation between educational level, type of ICTs accessed on one hand and information need and purposes on the other. It is observed that alone, ICTs are insufficient for significant benefits to emerge. Information ethical challenges are identified and recommendations made.

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Introduction

Although definitions as to what Information and Communication Technologies (ICTs) differ widely, they do bear some similarities. A fairly authoritative definition of ICTs is provided by The European Commission (2001:3), which states that ICTs include

"a wide range of services, applications and technologies, using various types of equipment and software, often running over telecommunications networks." The EC enumerates such technologies "to include well-known telecommunication services such as telephony, mobile telephony and fax. Applications include video-conferencing, tele working, distance learning, management information systems, and stock-taking. Technologies can be said to include a broad array ranging from old technologies such as radio and TV to new ones such as cellular mobile communications. Networks may comprise of copper or fibre optic cable, wireless or cellular mobile links, and satellite links. Equipment includes telephone handsets, computers and network elements such as base stations for wireless service. Software programs are the lifeblood of all these components, the sets of instructions behind everything from operating systems to the Internet." The EC sums it up adequately by stating that "ICTs are enabling and facilitating technologies. Individuals, community groups, business or government departments with access to affordable communications and computers can use them to save time and money and improve the quality of their work or home lives".

The benefits of ICTs are difficult to gauge in most African countries, particularly in the wake of poverty, hunger and disease. For example, UNCSTD (in Marcelle, 2000:1) stresses that

"ICTs do not offer a panacea for social and economic dislocation, and these may lead policy makers to give lower priority to the need to create effective national ICT strategies. However, on the basis of the evidence, it is apparent that the risks of failing to participate in the ICT revolution are enormous. Failure to give priority to ICT strategies that enable developing countries and countries in transition both to develop their national infrastructures and to join the GII (Global Information Infrastructure) will exacerbate the gap between rich and poor. There is a growing need to evaluate the social and eco-

nomics impacts of ICTs and to create opportunities for capacity building that will ensure their beneficial use and absorption within national economies and civil society."

Needless to say, views on the role and usefulness of ICTs in African development initiatives are diverse and occasionally contradictory. For instance, Kenney (1995) argues that access to ICTs is dependent on education and income distribution, while Moyo (1996) stresses the inevitability and pervasion of IT in all sectors of the economy. Some authors, like Chowdhury in Adeya (2002:1), are of the opinion that *"the poor cannot eat high-speed Internet"*, while others like Barlow in Adeya (2002:1) maintain that *"Africa should skip industrialism entirely and leap directly into the information era"*.

Generally, viewpoints on the role of ICTs in rural development can be grouped into four major categories, namely: political, economic, social and technological (PEST).

Economic implications primarily focus on the importance of science and technology (Basson: 1996). Basson stresses the need for African governments to utilize science and technology and compete in commerce and industry. This is in keeping with Rathgeber (2000), who identifies poor infrastructure - including telecommunications infrastructure - and the lack of skilled manpower as Africa's major challenges. Rathgeber observes that newly industrialized Asian countries took on this challenge and offered foreign investors both skilled labour, and an excellent infrastructure. In 1995, ICTs accounted for more than 25% of all exports from East Asian economies (Crede and Mansell in Rathgeber, 2000:3). According to the World Bank (1998/99:20), this capacity for ICT production has immensely contributed to East Asian economic growth. The World Bank further asserts that the 'knowledge gap' in many developing countries is a contributory factor to poverty. According to their report, there is no better way to bridge this divide than through the use of ICTs. Due to their ability to decouple or separate information from its physical repository, ICTs are excellent channels of communication. This view is supported by Pohjola in Bedi (1999:4), who argues that this decoupling characteristic is 'revolutionary' as large bodies of information can be accessed by individuals, irrespective of time and space. Bedi (1999) adds that the use of ICT networks enables e-mail access to a vast number of individuals.

One of the most innovative breakthroughs of the 20th Century was the Internet, whose effects are changing how traditional technologies are used, and how wireless technologies are deployed. According to Marker, Wallace and Macnamara (2002: 14), the Internet dramatically reduces the costs associated with making information available to others and accessing global information and knowledge resources. The authors further add that satellites and other advanced technologies make new things possible; i.e., recent innovations in hand-held devices, in mobile telephony, and in satellite communications have led to cutting edge information and communication tools specifically relevant to the needs of the poor. In some developing countries, rural health workers are now using small hand-held devices to record health data from their clients.

The social implications of ICTs are also highly regarded. Studies by Marker, Wallace and Mcnamara (2002:9-13) maintain a positive approach towards the role of ICTs in development, and affirm that ICTs do in fact have an impact on the standards of living and on poverty alleviation at various community levels. Examples of ICT access by the African rural poor in addressing their information needs are largely drawn from health, agriculture, community mobilization, and education and training.

When citing political implications, a narrative by Mudhai (2004:2-4) in the World Summit on Information Society (WSIS) held in Geneva, Switzerland, underscores the importance of ICTs in uniting African countries in development. Mudhai reflects on the latest developments initiated by African governments to leap into the 'information age' and gives examples of achievements in Nigeria, where there is an increase in fixed telephone lines from 300,000 to 720,000, and a rise in mobile phone subscribers from 500,000 to 2.5 million over the last two years. Other examples, provided by Mudhai, are: Egypt, which stresses the importance of the E-Africa Connection project within NEPAD; and Mozambique's and Rwanda's Heads of State, who reiterate that Africans have gone beyond the dilemma of choosing between ICTs and other development priorities. Mozambique has established a high-level multi-sector task force for ICTs, while Rwanda (a landlocked country) has "*an ambitious ICT programme*" poised to make it East Africa's technological hub, with broadband fibre-optic and wireless access to all schools within three years. Equally encouraging is Botswana, which is investing in ICTs as an imperative industry with the proposed US\$ 300million East African Submarine Cable System (EASSy). This cable system's intended docking points are situated in

Kenya, Tanzania, Uganda, Mozambique, Madagascar, Djibouti and South Africa. All these efforts are no doubt a step in the right direction for Africans, as ICTs can and will provide a new window for Africa to accelerate sustainable human development, which would inherently benefit rural women.

The significance of the role women play in development is crucial, given that women represent slightly more than half of Africa's population. However, it is lamentable that although these women are agents of production, growth and change, most are impoverished and live in economically fragile areas (Momo, 2005:2; Amoake in Soltane 2002:1; Adhiambo, 2001:1).

The UNDP (2001:3-16) argues that harnessing ICTs for human development requires raising awareness and constituency building across all levels of society. As maintained by the UNDP, the link between ICTs and many development challenges is not always obvious, especially in countries with high levels of illiteracy, low levels of basic telecommunications infrastructure and electrification, and high levels of debt.

Similarly, several other authors cite examples in which these shortcomings are clearly spelt out. For instance, Marker, Wallace and McNamara (2002:9-14) argue that problems underlying rural development in most African countries include issues of access and exclusion, which are still quite significant. By the same token, Bridges.org (2001), illustrate that 'real access' to technology is one of the key elements necessary for integrating technology into society. This organisation further describes access with the term, 'physical access'. In other words, is the technology in question available, physically accessible and affordable?

Reports from authors such as Harris (2004:35) and the World Bank (2002) stipulate that poverty, and not ICTs, is the primary bottleneck to ICT development initiatives in most developing countries. According to these authors, ICTs act as an amplifier for such underlying processes, and what makes development function well, can be made to function better using ICTs. Needless to say, ICTs are dependent on national policy, the regulation of broadcasting licenses, and on the ensuing skills required to use and manage this industry. This situation is still wanting in many developing countries, as there is a lack of enthusiasm on the part of decision-makers to embark on ICT projects. For instance, as opposed to South Africa, which does have a national ICT policy framework, the ICT policy debate in

Kenya still awaits parliamentary approval, after numerous years of trial, discussion and debate.

Given their multiple roles in society as mothers, wives and workers, women's voices are insufficiently heard. To this end, the International Technology Development Group [ITDG] (2005) has expressed the view that women rarely contribute to the policy debate surrounding poverty as most are often illiterate, lack confidence and mobility. Related problems and challenges have also been noted in studies by Ngimwa, Ocholla and Ojiambo (1997) on Kenya, Jiyane and Ocholla (2004) on South Africa, Ikoja – Odongo on women entrepreneurs in Uganda (2002), and Mooko (2002) on Botswana.

This study is largely informed by Info – mobilisation theory. In the light of the aforementioned concepts of systems and STS theories, Harris (2004) describes Info-mobilisation as an organic process of change in which collaborative groups discover and explore problems and address solutions together. Harris explains that Info-mobilisation is a form of interactive development that caters for a collaborative learning process, based on the evolving needs of a community. Thus, in his view Info-mobilisation involves adaptive learning, community learning, and the alignment of social and technological systems, participative values, and social and stakeholder groups. The overall view by Harris (2002) suggests that the development community should look toward the corporate world in order to understand the paths that they have traversed in adopting ICT. According to the author,

"it is the program that must be developed and ICT placed within context, rather than the familiar idea of 'build it' and the applications will naturally flow; or, build it and then let's see what evolves serendipitously" (Harris, 2002:1).

Accordingly, the concept of "community" is understressed and not given the attention it deserves. To this end, Harris (2004:35-38) focuses and expounds on three important approaches in which he analyses and gives insights into the info-mobilisation theory:

1. Info mobilisation is concerned with the information requirements of communities. It addresses the design, delivery and utilisation of community information systems (Harris: 2004:38).
2. ICTs can only have optimal impacts in rural communities if they are imbedded within other community development initiatives (Harris, 2004:38).

3. The success of ICTs in rural development yields better results when social, political and economic factors, and varying modes of communication, are taken into account, and used during implementation (Harris 2004:35-36).

This study set out to investigate and identify ICTs that provide access to, and use of, information, enhance quality of life, and improve the economic standards of rural women by conceptualising a model for the development, management, exploitation and use of ICTs in an African rural environment. As the study is a comparative analysis of Kenya and South Africa, this aim is conceptualised with the two countries in mind, although the accruing principals could be applied to rural set-ups in any African environment.

The study answered the following questions: How does ICT development, policies and strategies in Kenya and South Africa compare? What are ICT information needs and e-services of rural women in areas such as health, education, agriculture, social welfare, entertainment, commerce and industry, in both Kenya and South Africa. What are the ICT training needs of rural women in Kenya and South Africa. What are recommendations and the implications of these findings to information ethics?

Methodology

A survey method was used to collect data from a cross section of female members of the South African and Kenyan population in order to determine their current status in relation to information and the use of ICTs. The study was carried out in two countries, namely Kenya and South Africa. In South Africa, the study narrowed its focus down to the uMlalazi (KZ 283) municipality. According to the Uthungulu District Municipality report (2003), most of the population within the Umlalazi sub-region is migrant, resulting in larger female numbers in the region. Umlalazi sub-region/municipality is mostly rural in nature, with only a few urban settlements. This municipality is located in Uthungulu District in the province of Kwa-zulu Natal (KZN), South Africa. Uthungulu has the third highest population in the province, after the Durban Metropolitan Council and the uMgungundlovu District Municipality. KZN has the largest population per province in South Africa - approximately 9.3 million (South African Statistics (<http://www.statssa.gov.za/> :2001). While 43% live in urban areas, 57% reside in the rural areas (Kwa-Zulu – Natal, 2001). In Kenya, the study focused on

the Transzoia District, which is situated in the Rift Valley province of Kenya. The Rift Valley province is one of eight provinces in Kenya and has a population density of 7 million people (Opondo and Sekou-Ochieng, 2000). The Rift Valley province is one of the largest and most economically vibrant provinces in Kenya. Trans – Nzoia District is an administrative district of the Rift Valley Province, Kenya, and is located between the Nzoia River and Mount Elgon. Although the area has mainly been inhabited by the Kalenjin community, Kenya's independence in 1963 saw many of the farms vacated by white settlers and bought by individuals from other ethnic groups in Kenya (Wikipedia - the free Encyclopaedia, 2005)

The study used non-probability (purposeful) and probability (simple random) sampling techniques to create a sampling frame. In order to achieve the desired representation from various sub-groups in the population, purposive sampling was first applied. This sampling technique allowed us to initially identify suitable regions in Kenya and in South Africa which possessed high population densities. Using random sampling technique, suitable wards/divisions had an equal chance of being selected. This sampling technique also helped to prevent bias in the selection process. By using the snowball technique, women directly and indirectly connected to each other were interviewed. In stage 1, the study purposefully selected provinces in South Africa and Kenya with similar characteristics. As the units of study were the rural women of both South Africa and Kenya, stage 1 of the study selected populations that were homogeneous in nature. For instance, the choice of the KwaZulu Natal province in South Africa, and the Rift Valley province in Kenya, was based on the foundation that they are both densely populated. Additionally, most of the populations in both these regions reside in the rural areas. In South Africa, the first stage was achieved with the help of demographic data adopted from the Umlalazi Integrated Development Plan (UIDP, 2002:1). In order for the sample size to be representative of the mixed racial population found in South Africa, the study purposefully selected suitable wards from this frame list. This was done by identifying wards with not only the highest population densities, but also a population with a fair mix of all four races i.e. Black, White, Indian and Colored.

In Kenya, the first stage was achieved with the help of Census data from the Population and Housing Census of 1999. By the same token, the study selected suitable sub-divisions with high densities.

In stage 2, the study adopted the simple random technique to select its population from both countries. This method was deemed suitable because of the distances between respondents in rural areas. It was therefore important to minimize and control bias and cut down time and cost related to this survey.

In South Africa, wards 11, 12, 13, 15, 16, 18 and 25 of the Umlalazi Municipality served as good starting points from which to draw four wards. In order to avoid bias in the selection of suitable wards, the above wards were placed in a box from which four wards were randomly drawn, namely: Eshowe, Amatikulu, Gigindlovu and Mtunzini.

In Kenya, the sub-divisions of Kaplamai Division, namely Kimoson, Motosiet, Sinyerere, Sitatunga, Makutano, Biribiriet, Kapsara and Kapolet, served as suitable starting points from which to draw four subdivisions. Having placed these subdivisions in a box, four sub-divisions were drawn, namely: Kimoson, Sinyerere, Sitatunga and Makutano.

In stage 3 of the sampling, the snowball technique was applied, whereby women respondents connected to one another through direct and indirect links were identified and consequently interviewed. Approximately 400 respondents were sampled from both Kenya and South Africa. The selection of the sample size was based on Gay's (1996:125) guidelines. According to Gay: (i) the larger the population size, the smaller the percentage of the population required to get a representative sample; (ii) for smaller populations ($N < 100$) there is little point in sampling; (iii) if the population size is around 1500, 20% should be sampled; and (iv) beyond 5000, the population size is irrelevant and a sample size of 400 is adequate. The sample size was deemed suitable because the sample population approximated the qualities and characteristics of the general population. The main categories sampled for the study included women between the ages of: 15-20 years; 21-30 years; 31-40 years; 41-50 years and 51-60 years.

Data was collected using a structured questionnaire, whereby the questionnaire was used to interview the respondents. In situations where the respondents were unable to understand English, the region's national languages, namely Swahili (in Kenya) and iSizulu (in South Africa), were used to communicate with the respondents. The completed questionnaires from 400 respondents formed the basis of data analysis and interpretations for survey research. A total of approximately 400 questionnaires

were administered and divided under the following categories:

- Section one: personal information;
- Section two: the information needs and seeking behaviour of rural women: This included:
 1. Health information needs, purposes, sources and ICTs used
 2. Educational information needs, purposes, sources and ICTs used
 3. Social welfare information needs, purposes, sources and ICTs used
 4. Agricultural information needs, purposes, sources and ICTs used
 5. Commerce and trade information needs, purposes, sources and ICTs used
- Section three: enhancement of quality of life and social welfare
- Section four: hindrances to ICT tools and services
- Section five: training needs.

A coding scheme was developed and input into the Statistical Package for Social Science (SPSS). Data was then analyzed using descriptive statistics where frequencies, percentages, and means were calculated, and data presented accordingly. Relationships among variables were compared and interpretations made.

Results

Demographic profile of the respondents

Respondents were asked questions that sought to ascertain personal information such as their age, field of occupation and educational attainment. These structured questions were meant to determine relationships between demographic characteristics and the purposes and uses of ICTs. The overall response rate of the respondents was 100%, as the researcher and research assistants administered the survey.

Regarding age group, data obtained from rural KZN indicates that the highest number of respondents were between the ages of 31-40 years (66; 33.0%), followed by respondents in the 13-20 year age group (41; 20.5%). Respondents between the ages of 41-50 and those over 50 ranked third and fourth, with 35 (17.5%) and 37 (18.5%) respectively. The

lowest number consisted of 21 (10.5%) respondents between the ages of 21-30 years. Coming to Kenya, the highest number of respondents were between the ages of 31-40 years (83; 41.5%), followed by respondents between 13-20 years (58; 29%). Respondents between the ages of 41-50 and those over 50 came third and fourth, with 29 (14.5%) and 19 (9.5%) respectively. The lowest number consisted of 11 (5.5%) respondents between 21-30 years.

The P-Value for age group levels in both Kenya and South Africa indicates that there is a significant difference between rural women in the age groups of 13-20, 21-30, and those over 50 in South Africa and Kenya. More specifically, while there are more respondents between the ages of 13-20 residing in the rural areas of Kenya, there are more respondents between the ages of 21 – 30 residing in the rural areas of South Africa. Alternatively, there is a larger percentage of respondents over the age of 50 residing in the rural areas of South Africa than in Kenya.

Analysis by levels of education revealed that in rural Kwa-Zulu Natal (KZN) [SA], most respondents (81; 40.5%) had acquired secondary education, while 62 (31.0%) had primary education. However, only 34 (17.0%) respondents had acquired tertiary-college/varsity education, with 23 (11.5%) respondents reportedly having no schooling at all. Therefore, an average of 72 (35.8%) respondents had acquired basic education.

In rural Rift Valley Province (RVP) [Kenya], survey results indicate that most respondents (71; 35.5%) had primary education, 66 (33%) had secondary education, and 33 (16.5%) had obtained tertiary-college/varsity education. 30 (15%) respondents had no schooling at all. On average, 69 (34.2%) respondents had obtained basic education.

The P-Value for education levels in both Kenya and South Africa revealed that there is no significant difference between the education levels of rural women in South Africa and Kenya. While an average of 34% have basic education in both Kenya and South Africa, well over 10% of the respondents in both countries have no schooling at all.

In terms of the occupations of rural women in KZN (S.A), it was established that 58 (29.0%) respondents are small-scale traders, followed by those who work as housewives/homemakers (48; 24.0%). Other categories are farm workers (25; 12.5%), domestic workers (18; 9.0%), educators/teachers

(16; 8.0%) and students (15; 7.5%). 3 (1.5%) respondents were entrepreneurs owning large-scale enterprises, i.e. a guesthouse, a sugar cane plantation and a fruit farm. Only 9 (4.5%) respondents worked as clerical and community development workers (6; 3.0%). There were two preachers (2; 1.0%). In RVP (Kenya), the study's empirical results indicate that 68 (34%) respondents are small-scale traders, followed by: housewives, 29 (14.5%); educators/teachers, 27 (13.5); farmers, 26 (13.0); and students, 11 (5.5%). Domestic workers and preachers accounted for 10 (5.0%) each. This is closely followed by farm workers (6; 3.0%); large-scale entrepreneurs (5; 2.5%); nurses (4; 2.0%); clerical workers (2; 1.0%) and community development workers (2; 1.0%).

According to the study, the single largest occupation of the respondents in both Kenya and South Africa is that of small-scale traders.

The P-values for the occupations of rural women in South Africa and Kenya indicate that with the exception of traders and preachers (in which percentages for Kenya are higher), there is a higher percentage of housewives, farm workers, domestic workers, students, educators/teachers, entrepreneurs, clerical workers and community development workers in South Africa than in Kenya. The study further illustrates that whereas Kenya has a fair share of farmers and nurses, South Africa has no record of these two occupations amongst its rural respondents.

ICTs frequently used to access/receive educational, business/ trade, health, agricultural and social welfare information in Kenya and South Africa

The survey took into account the possibility that an individual could use a combination of different technologies while accessing or seeking information. Respondents were therefore at liberty to name all ICTs used to access information, whether traditional or modern. By capturing these responses, the survey was able to ascertain the ICTs that the respondents accessed and frequently used. Notably, the respondents also use other sources to obtain

information, such as printed material, libraries, friends, neighbours etc. (see table 1).

Within the field of education, the information needs of the respondents in rural KZN (SA) varied from student services/colleges (48.8%), to course work/research topics (25%), further studies (7.5%) and funding sources (7.5%), occupational information (5%), social work (1.3%) and business management (1.3%). Reasons for yielding educational information ranged from personal welfare and better living standards, to study assignments, counselling, further studies and job opportunities. The table above reveals that radio broadcasts are still highly prevalent as a source of information (160; 80%). The use of TV is relatively low (82; 41%). While 32 (16%) respondents also use film to access educational information, a similar number of respondents 25 (13%) use the cell-phone and telephone. Videos are also common (30; 15%). In comparison to other sectors, the educational sector has the highest number of respondents using the computer/internet (22; 11%). Only 8 (4%) respondents use mobile cinemas and CD-ROMs (2%) to access educational information.

In rural RVP (Kenya), the information needs of respondents ranged from course work/research topics (23.5%), to student services/colleges (22%), occupational information (12%), pre-school/primary school information (11.0%), further studies (10.5%), business education/financial management (9.5%), teaching (8.5%) and curriculum studies (3.0%).

Reasons for yielding educational information ranged from personal welfare and better living standards, to study assignments, counselling, child welfare, job opportunities, study assignments and future careers. The table above reveals that the radio is also highly prevalent among users (154; 77%). The TV is used by 81 (41%) respondents. While 25 (13%) respondents use films as a source of information, there are more respondents who use the cell phone (24; 12%) than the telephone (7; 4%). Video is used by 7 (4%) respondents. An equal number of respondents (5; 3%) use the computer/internet and the mobile cinema respectively.

Table 1 ICTs frequently used to access/receive educational, business/ trade, health, agricultural and social welfare information in Kenya and South Africa. [n=400]

ICTs	Education		Health		Business		Agriculture		Social Welfare		AV		P-Value
	K %	SA %	K %	SA %	K %	SA %	K %	SA %	K %	SA %	K %	SA %	
Radio	77	80	88	81	65	55	65	71	77	80	74.4	73.4	0.8200
Television	41	41	33	44	36	34	36	35	43	43	37.8	39.4	0.7430
Films	13	16	24	20	7	18	9	26	20	16	14.6	18.2	0.3315
Cell-phone	12	13	20	18	7	13	7	14	18	17	12.8	15.0	0.5252
Telephone	4	13	3	4	4	5	4	12	5	17	4.0	10.2	0.0000
Video	4	15	5	6	3	6	5	1	6	11	4.6	7.8	0.0000
Computer/ Internet	3	11	-	6	1	3	-	1	1	6	1.0	5.4	0.0000
Mobile cinemas	3	4	4	5	3	1	3	3	3	6	3.2	3.8	0.2092
CD-ROM	-	2	-	2	-	1	-	-	-	-	-	1.0	-

With regard to health, the information needs of the respondents from rural KZN (S.A) ranged from respiratory illnesses e.g. TB and asthma (21.3%), to HIV/AIDS (21.3%), arthritis (10.6%), terminal and chronic diseases such as cancer (6.3%), water-borne diseases (6.3%), diet/nutrition (6.3%), rheumatism (5.0%), family planning (5.0%), rabies (4.0%), snake bites (3.8%), sexually transmitted

diseases (3.8%), dentistry (3.8%), and fits (2.5%). Reasons for obtaining this information ranged from personal welfare, to children's welfare and general awareness. The radio scored highly as a source of information, as survey results revealed that 162 (81%) respondents use it to access information. The TV is equally important, as 88 (44%) respondents use it on occasion to source their health information.

While 40 (20%) respondents use film to access health information, there are more respondents who use the cell-phone (35; 18%), than the telephone (8; 4%). An insignificant number of respondents (12; 6%) use the computer/internet and video (12; 6%) for accessing health information. Only 10 (5.0%) use the mobile cinema, while 3 (2%) use the CD-ROM.

With regard to the health information needs of rural respondents from RVP (Kenya), the information needs ranged from family planning/gynaecology (32.5%), to tropical diseases e.g. malaria (24.0%), HIV/AIDS (17.0%), respiratory illnesses/coughs (7.0%), cancer (2.5%), Sexually Transmitted Infections (3.5%), snake bites (3.0), waterborne diseases (2.5%), diet/nutrition (1.5%), diabetes (1.0%), dentistry (3.5%), and fits (2.0%).

The reasons for obtaining this information ranged from personal welfare, to child and family welfare, and in some instances, for general awareness. The radio came first as a source of information (176; 88%), followed by the TV, which is only used by 65 (33%) respondents. While 47 (24%) respondents use films as their source of information, 40 (20%) respondents use the cell phone and only 5 (3%) use the telephone. Likewise, 10 (5.0%) respondents use the video, and only 7 (4.0%) respondents use mobile cinemas. Notably, there are no respondents who use the computer/internet and CD-ROM for their health information needs.

In the area of business and trade, areas in which respondents in RVP (Kenya) required information ranged from starting up a business (30.0%), pricing/marketing (14.0%), finance/book-keeping (12.5%), planning/management (10.5%), supplies/purchasing (8.0%), animal husbandry (7.0%), poultry keeping (7.0%), craftsmanship (5.5%), and exchange rates (5.5%). Reasons for obtaining this information include stocking, embroidery, financial management, business techniques, better living standards, profit making, income generation and family welfare.

Survey findings for business and trade reveal that while 130 (65%) respondents use the radio, 71 (36%) use the TV for their information needs. Notably, 13 (7%) respondents use films as their source of information, while 14 (7%) use the cell phone. Only 8 (4%) use the telephone, compared to a slightly higher number of respondents (14; 7%) who use the telephone. The use of the computer/internet is negligible, with only 2 (1%) respondents using it as their source. None of the

respondents use the CD-ROM. The video is used by 6 (3%) respondents, while mobile cinemas are used by 5 (3%).

In KZN (SA), respondents required information ranging from starting up a business (46.3%), to cookery (13.8%), pricing/marketing (10%), purchasing/supplies (10%), stock management (7.1%), financial management/book-keeping (6.3%), horn – covering/tourism (2%), hair and beauty salons (2.5%) and poultry and animal husbandry (2%). These needs seem to be closely related to the findings of a study by Ikoja-Odongo (2002). Reasons for obtaining this information ranged from skills enhancement, embroidery, stocking, financial help, financial management, business techniques, income-generation, seeking customers and family welfare.

Survey findings for business and trade reveal that while 110 (55%) respondents use the radio alone for their information requirements, 68 (34%) use the TV. The number of those who use film to obtain business information is 9 (18%). Notably, although not necessarily unusual in modern times, there are more respondents who use the cell-phone (25; 13%), than the telephone (10; 5%). Videos are also accessed by 12 (6%) respondents for business related needs. A negligible number of respondents (6; 3%) use the computer/internet to obtain information. There were two respondents who used the mobile-cinema, and one who used CD-ROMs.

The agricultural information requirements of the respondents from KZN (SA) included farm inputs/new technology (28.8%), crop type/diseases (22.5%), soil types/fertility (18.8%), livestock keeping (13.8%), herbicides/fencing (10.0%), and gardening/crop management (6.3%). This information was required for good harvests, enhancing animal fertility, preventing crop and animal diseases, improving sales, aesthetics and spiritual offerings. Most of those interviewed (142; 71%) used the radio, while less than half of this number 70(35%) used the TV. Cell-phones stood at 28 (14%), while the telephone was used by 23 (12%) respondents. Only 6 (3%) respondents use the mobile cinema, while two (1%) respondents use the computer/internet and video respectively.

The agricultural information needs of the respondents from RVP (Kenya) ranged from animal husbandry (35.5%), farm inputs/new technology (47%), soil type (5.5%), crop type/diseases (4.5%, 1.5%) and gardening/crop management (6.0%). In turn, this information was required for good harvests, farming, enhancing herd fertility, prevention

of diseases, aesthetic values and for health. Most of those interviewed (130; 65%) use the radio for their information needs, while 71 (36%) use the TV. While 17 (9%) respondents use films for their information needs, there are more respondents who use the cell-phone (14; 7%), than those who use the telephone (8; 4%). The video is used by 10 (5%) respondents for agricultural information needs. Only 5 (3%) respondents use mobile cinemas. Notably, there are no respondents who use the computer/internet and CD-ROM.

Social welfare information needs in rural KZN (SA) ranged from water resources and pit latrines (42.5%) to music/religious gatherings (23.8%), travel/holidays (10%), and community projects/women group activities (8.8%), pension (8.8%) and shopping/movies (6.3%). Reasons for obtaining this information ranged from leisure activities, entertainment, spiritual growth and relaxation and improved standards of living. Once again, the radio as a source of information scored high (160; 80%). The TV (86; 43%) was equally useful. Films (32; 16%) were also used as a source of information. The use of the cell-phone and the telephone stood at 34 (17%) and 32 (16%) respectively. The video is used by 22 (11%) respondents to source information, compared to 12 (6%) respondents who use the computer/internet for their information requirements.

In Kenya, the need to acquire social welfare information ranged from community projects/social meetings (154; 77%), water resources/pit latrines (11; 5.5%), spiritual matters (21; 10.5%), sports (4; 2%), shopping/travelling (3; 1.5%) and pension/housing (7; 3.5%). Reasons given for accessing this information ranged from leisure activities, spiritual growth, women's empowerment, improved standards of living, relaxation and for health reasons. The radio as a source of information came first, as 153 (77%) respondents use it to access social welfare information. The TV is used by 85 (43%) respondents. Films, on the other hand, are used by 39 (20%) respondents, while the cell-phone is used by 36 (18%) respondents. Notably, the telephone is used by only 9 (5%) respondents. The computer/internet plays no significant role, as only 2 (1%) respondents use it for their information needs. While 6 (3%) respondents use mobile cinemas, there were no respondents who use the CD-ROM.

On the whole, the radio is evidently highly accessed and is used by approximately 73% of the rural women in South Africa, particularly for education, health and social welfare needs. The TV plays an

equally important role in accessing information, as 39% of the respondents use it for their information requirements. The cell-phone has a clear advantage over the telephone, as 15% of the respondents use it, compared to 10.2% who use the telephone. Those who are mostly in the field of education (30; 15%) and social welfare (22; 11%) use videos. Although the computer/internet maintains a dismal average of only 5.6%, it is mostly used by those in the field of education (22; 11%).

Kenya's empirical results indicate that radio and television are the most commonly used ICTs amongst rural women in Kenya. An average of 74.4% use the radio for their information needs, while the TV is used by an average of 37.8%. The cell-phone has a comparative advantage over the telephone as it is used by 12.8% of the respondents. The latter is used by only 4.0%. Notably, the use of films as a source of information is on average higher than the cell-phone and the telephone, as 14.6% use it to source information. While 4.6% of the respondents use the video, 3.2% use mobile cinemas. Invariably, data indications are that the computer/internet and the CD-ROM have no value amongst rural women in Kenya.

On the whole, the radio is evidently highly accessed and is used by approximately 73% of the rural women in South Africa, particularly for education, health and social welfare needs. The TV plays an equally important role in accessing information, as 39% of the respondents use it for their information requirements. The cell-phone has a clear advantage over the telephone, as 15% of the respondents use it, compared to 10.2% who use the telephone. Those who are mostly in the field of education (30; 15%) and social welfare (22; 11%) use videos. Although the computer/internet maintains a dismal average of only 5.6%, it is mostly used by those in the field of education (22; 11%).

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computer/internet and the CD-ROM have no value amongst rural women in Kenya.

From the above results the study can safely deduce that an average of 74% of the respondents from both South Africa and Kenya use the radio as a medium of information access. Correspondingly, an average of only 38% use the TV for their information needs. Whereas 10.2% of the respondents in KZN (SA) use the telephone, only 4% from RVP (Kenya) use the telephone. In both countries, the use of modern technologies such as the computer/internet is negligible.

Alternative sources of information for educational, business/trade, health, agricultural and social welfare information amongst rural women in Kenya and South Africa.

In this question, respondents were at liberty to mention all or any other sources of information that they used in their quest for information, aside from

ICTs. This question aimed to gather information that would help determine the effectiveness and efficiency of rural information systems in the rural environments of Kenya and South Africa.

In table 2, survey results indicate that family (53.2%), friends (43.3%) and neighbours (38.0%) form the bulk of alternative sources of information amongst the respondents in RVP (Kenya). This is closely followed by community leaders (38.6%), books (30.9%), exhibitions/trade fairs (20.8%), area leaders (15.8%), educators (10.8%) and social/extension workers. Other sources such as traditional healers (7.8%), information centres (4.9%), newspapers (2.4%), magazines (2.4%), farmer’s cooperatives (1.5%) and nurses/midwives (1.5%) are less used as sources of information.

Table 2 Alternative sources of information for educational, business/ trade, health, agricultural and social welfare information amongst women in Kenya [n=200] and in South Africa [n=200]

Sources of Information	Education		Health		Business		Agriculture		Social Welfare		Av		P-Value
	SA	K	SA	K	SA	K	SA	K	SA	K	SA	K	
	<i>f</i>	<i>f</i>	<i>f</i>	<i>f</i>	<i>F</i>	<i>f</i>	<i>f</i>	<i>F</i>	<i>f</i>	<i>f</i>	%	%	
Newspapers	5	5	3	2	5	8	5	4	15	5	3.3	2.4	0.0469
Magazines	5	5	3	2	5	8	5	4	15	5	3.3	2.4	0.0469
Family	160	54	133	110	43	88	43	111	83	169	46.2	53.2	0.1623
Friends	103	73	100	81	133	65	93	69	113	145	54.2	43.3	0.0298
Neighbours	90	64	88	79	128	73	73	86	105	78	48.4	38.0	0.0364
Books	68	46	75	72	58	91	43	69	53	31	29.7	30.9	0.7941
Information Centres	8	11	5	6	8	10	23	18	-	4	5.5	4.9	0.2305
Community Leaders	60	41	30	97	13	55	25	80	83	113	21.1	38.6	0.0002
Area Leaders	-	-	-	-	-	-	3	5	13	68	4.0	15.8	0.0000
Traditional healers	-	-	13	11	-	11	15	16	25	24	8.8	7.8	0.0081

Social/Ext. Workers	10	6	43	46	-	12	30	25	3	4	10.8	9.3	0.0000
Educators	90	60	13	14	5	11	23	10	-	13	16.3	10.8	0.1089
Farmers Ass/co-operatives	-	-	-	-	-	-	-	3	-	-	-	1.5	-
Exhibitions/ Trade Fairs	-	-	5	-	23	54	10	29	-	-	6.3	20.8	0.0000
Nurses/Mid-wives	-	-	23	1	-	-	-	-	23	2	11.5	1.5	0.3025
Local/City councils	8	-	-	-	3	-	8	-	8	-	3.3	-	-
Schools	3	6	-	3	-	-	3	-	-	3	1.5	2.0	0.1890

Similarly, friends (54.2%), neighbours (48.4%) and family (46.2%) are highly favoured as alternative sources of information amongst the respondents from KZN (SA). Other sources include books (29.7%), community leaders (21.1%), educators (16.3%), social/extension workers (10.8%) and nurses/midwives (11.5%). Information centres (5.5%), magazines (3.3%) and newspapers (3.3%) are not popular sources of information amongst the rural women in South Africa.

The P-Value for alternative sources of information for educational, business/ trade, health, agricultural and social welfare information amongst women in Kenya and in South Africa illustrates that there is a higher use of alternative sources of information, such as newspapers, magazines, friends and neighbours, in rural KZN (SA) than in RVP (Kenya). However, community leaders, area leaders and trade fairs/exhibitions play a more significant role in RVP (Kenya) than in KZN (SA).

Comments on the use and availability of ICTs in rural KZN (South Africa) and rural RVP (Kenya)

In table 3, respondents were asked to give their personal responses to an open-ended question regarding the use and availability of ICTs in their community. The aim of this question was to capture varying opinions and attitudes related to ICT use and accessibility in their community. Data was then analyzed using content analysis. The survey revealed that a significant number (57; 28.5%) of the respondents in KZN (SA) felt that ICTs were not only unavailable and inaccessible to them, but also difficult to use. Similarly, 25 (12.5%) respondents felt that ICTs are costly and unaffordable. Coincidentally, the number of those who found ICTs to be handy (20; 10%) and those who felt that ICT centres should be established near rural women (20; 10%) were similar. 9 (9.5.0%) respondents were of the opinion that ICTs were easily available and accessible, while 18 (9.0%) felt that ICTs are affordable. A few respondents attuned to problems with infrastructure, such as lack of power (13; 6.5%) and poor TV and radio networks (10; 5.0%).

Table 3 Comments on the use and availability of ICTs in the community. N=200 (South Africa)

Comments	Frequency	Percent
Unavailable, difficult to use	57	28.5
ICTs are costly & unaffordable	25	12.5
ICTs are handy	20	10.0
Establish ICT centres near rural women	20	10.0
Easily available and accessible	19	9.5
ICTs are affordable	18	9.0
Lack of power	13	6.5
Great improvement in ICTS	10	5.0
Poor TV& Radio networks	10	5.0
There's no trust in ICTs	8	4.0
Total	200	100

In table 4, results from Kenya indicate that a large number of the respondents (63; 31.5%) believed that ICTs were unaffordable, followed by 48 (24%) stating them as unavailable, and 28 (14%) as inaccessible.

too far, too costly or entirely unavailable. Only 16 (8%) respondents acknowledged the usefulness and availability of ICTS, citing that they were "handy" (2; 1%) or "improved access to information" (14; 7%).

Therefore on average, the survey portrayed that 139 (69.5%) respondents felt that ICTs were either

Table 4 Comments on use and availability of ICTs in the Community. (Kenya) N=200

Comments	Kenya	
	Frequency	Percent
Would like affordable ICTs	63	31.5
ICTs should be made available	48	24
ICTs should be made accessible	28	14
There is improved information access with the use of ICTs	14	7
Use of ICTs depends on ones lifestyle	11	5.5
ICTs are very handy	2	1
There is need for ICT centres in rural areas	15	7.5
TV/ Radio networks are poor	2	1
Lack of power hinders use of ICTs	15	7.5
Total	200	100

How ICTs have enhanced the rural women’s quality of life

A number of arguments have been raised as to whether or not ICTs contribute to improving a society's quality of life. With this in mind, a structured question making use of the likert scale was designed. Respondents were expected to answer the question based on areas in which ICTs have served them best. In this question, the scale of 4 denoted a high and favourable response, (i.e. "always"), followed by 3 (i.e. "often"), 2 (i.e. "sometimes"), 1 (i.e. "never") and a "not applicable" scale. By calculating the average for each area listed, the study was able to arrive at conclusive remarks.

Evidently, ICTs enable most women to keep abreast of current affairs. Many rural women underscored the role ICTs play in daily news broadcasts. Most (91.5% in South Africa and 91.0% in Kenya) re-

spondents felt that ICTs, particularly the radio and TV, helped them socially enrich their lives. This was followed closely by the need to keep in touch with family and friends (81.0% in South Africa and 87.0% in Kenya). To most respondents, the mobile phone was particularly useful in this regard. Under entertainment, the respondents listed the ability to listen to music and other entertaining programs as important. With the help of ICTs, this service recorded the highest result overall, with 94.0% for Kenya and 71.5% for South Africa. Interestingly, although the use of the fax machine (44%) stood out as an important activity, particularly in South Africa, it scored dismally in Kenya (16.0%).

Additionally, the P-Value on how ICTs have enhanced the rural women's quality of life illustrates that respondents in both RVP (Kenya) and KZN (SA) feel that ICTs help them in accessing/receiving news items and keeping in touch with family and friends. There is, however, a higher percentage of respon-

dents in RVP (Kenya) than in KZN (SA) who feel that research purposes and for distance education. ICTs enhance their lives through entertainment, for

Table 5 How ICTs have enhanced the women's quality of life in South Africa (n=200) and Kenya (n=200).

Activity	Always		Often		Some-Times		Never		N/a		Av=% 4+3+2		P-Value
	SA	K	SA	K	SA	K	SA	K	SA	K	SA	K	
To listen to news	157	121	12	35	14	26	12	12	5	6	91.5	91.0	0.8596
In touch with family and friends	160	85	2	35	8	54	24	20	6	6	85.0	87.0	0.5647
Entertainment	88	117	35	42	20	30	47	6	10	5	71.5	94.5	0.0000
To fax doc.	41	11	17	5	30	16	90	162	22	6	44.0	16.0	0.0000
Data proc.	38	9	5	6	15	31	115	147	27	7	29.0	23.0	0.1721
For research purposes	20	7	15	13	18	73	130	103	17	4	26.5	46.5	0.0431
E-commerce/Trade	10	10	13	4	18	20	118	160	41	6	20.5	17.0	0.3704
Contact business Support Agen.	25	12	3	14	10	46	138	123	24	5	19.0	36.0	0.0002
Internet/related serv.	20	3	6	7	12	34	160	152	2	4	19.0	22.0	0.4578
Distance Education	28	11	5	20	6	46	134	120	27	3	16.5	38.5	0.0000

Evidently, ICTs enable most women to keep abreast of current affairs. Many rural women underscored the role ICTs play in daily news broadcasts. Most (91.5% in South Africa and 91.0% in Kenya) respondents felt that ICTs, particularly the radio and TV, helped them socially enrich their lives. This was followed closely by the need to keep in touch with family and friends (81.0% in South Africa and 87.0% in Kenya). To most respondents, the mobile

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Training needs for Kenya (n=200) and training needs for South Africa (n=200)

In the table below, respondents were expected to answer a question based on the "type of training they would require in order to assist them in accessing ICTs more often". In this question, the scale of 4 denoted a favourable response, i.e. very essential, followed by 3 (i.e. essential), 2 (i.e. quite essential), 1(not very essential) and a "not applicable" scale. By calculating the average for training needs under scales 4, 3 and 2, the study was able to arrive at conclusive remarks.

Survey results indicate that 19% of the respondents in KZN (S A) and 25.5% of the respondents in RVP

(Kenya) felt that basic education was essential. Similarly, while 26.5% have a need for basic education in KZN (SA), there was an average of 45.0% in RVP (Kenya) who also felt that they needed secondary education. Notably, 42.0% of the respondents in KZN (SA) and 45.5% of the respondents in RVP (Kenya) felt that adult education was essential. Interestingly, from all the enlisted training needs, computer/internet training scored highly, as 66.5% in KZN (SA) and 81.5% in RVP (Kenya) felt that this training would be essential. This was followed by 50.5% in KZN (SA) and 62.5% in RVP (Kenya) indicating that vocational training would be of foremost importance to them.

The P-Value on training needs for Kenya and South Africa illustrates that the with the exception of basic primary education and adult education, there is a significant difference in the training needs for Kenyan and South African rural women.

On the whole, results from both countries indicate that there is a definite need for the [internet/computer] training of rural women in order to assist them in accessing ICTs more often.

Table 6 Training needs for Kenya (n=200) and Training needs for South Africa (n=200)

Training Needs	Very Essential (4)		Essential (3)		Quite Essential (2)		Not very Essential (1)		N/A		Average % (4+3+2)		P-Value
	SA	K	SA	K	SA	K	SA	K	SA	K	SA	K	
	f	f	f	f	f	F	F	f	f	f	f	%	
Basic Primary Education	25	36	5	9	8	6	98	144	64	5	19.0	25.5	0.1189
Secondary School Education	50	47	-	14	3	29	100	105	47	5	26.5	45.0	0.0001
Computer /Internet Training	98	77	15	51	20	35	35	32	32	5	66.5	81.5	0.0007
Vocational Training	68	41	15	46	18	38	38	70	61	5	50.5	62.5	0.0159
Adult education	73	48	8	23	3	20	23	106	93	3	42.0	45.5	0.4809

Discussions and Conclusions

Essentially, while there are more respondents between the ages of 13-20 residing in the rural areas of Kenya, there are more respondents between the ages of 21 – 30 residing in the rural areas of South Africa. Alternatively, there are a larger number of respondents over the age of 50 residing in the rural areas of South Africa than in Kenya. Secondly, in terms of education, the study indicates that there is no significant difference between the education levels of rural women in South Africa and Kenya. More specifically, while an average of about 34% have basic education in both Kenya and South Africa, well over 10% of the respondents in both the two nations, have no schooling at all. It was also noted further that with the exception of traders and preachers (in which percentages for Kenya are higher), there is a higher percentage of housewives, farm workers, domestic workers, students, educators/teachers, entrepreneurs, clerical workers and community development workers in South Africa than in Kenya. It is further illustrated that whereas Kenya has a fair share of farmers and nurses, South Africa has no records of either of these occupations amongst its rural respondents. Thirdly, ICTs most commonly used by rural women indicate that an average of 74% of the respondents from both South Africa and Kenya use the radio as a medium of information access. An average of only 38% use the TV for their information needs. In both KZN (SA) and RVP (Kenya), the cell-phone has a clear advantage over the telephone. While the cell phone is used by 15% of the respondents in KZN (compared to 10.2% who use the telephone), it is used by 12.8% of the respondents in RVP (Kenya), compared to 4.0% who use the telephone. In both countries, the use of modern technologies such as the computer/internet is negligible. Family, friends and neighbours form the bulk of alternative sources of information in both RVP (Kenya) and KZN (South Africa). Additionally, there is a higher use of alternative sources of information, such as newspapers, magazines, friends and neighbours, in rural KZN (SA) than in RVP (Kenya). However, community leaders, area leaders, trade fairs/exhibitions play a more significant role in RVP (Kenya) than in KZN (SA). Fourthly, a large number (57; 28.5%) of the respondents in KZN (SA) felt that ICTs were not only unavailable and inaccessible, but also difficult to use. 25 (12.5%) respondents felt that ICTs are costly and unaffordable. Coincidentally, the number of those who found ICTs useful (20; 10%) and those who felt that ICT centres should be established near rural women (20; 10%) were similar. 9

(9.5.0%) respondents were of the opinion that ICTs were easily available and accessible, while 18 (9.0%) felt that ICTs are affordable. A few respondents attuned to problems with infrastructure, such as lack of power (13; 6.5%) and poor TV and radio networks (10; 5.0%). In Kenya, a large number of respondents (63; 31.5%) indicated that ICTs were unaffordable, followed by 48 (24%) stating them unavailable and 28 (14%) inaccessible. Fifthly, there is an indication that respondents in both RVP (Kenya) and KZN (SA) feel that ICTs help them in accessing/receiving news items and keeping in touch with family and friends. There is, however, a higher percentage of respondents in RVP (Kenya) than in KZN (SA) who feel that ICTs enhance their lives through entertainment, for research purposes and for distance education. In so far as training is concerned, results from both countries indicate that there is a definite need for the [internet/computer] training of rural women in order to assist them in accessing ICTs more often.

Recommendations and information ethical issues

In order for women to benefit most from ICTs, the following issues need to be addressed:

Literacy

- a) Due to high levels of illiteracy in computer technology and in basic education amongst rural African women, there is a need to integrate ICT with literacy education in many areas.
- b) In order to create a demand-driven ICT consumer community in rural areas, hindrances to accessibility must be significantly reduced either before or during the provision of the technology. This necessitates training and skills enhancement initiatives amongst other participatory development programs such as focus group discussions, direct interviews and workshops.
- c) The development of professionals and teachers as viable intermediaries in bridging the digital divide experienced by low-literate or illiterate youth in school education programs in the rural areas is also of crucial importance.

Cost

Cost issues of ICT access particularly affect women due to their family responsibilities, e.g. health and the education of their children. It is therefore necessary to effect and implement policies that involve connectivity and take into account the constraints facing the marginalized. According to the World Bank, competition between telecommunication companies can slash service costs and improve access to the said technology. Since large telecom operators tend to limit their operations to high income urban areas, privatization should be extended in order to allow small entrepreneurs to supply telecomm services to rural areas. Through regulation and subsidies, private operators can be invited to bid for the provision of services in areas that are not commercially viable in return for a subsidy financed with a universal access fund.

Training

As rural women generally experience lower levels of education than men and a lack of proficiency in English, ICT training for women would need to be gender-sensitive and offered by women trainers wherever possible. There is also a need to support programs that provide hardware, modems and online access to women's NGOs and women's centres in organizations and institutions which are embedded in appropriate women's support and distribution systems. It is also important to support the implementation of ICT technical training programmes for women, and women's access to higher-level training in technical expertise and repair services by examining the role that existing local and national level women's NGOs can play in ICT distribution, training, and support in partnership with technology providers. Women need to be encouraged to feel confident in their ability to use ICTs by focusing on thematic ICT activities that provide tangible benefits of participation. These include:

- i. Health information and advocacy for women and children (especially concerning reproductive rights and AIDS)
- ii. Women's rights and legal frameworks supporting the education of women and girls
- iii. Business and entrepreneurial information

Time

Women generally have heavy responsibilities, particularly those involving their families, which result in time constraints. It is therefore imperative that ICTs are incorporated not only according to the information needs of women, but also in light of other activities and projects aimed at empowerment, e.g. women's NGOs, health centres, educational institutions, self-employment and entrepreneurial centres, and even churches. In this way, women would be able to experience the tangible use of ICTs.

References

- Adeya, C. (2002). *ICTs and Development: a literature review*. [Online]. Retrieved 13 January, 2004 from: http://www.hec.unil.ch/aosterwa/Documents/eDev/IdPVD_Seminaire_03_04/Adeya_2002.doc
- Adhiambo, O. (2001). *Transforming tradition as a vehicle for women's empowerment: a critical dimension for poverty eradication*. [Online]. Retrieved April 4, 2006 from: <http://www.un.org/womenwatch/daw/csw/empower/documents/Adhiambo-EP7>
- Basson, N. (1996). *Passage to progress: the CSIR's journey of change 1945-1995*. Johannesburg: Jonathan Ball Publishers.
- Bedi, A. (1999). *The role of information and communication technologies in economic development – a partial survey*.
- European Commission (2001). *Communication from the Commission to the Council and the European Parliament. Information and Communication Technologies in Development. The role of ICTs in EC Development Policy*, Brussels, [Online]. Retrieved 12 October, 2005 from: http://europa.eu.int/eur-lex/en/com/cnc/2001/com2001_0770en01.pdf
- Gay, L.R. (1996). *Educational research: Competencies for analysis and application (5th Ed.)*. Upper Saddle River, NJ: Merrill/Prentice Hall.
- Harris, R. (2004). *Information and Communication Technologies for poverty alleviation*. UNDP/APDIP. [Online]. Retrieved 6 November, 2005 from: <http://eprimers.apdip.net/series/info-economy/poverty.pdf>
- Ikoja-Odongo, R. (2002a) *Insights into the information needs of women in the informal sector of*

- Uganda. *South African Journal of Library & Information Science* 68, N.1, 39-52.
- Information Technology Development Group (ITDG) (2005). *Women's voices*. [Online]. Retrieved 6 November, 2006 from: http://www.itdg.org/?id=womens_voices2 Accessed 6/11/05.
- Jiyane, V. and Ocholla, D. N. (2004). *An exploratory study of information availability and exploitation by the rural women of Melmoth, KwaZulu-Natal*. *South African Journal of Libraries and Information Science*, Vol.70, N.1, 1-8
- Kenney, G.I. (1995). *The missing link – information*. *Information Technology for development* (6)33-38.
- KwaZulu Natal (2001). *The inside story on current affairs in Kwazulu Natal*. [Online]. Retrieved 11 December 2003, from: <http://www.profilekzn.co.za/aboutKzn.htm>.
- Marcelle, G. M. (2000) *Getting gender into African ICT Policy: a strategic view*. [Online]. Retrieved 20 October, 2005 from: <http://www.archive.idrc.ca/books/focus/903/06-chp03.html>
- Marcelle, G. (2002). *Information and communication technologies and their impact on the advancement and empowerment of women: report from the online conference conducted by the division of the advancement of women*. [Online]. Retrieved 7 January, 2004 from: <http://www.un.org/womenwatch/daw/egm/ict2002/reports/Report-online.PDF>
- Marker, P., Mcnamara, K. & Wallace, L. (2002). *The significance of information and communication technologies for reducing poverty*. [Online]. Retrieved on 31 March, 2006, from: http://www.oecd.org/dac/ictcd/docs/matrixdocs/GBR_paper1.pdf. Accessed
- Mooko, N. P. (2002). *The use and awareness of women's groups as sources of information in three small villages in Botswana*. *South African Journal of Library & Information Science*, 68(2):104-112.
- Moyo, L. M. (1996). *Information technology strategies for Africa's survival in the twenty-first Century: IT all pervasive*. *Information technology for development*. 7:17-27.
- Mudhai, F. O. (2004). *Shs 444b. to be spent on phones upgrade by 2015*. [Online]. Retrieved 15 January, 2004 from: <http://www.nationaudio.com/News/DailyNation/Supplements/horizon/15012004/story150120041.htm>.
- Ngimwa, P., Ocholla, D. and Ojiambo, J. (1997) *Media accessibility and utilization by Kenyan rural women*. *International Information and Library Review*. 29: 45-66.
- Opondo, O; Sekoh - Ochieng. *We're 28.7 million, and now it's official* [online], Retrieved July 28, 2003 from: <http://www.profilekzn.co.za/aboutKzn.htm>.
- Rathgeber, E.M. (2000). *Women, Men, and ICTs in Africa: Why gender is an issue*. [Online]. Retrieved 20 October 2005, from: http://www.idrc.ca/en/ev-32944-201-1-DO_TOPIC.html
- Soltane, K. (2002). *Regional ICT developments: the AISI perspective - a report by the Economic Commission for Africa*. [Online]. Retrieved 2 July, 2003 from: <http://www.unicttaskforce.org/thirdmeeting/pers.asp>
- Solange R. and Momo, M. (2005). *Expanding the role of ICTs in Africa*. [Online]. Retrieved 28 January, 2006 from: http://www.idrc.ca/acacia/ev-32970-201-1-DO_TOPIC.html
- Uthungulu Distict Municipality (2003). *Development perspective. (Status Quo)*. [Online]. Retrieved 5 October, 2004 from: <http://www.uthungulu.org.za/default.asp> Accessed 5/10/04.
- Umlalazi Integrated Development Plan [UIDP](2002). [Online]. Retrieved 10 December, 2005 from: http://www.devplan.kzntl.gov.za/Municipal/IDPs/Umlalazi/analysis_IDP.pdf Accessed 10/12/05
- UNDP. (2001). *Information communications technology for development. Essentials: Syntheses of Lessons Learned No. 5*. [Online]. Retrieved 28 September, 2006 from: http://www.undp.org/eo/documents/essentials_5.PDF
- World Development Report (1998/99). *The power and reach of Knowledge*. [Online]. Retrieved 15 January, 2006 from: <http://www.worldbank.org/wdr/wdr98/ch01.pdf> Accessed 15/01/06
- World Bank (2002). *Telecommunications and Information services for the poor. Towards a strategy for Universal Access*. [online]. Retrieved 18 March, 2006 from: <http://rru.worldbank.org/Documents/PapersLinks/1210.pdf>

Mohamed Mesbahi

The Third World and the paradox of the digital revolution

Abstract:

We, the people of the Third World, greeted the revolution in information technology with great enthusiasm, perceiving it as the harbinger of an equalitarian and democratic society and the encapsulation of a new humanism. The question is whether or not this new utopia has effectively brought an end to the great divide regarding access to information and knowledge.

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We, the people of the Third World, greeted the revolution in information technology with great enthusiasm, perceiving it as the harbinger of an equalitarian and democratic society and the encapsulation of a new humanism. The question is whether or not this new utopia has effectively brought an end to the great divide regarding access to information and knowledge.

In principle, access to information has been opened up thanks to the advent of worldwide networks to the extent that it escapes any religious, political and social control. The internet has had a leveling effect and put different people on an equal footing, enabling them to engage in dialogue amongst themselves.

Thus, we can say that the digital revolution has brought about a new phenomenon: the oneness of Reason. This oneness seems to be very close to Averroes' concept of "Virtual or potential Intellect". Virtuality in the context of the Internet is digital. Though ubiquitous, it cannot be located anywhere or be assigned one place or any particular place. It operates as an empty signifier that is detached from any signified or referent and has no anchor. It is in other words, a void, which paradoxically has fullness.

The new "Virtual Reason" encapsulated by the Internet is also similar, in many aspects, to the Enlightenment Reason, in the way that both of them encourage progress, innovation and create its public domain. It should be noted, however, that the new "Virtual Reason" consists mainly of programs and technological procedures and not only of the apriori principles, as in the Enlightenment Reason.

New Technologies of Information and Communication (ICT) have brought about a new mode of life for human beings that should not be confined to the world of computer science and other related technological domains.

This new mode of life is not shared by all humanity. Far from bringing about the worlds' unity, ICT increase differences and hierarchies both between the first and the third world and within each one of these worlds.

The appearance of the Digital Divide urged us to review our optimistic enthusiasm about the digital utopia that promised to unify humanity as far as the right of information and development is concerned. In fact, the information and communication revolution, like all revolutions, carried along with it a new

and more important gap between social classes and nations. The Divide in the capacity to buy a computer and new technological equipments, the facility to access the world of internet, the ability to understand its complicated programs, the skillfulness of interpreting their data and pose the suitable questions... : these are only the apparent face of the digital informatics Divide. Therefore, we start to see the limited influence of the digital revolution to bridge the gap between social classes and between individuals. The following indicators of the digital divide (such as the Tele-density Indicator, Technical Progress Indicator, Technical Achievement Indicator, Network Readiness Indicator, Media usage Indicator, Information intelligence Quotient, Standard Number of Digital Access...) inform us that the divide between nations and within the same nation is increasing, for instance the percentage of internet users in the Arab World has reached only 5%.

We cannot deny, of course, that the logic of the Worldwide Networks of the new technologies does not acknowledge the existence of borders between nations, cultures and civilizations. This is so because these technologies all try their best to nibble at the nations' sovereignty over their cognitive and information space in favor of the worldwide market. Despite the resistance of the third world to ICT, the ongoing technological revolution will eventually affect our part of the world and change it from a semi-industrial, semi-agricultural world into a computer-driven world, geared to advertise and sell its products. This affords us an opportunity to achieve progress and close this digital divide.

Even if the world has witnessed the birth of new technologies for more than four decades, the spread of the information knowledge in the nations of the south is still very limited. Concerning the African nations, apart from the use of Internet in public institutions, industrial sites and private information services, the educational institutions, illiteracy in the electronic information remains wide spread among people. This illiteracy is not due only to the difficulty of acquiring the new technological revolution tools (hard and soft) or the sophisticated ability to use them, but it is also a consequence of illiteracy and poverty (moral and material).

Some people think that people's lack of responsiveness to the digital revolution products lies in the fact that the spread of this revolution in Africa and the third World started first in the security departments of these countries. This fact has, consequently, led some people to think that the use of these technologies in general is linked to falsification and

oppression of political beliefs and freedom, and this of course made people turn away from these technologies. Whatever the pressure of globalization may be, the domains of use of these technologies in our countries have been limited to health, education and finance, and for those searching for jobs either in or outside the same country, or carrying out researches.

We cannot deny that digital technology has indeed affected economy, employment structure and even the way of thinking and feeling among the young generation. Even though this influence was not visible enough to reduce the impact of poverty among people, we cannot reject the success of different experiments led by a number of associations and organizations of the civil society in penetrating the countryside (e.g. handcraft). These associations have developed light industries, business and other services that aim to ensure human development in the end.

In spite of this, the effect of digital technology, which can help to achieve this development, is still very restricted because of the computer illiteracy and poverty, as mentioned before. This illiteracy does not prevent in a way the large use of the cell phone, which has been proved efficient so far.

The knowledge society does not leave any room for illiterate people. An example of this can be seen through the persistence of illiteracy in the Arab World (where the percentage is more than 45% of the population, that is about 111 million, 74 million of these are women). The propagation of poverty and lack of suitable informatics programs concerning education and training workers, farmers, free traders... all these factors make the emergence of a knowledge society very difficult in our countries. If we add to this the violent reaction of Islamic fundamentalist against the ICT, we will understand the extension and danger of the problem of the Digital Divide.

This does not mean that we are inviting people to reject ICT as it leads to more cognitive discrimination. On the contrary, we believe that it is an opportunity that we must seize so that we can develop new and suitable ways to reduce the effects of any severe and negative results of ICT on individuals and society. We can also consider these technologies as a tool that will help reconsider the distribution of mental and material wealth all over the world (for example ICT can be used, in a way, to counter illiteracy, control administrations, train or re-train

professionals and also take care of the citizens' health...).

All that has been mentioned above reveals that the digital divide is not only a mere difference between those who can or cannot afford to buy and use a computer but a total and complex phenomenon that requires total treatment. These techniques urge us to re-examine the human, cultural, economic and political development process, taking into consideration man as a starting point to any development process. Thus if we do not find solutions to the problems of poverty, illiteracy, unemployment, education and lack of democracy (i.e. if we do not reevaluate the status of men) we can never profit from the advantages of ICT in general. In other words, putting an end to the digital gap starts with the abolition of all the gaps: social, cultural, health and employment gaps. The digital revolution is not a "magic wand" that can solve all our complex and permanent problems. It is essential to find solutions first to the structural problems in order to provide suitable conditions that would allow us to profit from the advantages of the information and communication revolution. Introducing computers at schools and universities will not lead automatically to a better level of education unless we restore and improve the educational system. Otherwise, this introduction of computers may in a way cause the level of students to go down. Similarly, equipping administrations with computers cannot give an effective result if employers are not re-trained or promoted culturally and materially so that they can cope with the new culture brought by these new machines. Spreading the culture of computer and new technologies must start in primary schools, youth organizations, and local authorities and not only in ministries and public administrations.

A total view does not require regarding the ICT accidentally, that is not to consider these techniques only as an instrument to resolve our temporary economic and social problems, but it implies regarding them as a strategic instrument to build a knowledge society based on abundant information. In short, we have to pose the human element in the centre of any development concerning the ICT.

The ICT revolution has created its own culture and values. Our devotion to this culture is necessary to our adherence to the environment of the web, provided that we remain cautious and vigilant to the leveling and anarchy that it creates. The passage from the traditional and particular system of values and conventions to the universal system, that the web imposes, has to be smooth; otherwise, the

"informatics antibodies" will attack this new culture and demand to impose restraints on the new space, which is to prevent citizens from having free access to the world of knowledge. The implantation of this new culture in our countries implies the reconsideration of all our educational and cultural systems. However, this does not mean that we call for the standardization and eradication of cultural diversity, or for believing in the necessity of tutelage on the informatics space, but we only call for being open to the universal without ignoring local cultures.

The principle of transparency is essential for the information ethics, because we cannot fight corruption, violence and exclusion if there is an informatics blackout. Unfortunately, Africa has got a very bad rank concerning the level of transparency and democratic participation.

We believe that the entrance of the informatics discourse in our culture can refresh our development discourse so that it can go beyond its artificial contradictions. This is so because the informatics discourse does not raise any objection to joining opposites such as modernity and tradition, reason and revelation. However, our greatest and enduring problem is that our past is so voluminous, but if we apply informatics programs to this rich heritage, we can dominate and reconcile it with the new culture of ICT.

What is strange about this is that though there are more than 233 universities in the Arab World, 10 million students, and more than 1000 centers of scientific research, yet they cannot transform these scientific capacities into efficient capabilities in the world of ICT. We notice that even if the Arab World is rich in written and oral heritage, it cannot convert this heritage into a cultural industry. This does not imply that the Arab World does not appear on the geo-cultural informatics map, but it means that its contribution and participation are not transformed into a knowledge society.

The digital revolution has not only revealed our economical, political and cultural deficiencies, and given us a rare opportunity to catch up with the march of progress. It has also done more than this as it is trying to re-construct the human mind so that it can be fit and take up the new challenges of progress. In this context, is our African reason, though deeply rooted in heavy tradition and obsessed by fundamentalist and nationalist demagogues, able to be transformed in the light of the new methods and approaches of "virtual reason"?

The answer is still to be found. And it is incumbent upon us to endeavor to find it.

Chibueze C. Udeani

Cultural Diversity and Globalisation: An Intercultural Hermeneutical (African) Perspective

Abstract:

In our today's global age one of the central challenges facing Africa is that of coming to terms positively with her cultural diversity. Furthermore Africa is confronted with the challenge of global cultural diversity that has been characteristic of our global age. One of the questions raised here is how can the intrinsic African cultural diversity be made comprehensible not only to non-Africans but also to Africans themselves? Talking of understanding makes the issue a hermeneutical one. Hence the following questions, how can this hermeneutical challenge be mastered? What tools are required in order to accomplish this mission?

Any efforts towards accomplishing this task must have to put many dimensions into consideration. These include, among other things, the historical, regional, political, economic, etc. Such efforts would imply not only Africa being occupied with herself culturally, she on the other side needs to become relevantly conscious of the implications of these cultural dynamisms, understand it with reference to herself and the rest of the global community and finally interpret this phenomenon from an African perspective. These are the issues being addressed in this paper.

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Introduction

One of the central aspects of globalisation today is the issue of cultural diversity. More than ever before the different cultures of the world are culturally drawn so closely on different levels. This proximity makes not only the issue, but also the challenges and in lesser cases, the chances of cultural diversity within the process of globalisation more conscious. This awareness of cultural diversity has led to diverse opinions and reactions within the global community. Scholars differ on the prospects and implications of this development.

Globalisation, Africa and Cultural Diversity

The issue of globalisation is certainly an issue of development both politically, technologically, economically culturally etc. There is a link between culture and development. This is especially when development is seen more broadly. This link between culture and development could be seen from the point of view that culture can serve as ultimate catalyst or even hindrance for development. Considering the position of Africa today within the process of globalisation, this would entail, examining the relationship between culture in terms of cultural diversity and globalisation from an African perspective. For Africans globalisation in its present form implies an ever-increasing process of marginalization.

A closer look on Africa from the perspective of cultural diversity reveals that there is an inherent and intrinsic relationship between Africa and cultural diversity which could be likened to the identity-relationship between the snake and lengthy body. Cultural diversity is a central part of the African collective identity. This central aspect of the African identity has not always proven to be a blessing for Africa in dealing with herself and also in her history especially in her encounter with the rest of the world. This is due to, among other things, the fact that the intrinsic African cultural diversity is dominantly an ethnicised cultural diversity. This implies that the respective African cultures are specifically bounded and integrated mostly within particular groups. These define different parts of the continent in contradistinction to one another, emphasizing more of the differences and local contextualities at the expense of the collective Africa perspective.

The African "regional cultures were broken up and destroyed (or at least radically altered) primarily by the European and Islamic incursions going back some 500 years. The slave trade, introduction of new diseases, forced colonization, foreign language and religious impositions, and alien administration threw most of the continent into social, religious, political, and cultural confusion. Some of these regional cultures once had great civilizations and Kingdoms but a minimum of texts survived to record their ideas and achievements. What remains of them are fragmentary pictures: icons from ritual life, histories of smaller communities passed on orally.... A true recovery, however, of these regional cultures..of a pre-colonial (sic) Africa, is extremely problematic—and this is made even more problematic by the nature of developments in the postcolonial experience."¹

In the global age of today "local contexts in the world are more and more dissolving into a worldwide network of interaction under the influence of technological innovations that have reduced to virtually zero the costs (in terms of time and money) of communication and information. Globalization was, in the first instance, observed with regard to transnational movements of capital along electronic media but in the meantime turns out to have important cultural dimensions."² Globalisation in its present form and stage strongly promotes a "meta-local world culture, without local specificity and local validity... and hence devastating for any localizing cultural identity like the African one."³ This makes it all the more necessary to pose the question of cultural diversity and globalisation from an African perspective.

Cultural diversity here has to be seen from two sides: the diversity intrinsic within the African cultural landscape and the diversity of cultures with which Africans are now being more intensively confronted within the process of globalisation. Globalisation, as stated above, is not simply an economic phenomenon but also "a new stage in the

¹ Bell, R.H., *Understanding African Philosophy – A Cross-Cultural Approach to Classical and Contemporary Issues*, New York & London, Routledge, 2002, p. ix.

² Van Binsbergen, W., "Can ICT belong in Africa, or is ICT owned by the North Atlantic region?" http://www.shikanda.net/general/WIM_ICT_situating.pdf retrieved 03. Jan. 2007 p. 118

³ Ibid, 123

evolution of humankind and hence of creation as a whole. As it constitutes a new way of being in terms of the whole and hence relationally, the issue becomes that of living with all the peoples and cultures of the world.⁴ In Africa particularly globalisation, through its trespassing on cultures undermines acculturation and human relations and creates a conflicting situation.⁵ This is a hermeneutical challenge for Africa. Africa is called upon to address, understand and interpret both her own and the global predicaments and cultural diversity for herself within the context of our today's global age. "Such contextualisation (like the issue of conflicts in Africa) implies, among the rest, that ... Africans (sic) themselves provide the definitions of the criteria necessary to deal with conflict, together with the supporting structures needed to prevent, manage and resolve conflicts in Africa."⁶ For Africans this hermeneutical task entails understanding and interpreting the two forms of cultural diversity within the frame of globalisation, global age and "village" in terms of their own possibilities.

On Intercultural Hermeneutics

Hermeneutics grew up as an effort to describe more subtle and comprehensive patterns of comprehension, more specifically the "historical" and "humanistic" modes of understanding. As the study of interpretation and understanding of texts, it "involves two different and interacting focuses of attention: (1) the event of understanding a text, and (2) the more encompassing question of what understanding and interpretation as such are."⁷

Though hermeneutics is not a household word be it in philosophy or literary criticism, not to talk of common areas of human activities, most of the human daily actions could be termed hermeneutical.

Most of these are efforts towards or processes of interpretation and understanding. One needs to consider the ubiquity of interpretation and the generality of the usage of the term interpretation. In fact, from the time we wake up in the morning until we sink into sleep, we are "interpreting". On waking we glance at the bedside clock and interpret its meaning: we recall what day it is, and in grasping the meaning of the day we are already primordially recalling ourselves the way we are placed in the world and our plans for the future; we rise and must interpret the words and gestures of those we meet on the daily round. Interpretation is, then, perhaps the most basic act of human thinking; indeed existing itself may be said to be a process of interpretation.⁸

In our global world of today, existence in itself could be understood as a "constant process of interpretation". "The science of hermeneutics as an act of interpretation and understanding undergoes a fundamental change in today's global context... and it experiences an unprecedented widening of its horizons..."⁹ The issue might then boil down to the question of what kind of interpretation do one need today to grasp the dynamics of globalisation especially with regards to African cultural diversity.

The foregoing indicates that we need a new form of approach when it comes to understanding within the context of African cultural diversity today. The kind of hermeneutics needed here is the intercultural form. This is due to the fact that, among others, what is involved here entails a laying open of a culture or cultures, a laying out that implies "reasonable explanation" and translation not only within a single culture but from one cultural world into the other.¹⁰ "Thus in approaching Africa...we must work hard to determine what is significant from the point of view of its people. Understanding anything is always tied to its surroundings, which include language, customs, geography, iconic traditions, and especially the ordinary practices of its people."¹¹

The above also applies when one tries to understand ones own culture and the other's culture For Africa this would imply that it involves the process of bringing African cultures and equally non-African

⁴ McLean, G.F., *Hermeneutics for a Global Age*, Washington D.C., The Council for Research in Value and Philosophy, 2003, p.2.

⁵ Dalfovo, A.T. "From Global Interests to Cultural Values." in: Blanchette, O. et al (eds) *Philosophical Challenges and Opportunities of Globalization*. Vol. 1 p. 267.

⁶ Ibid. P. 268

⁷ Palmer R.E. *Hermeneutics – Interpretation Theory in Schleiermacher, Dilthey, Heidegger, and Gadamer*, Evanston 1969, p.8

⁸ Ibid P. 8f

⁹ Mall A.R. *Intercultural Philosophy*, Lanham, p. 15

¹⁰ Palmer R.E., p.13

¹¹ Bell, Ibid.p.1

cultures to the understanding of Africans and non-Africans in such a way that they would be in a position to serve as catalysts for Africans within the process of globalisation. This is more so for what applies to the understanding between Africans and non-Africans apply equally to Africans among themselves and between the different local African cultures.

The hermeneutic entailed here involves a type of mediation and "message bringing" process for Africans for themselves; from African cultures, through Africans, to themselves and to non-Africans on the one hand and on the other hand letting other non-African cultures address the African cultural worlds especially within the context of globalisation. There is need for a "laying open" of the African cultures to Africans themselves and non-Africans. This will imply a discursive process in understanding. Africa here has to assert herself and her cultures. This leads to a "laying out" i.e. explaining it to both parties involved. This implies three dimensions. Firstly the culture in question African or non-African has to express itself. This is a stage where it will be left for this particular culture in its peculiarities to express itself as such. This is not an issue of instrumentalising the cultures, be it by its members or external agents to achieve any other purpose. The central purpose must be that of making this particular culture be appropriately understood. Hence an honest effort towards objective self expression of the culture in question is presupposed.

Subsequent to this is the phase of explanation. Explanation emphasizes the discursive aspect of understanding a culture. It makes the explanatory rather than the expressive dimensions in cultural encounter the main focus. The primary goal here is to explain a culture, rationalize on it and make clear both to its members and non-members. Here that which is brought to expression in the first phase, in our case a particular African culture for instance, will have to be made intelligible not only to the culturally other or cultural outsider but also to the members of the particular African culture in question. This includes an introduction into, and invitation to participate in the intrinsic logic, values, judgments, conclusions etc, of this particular culture in question.

This is followed by the phase of translation. Among other things, translation brings the particular African culture to a kind of clash with itself through its members and also with the cultural world of the non-members. The already expressed and explained particular African culture gets translated into the cultural framework of the real (spatial and temporal)

contextuality of its members and to non-members. This gives room, among others, for critical self reflexion, dialogue and what would be an understanding of the culture in question.

Cultural diversity within the context of Globalisation from an intercultural hermeneutical (African) perspective would, at the long run, mean a laying bare of African and non-African cultures, a laying out that implies an explanation not only to the outsiders but also to ourselves coupled with a translation from the African cultural into the non-African world and vice versa. This will go a long way in reversing the negative dynamics of the intrinsic African cultural diversity and make the diverse African cultures serve as ultimate catalyst for development of Africa in our global age.

References

- Bell, H. Richard: Understanding African Philosophy – A Cross-Cultural Approach to Classical and Contemporary Issues. New York/London, Routledge 2002. ix.*
- Dalfovo, A.T.: "From Global Interests to Cultural Values." in: Blanchette, O. et al (eds) Philosophical Challenges and Opportunities of Globalization. Washington D.C., The Council for Research in Value and Philosophy 2001. Vol. 1. 267*
- Mall, A.R.: Intercultural Philosophy. Lanham: Rowan and Littlefield Publishing Incorporation, 2000. 15*
- McLean, F. George: Hermeneutics for a Global Age. Washington D.C., The Council for Research in Value and Philosophy 2003. 2*
- Palmer, E. Richard: Hermeneutics – Interpretation Theory in Schleiermacher, Dilthey, Heidegger, and Gadamer, Evaston, Northwestern University Press 1988. 13*
- Van Binsbergen, Wim: "Can ICT belong in Africa, or is ICT owned by the North Atlantic region?" http://www.shikanda.net/general/WIM_ICT_situating.pdf retrieved on 3rd Jan. 2007.118*

Kgomotso H. Moahi

Globalization, Knowledge Economy and the implication for Indigenous Knowledge

Abstract:

This paper considers the impact that globalization and the knowledge economy have on the protection and promotion of indigenous knowledge. It is asserted that globalization and the knowledge economy have opened up the world and facilitated the flow of information and knowledge. However, the flow of knowledge has been governed by uneven economic and political power between the developed countries and the developing countries. This has a number of ramifications for IK. The dilemma faced is that whichever method is taken to protect IK (IPR regimes, documenting IK etc) exposes IK to some misappropriation. Protecting it through IPR is also fraught with problems. Documenting IK exposes IK to the public domain and makes it that much easier to be misused. However, not protecting IK runs the danger of having it disappear as the custodians holding it die off, or as communities become swamped by the effects of globalization. The conclusion therefore is that governments have to take more interest in protecting, promoting and using IK than they have been doing.

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Introduction

According to Mazrui,¹ there are three distinct ways that globalization is interpreted: as economic interdependency across vast distances; information availability and movement across vast distances; and reduction of the world into a global village. Mazrui further states that 2 forms of globalization can be identified: economic globalization and cultural globalization. Globalization is also viewed as the opening up and interconnectedness of the world. This openness and interconnection has been given impetus by the need to open up economic and trade markets as well as developments in information and communication technologies culminating in the so called "knowledge economy". Many people assert that globalization is characterized by a mismatch of political and economic power, and that it is the more powerful countries in the north that benefit from globalization.

It has been stated in some quarters that colonialism can be viewed as the first stage of globalization.² Mazrui agrees with this sentiment and states that although the term globalization is new, the actual process started centuries ago fueled by 4 major engines of religion, technology, economy and empire building. Colonialism was about empire building, finding raw materials and new markets³. To do this effectively, the colonizers used religion to undermine the rich cultures of the colonized people. At the same time, many people were displaced from their cultural lands to make ways for settlers and for development; cultural objects and artifacts were plundered and carried away from the colonized countries; indigenous knowledge of communities was at the same time denigrated as it was appropriated to create new products and ideas by the colonizers.

Misappropriation of indigenous knowledge and other products and artifacts is therefore not a new thing and has been going on for many centuries. It was only in the 20th Century that issues of the intellectual property of communities from which the IK originates who were mostly in developing countries

was given any thought. These issues are still being debated and grappled with, and it is contended that globalization and the knowledge economy necessitates the protection and promotion of IK - a move that has ethical implications.

Indigenous knowledge and its importance

Many writers have defined indigenous knowledge as the knowledge, ideas and practices that are peculiar to a particular community and embody the community's identity and ways of surviving and maintaining the environment they find themselves in. Jones and Hunter maintain that there are varied meanings to indigenous knowledge and these emanate from the fact that IK itself is "embedded in the cultural fabric woven with the social, economic, technical, and scientific threads of a people developed and refined over time".⁴ However, some definitions of IK are based on the fact that it is derived from communities that are indigenous to a region or place. These may include the Maori of New Zealand, Basarwa of Botswana, American Indians and the indigenous people of Canada. But also, IK is often associated with rural based communities that possess limited or no education and who still live as one with nature, using IK to survive the vagrancies of nature. However, it is the contention that IK is not only a preserve of indigenous people or rural communities; IK is the knowledge that is held communally by communities that have lived in a particular area a significant amount of time. These communities may be indigenous, rural or urban. IK therefore represents a strategy that is used by communities to deal with everyday issues of life, be it food production, health, education, the environment, etc. Kiggundu distinguishes between indigenous knowledge and indigenous knowledge systems (IKS). He states that IK is also referred to as folklore; and IKS refers to the techniques and methods used by communities to harness the IK⁵.

Most IK, especially in developing countries, is not documented and is transmitted orally from generation to generation. As such, it is vulnerable to grad-

¹ Mazrui, Ali: Pan Africanism and the Origins of Globalization

² Saul, Samir: Colonialism.

³ Mazrui, Ali: PanAfricanism and the Origins of Globalization

⁴ Jones, Michael & Hunter, Joshua: Enshrining Indigenous Knowledge in the National Science Curriculum.

⁵ Kiggundu, J. Intellectual Property Law and the Protection of Indigenous Knowledge.

ual disappearance due to the influence of globalization and as individuals who lived life in the old way depart this life. Arguments have been raised that undocumented IK is considered to be in the public domain and therefore available for all with the possibility of being easily misappropriated. It is for these reasons that the documentation of IK has been advocated; the creation of digital libraries is seen as a way that ownership of IK can be articulated and the databases used to check whether the IK is new or has always existed and therefore cannot be patented to individuals wishing to own it.

The importance of IK has been acknowledged as crucial for health, agriculture and for commercial value in many other products. Arts and crafts emanating from indigenous knowledge have also attracted a lot of attention. The products of IK therefore are part of a multi million trade and investment in the world. Moahi, quoting Sahai notes that: "The global market for herbal products is exploding; it is estimated to touch 5 trillion by 2020. Four out of ten people in the US are using what they call alternative medicine, even when the cost is not covered by medical insurance"⁶. The issue is that since such information is undocumented and is thus in the public domain, it has been used to produce goods and products from which the communities who own the IK have not benefited. It is for these reasons that people have advocated documentation to guard against the disappearance and misappropriation of IK. In spite of this interest and the money that is being made from IK, communities who own it are sliding further and further into poverty.

According to Daes⁷ IK is also a very important resource for communities because it is very much tied to the socio-economic, spiritual and cultural aspects of the owners' lives. He concludes therefore that the protection of IK cannot be divorced from rights to land, culture and to adequate livelihood for communities who own IK. At the same time IK is also important for the world as a whole, and should be shared as long as communities are consulted and acquiesce to its use and most importantly, benefit from such use.

IK as a public good and globalization

Economic globalization is characterized by transnational and multinational corporations seeking to extend their markets and sources of raw materials and ideas. Generally they tend to look for such in less developed countries. Indeed, Luna writes that there is a great rush to the world's forests to learn of the potential of medicinal plants⁸. This according to Mudiwa⁹ is due to the fact that biological resources are the mainstay of man's survival and these are mostly found in developing countries. Although the contention is that biological resources are meant for the good of the entire world, the irony is that the finished products such as drugs are patented and are out of reach for poor countries and communities.

Negating IK

Cultural globalization can contribute to the erosion of people's languages and culture. This may have an effect on IK as the tendency is to be dismissive of undocumented, unscientific knowledge. Developments in media and information communication technologies contribute to this state of affairs. The effect has been to engender a negative attitude in most of the people towards all things indigenous, such as traditional practices relating to health, education, agriculture, etc. The major argument advanced is that such practices have no scientifically proven basis. Indigenous information is regarded as inferior and not backed and validated by scientific methods.

Individualization and commercialization of IK

Globalization has commoditized and privatized knowledge, resulting in the knowledge economy. Indigenous knowledge has not been exempt from this privatization. Knowledge that was in the public domain, owned by communities and passed down

⁶ Moahi, Kgomotso H: Documenting Indigenous Knowledge Systems: Prospects and Challenges

⁷ Daes, Erica-Irene: Some Observations and Current Developments on the Protection of the Intellectual Property of Indigenous People

⁸ Luna, Jonathan: Bioprospecting or Biopiracy, the Complex Relations of the Appropriation of Indigenous Knowledge

⁹ Mudiwa, Morries. Global Commons: the Case of Indigenous Knowledge, Intellectual Property Rights and Biodiversity

from generation to generation, has been privatized by applying intellectual property rights that confer rights on individuals, effectively robbing whole communities. Daes states that globalization is a two edged sword: on the one hand it has opened up the world so that there is a free flow of ideas; whilst however, a few voices, and global corporations have drowned out other voices¹⁰. It is therefore not a surprise that IK is said to be under threat.

IK as a knowledge system worth having

Developments in information and communication technologies have fuelled what is now commonly referred to as the knowledge economy. The basis of this economy is that we live in a world where the major currency is information and knowledge just as much, if not more than capital and land. It is posited that whoever has access to information and knowledge and uses it effectively can expect to develop and generate wealth. A major argument is that developing nations are not progressing because they do not have access to knowledge that they would use to improve production and generate wealth. However, knowledge is available for use by developing countries, but it is not attractive because it is said to be unscientific, and can only be useful if subjected to the scientific methods which are mainly a western construct that the rest of the world adheres to. The development of information communication technologies has however, brought IK into focus as a knowledge system worth having – hence the clamor to obtain IK and develop products and services of value.

The paradox of intellectual property rights

The knowledge economy has had a number of influences and impact on indigenous knowledge and communities who own it. Thomas and Nyamnjoh¹¹ have succinctly spelt out the ways in which both globalization and the knowledge economy have

impacted IK. First, in the knowledge economy, intellectual property has been given a very high profile and represents greater economic value. Indeed, much of the intellectual property of knowledge products is not vested in those who created it, but rather in global corporations that become the content providers and therefore command the greatest profits. The efforts being made to apply intellectual property rights, which are by nature individualistic, to knowledge that is communally owned, such as IK, has created a myriad of problems, especially for the communities who own the IK. Thomas and Nyamnjoh further state that some elements of IK such as “music, weaves, symbols, artifacts, knowledge of natural resources, dance steps, motifs – are steadily becoming privatized and have become part of the circuits of knowledge production, distribution and consumption”.¹² The effect has been commercialization of these products with the result that they become trivialized and lose their sacredness and meaning. Indeed, as stated before, the communities whose baskets, etc are commercialized do not benefit to the extent that global capital does – women may weave baskets in Botswana, sell these to a middleman who conducts brisk trade in supplying some global partner who then makes much more money than the women will ever see from products of their own knowledge and hands. Thomas and Nyamnjoh state that as the knowledge economy spreads its tentacles, it begins to displace IK from the hands of its owners, the communities. The knowledge is then “reconfigured in response to the asking and dictates of global capital”.¹³

Dispossessing Communities of IK

Globalization or neo-colonialism as some refer to it, has played a large role in dispossessing communities of their knowledge and identity. Many ideas and knowledge have been removed from communities through agreements for bilateral aid. Research organizations and governments in developing coun-

¹⁰ Daes, Erica-Irene: Some Observations and Current Developments on the Protection of the Intellectual Property of Indigenous People

¹¹ Thomas Pradip & Nyamnjoh Francis: Intellectual Property Challenges in Africa: Indigenous Knowledge Systems and the Fate of Connected Worlds

¹² Thomas Pradip & Nyamnjoh Francis: Intellectual Property Challenges in Africa: Indigenous Knowledge Systems and the Fate of Connected Worlds

¹³ Thomas Pradip & Nyamnjoh Francis: Intellectual Property Challenges in Africa: Indigenous Knowledge Systems and the Fate of Connected Worlds

tries benefit from donor funding as long as they will accept foreign students and researchers to come and conduct research and invariably take home all the data and findings which eventually find their way back to developing countries as products developed in the West and patented there. Clearly there is dire need for intervention aimed at protecting IK and ensuring that the economic gains of communities and the protection of their sacred and confidential knowledge is assured.

Ethical Dilemmas of not Protecting IK

Despite the problems of protecting IK, there are however some ethical dilemmas of not protecting it and Ng'etich¹⁴ points them out clearly. Many communities that own documentation are slowly disappearing and their way of life is changing. It is therefore crucial that IK should be preserved through documentation. Second, although there are issues with Western technology through multinational corporations bankrolling the appropriation of IK, it is a fact that this technology is required as many communities do not have the means to facilitate the appropriation. Third, not documenting IK means that it is taken to be in the public domain to be picked up and used by anyone who has the means, documenting it means that there is a database against which patent claims can be checked. Fourth, knowledge and information have been shown to be the means to development and economic benefits, protecting IK secures IK for appropriation by the communities themselves through what Ruiz¹⁵ refers to as contracts and know-how licenses that regulate access to IK and establish terms under which such IK can be used as well as how communities should benefit.

Issues of protecting and promoting IK

According to writers such as Chisenga¹⁶ developing countries, especially Africa contributes a minimal amount of knowledge or content on the Internet. The Internet is completely dominated by the US, Europe and Asia. Such writers have insisted that these countries need to put their own indigenous information on the global network so that they not only look to foreign, westernized information to solve their problems, but also have access to their own. The argument is that such countries do have knowledge that is indigenous to their situation and therefore can assist them in surviving and generating wealth, and this information can be a means of bridging the knowledge divide that seems to exist. However, there are problems and issues to deal with.

First, is the failure of governments to harness IK even as they acknowledge that sustainable development can be abetted by integrating IK. There is talk of the importance of IK and the need to protect it, but governments have not done much, with a very few exceptions such as South Africa, India, Brazil, etc. The vacuum that is therefore created by the governments tends to be filled by other international organizations and researchers who may do so legally and illegally. Where international organizations provide support to efforts by government to harness and document IK, there are agreements that are made which provide access to external forces to the IK, sometimes without consultation of communities.¹⁷

Intellectual property rights agreements and conventions have been signed which according to owners of IK propose measures that run counter to the beliefs and cultures of the communities and tend to take a non-holistic approach that does not consider the rights of IK owners to land, biodiversity, and self determination, i.e. consider *in situ* IK protection: "Indigenous peoples have called for approaches for protection of rights over IK to be holistic, reflecting their holistic worldviews, where knowledge is inextricably linked to traditional territories, resources

¹⁴ Ng'etich, Kibet A: Indigenous Knowledge, Alternative Medicine and Intellectual Property Rights Concerns in Kenya

¹⁵ Ruiz, Manuel: Policy Briefs: National and Regional Laws to Protect IK related to Genetic Resources

¹⁶ Chisenga, Justin: Indigenous Knowledge: Africa's Opportunity to contribute to Global Information Content

¹⁷ Thomas Pradip & Nyamnjoh Francis: Intellectual Property Challenges in Africa: Indigenous Knowledge Systems and the Fate of Connected Worlds

and culture". Also Swiderska & Argumedo,¹⁸ reviewed a number (8) of UN agencies' activities in protection of IK. They found a common thread of weaknesses in the work of all these agencies that lend credence to the criticism leveled against these organizations by communities owning IK and other interested parties. These include creating an artificial boundary between IK, biodiversity and folklore and crafts; Treating IK in isolation from human rights of the communities that own IK, there is need for more recognition in this regard, and it has been missing; Membership is typically made up of government representatives, and communities are hardly represented and therefore are excluded from making decisions that affect them.

Second, there is reliance on Western science and technology to transform IK and products into value added products, and once this is done, communities tend to lose control of the product and not benefit from the profits that are made – and yet the knowledge originated from them. Also according to Kawooya, African scholars, researchers and scientists are said to be reluctant to digitize IK because the very tools of the information society make it easy for such knowledge to be misappropriated. Others have argued that documenting IK, exposes it to the public when some communities would prefer to keep their own IK to themselves rather than expose it. Some communities may have own laws and regulations about what information may be disclosed and under what circumstances. This may be at variance with the establishment of national IK repositories or even IPR. Other arguments are that putting IK in the public stage may disadvantage communities that are rural and poor who may be unable to defend their knowledge and resources once they are out there from misappropriation.

Third, it is argued that IK can be protected by *sui generis* laws where the state legislates on behalf of the communities who own IK. Writers have expressed concern at this stating that it is undermining indigenous peoples' right to self determination and control of their own resources, and in some instances, may result in the exploitation and marginalization of such communities. Organizations such as WIPO and WTO advocate the use of existing or novel *sui generis* measures to protect IK. *WIPO's Model Provisions for National Laws on the Protection of expressions of Folklore against Illicit exploitation*

¹⁸ Swiderska, Krystyna & Argumendo, Alejandro: Towards a Holistic Approach to Indigenous Knowledge Protection

and other Prejudicial Actions provides a sui generis model for countries to adopt.¹⁹ In spite of this, few countries have *sui generis* protection, particularly in the African context.

Fourth it has been argued that access to the Internet will enable the developing countries to put their own content on to the Internet. However, Daes argues that for indigenous people, it will then be a struggle to keep their most sacred and private knowledge out of the Internet. "At the touch of the finger, volumes of confidential material will be placed irreversibly on the global public domain – the global commons-, where it can then be transformed and commercially exploited by others".²⁰ Questions do arise: who will be responsible for putting content on the Internet? Will communities be able to access their own content? What powers will communities have to control access and use to that content? These are very real issues that must be addressed if IK is to come into its own and drive the development process.

Suggested approach to protect and promote IK

Given the weaknesses found in international efforts at protecting IK, there is a need for home grown solutions that will take into consideration the holistic rights of communities and involve them in policy making, decision making and implementation. At present, governments in the developing countries, particularly in Africa, have not expended their energies on the issue of protecting IK. If there are any activities, they are restricted to universities and research institutions without the participation of governments in devising policies and legislations governing bioprospecting, research and trade in IK, biodiversity and artifacts.

According to Moahi²¹, Governments can and should take more active interest in matters concerning IK.

¹⁹ Kawooya, Dick: Copyright, Indigenous Knowledge and Africa's University Libraries: the Case of Uganda

²⁰ Daes, Erica-Irene: Some Observations and Current Developments on the Protection of the Intellectual Property of Indigenous People

²¹ Moahi, Kgomotso H: Documenting Indigenous Knowledge Systems in Africa: Prospects and Challenges

They should do this by setting the national agenda through developing national IK policies and formulation of legislature that would protect and promote the use of IK for the national interest.

In taking an active position regarding IK, governments should do so in consultation with the various communities that own IK; there has to be collaboration and agreements on how, for example, sacred IK is to be treated; how communities must be consulted and play a active role in the protection, promotion and use of its IK, and in ensuring that IK protection is done in a holistic manner that takes into consideration all aspects of IK. In considering what should be done to protect and promote IK in Botswana, Kiggundu²² suggests the University of Botswana should take the lead and should therefore educate communities about indigenous knowledge rights. This would be a good approach and it is the contention here that governments should move to designate organizations to protect and promote IK, whilst at the same time educating communities about the importance of IK in IK rights.

Governments can also act by supporting and championing IK resource centers or repositories to act as clearinghouses for collecting, documenting and disseminating IK by sponsoring and encouraging research into IK in the same way that governments in South Africa, India, Brazil are doing. They can involve communities in IK documentation exercises to ensure that holistic documentation is maintained.

Another form of promoting and protecting IK is documenting IK in databases and websites to establish prior existence and deter fraudulent claims of IP. This should be done in consultation with communities where responsibility of putting IK in database is clearly articulated and access issues are taken into consideration and measures put in place to ensure proper use of the IK. According to Kiggundu²³, once IK is documented in digital form it becomes easier to market it for the benefit of communities and to prevent what he terms "unauthorized and surreptitious exploitation". This has been done in countries such as India and Brazil.

²² Kiggundu, J. University Education and Intellectual Property in the Digital Era: Whither Botswana?

²³ Kiggundu, J. University Education and Intellectual Property in the Digital Era: Whither Botswana? 2007

Government should also in consultation and collaboration with communities put in place *sui generis* legislation to govern the flow and use of IK in bid to protect it from misappropriation on the grounds that it cannot be patented because it does not have novelty value. This can be done by adding legislation within the existing laws that govern intellectual property rights. Kiggundu²⁴ gives an example of how this may be done especially with regard to IK in areas of food, drinks and medicine. He states that such knowledge can be protected by geographic indications where patenting may not be possible.

Conclusion

This paper has shown how globalization and the knowledge economy has affected Indigenous Knowledge. Globalization and the knowledge economy have exposed IK for the potential and actual value it has yielded to the world's most powerful multinational corporations. At the same time too, globalization has negated IK by viewing it as untried and untested unless it is processed by Western technology. IK has also been individualized and commercialized to the point where symbols that are held sacred by communities are trivialized as slogans and logos that are used and patented. From the above, it is very clear that efforts must be expended to protect IK, if only to mitigate the above issues. This paper has considered a number of ways that have been used to protect IK: enacting *sui generis* laws; documenting IK; seeking contract licensing, etc. However, in order for the above to work, governments will have to take a more proactive stance and be at the forefront instead of background.

Despite the above, there are many initiatives in the developing world that are aimed at providing the much needed intervention to protect and promote IK in the face of globalizations. South Africa for example, has an IKS policy that was adopted in 2004 and supports research into IKS. Nigerians were recently urged by Obasanjo to set up a training and research institute in the field of traditional medicine. South Asian countries are poised to create a digital library of the region's traditional knowledge and develop laws against misappropriation. India has had its own traditional knowledge digital library which has been used as a benchmark by other countries.

²⁴ Kiggundu, J. Op Cit. (note 23)

References

- Armstrong, Chris & Ford, Heather (2005). *The African Digital Commons: A Participants' Guide 2005*. Commons Sense Project, WITS University. 72pp.
- Chisenga, Justin: *Indigenous Knowledge: Africa's Opportunity to Contribute to Global Information Content*. *South African Journal of Libraries and Information Science* 68(1), 2002, p. 16-20.
- Daes, Erica-Irene: *Some Observations and Current Developments on the Protection of the Intellectual Property of Indigenous Peoples*.
- Jones, Michael, E & Hunter Joshua: *Enshrining Indigenous Knowledge in the National Science Curriculum: Issues Arising from the Maori Case*. RSCD Conference- Chiang Mai University. July 11-24, 2003.
- Kiggundu, J., *Intellectual Property Law and the Protection of Indigenous Knowledge*. In: Mazonde, I & Thomas P. *Indigenous Knowledge Systems and Intellectual Property in the Twenty-First Century Perspectives from Southern Africa*. CODESRIA, University of Botswana and World Association for Christian Communication. 2007: pp. 26-47.
- Kiggundu, J., *University Education and Intellectual Property in the Digital Era: Wither Botswana?*. Paper presented at an Intellectual Property Forum of the University of Botswana. April 2007: 17pp.
- Luna, Jonathan: *Bioprospecting or Biopiracy, the Complex Relations of the Appropriation of Indigenous Knowledge*. Florida State University. D-Scholarship Repository. 2005: 56pp. at: <http://dscholarship.lib.fsu.edu/undergrad/85> Accessed on 03/01/2007
- Mazrui, Ali: *Pan-Africanism and the Origins of Globalization*. 2001. [Http://iqcs.binghamton.edu/iqcs_site/dirton12.htm](http://iqcs.binghamton.edu/iqcs_site/dirton12.htm) Accessed on 03/01/2007
- Moahi, Kgomo H: *Documenting Indigenous Knowledge systems in Africa: Prospects and Challenges*. *ESARBICA Journal Volume 24 (2005)*, pp.75-87.
- Mudiwa, Morries: *Global Commons: the Case of Indigenous Knowledge, Intellectual Property Rights and Biodiversity*. Undated, 26pp.
- Pradip, Thomas & Nyamnjoh, Francis, B: *Intellectual Property Challenges in Africa: Indigenous Knowledge Systems and the Fate of Connected Worlds*. In: Mazonde, Isaac and Thomas, Pradip: *Indigenous Knowledge Systems and Intellectual Property in the Twenty First Century*.
- Perspectives from Southern Africa*. CODESRIA, University of Botswana and World Association for Christian Communication. 2007: p. 12-25.
- Ruiz, Manuel: *Policy Briefs: National and Regional Laws to Protect IK Related to Genetic Resources*. *SciDev.Net*.
- Saul, Samir: *Colonialism*. University of Montreal. Undated
- Swidersa, Kyrstyna & Argumedo, Alejandro: *Towards a Holistic Approach to Indigenous Knowledge Protection: UN Activities, 'Collective Bio-Cultures Heritage' and the UNPFII. Fifth Session of the UN Permanent Forum on Indigenous Issues, 15-26 May 2006*. N.Y.

Kenneth Einar Himma

The Information Gap, the Digital Divide, and the Obligations of Affluent Nations¹

Abstract:

In this essay, I would like to do three things. First, I would like to provide a broad and brief overview of the effects of absolute poverty in creating an information gap and a digital divide and the effects of these gaps in perpetuating absolute poverty. Second, I would like to show that ordinary case intuitions, normative ethical theories, and theological considerations converge in entailing a moral obligation to help those in poverty. Third, I would like to argue, all too briefly, that although this surely involves making donations of both cash and food - free of the sorts of conditions that are frequently imposed by organizations like the IMF and World Bank - it also involves donations of a sort that are specifically targeted to close the information and digital divides.

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The global distribution of material resources should bother any conscientious person. One billion of the world's six billion people live on less than \$1 per day, while 2 billion live on less than \$3 per day. Poverty in the affluent world is largely relative in the sense that someone who is "poor" simply means he has significantly less than what others around him have. But since wealth is, unfortunately, frequently associated in the West with moral worth, it is important to realize that relative poverty is a genuinely painful condition. People who live in conditions of relative poverty are generally treated with less respect – and hence are denied something that is essential to human well-being.¹

In the developing world, poverty and the suffering it causes is considerably worse. Here poverty is characteristically "absolute" in the sense that people do not have enough to consistently meet their basic needs. People in absolute poverty lack consistent access to adequate nutrition, clean water, and health care, as well as face death from a variety of diseases that are easily cured in affluent nations. Indeed, 15 million children die every year of malnutrition in a world where the food that is disposed of as *garbage* by affluent persons is enough to save most, if not all, of these lives.

Fortunately, life-threatening poverty has begun to attract the attention of parties and organizations that hold passionately conflicting views on many other pressing moral issues. Liberals and conservatives in the U.S. might disagree about, say, abortion

rights; but everyone seems to agree that something should be done about absolute poverty.

It is hard to overstate the significance of this emerging consensus on absolute poverty. People in the U.S. commonly believe the only moral obligations that we owe to other people are negative in the sense they require only that we refrain from performing certain acts; for example, we are obligated not to shoot other people, but not to do something to save someone's life. That citizens in the U.S. are converging on a desire to help the absolutely poor given this unfortunate view of moral obligations is quite remarkable.

In this essay, I would like to do three things. First, I would like to provide a broad and brief overview of the effects of absolute poverty in creating an information gap and a digital divide and the effects of these gaps in perpetuating absolute poverty. Second, I would like to show that ordinary case intuitions, normative ethical theories, and theological considerations converge in entailing a moral obligation to help those in poverty. Third, I would like to argue, all too briefly, that although this surely involves making donations of both cash and food – free of the sorts of conditions that are frequently imposed by organizations like the IMF and World Bank – it also involves donations of a sort that are specifically targeted to close the information and digital divides.

The argument for this latter conclusion will be grounded in two considerations. First, it will be grounded in certain basic principles that have governed "globalization" – the process by which trade barriers between countries have systematically been reduced over the last couple of decades – usually to the advantage of affluent nations and to the disadvantage of developing nations. Second, it will be grounded in certain claims about the most efficacious way to satisfy our collective and individual obligations to alleviate the conditions of life-threatening poverty. I will conclude that (1) these measures should be borne both individually and collectively by taxpayers in affluent nations; and (2) corporations should waive certain intellectual property rights that up to now they have been extremely reluctant to waive in order to prepare developing nations for a global economy that satisfies basic principles of fairness.

¹ Nevertheless, poverty is becoming more serious in countries like the U.S., where a recent study shows an increase in the percentage of the population in "severe poverty," which is defined as having an income less than half of that defined by the federal poverty line. The number of people living in severe poverty increased by 26% from 2000 to 2005. See, e.g., Tony Pugh, "More Americans Falling Deeper into Depths of Poverty," *Seattle Times*, February 26, 2007; available at <http://archives.seattletimes.nwsource.com/cgi-bin/texis.cgi/web/vortex/display?slug=poverty26&date=20070226&query=poverty>. Moreover, there is some absolute poverty in the U.S., as there are now more than 750,000 persons who are homeless. See Stephen Olemacher, "Official Count: 754,000 people believed homeless in U.S.," *Seattle Times*, Wednesday, February 28, 2007; available at http://seattletimes.nwsource.com/html/nationworld/2003592874_homeless28.html.

The Bi-Directional Relationship between Absolute Poverty and the Digital and Information Divides

There are gaps in access to information and information communication technologies (ICTs) within nations and between nations. Within the US, for example, there are such gaps between rich and poor citizens, whites and blacks, and urban dwellers and rural dwellers. According to the Department of Commerce (1999):

The 1998 data reveal significant disparities, including the following: Urban households with incomes of \$75,000 and higher are more than twenty times more likely to have access to the Internet than rural households at the lowest income levels, and more than nine times as likely to have a computer at home. Whites are more likely to have access to the Internet from home than Blacks or Hispanics have from any location. Black and Hispanic households are approximately one-third as likely to have home Internet access as households of Asian/Pacific Islander descent, and roughly two-fifths as likely as White households. Regardless of income level, Americans living in rural areas are lagging behind in Internet access. Indeed, at the lowest income levels, those in urban areas are more than twice as likely to have Internet access than those earning the same income in rural areas.

Other things being equal, poor people in the US are less likely to have access to online information and the ICTs that makes access possible than affluent people.

Similar gaps exist between the affluent developed world and the impoverished developing world. Although Internet access is increasing across the world, it is still the case that a comparatively small percentage of the developing world's poor has Internet access. A 2005 UNESCO report indicated that only 11% of the world's population has access to the Internet, but 90% of these persons live in the affluent industrialized developed world.²

² Matias Ponce, "UNESCO Report Highlights Digital Divide," (November 4, 2005); available at http://english.ohmynews.com/articleview/article_view.asp?article_class=4&no=256818&rel_no=1. Accessed February 16, 2007.

Although these differences in access to ICTs and information correlate with differences in wealth, there is a causal relation between them. Obviously, people who are too poor to fully meet their immediate survival needs cannot afford either ICT access and the training that prepares one to take advantage of such access. But not being able to afford such training and access is likely to perpetuate poverty in a global economy increasingly requiring the ability to access, process, and evaluate information. Lack of access owing to poverty is a vicious circle that helps to ensure continuing poverty.

The Moral Dimensions of the Information and Digital Divides

As there is confusion and disagreement about the concepts of digital and information divides, I would like to provide a brief explanation of these notions as used in this paper. A *digital divide* between groups A and B refers to a gap in *meaningful* access to ICTs, which requires the ability to use ICTs to economic and cultural advantage. On this conception, someone who has the relevant ICTs but can do no more with them than download music from online sharing sites has access, but not *meaningful* access, to ICTs because she does not have the ability, opportunity, or disposition to use them in a way that promotes her cultural knowledge or economic well-being.

An *information gap* between groups A and B refers not only to a gap in access to information that can potentially improve a member's cultural knowledge and economic well-being, but also refers to a lack of ability, opportunity, or disposition to use that information in a way that contributes to that member's cultural knowledge and economic well-being. Someone who can find information that can ground economically productive activity, but lacks the ability (perhaps because of underdeveloped analytic skills) or opportunity to put it to use would suffer from an information gap relative to someone who is succeeding in the "information" or "knowledge" society.

These kinds of divides are typically characterized as problems to be remedied, but the ethical issues are more complex than is commonly assumed. Someone who thinks that such gaps unambiguously present a moral wrong that must be rectified focus primarily on the benefits of ICTs and their meaningful use. Having meaningful access to ICT, which includes the skills to be able to process information in a way that creates marketable value, results in

benefits that are economic and non-economic in character. Clearly, there are a host of marketable things someone competent with ICTs can do to improve her standard of living and well-being. Likewise, if we think that there are many things about that world that are worth knowing for their intrinsic value (as opposed to their value in bringing about some other means, such as an increase in wealth), then meaningful access to and use of ICTs can increase a person's understanding of the world – something that seems sufficiently valuable, along with the economic benefits, to characterize lack of such access to ICTs as a problem needing solution.

Of course, the moral calculus is never so simple as it may initially appear. The worldwide availability of mass media featuring content from all over the world can have the effect of reducing cultural diversity. Human culture can be thought of as analogous to artistic product – though it is collective in a way that, say, paintings are not. Human beings manufacture the cultural norms and conditions in which they live by converging upon shared assumptions about what is and is not valuable, by expressing shared tastes in the development of indigenous art, fashion, language, knowledge, and food. Exposure, say, of African nations to certain cultural content from the West can certainly expand an African's sense of the cultural possibilities and result in new cultural forms that are hybrids of African and Western influences – and this can certainly be seen as good from a moral vantage point.

However, the availability of a particular culture's content can also have the effect of eliminating cultural forms that, as a moral matter, should be preserved. Many persons, I think, share the intuition that the progressive Americanization of cultures ranging from Western European to African and Asian (in the form, for example, of a proliferation of American corporate franchises, like McDonald's, Starbucks, the Gap, in an increasing number of international cities) raises moral issues.

Moreover, resolving the divide between North and South threatens the multilingualism endemic to, for example, nations in Africa. More than 75% of the World Wide Web's content is in English – a percentage that will continue to increase as more persons in the developing world gain meaningful access to the World Wide Web – yet English is the native language for less than 50% of people with Internet access (including, of course, people in Western European nations) The proliferation of ICTs and the requisite skills to use them requires fluency in English and threatens, according to some estimates, as

many as 6,000 languages currently being spoken, the majority of which are in Africa.³

But it is as important to avoid a cultural paternalism that leads to steps that insulate existing indigenous cultures from outside influences as it is to avoid the sort of cultural imperialism of which the U.S. is often accused – especially in cultures in which life-threatening poverty is endemic.

There are no easy choices here with respect to the kind of gaps with which we are concerned. If it is important to preserve distinct cultures for the same reason it is important to preserve works of art, it is also important to protect the autonomy rights of individuals to choose the cultural forms that best express their developing sense of values and priorities. It is equally important, on this assumption, to protect the right of people subject to conditions of absolute – or, for that matter, relative – poverty to improve their standard of living so as to ensure a healthier, happier life in which they can flourish in all the ways it is reasonable to think people should flourish.

Given that total globalization of economic activity appears inevitable, I think it is fair to assume that, while the value of preserving culture is an important moral value, the values associated with making possible a more economically affluent life for the one billion people who live on less than \$1.00 a day and the two billion who live on less than \$2.00 a day outweigh the admittedly important moral value of preserving diversity. Life is more valuable than art and culture – though art and culture are obviously an important part of what makes life worth living.

This should not be taken to deny that every possible step should be taken to preserve cultural diversity and multilingualism as the affluent world attempts to solve the problems associated with the various divides (ICT, knowledge, information, skills). If diversity can be preserved while raising standards of living among the most wretched poor of the world, then it should be done. The cultural richness made possible by the world's diverse customs and languages is, from any evaluative standpoint (aesthetic, prudential, and moral), of tremendous importance and should be protected by every feasible means.

The point is rather that the moral value associated with alleviating the conditions of poverty that

³ See Ponce (2005), above.

threaten life, health, security and human dignity outweigh the value of such diversity if they come into irresolvable conflict. If the cost of feeding chronically malnourished individuals and making possible a certain level of affluent self-sufficiency among the world's poorest people means the disappearance of certain cultures, so much the worse for those cultures – though we should not lose sight of the fact that something of genuine moral importance is being lost. Of course, it should be emphasized that no claim is being made here that these two values cannot both be protected and secured; the claim is rather that alleviating a poverty that is beyond what most people who have never seen it can imagine outweighs preserving the diversity that enriches even the lives of people who never travel beyond the confines of the nearest large metropolitan area.

This is not, of course, an entirely comfortable position to take, but reflection on one's own preferences seems to require it. One should always be aware that intuitions and preferences are culturally conditioned, so there is a danger that my intuitions are not universally shared; if so, that is a gap in my argument. But I will take a full belly and a materially comfortable life over adherence to any particular cultural form – including the one with which I am most comfortable. It is true, of course, that Western intuitions are conditioned by the West's atomistic conception of the individual as supreme, whereas other Eastern cultures conceive of the group to which one belongs as supreme. Still, it is hard to imagine any practically rational being preferring the chronic discomfort of serious poverty to membership to any group that does not have a religious character.

Do Affluent Nations Have a Moral Obligation to Help Developing Nations Overcome Poverty and the Information and Digital Divides?

To say that X is good is to not to say that X is obligatory. Failure to do something morally good is not necessarily morally wrong and does not necessarily merit blame, censure, or punishment. It would be good if I were to run into a burning building to try to rescue someone, but it is not morally wrong for me to refrain from doing so; risking my life to save another is *supererogatory* – that is to say, morally good but beyond the call of obligation. Failure to do something morally obligatory, in contrast, is necessarily morally wrong and merits blame,

censure, or punishment. We praise supererogatory acts, but not obligatory acts. We blame non-performance of obligatory acts, but not non-performance of supererogatory acts.

It is uncontroversial that it is *morally good* for affluent persons or nations to help impoverished persons or nations, but there is considerable disagreement about whether affluent persons and nations are *morally obligated* to help alleviate the effects of absolute poverty. As noted above, many persons in the U.S. take the position that the only moral obligations we have are *negative* in the sense that they require us only to abstain from certain acts; we are obligated, for example, to refrain from killing, stealing, lying, etc. On this view, we have no moral obligations that are *positive* in the sense that they require some positive affirmative act of some kind. It follows, on this view, that we have no moral obligation to help the poor; helping the poor is good, but beyond the demands of obligation.

Indeed, some would argue that it is a conceptual truth (derived from the content of the concept, as opposed to being derived from substantive moral norms) that helping the poor is good but not morally obligatory. On this line of analysis, helping the poor is, as a conceptual matter, "charity." But it is a conceptual truth that charity is morally good, but not obligatory; that is to say, it is a deeper implication of the very meaning of "charity" that it is supererogatory. Accordingly, charity is praiseworthy, but failure to be charitable is not blameworthy.

I think this view is both mistaken and pernicious. In the next four subsections, I will argue that this view is inconsistent with the ethics of every classically theistic religion, ordinary intuitions about certain cases, and each of the two main approaches to normative ethical theory, consequentialism and deontological ethical theory. Taken together, these arguments provide a compelling case for thinking the affluent are morally obligated to help alleviate the conditions of absolute poverty wherever they are found.

Theological Considerations

To begin, it is clear that Christian ethics entail a robust moral obligation to help the poor. Jim Wallis points out, for example, that there are 3000 refer-

ences in the Bible to alleviating poverty.⁴ Jesus frequently speaks of helping the poor as a *constituent* of authentic religious faith in God; Matthew 25:31-46 states:

When the Son of Man comes in his glory, and all the angels with him, then he will sit on the throne of his glory. All the nations will be gathered before him, and he will separate people one from another as a shepherd separates the sheep from the goats, and he will put the sheep at his right hand and the goats at the left. Then the king will say to those at his right hand, "Come, you that are blessed by my Father, inherit the kingdom prepared for you from the foundation of the world; for I was hungry and you gave me food, I was thirsty and you gave me something to drink, I was a stranger and you welcomed me, I was naked and you gave me clothing, I was sick and you took care of me, I was in prison and you visited me." Then the righteous will answer him, "Lord, when was it that we saw you hungry and gave you food, or thirsty and gave you something to drink? And when was it that we saw you a stranger and welcomed you, or naked and gave you clothing? And when was it that we saw you sick or in prison and visited you?" And the king will answer them, "Truly I tell you, just as you did it to one of the least of these who are members of my family, you did it to me." Then he will say to those at his left hand, "You that are accursed, depart from me into the eternal fire prepared for the devil and his angels; for I was hungry and you gave me no food, I was thirsty and you gave me nothing to drink, I was a stranger and you did not welcome me, naked and you did not give me clothing, sick and in prison and you did not visit me." Then they also will answer, "Lord, when was it that we saw you hungry or thirsty or a stranger or naked or sick or in prison, and did not take care of you?" Then he will answer them, "Truly I tell you, just as you did not do it to one of the least of these, you did not do it to me." And these will go away into eternal punishment, but the righteous into eternal life.

The implicit conception of authentic faith here is that it is not just about believing certain propositions; it is also about doing things – and one of those things is to help the poor. Not helping others in need is tantamount to rejecting Jesus. Since (1)

this is justifiably punished and (2) punishment is justified only for failures to do what is obligatory, it follows that helping others is morally obligatory.

If more is needed, Matthew 22:34-40 describes the foundational principles of Christian ethics as follows:

When the Pharisees heard that he had silenced the Sadducees, they gathered together, and one of them, a lawyer, asked him a question to test him. 'Teacher, which commandment in the law is the greatest?' He said to him, ' "You shall love the Lord your God with all your heart, and with all your soul, and with all your mind." This is the greatest and first commandment. And a second is like it: "You shall love your neighbour as yourself." On these two commandments hang all the law and the prophets.'

In these verses, Jesus informs his questioner we are "commanded" – and hence *obligated* – to love our neighbors as ourselves. But "love" cannot refer to the emotions or feelings we ordinarily use the term "love" to pick out. First, what we feel is beyond our direct volitional control and we cannot be obligated to do what we is beyond our direct volitional control; as the matter is usually put, "ought implies can." Since I cannot efficaciously will that I feel towards some stranger the joyous emotion that I feel, for example, towards my wife or towards my nieces, I cannot be obligated to do so. Second, we do not experience that feeling towards ourselves; while we are self-interested and regard ourselves with esteem, this is different from the kind of emotion we feel towards other people we love. The day I look in the mirror and feel in response what I feel when I see my nieces is a day I will immediately seek some therapy for what is clearly a pathological narcissism.

Although many theologians have interpreted "neighbors" as applying only to Christians, this is implausible.⁵ The New Testament is clear about the passages in which it refers to all people. Christians are typically referred to as "brethren" or as comprising the "body of Christ" (or the Church). Neighbors, properly construed in conjunction with the other verses in which Jesus insists upon helping the poor is best construed as referring to all people – Christians and non-Christians alike. Indeed, the Pauline letters are famous for the egalitarian view of salvation that is promoted; there is no "chosen people"

⁴ Erin Curry, "Jim Wallis, Dems' Favorite Evangelical?" Baptist Press (January 19, 2005); available at <http://www.bpnews.net/bpnews.asp?ID=19941>. Accessed February 17, 2007.

⁵ I'm indebted to Johannes Britz for this insightful concern.

as the Old Testament *seems* to assert; we are all children of God with the possibility of salvation.

The obligation to love our neighbors as ourselves is properly construed as an obligation to treat the interests of other people as important as our own – and this clearly entails that the affluent are obligated to help the poor. Someone who spends money on unnecessary fashionable clothing is not treating the interests of someone in conditions of life-threatening poverty as being as important as her own because basic needs clearly outweigh desires for life's luxuries. It is clear that this first principle of Christian ethics requires the affluent to deploy some of their disposable income to help alleviate absolute poverty.

Judaism grounds *Tzedakah*, an obligation to help the poor, in both the Torah and the Talmud. At the outset, it is important to note that Leviticus 19:18 states the very law that entails an obligation to help the poor in Christianity: "You shall not take vengeance or bear a grudge against any of your people, but you shall love your neighbour as yourself: I am the Lord." The same interpretive considerations applied to the New Testament statement are relevant here, as Jesus regarded himself as a teacher of the Jewish tradition and was regarded by followers as the fulfillment of Jewish prophecy.

Other verses are more specific. Leviticus 23:22 puts the point in terms of agricultural products, but the point remains the same: "And when you reap the harvest of your land, you shall not reap all the way to the edges of your field, or gather the gleanings of your harvest; you shall leave them for the poor and the stranger." Similarly, Deuteronomy 14:28-29 explicitly requires tithing: "Every third year, you shall bring out a full tithe of your yield of that year, but leave it within your settlements. Then ... the stranger, the fatherless, and the widow in your settlements shall come and eat their fill."

The Talmud is no less specific. Tractate Baba Bathra states: "It has been taught: R. Meir used to say: The critic [of Judaism] may bring against you the argument, 'If your God loves the poor, why does he not support them?' If so, answer him, 'So that through them we may be saved from the punishment of Gehinnom.'" As Rabbi Maurice Lamm sums up the Jewish view: "Support for the disadvantaged in Judaism is not altruism. It is 'justice.'"⁶ And to do

⁶ Rabbi Maurice Lamm, "Support for the disadvantaged in Judaism is not altruism -- it is nothing

justice, of course, is obligatory; in the case of Judaism, it is necessary to save the Jew from a "meaningless death." As such, it is a commandment and an obligation.

Finally, Islam regards the obligation to help the poor (*Zakat*) as one of the five basic obligations (or "pillars," as these obligations are commonly called) of its faith. These pillars obligate Muslims (1) to declare that there is no God but Allah and Muhammad is the Messenger of God (*Shahada*); (2) to worship in prayer five times daily while facing Mecca (*Salat*); (3) to fast from sunrise to sunset during the holy month of Ramadan (*Sawm*); (4) to make a pilgrimage to Mecca (*Hajj*); and (5) to give to the poor and needy (*Zakat*).⁷ Once a tax collected by the government, satisfaction of the obligation to help the poor is left to the conscience of the believer.

However, it is no less an obligation in virtue of being left to the believer. The law of a government does not necessarily reflect the content of a Muslim's moral obligations. Only insofar as a government's law incorporates the content of Sharia law does it express the content of the moral obligations defined by the Koran because Sharia law is directly derived from the Koran. Whether enforced by a state or not, every Muslim is obligated to help the poor – and this obligation is part of Sharia law as expressed in Islamic Scripture. While there is much that the Abrahamic classically theistic faiths disagree upon, they are united in holding that helping the poor is a moral obligation.

Nor should it be thought that there is any requirement that the recipient have exhausted all efforts to create opportunities for himself. The Scriptures of all these religions were written at a time when resources were so scarce one simply could not manufacture appropriate economic opportunities. While we now live in a world in which one can do exactly that (provided one has adequate resources at least in the form of proper training), the concern

less than justice," *Jewish Literacy*, available at: http://www.aish.com/literacy/mitzvahs/Day_to_Day_Judaism_Charity.asp. (Accessed February 22, 2007).

⁷ For a helpful but brief discussion of the five pillars of Islam, see Malise Ruthven, *Islam: A Very Short Introduction* (Oxford: Oxford University Press, 1997), pp. 143-48.

of these religious with the duty to alleviate poverty is not with such contingencies.⁸

Peter Singer's Drowning Infant Case

Peter Singer asks us to consider the following situation. An adult notices an infant face down at the edge of a nearby pond in some very shallow water and can see the infant is flailing. Instead of simply bending over and removing the infant from the water, a gesture that would cost him no more than a few seconds and some wet hands, he walks by without doing anything and allows the infant to drown. People almost universally react to this case with a judgment that the adult has done something grievously wrong.

Most people view this situation as a counterexample to the view that we have no positive obligations to help others – even, in my experience, persons who initially hold this view. Indeed, I frequently present this case in applied ethics classes to students who nearly all begin this portion of the class with the view that all our obligations are negative; despite this, they almost universally respond quite passionately that a grave wrong has been committed. After realizing that their initial view is inconsistent with their reaction to this case, they overwhelmingly abandon their initial view that all our obligations are negative.

Singer infers from this example that we have an obligation to save the life of another person if we can do so without sacrificing something of comparable moral significance, but the example will not support such a strong principle. The reason is that the example involves a person who can save an infant at trivial cost to himself; it would be one thing if he had to risk injury to do so, but the example is couched so that the costs are minimal – temporarily wet hands and a few seconds of lost time.

At most, we can infer the weaker principle that we have an obligation to save the life of another person if we can do so without incurring a significant cost to ourselves, but this is strong enough to entail a robust obligation on the part of the affluent to alleviate the life-threatening conditions of absolute poverty. Sacrificing a \$30 shirt one does not need in order to save the life of a desperately malnourished child for one month is a trivial cost for someone who makes \$40,000 per year, about the aver-

age income in the U.S. A national commitment of even \$100 billion per year to foreign aid is insignificant in an economy worth \$12 trillion dollars. Indeed, \$100 billion is about 3.5% of the \$2.9 trillion budget President Bush recently asked Congress to approve. In 2005, the U.S. spent about \$28 billion in foreign aid.⁹ Clearly, even the weaker principle that can be extracted from Singer's example entails that the U.S. is morally obligated to do much more.

Alleviating Life-Threatening Effects of Bad Moral Luck

It might be tempting to think that merit largely determines how material resources are distributed in the world. We are affluent and they are not, on this line of thinking, because we have earned it and they have not. While poverty is always regrettable, it does not necessarily involve justice: as long as people have gotten everything they deserve, there is no injustice in their having less than they need. We are our own keepers, and our respective merits determine what distributions are just. In other words, we have what we have because we have earned and hence deserve it.

While desert plays a role in explaining why people have what they have, luck plays as large a role. Had, for example, Bill Gates's parents lived in conditions of absolute poverty in a developing nation instead of an affluent suburb of Seattle, he would not be living anything like the kind of life he lives. He would surely not be the world's richest man or the head of Microsoft because he would not have had access to the resources available in an affluent nation like the U.S., including an education that made it possible for him to achieve the level of digital and business sophistication needed to start a successful corporation like Microsoft. Indeed, the probability that Gates would not also be mired in conditions of absolute poverty is so low as to be morally negligible. Although Gates's personal merits obviously played an important role in his success, luck played an equally important role: he lucked into being born into the affluent world instead of the developing world and that has made all the difference.

⁹ Anup Shaw, "The U.S. and Foreign Aid Assistance," *Global Issues* (October 7, 2006); available at: <http://www.globalissues.org/TradeRelated/Debt/USaid.asp>. Accessed February 17, 2007.

⁸ Another outstanding point I owe to Johannes Britz.

The same is true of anyone who lives in the affluent developed world. Most of us who enjoy affluence in these nations have done something to deserve it, but we also owe what we have to not having had the misfortune of being born to parents living in conditions of life-threatening poverty who lack access to the basic resources affluent persons take for granted: adequate nutrition, water and shelter, as well as 12 years of free education and government funding available for a university education.

There is, of course, nothing morally wrong with being lucky. What we luck into is, by definition, beyond our control and not hence subject to moral evaluation. The idea that someone commits a moral wrong in virtue of having something happen to her utterly beyond her control is clearly absurd.

But whether we keep all we have lucked into is something within our control and subject to moral evaluation. Of course, it would be ridiculous to claim that it is always wrong to keep what we have lucked into; this would imply that we all should give up all of our material resources given that what all of us have depends so critically on the good fortune of having been born in an affluent country.

Sometimes it is just and hence morally permissible to keep all that you have lucked into on a particular occasion. If, for example, my neighbors and I contribute a modest amount to fund a lottery game we will all play, it seems reasonable to think that, other things being equal, there is no injustice with the winner's keeping the prize – even though the result of the game is determined by luck and no one can antecedently claim to deserve the winnings.

But substantive principles of justice link the justness of a holding to its being deserved. As a general matter, justice requires that people get what they deserve – whether we are talking about retributive, corrective, or distributional justice. Although the last paragraph suggests that it is not necessarily unjust to keep undeserved holdings, undeserved holdings are presumptively problematic in the sense that keeping them requires justification. In the context of retributive justice, for example, it is clear that giving a person more punishment than she deserves is unjust.

It is reasonable to think that the intrinsic worth of human life entails that every person *deserves*, at the very least, a fair opportunity to survive. Of course, if there is really not enough to go around, then some people will not survive, and this does not raise any issues of injustice as long as resources are as

otherwise fairly distributed as is compatible with their being so scarce. In this world, people die and no one can be blamed on grounds of justice – even if some who survive owe their survival to luck; in this tragic world, it is not unjust to hold on to undeserved resources needed to survive.

But this is not the world in which we live; our world is a world where there is much more than enough to go around, yet some have billions of dollars and others lack consistent access to adequate food and water. Someone who has much more than needed to survive partly in virtue of luck denies to others a fair opportunity to survive. Keeping all those resources is keeping something she does not deserve, while denying to others something they do deserve – and this seems clearly unjust.

Here it is important to remember that it is the moral equivalent of a game of chance that determines where one is born. When a person cannot opt out of a game of chance and the results of that game largely determine whether she will have *much* more than she needs to survive or whether she will instead struggle mightily just to satisfy her basic needs (and sometimes fail to do this), those who have the good fortune to draw birth in the affluent world owe an obligation of justice to those who have the misfortune to draw birth in conditions of absolute and hence life-threatening poverty.

Consequentialism and Deontological Moral Theories

There are two main species of normative ethical theory that evaluate acts rather than character: consequentialism and deontology. Consequentialism is the view that the moral value of any action is entirely determined by its consequences in bringing about some objectively desirable state of affairs; for example, act utilitarianism holds that the first principle of ethics is the obligation to maximize "utility," which may be defined in terms of pleasure, well-being, happiness, or satisfied preferences. Strictly speaking, deontology can be accurately described as the negation of consequentialism: the moral value of at least one act is partly determined by features intrinsic to the act, rather than the consequences of the act. For example, an act utilitarian would have to explain the wrongness of lying in terms of features extrinsic to the lie (namely, the effects of the lie on total utility), whereas a deontologist can explain the wrongness in lying in terms of its inherent features (namely, its deceptive character).

While there are different consequentialist theories and different deontological theories, a brief consideration of two of the most historically influential, I hope, will suffice to show these different theories generally converge on the view that we have a moral obligation to help the poor. This is not to say that every consequentialist and deontological theory has this result; there may well be particular theories that hold that helping the poor is good but not required. But this, I hope will be evident, will be the exception and not the rule.

Consider, to begin, act utilitarianism's claim that our sole obligation is to maximize utility. Here it is important to note that material resources have diminishing marginal utility once basic needs are satisfied. Once basic needs are met, each successive increment of disposable income has less value to us than the last increment of the same amount. For example, a person making \$45,000 per year, other things being equal, will derive less utility from a \$5,000 raise than someone making \$40,000 per year. If this is correct, then utility will be maximized by moving it from people who have more than they need to people who have less than they need.

Indeed, it is for this reason that many act-utilitarian theorists believe we are obligated to distribute material resources so everyone has an equal share; if you have \$50,000 and I have \$40,000, the utility of an additional \$5,000 to me exceeds the utility of the \$5,000 you have over \$45,000. Accordingly, to satisfy your obligation to maximize utility, you should give me \$5,000, which would equalize our share of the resources.

The point here is not that all act utilitarians are egalitarian with respect to distributive justice; many would argue that, notwithstanding the diminishing marginal utility of non-necessities, an equal distribution of income would ultimately reduce community utility because it would remove an incentive to engage in productive activity that increases the community's material resources. The point, rather, is that egalitarians with respect to distribution of income are quite frequently act utilitarians who ground their position in the diminishing marginal utility of resources not needed to satisfy basic needs. One way or another, the diminishing marginal utility of non-basic material resources pretty clearly implies, on an act utilitarian view, an obligation to move disposable income to persons who lack the basic necessities.

Deontological theories almost universally hold that we have an obligation to help the poor. Consider,

for example, Immanuel Kant's view that the first principle of ethics, the first categorical imperative, entails an obligation to help the poor. According to the first categorical imperative, we should act only on those maxims (i.e., principles that explain our acts) that we can consistently universalize (i.e., consistently will these maxims as universal laws *everyone* always acts upon). Here is what Kant has to say about its application to the issue of whether we have an obligation to help the poor:

A fourth, who is in prosperity, while he sees that others have to contend with great wretchedness and that he could help them, thinks: "What concern is it of mine? Let everyone be as happy as Heaven pleases, or as he can make himself; I will take nothing from him nor even envy him, only I do not wish to contribute anything to his welfare or to his assistance in distress!" Now no doubt if such a mode of thinking were a universal law, the human race might very well subsist and doubtless even better than in a state in which everyone talks of sympathy and good-will, or even takes care occasionally to put it into practice, but, on the other side, also cheats when he can, betrays the rights of men, or otherwise violates them. But although it is possible that a universal law of nature might exist in accordance with that maxim, it is impossible to will that such a principle should have the universal validity of a law of nature. For a will which resolved this would contradict itself, inasmuch as many cases might occur in which one would have need of the love and sympathy of others, and in which, by such a law of nature, sprung from his own will, he would deprive himself of all hope of the aid he desires.¹⁰

Of course, many theorists worry that the first categorical imperative, applied as Kant intends, will not have many of the substantive results that Kant believes it has; the first categorical imperative seems to work only on acts that involve some sort of deception. But the point is that Kant himself believed that we have a moral obligation to help the poor, and he believed this was a transparent application (after all, he devotes only one paragraph to the argument) of the first categorical imperative.

¹⁰ Immanuel Kant, *Fundamental Principles of the Metaphysic of Morals*, Second Section; available at <http://etext.library.adelaide.edu.au/k/kant/immanuel/k16prm/prm3.html>.

Another influential deontological theorist, W.D. Ross, took the position that we have a number of *prima facie* duties that, taken together, determine what we are obligated to do on any given occasion. As Ross describes it, "Prima facie duty' is a brief way of referring to the characteristic (quite distinct from that of being a duty proper) which an act has, in virtue of being of a certain kind (e.g., the keeping of a promise), of being an act which would be a duty proper if it were not at the same time of another kind which is morally significant" (377). A duty is a *prima facie* duty in the sense that it is presumptive and can be overridden by a stronger *prima facie* duty; what we are ultimately obligated to do is determined by the strongest of these presumptive duties.

Ross gives what he takes to be a complete list of *prima facie* duties: (1) Those resting (1) on a promise; (2) on a previous wrongful act; (3) on previous acts of other persons (e.g., services that may give rise to a duty of gratitude); (4) on a distribution of pleasure or happiness; (5) on persons whose conditions we can make better (duties of beneficence); (6) on the ability to improve our own conditions (duties of self-improvement); (7) on the harmfulness of certain behaviors on others (duties not to harm others). Proposition (5), of course, describes a *prima facie* obligation to help the poor.

Notoriously, Ross does not provide any theoretical considerations that would enable us to determine what is, all things considered, our proper (or ultimate) duty; however, this is not really relevant for our purposes. Certainly, the obligation to help the poor is not absolute in the sense that it takes precedent over all other duties. It seems clear that a person of limited means has a duty to take care of her family that outweighs the duty to help the poor if she cannot do both. The point of this section is simply to suggest that, whatever else they might disagree upon, consequentialist and deontological theories typically (though not necessarily) agree that the affluent have a moral obligation to help the absolutely poor.

What Would Have to Be Done to Solve These Problems?

So if we assume, as I am willing to do, that these divides are problems of justice that require a solution, the question is how do we go about solving them? This much is clear: the solutions will be expensive and much more complicated than can be

addressed in a few short pages. Accordingly, I purport to do no more than provide a brief sketch of some the obstacles to bridging the divide and the poverty it perpetuates.

At the outset, it is worth noting that the affluent world cannot provide all of the benefits associated with meaningful access (construed to include some threshold level of skill in using them) to ICTs simply by providing the relevant ICTs and training to impoverished nations.

There are a number of problems here. First, and most obviously, you cannot eat ICTs, Internet access, or information; if we are dealing with countries with life-threatening poverty (and much poverty in the developing world is absolute in this sense), then the very first step in providing meaningful access to ICTs is to ensure that these more basic needs are met. Someone who is malnourished and sick will not be in a position to take advantage of ICTs no matter what else is done. So part of the program will have to include provision of foodstuffs, clean water, and healthcare to free people from having to devote all their time and energy just to ensure their bellies are full enough to keep from keeling over – something that affluent nations have done much too little to address up to now.

Second, other kinds of physical infrastructure are needed in developing nations to ensure that people have access to the opportunity to participate in the online economy. As Johannes Britz observes, the affluent have no problem ordering goods from Amazon.com because they have homes with road access making it possible for UPS or Fed-Ex to deliver those goods. In many places in Africa, especially Ethiopia, people live away from roadways and must walk long distances to school and work, but this situation also prevents UPS and Fed-Ex from delivering goods there.¹¹ Indeed, one must have a credit card to make such purchases – and impoverished people in the developing world do not have credit cards.

Third, and most importantly, people must not only have the relevant ICTs, but also the ability to utilize these ICTs to produce output that is ultimately marketable in a global economy. People once thought that having access to radio technology would improve the economic lot of poor persons in the developing world; evidence now suggests there are more radios in South Africa than mattresses, but

¹¹ I owe this important point to Johannes Britz.

unemployment is high at more than 30% and disproportionately affects blacks. Similarly, Internet access does no good in alleviating poverty if all that is done with it is to download the latest product from Hollywood for the purpose of amusing oneself.

What is needed is a particular type of skills – the type that enables a person to use ICTs and information to produce output that is in demand. Only where impoverished persons are in a position to produce something other people want to buy can they raise their standards of living. Obviously, these skills include programming, designing websites, and so on; less obviously, they require at this point in time training in English, which is increasingly becoming the world's language of commerce – although it would clearly be ideal to make efforts to ensure the easy availability of devices that accurately translate the contents of a website in one language into any other of the world's written languages. Sadly, at this point in time, the developing world lacks the resources to provide such training.

But even adequate training isn't enough. To improve the lot of poor countries, affluent countries must provide *fair*, competitive opportunities for a person to take advantage of her skills. While more and more people are getting such opportunities through corporate outsourcing, they do not receive a fair wage – though what they receive is more than what they could otherwise earn.

The benefits of these new opportunities are often offset through laws that protect the interests of affluent developed nations at the expense of developing nations. The most conspicuous example here is the law of intellectual property, and especially the protection of intellectual property rights in software. To compete in a global economy in which information is an increasingly valuable marketable commodity, people need meaningful access to the software that makes utilization of ICTs so productive in the affluent world. But current intellectual property laws have the effect of allowing corporations to maintain pricing levels that effectively bar legal access to these products among people in the developing world. If Nike's outsourcing menial work (at exploitative wages) improves the standard of living of employees in the developing world, it does not raise that standard enough to enable those persons in the developing world to acquire the software and skills to lift themselves out of a condition where they must perform menial and uninteresting labor to survive.

Corporations can, and should, do something to change this unfortunate state of affairs. Corporations surely have a morally legitimate interest in the content they create and make possible and surely deserve a fair rate of return for that product. But when it comes to products that are needed to alleviate absolute poverty, which include not only software but also medicine for the diseases that are endemic in the Global South, they should, as a moral matter, waive these rights so as to make these products genuinely available in the developing world.

Moreover, corporations should ensure that jobs outsourced to absolutely poor nations be paid a fair wage. Too often, the wages paid to people in absolute poverty are far less than what would be paid an employee in a Western nation. Although it is true workers in the developing world make more from outsourced work than they otherwise would and thereby benefit economically, it is also true the wages are so much less than the work would merit in the nations from which it is outsourced that it borders on exploitation. Corporations should contract on fair terms; the economic benefits alone are not a justification for exploiting persons.¹²

The economic benefits made possible by corporate outsourcing of work to the developing world are also offset by unfair conditions attached to foreign aid. Sadly, the World Bank and IMF (and even the US agency responsible for providing foreign aid) frequently tie the provision of aid to the satisfaction of conditions that make matters worse because they ignore a culture's history, mores, social conventions, and ways of organizing economic activity. The most frequent condition is to insist that recipient countries immediately carry out system-wide political and economic reforms – which typically make things worse, in part, because affluent nations demand full access to all emerging markets in developing nations while protecting vulnerable markets (like agriculture) in affluent nations where costs of labor are much higher. The effect is that emerging industries in developing nations are destroyed along with what few jobs there might be to support the population. In some instances, it seems reasonable to think that these nations would be better off without such conditional aid, but the conditions of absolute poverty make it difficult to turn it down.

¹² I am indebted to Johannes Britz for yet another insightful point here.

This is a complicated issue that cannot be done justice here but there are two conspicuous examples illustrating the folly of one economic and political culture trying to impose an image of itself on another. Shortly after the Berlin Wall fell, the IMF was charged with the responsibility of overseeing a process in which Russia went from a centrally organized economy run by the state to a fully privatized system of free enterprise. The result has, thus far, been a disaster. Many people are far worse off in both economic and security terms: Russia is poorer and more dangerous than it ever was under Soviet-style socialism. Indeed, the complaint is not infrequently heard among Russians that the country was better off as a socialist totalitarian state.

This is, of course, not to say that Soviet-style socialism was good. It is rather to point out the folly of efforts by market fundamentalists, such as those who have disproportionate influence in the IMF, to foist total privatization on countries whose history and culture affords no reason for thinking such a transition could be anything other than an unmitigated disaster.

Unfortunately, these problems are consistently lost on decision-makers in the IMF who continue, along with the World Bank, to tie loans and other forms of aid to developing nations to economic conditions that are all but certain to exacerbate, rather than alleviate, absolute poverty and the accompanying divides in both ICTs and information. One would have hoped the obvious fact that the problems caused in Russia would reduce the temptation to try to remake every developing nation in our image without sufficient knowledge of the history, culture, and traditions of the affected nations.

In contrast, China is one of the economic success stories of the twentieth century. The process of privatization in China has been gradual, having begun almost accidentally with the discovery among farmers tending a collectivized farm that allowing people to take control over particular sub-parcels and keep the profits resulting from their efforts dramatically increased production figures and net wealth. In response, China sanctioned the privatization of farming and enjoyed spectacular results – all the while protecting vulnerable industries that were unable to compete favorably with corresponding Western industries, a practice that was quite common in Western industrialized nations.

Indeed, it is particularly worth noting that the spectacular growth of the U.S. economy prior to the formation of the WTO depended in large measure

on economic barriers on trade designed to protect vulnerable developing industries. These barriers included such devices as tariffs and special taxes on goods imported to the U.S. from other countries, as well as legal restrictions on imported goods – a practice the WTO continues on a more limited basis even while insisting, as a condition of aid, that developing nations completely open their markets to foreign competition.

The result of the controlled privatization of Chinese economic activity is that no country has had more success in moving from state socialism to free enterprise. While the gap between rich and poor has, of course, widened, China has taken steps to ensure that the very poorest have also benefited. In consequence, it is reasonable to think that (1) China will be a democracy in 50 years and (2) China will be the world's largest economy and the U.S.'s fiercest rival in the competitive world market at that time. The contrast between the failure of instant privatization in Russia and the success of gradual, controlled privatization in China, as well as the reasons for this contrast, could not be clearer.

Yet the IMF, World Bank, and USAID continue to condition loans and other financial aid to developing nations on policies that have ruined Russia's economy and would have ruined the United States' own economy had those policies been imposed upon us. It is tragic that these mistakes continue to be made when they could be so easily avoided with some cultural sensitivity.

Compounding the problems of these poor nations, of course, is the staggering debt they owe to representatives of affluent nations like the IMF and the World Bank. A few statistics suffice to convey the desperate character of the situation. African nations annually pay about \$15 billion in debt service on an outstanding debt of \$230 billion. That is \$1.30 in debt service for every \$1.00 in foreign aid.

If these numbers seem, at first blush, significant from the perspective of an affluent nation, one need only consider that George Bush recently asked Congress for a federal budget in 2008 of \$2.9 trillion dollars. \$230 billion dollars is chump change – indeed, less than 10% – compared to the size of the U.S. budget; and it is less than 2% of the value of the U.S. economy last year: in 2006, the GDP in the U.S. was approximately \$13 trillion. If citizens of the U.S. were to bear the cost of forgiving the debt, it would amount to a tax increase of no more than \$80 per citizen per year for ten years (significantly less than the price of designer jeans). If citizens of

affluent European nations were to do their share in bearing the cost of forgiving the debt, it would reduce the cost per citizen to \$31 per year (about the price of a movie and popcorn for two people) for ten years.

Although these figures are trivial for nations as rich as the U.S. and European nations, they greatly inhibit the ability of African nations to address all the important problems of absolute poverty. African nations spend about ¼ of the cost of debt service per year on healthcare. In some nations, healthcare spending is \$7 per year per person – a fraction of what is needed to deal with the HIV pandemic in Africa. Education expenditures in Africa have decreased dramatically, forcing schools to close or charge exorbitant fees. The result is a workforce that is less knowledgeable, less skilled, and more likely to be left further behind in an increasingly competitive global economy.

No comparatively short discussion of the problems faced by absolutely poor nations in the developing world can possibly be sufficient to convey the full spectrum of problems faced by the developing world, but it is enough that a number of conclusions can plausibly be drawn. This much is clear: the solution to the information and digital gaps between the developed and developing world will have to involve a multifaceted approach that includes, at the very least, the following elements: (1) unconditional cancellation of all debts owed to the IMF and World Bank unless there is compelling reason to think that the relevant regime is so corrupt that debt cancellation will not result in improvement in the condition of the poor; (2) increasing unconditional aid to the developing world that is targeted to provide food, healthcare, and infrastructure that will produce meaningful opportunities for citizens to improve their lives in the information society; (3) unconditional aid directed at providing education necessary for persons to use ICTs and information to their economic benefit; and (4) a commitment to provide all such unconditional aid, until at the very least, two conditions are satisfied. First, the life-threatening effects of absolute poverty have been permanently eradicated; and, second, the population has access to ICTs and possesses all the intangible (e.g., knowledge) and tangible (e.g., roads and other infrastructure) resources to significantly benefit from information-related market transactions among nations in the global economy.

While there are doubtless other conditions that must be fulfilled and hence that those enumerated above are not sufficient to eradicate absolute poverty, they

are surely necessary. No collective or individual effort that fails with respect to one of these particulars can hope to make real progress in efforts to provide the poorest nations with access to the information economy that will enable them to achieve significant economic progress in addressing their worst problems.

Soraj Hongladarom

Information Divide, Information Flow and Global Justice

Abstract:

There is a significant information divide between the countries in the North and those in the South. This is detrimental to economic growth as information feeds into knowledge production. The divide is exacerbated by a series of uneven and unjust flows of information between the North and the South. Two related patterns of the unjust flow are explored, namely the flow of biological resources and information and the flow of rare manuscripts and published materials. I argue that the concept of global justice is an appropriate tool to comprehend the situation; this is an addition to those offered in Britz and Lor (2003). Furthermore I discuss the need for increasing intra-South information flow. This will strengthen the Southern countries as a whole, since the flow will link the countries together so they have a stronger voice and chances to learn from one another directly.

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- Relevant publications:
 - Hongladarom, S. and Charles Ess. Eds. 2007. Information Technology Ethics: Cultural Perspectives. Hershey, PA: Idea Group.
 - Hongladarom, S. Ed. 2007. Computing and Philosophy in Asia. Newcastle: Cambridge Scholars Publishing.
 - Hongladarom, S. 2004. Making information transparent as a means to close the global digital divide. *Minds and Machines* (14): 85-99.
 - Hongladarom, S. 2003. Exploring the philosophical terrain of the digital divide. In *Computers and Philosophy 2003: Selected Papers from the Computers and Philosophy (CAP) Conference*, The Australian National University, 31 October to 2 November, 2003. J. Weckert and Y. Al-Saggaf, Eds. Volume 37 in the *Conferences in Research and Practice in Information Technology Series*. Sydney: Australian Computer Society, 2003: 85-90.
 - Hongladarom, S. 2004. Growing science in Thai soil: Culture and development of scientific and technological capabilities in Thailand". *Science, Technology and Society* (9.1): 51-73.

Information has become a precious resource. It is commonly known that today's economy is being driven by knowledge and information, and that today's advanced technologies in many fields are deeply infused with information. However, it is also well known that this type of information lies mostly in the hands of those in the highly developed western countries, who generate the information to serve the needs of their industries and enterprises through basic and applied research. These industries in turn feed the economies of these countries, which come back to provide more funding for further research. Thus a cycle has developed whereby the industrialized economies are able to sustain their pace of economic progress.

On the other hand, the countries and economies in the developing world do not seem to fare as well. What is happening is that the same kind of virtuous cycle that has already taken place in the developed world has largely not found its way to get started yet. And the key to this non-starting is the apparent lack of information. Without effective research and development facilities and infrastructure, the countries in the developing world seems to lack a mean of generating information and knowledge that is necessary to fuel their own industries. Without these industries there is little that these countries can rely on in order to provide their own funding for research and development.

I would like to call this situation an 'information divide.' It is broader than what is commonly known as the digital divide in that the latter is focused more on the actual access to information technology and the global computer network, whereas the information divide here is more a matter of a society's capability of generating their own information that could be harnessed in their economic development. The digital divide as commonly known is then only a part of the wider information divide, and many scholars have agreed that a way to solve the digital divide problem is to increase the flow of information. Nonetheless, there are some serious problems about this, most notably involving certain types of injustice that are involved in the flow of information, especially between the North and South.

What I aim to do in the paper, then, is to lay out a conceptual map for the whole issue, firstly by outlining the ethical issues involved, then providing some conceptual clarifications—it is clear that the very concept of information needs to be clarified. I contend that the concept of global justice is necessary as a tool to understand the situation where

there is a disparity and injustice in the flow of information. Then I conclude by suggesting some concrete means by which this information gap can be reduced.

As for the first part on the ethical conception, I argue that the disparity in information between the developed and developing world is not simply a matter of one side having more information than the other. On the contrary it is actually a matter of the capability of 'harvesting' or 'mining' the information that is already there everywhere. This capability has in fact spilled over from the territorial confines of the developed world when, for example, biologists and pharmacologists from the West come to countries like Brazil or Thailand searching for biological samples that could be developed for new drugs. The information is already there, but some expertise is needed to extract it. This issue, known as 'biopiracy' or 'bioprospecting,' has created controversies and protests from those in the developing world (as well as their allies in the developed world), who see this to be an injustice, since the drugs that will be developed will often be catered to the interests of the rich consumers in the West. Hence, sharing of information has become a crucial issue in the relations between the developing South and the developed North. The issue that needs to be ironed out is how this sharing of information should be spelled out in detail in practice, not only about sharing of information gleaned from biological resources, but other kinds of information also.

Apart from biopiracy or bioprospecting, Johannes Britz and Peter Lor (Britz and Lor 2003) have also examine the case of information flow from Africa to North in the form of library materials through their purchase by rich Western libraries. Not only is this happening in Africa, but it also occurs on a significant scale in Thailand, as libraries in the West and Japan are buying up precious books and rare manuscripts from the country, leaving the country with fewer products of their own intellectual tradition of their own than in the Western countries.

The key ethical issue here is that of international or global justice: Is it just for Western libraries to buy up intellectual resources in the South? It might, however, be argued that the buying up could be necessary in case these resources are in danger of disappearing altogether. In Thailand, for example, rare manuscripts found in rural temples may not be appreciated by the local people, who either do not understand them or do not regard them as important. In any case the manuscripts might not be well taken care of. Hence it is likely that the precious

information found in these manuscripts might be lost forever if not for the effort of Western libraries to care for them.

The same line of argument can also be made regarding mining of biological resources. If the value of these resources were not recognized and developed into medicines through sophisticated techniques found yet only in the North, then what is the use of keeping them there in the jungle? However, the question is to which group of people the benefits will go to. In the case of rare manuscripts and published materials, the benefits usually go to those who have access to those libraries themselves, and these usually are scholars in the North. As for the biological resources, in many cases they are developed into medicines that are geared toward the needs of those in the West who are better prepared to pay for the medicine than those in the South (Schüklenk and Kleinsmidt 2006). In both cases those in the South are left out, even though they could be said to be the custodians of the very resources that are developed to benefit those in the North themselves.

Thus, it is imperative that a just and equitable scheme of benefit sharing be devised and fully implemented. For the library resources and information flow, this could mean that those in the South should be compensated in some way for the information that is taken from them. But it is important to note here that such compensation scheme should be the last resort. It should be enacted only in the circumstance where the Southern locale in question is unable to take care of their resources, or where the information resources are in danger of being lost otherwise. Such circumstances are very few, and it would be more beneficial to everyone involved for the rich libraries in the North to enter a form of information sharing through building up networks of libraries between the North and the South. Hence the compensation needs not be in monetary form only, but it could come as programs for building up the capacity of the Southern communities so that they are better equipped to cope with the increasingly complex world. One specific way this could be done is perhaps funding of educational effort to national governments in the South, or directly to the local governments themselves. One should not forget that information resources such as rare manuscripts or books published in the South are integral parts of the people's lives and traditions, so the books and manuscripts should if possible remain within the communities of readers to which these books and manuscripts are intended. As information flows from the South in an apparently unjust form,

information should then flow back to benefit the South to redress the situation. Thus, I agree broadly with the proposal by Britz and Lor that the conception of justice should be one that governs the South-North flow of information (Britz and Lor 2003, p. 162).

In their paper, Britz and Lor argue that three concepts of justice, namely those of commutative justice, distributive justice and contributive justice, should be put forward as a scheme to ensure fair and just flow of information from South to North (Britz and Lor 2003, p. 162). Basically the first is the kind of justice that obtains when there is fairness in exchanging; the second concerns fair distribution of resources, while the last is about giving and taking between individuals and their community. However, these three concepts do not directly address the issue of disparities and unfairness *among nations*. Commutative, distributive and contributive justices are relevant in all instances of dealings between people or groups of people, but none of them addresses the issue of the global disparity in resources or capacity that is addressed by global justice. So I would like to propose that the concept of global justice be added. This will point toward the fact that the ethical issue in question is an international one and consequently requires international effort to provide a solution.

When global justice is added to the picture, what emerges is that the distinction between North and South as groups of countries is highlighted. In commutative or distributive justices, an instance of injustice can be solved within the boundary of a nation state. When one party fails to follow up their commitment, such as when they fail to honor a contract, the offended party can take this matter to the national authority to help redress it. The authority in question has jurisdiction over both parties. However, in the case of global injustice, it is unclear who should be turned to in order to help redress the situation. The United Nation, to take the supreme example of an international organization, does not have authority over the sovereign states.

In this situation, global justice is markedly different from the other types of justice. In fact the international and cosmopolitan dimension of global justice is a subject of a lengthy debate among theorists as to whether global justice deserves a totally different set of conceptual tools to address it, or whether the same tools used in the more familiar types are adequate (See, e.g., Mandle 2006; O'Neill 2000; Pogge 2001.) An adequate discussion of this difficult topic would obviously be out of the scope of the

present paper. What I propose here is only that global justice be considered as one of the conceptions that are relevant to the discussion on information flow. Depriving the local communities of their precious intellectual resources such as books and manuscripts without due compensation clearly constitutes injustice, and in order to redress this concerted international effort is needed. The putative fact that the local people may not be taking adequate care of their own intellectual resources might not be tenable as a support for an argument for taking local resources out of the area, unless it can be demonstrated that these resources stand to be in grave danger if left with the local people. But this in fact attests to the fact that the local people need to be empowered so that they have the means to take care of their own intellectual resources. So rather than for taking these resources out from their communities arguing that the resources will be safer somewhere else, the local people should be provided with capacity building schemes which enable them to take care of the resources properly. Moreover, the national governments should be the ones who protect these documents (in case the local communities are actually unable to do so) rather than the Western libraries in any case, as they stand as intermediaries between the local population and the wider international circles, and as they should play the role of protecting the intellectual resources within their countries.

Talking about sharing of information and justice also implies that one also talks about flow of information from one region to another. To think that the problem of information divide could be solved by simply letting information flow from North to South does not work, because that would mean the information that is already there in the South is not put to use, a point also agreed to by Britz and Lor (Britz and Lor 2005; Lor and Britz 2003), as we have seen.

Hence, I propose a system of flow of information that better also reflects global justice. Instead of the one-directional flow, and in addition to the scheme of just information flow from South to North discussed above, information needs to flow in and out in both directions, including among the Southern countries themselves. In order for the South to be actually strengthened, information needs also to be able to travel from one part to another all within the South itself. This, unfortunately, is not happening on a significant scale, as developing nations still look toward the Western countries for models and for knowledge and expertise.

For that to be feasible, there has to be a network of Southern, developing countries with one another. This is not as easy as it might look, because there are a number of obstacles that need to be overcome, such as differing language, cultures and perhaps more significantly the idea that there is nothing to be learned from one's counterpart in another developing country. Another important point is that there has to be an effective way of 'mining' or 'extracting' information so that valuable information in the South is not lost to the whole world. This also involves looking toward the traditions of the cultures of the South (and indeed at those of the North) in order to find insights and even expertise in dealing with contemporary problems.

Let us look at how all this is done in a little more details. Firstly, strengthening South-South information flow is facilitated by the people in the South themselves getting more connected to one another. A vestige of colonialism that is still visible today is that former colonial countries usually interact with their former masters. Thus Indonesia interacts quite a lot with the Netherlands; South Africa and Australia with Britain, for example. These are historical ties and there is in principle nothing wrong with them. However, when these ties, also those between the South and the North, are exclusive, South-South interaction and communication suffer. A clear disadvantage of this is that the Southern countries then are forever dependent upon their former colonial masters. There is then no chance for these countries to get together to form a united front to strengthen themselves. The picture is like that of a planet and a number of satellites orbiting it, where the satellites are in no way of breaking away. The alternative picture that I am proposing is that of a number of former satellites to band together to form a larger unit, thereby strengthening each part. This is one way to redress the global injustice problem because strengthening the Southern countries through increasing channels of communication and information flow among them is a prerequisite for the Southern countries to help one another. Without this help and connection, there is little chance of breaking away from the pattern of dependency that afflicts most Southern countries today.

Secondly, the people in the South themselves need to free themselves from the mindset that tells them that there is little to be learned from their peer across the borders or in other Southern continents. This is a strong misconception because most in the South have learned that the path to development lies through following the North's lead. In fact another advantage of focusing on intra-southern

information sharing is that it dissolves the global/local dichotomy that seems to be prevalent in today's discourse about information flow, where the global is represented by the North and the local by the South. The North is global in the sense that it acts like the planet around which the 'locals' orbit like satellites. This picture clearly illustrates that the West (or the North) is the hegemonic force that is capable of dominating the world, becoming the global in the process and thereby forcing non-western cultures to be the local ones. This is clearly an instance of global injustice.

On the contrary, developing South-South flow would mean that everywhere is a global and a local at the same time, or nowhere is exclusively a global or a local. However, Lor and Britz point out that the prospect for robust South-South information flow is currently poor and will not take place in a large scale any time soon (Lor and Britz 2005, p. 73), though they also admit some bright spots. It is indeed true that South-South flow has a lot of obstacles to be overcome, but we should not forget that we are not talking about the satellites becoming a big planet. Instead we are talking about satellites linking with one another. So the flow takes place between two Southern countries, for example, on a much smaller but more intimate scale. The Internet can be of tremendous help (Lor and Britz 2005, p. 73), but so are personal dialogs and communication in other forms. Strengthening intra-South flow of information is possible because the South does have its store of information that is ready to be shared for the benefit of the world. The challenge is only how to bring that out in such a way that does not require being dependent on the North.¹

References

- Britz, Johannes and Peter J. Lor. 2003. *A moral reflection on the information flow from South to North: an African perspective*. *Libri* (53): 160-173.
- Lor, Peter J. and Johannes Britz. 2005. *Knowledge production from an African perspective: International information flows and intellectual proper-*

ty. *The International Information and Library Review* (37): 61-76.

Mandle, Jon. 2006. *Global Justice*. Cambridge: Polity Press.

O'Neill, Onora. 2000. *Bounds of Justice*. Cambridge University Press.

Pogge, Thomas. 2001. *Priorities of global justice*. *Metaphilosophy* (32): 6-24.

Schüklenk, Udo and Anita Kleinsmidt. *North-South benefit sharing arrangements in bioprospecting and genetic research: A critical ethical and legal analysis*. *Developing World Bioethics* (6): 122-134.

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Franz Martin Wimmer

Cultural Centrisms and Intercultural Polylogues in Philosophy

Abstract:

A "dilemma of culturality" for philosophy, tending to universality, is given with the fact that there is not one and the definitely adequate language or tradition of philosophy. There are many, each of them being cultural, not natural. The question is about the possibility of systematic philosophy with the presupposition that there are different cultural coinages in every philosophical thinking which can be influential on every level of reflection and argumentation. Intercultural philosophy is bound to reflect on this problem. In the following text, I propose to distinguish four different types of centrism being influential in intercultural encounters: expansive, integrative, separative, and tentative centrism. Then some examples are given for certain types of centrism in the fields of history and philosophy. Finally, I shall argue for dialogical or rather: polylogical interactions, in the field of philosophy.

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- Relevant publications:
 - Interkulturelle Philosophie. Eine Einführung. Wien: Facultas (UTB) 2004, 263 p.
 - Essays in Intercultural Philosophy. Chennai: Satya Nilayam 2002, ix+134 p.

The Dilemma of Culturality of Philosophy

The project of philosophy I understand to be fundamentally a trial to ascertain insights concerning basic ontological, epistemological and normative questions, and to express such insights adequately, thereby making them approachable and arguable in an intersubjective way. With respect to its content, philosophy can be characterised in a traditional (Western) way as dealing with either ontological, or epistemological, or else ethical questions, in order to clarify concepts and propositions connected with such fields. Philosophy, we may say, basically tries to solve questions of ontology or epistemology, or ethics. It does so by way of argumentation, which means that reason and logic in some way or other are to be expected as being universally used. With respect to its form, philosophy is developing definitions as well as some sort of meta-language, which allows making explicit general statements.

Philosophy in this technical sense of the word can be found in the heritages of different ancient societies, although one must not agree that it has developed in literally any human group. Therefore, philosophy in a technical sense is neither the unique outcome of only one – say, the Greek or Occidental – heritage, nor must we assume that it can be found in the traditions of all and every societies or cultures. It may be safe to look for philosophical contributions in some of the Eurasian populaces beginning with the axial period (800 to 200 BCE, approximately) as Karl Jaspers and others suggested. But there have to be considered equally origins of philosophising in sub-Saharan Africa, in Arabic Islam, or in pre-Spanish America, to mention but the most eminent cases. The crucial point is that we have to deal with several origins of later philosophies, originating in societies that were different linguistically, socially, and with respect to their worldviews and religions. Some of those traditions, especially the traditions of ancient China, India, Greece, as well as the aforementioned ones, still remain influential in today's societies in such a way that different orientations are provided which may be incompatible with each other in some respects.

At the same time by the process of modernisation and globalisation is given the necessity to promote or at least to develop common ideas. The fundamental question for philosophy in such a situation consists in the need to question about the conditions of the possibility of systematic philosophy with

the presupposition that there are different cultural coinages in every philosophical thinking which can be influential on every level of reflection and argumentation.

A "dilemma of culturality" for philosophy, tending to universality, is given with the fact, irritating for every argumentation, that there is not *one* and the definitely adequate language or tradition of philosophising. There are many, each of them being cultural, not natural. Here, more is at stake than just a completion of Eurocentric historiography of philosophy by the depiction of non-Occidental traditions and by comparisons with them, if we are to be entitled to talk about interculturally oriented philosophy at all.¹ The Latin prefix "inter-" is denoting a mutual relationship, and it may suffice hinting to the fact that we are using the adjective "intercultural" with respect to the noun "philosophy". Thereby it is indicated that what is under consideration is not some sort of "philosophical" or "historiographical" interculturality, but is merely philosophy. However, philosophy in such a way that this discipline itself has to reflect constantly its own concepts, questions, and methods with respect to the fact of its own culturality.

One of the consequences from such a situation is, that one inevitably has to interpret the thoughts of others by one's own concepts and categories. Given this fact the question arises, whether such a "centrism", inevitable as it may be, always works along identical lines. I want to show that there are different types of centrism, whose differences are relevant to philosophy and to chances and forms of intercultural encounters.

Types of Cultural Centrism

Expansive centrism

By "expansive centrism" we can understand the idea that "the truth" about something, or "the optimum" of a certain way of life be already reached definitely, and therefore has to be disseminated everywhere.

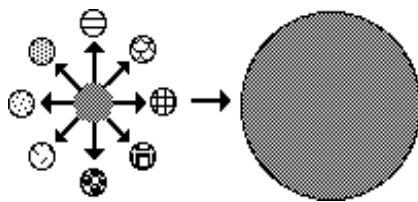
¹ For comparative philosophy cf. Bahm, Archie J.: *Comparative Philosophy.*, p. 7: "It (viz. comparative philosophy, FW) is not preoccupied directly with the solution of particular problems, such as the nature of truth or self or causality." If Bahm is right, one seriously has to doubt the "philosophical" impact of such comparisons.

Such an idea can be read from the Christian gospel as well as from the theories about the necessity of modernising and civilising non-European humankind.

The idea is: There is a centre, where reigns true faith, definite knowledge, objective progress. And there is a periphery, ruled by paganism and superstition, backwardness and underdevelopment.

It is the task of the centre in that perspective, to expand and to supersede, ultimately to eliminate everything else. That leads to the imagination of a monologic process, a proclamation of salvation in religious, of prosperity and happiness in secular sense.

Since it is essential in such an idea that there are no serious alternatives to the "truth" or the "optimum" proclaimed, the imagined monologue has to go to all directions, but that no response from elsewhere ought to touch on the centre. Therefore, we can sketch this type of expansive centrism in the following way:



Integrative centrism

A second type, which can be coined "integrative centrism" may start from the same conviction about the objective superiority of one's own ways of thinking and living, but may at the same time be convinced that no particular activity be necessary to overcome rivals. One's own way could be thought to be attractive in such degree that it would be sufficient in itself to attract and to integrate others.

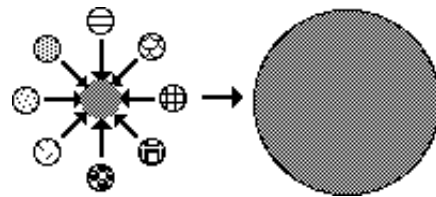
Such an idea can be met with in classical Confucianism, when Mencius is discussing the question how to gain power.

The task of the centre in such a view consists in the permanent maintenance or restitution of what is known to be the right order. No further activity of the centre is thought to be necessary, since the attractivity of the centre is so strong that every activity comes from the periphery, aiming to adapt oneself to the way of the centre.

With such an idea the result is a monologic process, too, in the sense of offering the good way of life.

There can be no more alternatives to that offer than is the case with the first typos. In both cases there is a complete antithesis of one's own way, hold to be the only right way, and the many foreign ways on the other side.

Both types, too, have in common that there is nothing valuable to be expected from the outside and that therefore the differing ways of thinking and living ultimately will vanish. The idea of an "integrative centrism" can be imagined in the following way:



It is the common conviction to both these types of centrism that their respective ways of thinking and acting are hold to be without rival. In this sense, the conviction not only of superiority, but also of exclusivity prevails.

True dialogues – and polylogues as well – in philosophy not only require that the participants are open to each other's arguments, but also that they are convinced of their own way of thinking, not giving up them without sufficient reasons. This leads to a decisive question: Are there orientations, which are compatible with the conviction of the optimality of one's own way of thinking, and do not imply the assertion of exclusive validity or truth?

The question will be decisive, if we accept the description of the situation of philosophy in the process of globalisation given above. It implies that there will coexist orientations, which are not congruent, which even can be incompatible, but are rooted in well-developed and differentiated discourses. If, under such conditions, something valuable is expected to result from encounters, we will have to look for types of "centrism", which are not exclusivistic.

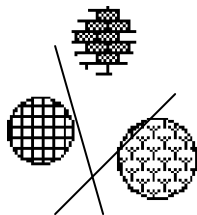
Separative or multiple centrism

We can distinguish a third attitude, which accepts that there coexist several or many convictions side by side. They may tolerate each other, there may even been mutual esteem, so that the situation is characterised by a multitude of separate "centres".

In this perspective, diversity and multiplicity, not homogeneity is basically accepted in a "multi-

cultural" understanding. The danger of such a view – probably fatal for philosophy – can be that differences are seen to be insurmountable, as if they were naturally, not culturally conditioned.

The main task of the various centres in this view will consist in the conservation of their respective identity and heritage, and in the differentiation from other traditions. These traditions will persist in neat segregation from each other. Under certain conditions, they will tolerate each other, but they will not allow influences in questions of "truth" and "values", there will be no discourse between them. The situation can be illustrated as follows:



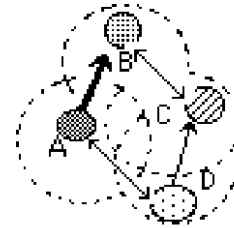
Tentative or transitory centrism

Another type of centrism can be seen as transitory or tentative, allowing both the conviction of being right, and openness to basically different views of others, which are equally convinced of being right. It may even be a necessary condition for an adequate understanding of the other's conviction, that I am "absolutely" sure about mine. Here too, plurality and not uniformity is thought to be fundamental, though in such a way that every concrete instance of thinking is not held to be final, but provisional. Suppose that there are four possible participants in a dialogue or polylogue on some issue, any one of them can be interested in the other, and open to them in a different grade. Any of them is acting and thinking from their respective field of evidence, all of them have "cultural coinages". Still, these conditions may lead to processes of influencing which can be intended to develop mutual argumentation.

Every participant in such a situation remains a "centre", but none of these "centres" is held to be the definite stand. Everyone fundamentally agrees that there may be views and insights, different and even contrary to his or her own. When there are sufficient motives to dialogues, each "centre" will try to convince the others or some of them, if they are philosophising at all. By a process of convincing I understand a qualified form of influencing somebody, which ought to be distinguished from manipulating as well as from persuading. All of these expressions and respective argumentative actions have in common, that they aim to change some-

body's opinions or ways to behave and act. However, only processes of convincing ought to be considered being decisive, even if persuading as well as manipulating practically may lead to the same effects.

In a tentative understanding of being "centres", there will be persistence and openness, acceptance of arguments, and criticism of others, which may be seen as follows:



Exclusive Centrism in Action

Every one of the four mentioned types of apprehending and criticising thinking different from one's own, is developing certain strategies to demonstrate its own superiority. In this sense, every type is centrist. They differ according to the different hierarchies of knowledge and abilities they imply, and consequently in the difference of expectations and valuations of the other.

The three types mentioned first have in common that everything, which is thought to be of real interest and reliability, is supposed to be found within one's own tradition. Expansive, as well as integrative and separative centrism do not seriously expect that there is something to learn from other cultural traditions.

The example of history

This can imply – in a Euro-centrist understanding – that the history of humankind in general, and the history of human thought in special, is seen in one great process, whose essential contents and results can be learned best – or rather: exclusively – from occidental history. There can be found examples of such a view in the history of several historical disciplines.

Concerning world history, the view was common until the 18th century that the Bible contains all essential stages and personages of humankind. Chinese history, as an example, was seen to have started with Noah, identified to be the "Yellow

Emperor" and having founded that culture in the East, far away from the reigns of his sons Sem, Japhet, and Ham.²

The British historian Mc Dougall once depicted more recent views within his field quite ironically, when characterising anglo-saxon traditions of the writing of history at the beginning of the 20th century:

"Once upon a time the historical profession was more or less united, at least in the English-speaking world. Professional historians shared a common exposure to the classical and Christian traditions, a common Anglocentric perspective, and a common interpretive theme: the progress of freedom. This, of course, was the liberal or 'Whig' interpretation of history that traced mankind's pilgrimage from Mesopotamia to Mount Sinai, to Runnymede, Wittenberg, and 'two houses of Parliament and a free press' – and assumed that backward peoples, if not weighed down by anchors like Hinduism, would follow the Anglo-American peoples to liberty."

This tale, Mc Dougall is thinking, cannot be told any more in such a way:

"This vision held sway until the cataclysm of 1914-18 made belief in progress more difficult to sustain, the Great Depression eroded faith in liberal institutions, and decolonization forced consideration of non-Western cultures on their own terms."³

One may wonder whether the same could be said about some politicians of today, when talking about developmental goals and means.

The example of philosophy

Concerning philosophy and its developing in the singular, the German idealist Hegel's view still may be with us. He was describing the activity of "*the spirit*" as being a unique progressive movement of self-development, in a very vivid metaphor. That movement Hegel sees as a series of developments, which together are not summing up to a straight line, but to a circle, whose periphery is made by a

lot of circles.⁴ It is decisive for Hegel's understanding that these "*many circles*", forming the one great circle of philosophy, are seen to be exclusively occidental. There is, say, scepticism as one of the "*spirit's*" realisations, such that a peripheral circle can be symbolised by the name of "Sextus Empiricus", but there is none by the name neither of "Nagarjuna" nor of "Wang Chong", both also being sceptics in their respective contexts. Hegel explicitly does exclude such a possibility. "*So called oriental philosophy*" is none of his business when describing the philosophy of humankind – it is only "*something preliminary*", which has to be dealt with for the sole reason to show "*why we do not treat it in a more extensive way, and how it is related to the concept of true philosophy*".⁵

The reason as seen by Hegel is: Philosophical thinking everywhere realises in particular, especial ways. But not everywhere such thinking will gain solidity. In "*oriental intuition*" the "*particular is destined to vanish*". Solid thought has its ground: the "*firm, European reason*". And it is only to abstain from such solidity wherefore "*oriental ideas*" are useful, Hegel tells us.⁶

Up to our days, it can be learned from Western philosophers, that "philosophy in a strict sense" can be found nowhere except in occidental tradition. One example may suffice. The German philosopher Hans-Georg Gadamer, well known in the field of hermeneutics, quite recently stated that basically it is "*a question of mere arbitrariness*" whether we call "*the talk of a Chinese sage with his pupil 'philosophy', or 'religion', or 'poetry'*" – and that the same be true about Indian traditions. The "*concept of philosophy*", Gadamer tells us, "*is not yet applicable to the great answers, given by the cultures of East Asia and India*" to the fundamental questions of mankind "*which have been asked for by philosophy in Europe all the time*".⁷

It is too bad with such utterances that often – and also in Gadamer's case – we do not come to know whether they are meant to hold in the same sense for every "Chinese sage", for any "Indian tradition"

² Cf. Gottsched, J.C., *Erste Gründe* 1756, pp. 7ss.

³ Mc Dougall, Walter A.: 'Mais ce n'est pas l'histoire!' p. 19

⁴ Hegel, G.W.F.: *Vorlesung über die Geschichte der Philosophie*, vol. 1, p.: 33

⁵ Hegel, op.cit., p. 111

⁶ Hegel, op.cit., p. 136

⁷ Cf. Gadamer, Hans-Georg: *Europa und die Oikoumene*. pp. 67-86

etc. It obviously does make a difference for classifying something as philosophy, religion, or poetry, what author and what text is meant – it makes a difference in both the Eastern and the Western lore. And of course it makes a difference elsewhere, in Africa and America – everywhere.

It seems obvious to me that argumentations of Mencius and Xunzi on human nature, of Mozi on knowledge, morality and justice, of the Zhuangzi on the criteria of truth etc. are contributions to philosophy. Why such texts could indiscriminately be classified as religious, I just cannot see. And if some of such texts evidently possess poetical quality, the same is true for philosophical texts from Parmenides to Wittgenstein.

The point is not to equate one cultural tradition of philosophy with philosophy itself. Avoiding such a shortcut – which reminds very strongly to the theologian's phrase "*extra ecclesiam nulla salus*" – will require both the elaboration of a generic concept of philosophy, and of transcultural hermeneutics. Either can only be done, if monocentrism and exclusiveness in the understanding of the history of philosophy is overcome.

Such exclusiveness is met not only with Occidental thinkers. I may quote the answer of the director of an "Institute of Buddhist Dialectics" to the proposal, to give lectures about Western philosophy at his institute:

*"I can understand why you have come to India to study Buddhist philosophy. For our tradition is indeed deep and vast. But I frankly don't see what we have to learn from you. For, Western philosophy is very superficial and addresses no important questions."*⁸

It of course would be interesting to know about the specific understanding of "Western philosophy" allowing this judgement. For, the very same sentence about one or the other position can be – and has been – passed within Western philosophy itself.

Exclusive forms of centrism must be expected to rise from different conditions and convictions. Sino-centrism can be met with, but Afro- and Islamo-centrism and others as well. In any case, as it is with Euro-centrism, different extra-philosophical motives will have to be taken into account: religious

⁸ The Ven. Gen Lobzang Gyatso, quot. by: Jay L. Garfield: *∴ Empty Words*, p. 229

as well as nationalist and chauvinist, racist or ideological persuasions may be decisive.

Consequences and Tasks. The Model of a Polylogue

The first consequence considering the situation of globalised humankind with basically different regional ways of thinking consists in a (self-) critical evaluation of philosophy as a profession. We have to acknowledge that any professional training of philosophers, that equates the general term "philosophy" with the culturally bound term "occidental philosophy" is misleading. Such an equation has been the normal case with almost all professional philosophers for a long period. So, it will be no easy task, since as a necessary precondition for it – by far not a sufficient one – Euro-centrism has to be criticised and developed into a general criticism of centristic ways of thinking, and moulded into a theory of non-centristic philosophy.

The relevance of cultural traditions for the present and the future has to be analysed. The first step, again, will be to reconstruct different traditions of thought in a comprehensive and differentiated way. In this field contemporary African philosophers have done pioneering work. However, if their work is not limited to provide better self-understanding, but to lead to better understanding between persons of different cultural coinage, new categories and concepts must be elaborated. This will be a continuation of the project of European enlightenment with different means, not by relying on a unique method of science, but by creating a polylogue⁹ of traditions.

Different degrees and forms of the influence of one or more traditions upon other traditions have to be distinguished. For the purpose of an illustration, let us take the case of, say, four relevant traditions: A,

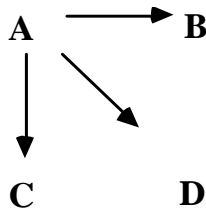
⁹ I am talking about "polylogues" rather than "dialogues" to indicate that many sides, not just two can be involved. Though the "dia-" in "dialogue" means "in between", and does not linguistically imply "two", association is common that a dialogue is between two persons or positions. Even comparative philosophy often tends to twofold, not manifold comparisons and dialogues. Here, the term "polylogue" is used in the sense that many persons, coming from many philosophical traditions, go into discourse with each other on one topic or problem.

B, C, D.¹⁰ Between all of these traditions there might be unilateral (\Rightarrow) or bilateral ($\Rightarrow\Leftarrow$) influences. Under these conditions we can formally distinguish the following models:

Unilateral centristic influence: monologue

$A \Rightarrow B$ and $A \Rightarrow C$ and $A \Rightarrow D$

Such an "ideal" monologue of "A" towards "B", "C" and "D" would look like that:



There are no influences whatsoever, coming from others in the direction to "A". Second, there is indifference and ignorance on the part of all others. Third, the influence of "A" equally works in any direction. Fourth, there is imagined one and only one intention of influencing going to all directions.

It is to be doubted that any of these features of the model ever occurs in real discourse. However, real processes can be intended to come close to such a model. There are unilateral conceptions of absolute superiority, as we have discussed with respect to "centrisms". They may, e.g., result in lack of "South-South" dialogues in philosophy. And there was, and perhaps still is, the concept of "the white man's burden" to act into all regions and directions in order to baptise or to "civilise" the rest of the world.

However, the idea itself is not realistic. Can it be something like a regulative ideal? One would have to hold a very strong presupposition to believe that – one would have to be sure that "A" is right in every respect where there are differences with others. I doubt whether this ever could be shown by culturally independent means.

¹⁰ It is not at all evident in a given discussion that there will be unanimous agreement about what "A,B,C,D" means, nor about what traditions are relevant. If, e.g., in a quarrel about human rights Confucianist as well as Occidental and Islamic conceptions of man are confronted to each other, the "muntu"-concept from African traditions also has to be reflected upon – and such a list of candidates may get long.

Historically, the following models seem to be more realistic.

Unilateral and transitive influence: extended monologue

$A \Rightarrow B$ and $A \Rightarrow C$ and $A \Rightarrow D$ and $B \Rightarrow C$

In this stage, no dialogues are necessary, although by the double sided influence on C (from the side of A, as well as from B) comparative descriptions between A and B will become possible. For the tradition A, in this case, every other tradition remains "barbarian"; B ignores D, C also ignores D. But B imitates A and therefore "civilises" C with concepts partly derived from A.

Partially bilateral and multilateral influence: dialogues

There are many logically possible stages from $A \Rightarrow\Leftarrow B$ and $A \Rightarrow C$ and $A \Rightarrow D$ via $A \Rightarrow\Leftarrow B$ and $A \Rightarrow C$ and $A \Rightarrow D$ and $B \Rightarrow C$ up to $A \Rightarrow\Leftarrow B$ and $A \Rightarrow\Leftarrow C$ and $B \Rightarrow\Leftarrow C$ and $B \Rightarrow\Leftarrow D$ and $C \Rightarrow\Leftarrow D$ and $A \Rightarrow D$

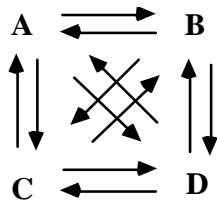
Between each of these models several stages can be distinguished. We can skip listing all of them. Partially bilateral and multilateral influences are processes of selective acculturation. For tradition A, some other traditions are not "barbarian" any longer, they become "exotic". The same holds true for B, C, and D in an increasing manner, but mutual influencing is never complete. The stage symbolised in the last paradigm represents a polylogue between all relevant traditions with the exclusion of D. In this situation, comparative philosophy is firmly established.

Let us now imagine an "ideal" polylogue between "A", "B", "C", and "D".

Complete multilateral influence: polylogues

$A \Rightarrow\Leftarrow B$ and $A \Rightarrow\Leftarrow C$ and $A \Rightarrow\Leftarrow D$ and $B \Rightarrow\Leftarrow C$ and $B \Rightarrow\Leftarrow D$ and $C \Rightarrow\Leftarrow D$

There are influences from all sides to every tradition; everyone is interested in every other; all of the influences are working with equal intensity. There is one and only one intended influence from every stance to any other. The situation looks like that:



This again is not depicting reality. But it is important to ask whether such an ideal can serve as a regulative idea for practising philosophy on a global scale. It seems preferable from logical reasons since there will be no presupposition of absolute rightness as long as there are different views. The presupposition here merely is that activating human reason in as many directions as possible will be effective.

Conclusion

Philosophers of all ages wanted to consider ontological, epistemological, and ethical questions relatively independent of their own cultural and religious environment. The specific problem of contemporary philosophy arises out of a situation where one of the cultural settings of the past has been more successful than others in establishing itself on a global scale – as being non-traditional but rather a "scientific" enterprise.

Obviously, it is the clandestine claim of philosophers to arrive at judgements which are transculturally valid. Even if that claim is illusory, philosophers nevertheless tried to achieve this goal. This road has been taken in many different ways in the past. In the present situation, intercultural reorientation of philosophy becomes a necessity that arises in the context of globalisation; it is not a choice but a need. In this context there seem to be two alternatives.

There is the program of relying on method without reliance to tradition. This is the consequent alternative to ethnocentric and traditional thinking, but it is not feasible. It was not feasible in its Cartesian form, nor in the form it took in phenomenology or in Analytic philosophy. Every effort to philosophise in an exclusively methodological manner is led by criteria and concepts rooted in a cultural context.

The second alternative is seemingly less rigid. It consists in the confidence to one's own position within the classical tradition. One's own way of thinking, terminology and methods of argumentation seem reliable in this view. However, this is nothing more than ethnophilosophy, even if it is explicit, differentiated, and well documented.

Is there a third way, a real alternative to Eurocentrism and the separatism of ethnophilosophy? I think there is. It consists in a procedure, which is no longer merely comparative, or dialogical, but rather polylogical. Questions of philosophy – questions concerning the fundamental structures of reality, the knowability, the validity of norms – have to be discussed in such a way that a solution is not propagated unless a polylogue, between as many and as different traditions as possible, has taken place. This presupposes the relativity of concepts and methods, and it implies a non-centristic view to the history of human thinking. At the very beginning a rule can be formulated for practice:

Do not expect philosophical theories to be well founded, whose authors stem from one single cultural tradition.

The rule can be formulated in a positive way too: Wherever possible, look for transcultural overlapping of philosophical concepts and theories, since it is probable that well-founded theories have developed in more than one cultural tradition.

References

- Bahm, Archie J.: Comparative Philosophy. Western, Indian and Chinese Philosophies Compared. Albuquerque: World Books 1995*
- Gadamer, Hans-Georg: Europa und die Oikoumene. In: Gander, Hans-Helmuth (ed.): Europa und die Philosophie. Frankfurt/M.: Klostermann 1993*
- Garfield, Jay L.: Empty Words: Buddhist Philosophy and Cross-Cultural Interpretation. New York: Oxford UP 2002*
- Gottsched, J.C.: Erste Gründe der gesammten Weltweisheit etc. 6th. Ed. Leipzig: Breitkopf 1756*
- Hegel, G.W.F.: Vorlesung über die Geschichte der Philosophie. 3 vols. Ed. G. Irrlitz. Leipzig: Reclam 1982*
- Mc Dougall, Walter A.: 'Mais ce n'est pas l'histoire!' Some Thoughts on Toynbee, McNeill and the Rest of Us. In: The Journal of Modern History, Vol. 58, No. 1, 1986, pp. 19-42*
- polylog. Zeitschrift für interkulturelles Philosophieren, Wien, vol.1, no.1 1998*

Albert K. Boekhorst

Towards an Information Democracy: A Research Agenda

Abstract:

People, organisations and societies need knowledge to satisfy their needs so they can survive and develop themselves and move forward in time and space. Knowledge on themselves, their social and their physical surrounding. Those who are better than others capable to satisfy their information needs in an effective and efficient way, and participate in the relevant information networks are more capable to survive and develop themselves than those with less advantageous traits. However, there are barriers that complicate or can even block the successful access to needed information and to the information economy. Four types of potential barriers that are based on interdependencies between people: economic, political, affective and cognitive are described.

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People, organisations and societies need information to satisfy their needs so they can survive and develop themselves and move forward in time and space. Knowledge on themselves, their social and their physical surrounding. Those who are better than others capable to satisfy their information needs in an effective and efficient way, and participate in the relevant information networks are more capable to survive and develop themselves than those with less advantageous traits.

However, there are barriers that complicate or can even block the successful access to needed information and to the information economy. We distinguish four types of potential barriers that are based on interdependencies between people: economic, political, affective and cognitive.

Economic barriers

Economic relations refer to the fact that people are dependent on the production and the distribution of scarce resources including food, clothing and housing. Information can also be seen as a quantifiable unit to which one can assign a value depending on supply and demand. Since the seventies of the 20th century, information is often seen as the fourth production factor, which functions as the driving force of the economy. This means the application of supply and demand factors are applicable to the production, use and control of information. This includes not only the information itself, but also the infra-structure that is needed. At the same time producing information products is relatively much more profitable than industrial or agricultural ones. As information needs a carrier and an infrastructure, we distinguish content, technical infrastructure and a social infrastructure. For each of these elements the laws of supply and demand are applicable.

Discussion item 1

The uneven distribution of wealth in the world leads to differences in infra-structure and the possibility to 'buy' and 'sell' information products. This is relevant for both the technical infrastructure as the social infrastructure. The information economy is dominated by 'western' countries. For information products this can be demonstrated by checking ISSN, ISBN and patents by country. 'Digital divide' is mainly an 'economic' problem.

Research item

The implementation of 'Open source software' and 'Academic Repositories' for scientific information, suitable for the African situation should be investigated. Next to that there is a need for possibilities of affordable access to general information for development and recreation.

The World Bank offers annual World Development Reports (WDR). They offer invaluable access to the economic, social and environmental state of the world today. Each year the WDR provides in depth analysis of a specific aspect of development

Political barriers

Political relations are the effect of people's need to protect themselves against physical constraint and aggression of others. To obtain this a regulation of violence is needed whereby specialists can enforce their power. Hereby the law and order of a society is formally stipulated. These rules have reference to all relation's people have with each other. Laws regarding information are for example regulation on author's rights, archive laws, access to government information and freedom for the press. These legislations can be seen as political regulations through which access to certain types of information is controlled.

Discussion item 2

The access to information is not guaranteed in all countries in the same way. Some countries have legislation which entitles citizens access to government information and/or to files on themselves while others has not.

Research item 2

An comparative investigation into the 'openness' to (government) information and legislation into information privacy can lead to insight into formal barriers to information. Both for retrieval and dissemination.

'Over seventy countries around the world have implemented some form of **freedom of information legislation.**' (Wikipedia)

Affective barriers

Affective relations refer to the fact that people have feelings for each other. People need each other for affection, love and support. These friendships and emotional relations are not limited only to other people, but also include objects and organisations that are appropriate to a person's culture. Computers and other information sources such as books, computers, CD's and television are also included. This linking has reference to not only the information type, but also the information itself. For example, differences in the appreciation for diverse forms of ballet and poetry are noted from the sales figures of books/ magazines and the user records of the public library. And of course emotional factors such as anxiety, frustration and confidence does influence the searching process.

Discussion item 3

The format in which information is made public can influence the ease of access for people and the chance to sell it. Information products and transfer are mainly based on (digital) texts and is not very accessible for persons and societies with an oral tradition. The law of less effort is also applicable here.

Research item 3

Research is needed how to access people who need information for development from printed and digital resources, while they were brought up in a orally tradition.

Among others Kuhlthau and Dervin have given attention to the emotional aspects in search processes.

Cognitive barriers

Cognitive relations refer to the fact that people are dependent on each other because they learn from each other. People create knowledge and distribute this between each other in the form of information. Up to the development of writing, people communicated mainly through speech and verbal communication. Writing and printing made it possible for information to be disseminated in spite of borders of time and space. Learning from each other happens in diverse ways and is not limited to education at school. The scope and content that is taught to the people depend on their social position and societal

relations. An illiterate farm worker in the 18th century was not as affected by his illiteracy as an illiterate person in the first decade of the 21st century in Western society. To be able to survive and develop themselves people, organisations and societies need to be information literate. Information literacy is strongly connected with Life Long Learning. National governments should give attention to the recognition of lifelong learning and information literacy as key elements for the development of generic capabilities which must be required for the accreditation of all education and training programs.

Discussion item 4

Ongoing technization, differentiation and globalisation (Informatization process) lead to an explosion of information accessible via a variety of information media and channels. More skills and knowledge than ever before is needed to locate and select and evaluate information needed to satisfy a persons' information need to be able to move forward in time and space. Being able to distinguish information needs and to be able to satisfy these needs effectively and efficiently is called being 'information literate'. The Informatization process asks for continuing attention for information literacy in all phases of formal and informal schooling to prepare them for a successful Life Long Learning and empower them to be adequate members of their society.

Research item 4

Tools should be developed for the implementation of information literacy into the regular curriculum's of schooling. The role of school, public and academic libraries should be make clear.

The Alexandria Proclamation on Information Literacy and Lifelong Learning offers an excellent departure for assessment and implementation of integrated information literacy into all levels of schooling.

References

- Beacons of the Information Society. The Alexandria Proclamation on Information Literacy and Lifelong Learning.*
<http://www.ifla.org/III/wsis/BeaconInfSoc.html>
- Boekhorst, Albert Klazes. 2000. *Informatievaardig worden in het onderwijs, een informatiewetenschappelijk perspectief een vergelijkende gevalstudie in Nederland en Zuid-Afrika.* Pretoria: University of Pretoria. (Available at

<http://upetd.up.ac.za/thesis/available/etd-11082004-111737/unrestricted/00thesis.pdf>)

Britz, J.J., Lor, P.J., Coetzee, E.M.I. & Bester, B.C. 2006. *Africa as a knowledge society: a reality check*. *International Information and Library Review*, 38(2006): 25-40.

Kuhlthau, Carol Collier. 2004. *Seeking meaning : a process approach to library and information services*. Westport, CT [etc.] : Libraries Unlimited

Dijk, Jan van. 2005. *The Deepening Divide, Inequality in the Information Society*. Thousand Oaks, London, New Delhi: Sage, 240 p.

Hamelink, Cees J. 2000. *The ethics of cyberspace*. London [etc.] : Sage Publications.

Julien, H., McKechnie, L. & Hart, S. 2004. "A content analysis of affective issues in library and information science systems work" [Summary of a research note delivered at the ISIC 2004 conference, Dublin, 1-3 September, 2004] *Information Research*, 10(1) summary 6 (Available at <http://InformationR.net/ir/10-1/abs6>)

The World Bank. *World Development Report 2007: Development and the Next Generation* (Available at <http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTRESEARCH/EXTWDRS/EXTWDR2007/0,,contentMDK:21055591~menuPK:1489854~pagePK:64167689~piPK:64167673~theSitePK:1489834,00.html>)

World Economic Forum. (2003). *Gearing Africa for the knowledge economy*, African Economic Summit. Retrieved October 13, 2004 from <http://www.weforum.org/site/knowledgenavigat or.nsf/Content/Gearing%20Africa%20>.

Wikipedia: *Freedom of information legislation* http://en.wikipedia.org/wiki/Freedom_of_Information_Act

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Cybernetic Pluralism in an Emerging Global Information and Computing Ethics¹

Abstract:

I trace the development of an emerging global Information and Computing Ethics (ICE), arguing that ethical pluralism – as found in both Western and Asian traditions – is crucial to such an ICE. In particular, ethical pluralism – as affiliated with notions of judgment (phronesis in Aristotle and the cybernetes in Plato), resonance, and harmony – holds together shared ethical norms (as required for a shared global ethic) alongside the irreducible differences that define individual and cultural identities. I demonstrate how such pluralism is already at work in both contemporary theory and praxis, including in development projects in diverse cultures. I conclude with a number of resonances between this global pluralism and African thought and traditions that thus suggest that such a pluralism may also succeed in the African context, as diverse African cultures and countries seek to benefit from ICTs while maintaining their cultural identities.

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- Relevant publications:
 - Information Technology Ethics: Cultural Perspectives. S. Hongladarom, C. Ess, (Ed.). Hershey, PA: Idea Reference 2007, 257 p.
 - Neither relativism nor imperialism: Theories and practices for a global information ethics. Introduction (with May Thorseth), pp. 91-95, and special issue on "Global Information Ethics: Cross-cultural Approaches to Emancipation, Privacy and Regulation." *Ethics and Information Technology*, Volume 8, Number 3, pp. 91-154

Agenda

I begin **Part I** with sample definitions of computer ethics, information ethics, and professional computing ethics as initial definitions that, as was appropriate at the time of their crafting, are addressed to specialists and professionals. But given that "information processing," including communicating via computer networks, is now undertaken by over 1 billion people on the planet, we need an Information and Computing Ethics (ICE) "for the rest of us." This global reach further requires an emerging ICE that conjoins globally shared norms and values with the values, norms, traditions, and practices of diverse cultures – cultures that are irreducibly different from one another, and must remain so for the sake of preserving their identity. I then suggest that how we develop such a global ICE further depends on whether we will seek out simply commonalities and pragmatic agreements based on shared economic interests, for example, and/or, in the words of the Japanese comparative philosopher Nishida, if we seek to know "the Other" through a *resonance*, a structure of connection alongside the irreducible *differences* defining individuals as distinct from one another. Such resonance intersects with various forms of *ethical pluralism* that meet, I argue, the central requirement of a global ICE to conjoin shared norms with the irreducible differences defining both individual and cultural identities. (We will see in greater detail [Part III] how this pluralism seeks to go beyond the pluralisms developed in contemporary political philosophy by John Rawls and Charles Taylor. In the conclusion [Part IV], I return to how such resonances entail greater ethical demands upon us than the quest for commonalities.)

Part II is a careful examination of *ethical pluralism*, beginning with its Western roots in what I call Plato's *interpretive pluralism* and then Aristotle's notion of *pros hen* or focal equivocals. These pluralisms further require *phronesis*, Aristotle's conception of practical judgment as precisely the ability to discern how shared norms may indeed be understood and applied in diverse ways in diverse contexts. *Phronesis* in turn derives from Plato's use of the *cybernetes*, the pilot or helmsman, as an exemplar of ethical judgment that emphasizes the capacity for *ethical* self-correction – the basis, nicely enough, for *cybernetics* as a central concept in computer science. Happily, both religious traditions (including Islam) and eastern traditions – including Confucian, Daoism, and Buddhism – likewise develop similar notions of judgment, ethical pluralism,

and the core metaphors of harmony and resonance that describe pluralism's conjunction of shared norms and diverse interpretations, as made possible by judgment.

Hence, such notions and metaphors may serve as a framework for a global ICE – i.e., one that brings together East and West, African and indigenous traditions, etc. – that sustains irreducible differences alongside shared norms. In fact, such pluralism can already be seen in the contemporary ICE *theories* developed by Terrell Ward Bynum and Luciano Floridi.

In **Part III** we see, moreover, that such ethical pluralisms are instantiated at the level of *praxis* in contemporary ICE in several examples, including: a procedural approach to determining what 'emancipation' might mean in diverse cultures (Stahl) – an understanding supported by a striking example of how women in Jordan have learned to use ICTs for an emancipation that emerges from and meshes with their particular cultural contexts (Wheeler); an open source software developed for the Indymedia movement – one that, as open source, allows itself to be modified to meet local interpretations of open access and free speech (van der Velden); a pluralistic framework for notions of 'privacy' and affiliated codes and laws regarding data privacy protection in both Western and Eastern countries (Ess); and an exploration of Theravadan and Mahayana Buddhist approaches to privacy vis-à-vis modern Western notions of individual privacy (Hongladarom). This last exploration, finally, contributes towards the sort of pluralism that I and Soraj Hongladarom seek to develop – one that, in contrast with Rawls' notion of overlapping consensus, extends beyond the boundaries of liberal states and further allows participants in a dialogue intending to develop a global ICE to "bring their specific backgrounds to the table" (Hongladarom & Ess 2007, xv)

Part IV then seeks to initially outline some specific obligations and duties for a global ICE, beginning with the primarily *negative* rights and duties affiliated with seeking commonalities in our online cross-cultural engagements (e.g., do not violate another person's right to data privacy), and then moving to possible, primarily *positive* rights and duties entailed by seeking to meet "the Other" online in *resonant* ways structured by judgment and interpretive pluralism. Unfortunately, what we must do to establish *trust* and deal with ambiguity as *embodied* beings may not always "translate" easily to online venues. But we may nonetheless, as Hongladarom argues, positively cultivate the sort of character and

compassion that would *prevent* violation of rights – e.g., to privacy – by reducing our egoistic self-interest and greed. More broadly, we will need to be more aware of how *evil* – defined in part as the systematic dehumanization of "the Other" – may be at work within the very theoretical frameworks we seek to use to foster social justice in a global ICE (Kvasny). We will further need to explore how diverse *religious traditions* may be positively incorporated into a global ICE that seeks to preserve cultural identities (Bhattarakosol). Finally, a number of important resonances between *African* thought and the Western and Eastern traditions already woven together in a global, *pluralistic* ICE suggest – if only in an initial way – that a pluralistic approach to the development of an *African* Information Ethics may likewise succeed in connecting African ethics with shared, global norms, while simultaneously sustaining and fostering the irreducible differences that define African cultures and traditions.

I. What is ICE?

A. Initial canonical definitions

Computer Ethics, as one of the foremost pioneers in this field, Terry Bynum, has carefully documented and explored, begins in the English-speaking West with the work of Norbert Wiener (1948; see Bynum 2000, 2001, 2006). We will see later on that Wiener's work – specifically, his effort to define CE in terms of using our technologies to contribute to human *flourishing* – certainly remains pertinent. In particular, Bynum builds his understanding of CE in part on the work of James Moor, whose famous paper, "What Is Computer Ethics?" includes the observation that problems arise in relation to computers because of "policy vacuums" – i.e., the lack of policies, guidelines, etc., in the face of especially the new ethical issues and social impacts of computing technology (1985, 266). For his part, Bynum subsequently offered the following definition of computer ethics, as based on both Wiener and Moor:

"Computer ethics identifies and analyzes the impacts of information technology upon human values like health, wealth, opportunity, freedom,

*democracy, knowledge, privacy, security, self-fulfillment, and so on."*¹

B. Information Ethics

Intersecting the focus on computers and computer networks as specific forms of technology is a second definition – one that emphasizes rather the primary fact that computers are used as *information* processors. While the exact definition of *information* – especially in contrast with what many of us take to be different types of knowledge most broadly (including data, knowledge, and wisdom) – is a matter of dispute (e.g., Zins 2007), if we agree in an operational way that what computers process is information, then information ethics "... comprises all of the ethical issues related to the production, storage, access, and dissemination of information" ²

C. Professional ethics.

Of course, the first people who had to really wrestle with these ethical issues were, as Wiener illustrates, computer scientists. Over the years, professional organizations such as the ACM and IEEE have developed statements of the ethical obligations and standards of the *professionals* responsible for the design, deployment, and use of these technologies.

So, for example, the ACM code of ethics (1992) includes the following:

- As an ACM member I will*
- 1.1 Contribute to society and human well-being.
 - 1.2 Avoid harm to others
 - 1.3 Be honest and trustworthy
 - 1.4 Be fair and take action not to discriminate
 - 1.5 Honor property rights including copyrights and patent
 - 1.6. Give proper credit for intellectual property
 - 1.7. Respect the privacy of others
 - 1.8 Honor confidentiality

¹ Bynum, Terrell Ward & Rogerson, Simon: Introduction and overview: Global information ethics. 119

² Hauptman, Robert: Ethics and the Dissemination of Information. 121

The code includes still more specific professional responsibilities, e.g.,:

- 2.1 Strive to achieve the highest quality, effectiveness and dignity in both the process and products of professional work.
- 2.2 Acquire and maintain professional competence.
- 2.3 Know and respect existing laws pertaining to professional work
- 2.4 Accept and provide appropriate professional review.
- 2.5 Give comprehensive and thorough evaluations of computer systems and their impacts, including analysis of possible risks.
- 2.6 Honor contracts, agreements, and assigned responsibilities
- 2.7 Improve public understanding of computing and its consequences.
- 2.8 Access computing and communication resources only when authorized to do so.³

To be sure, such ethical norms and obligations are crucial – but as is both clear and appropriate to their origins and intended audience, these norms are addressed primarily to computing *professionals*, i.e., those specialists and experts within the various fields surrounding computation as an intellectual, technical, and/or business enterprise, including computer scientists, systems administrators, etc. Obviously, as the use of computers and computer networks to communicate globally as well as to process information in increasingly diverse ways (e.g., from word processing to online banking; from the various forms of computer-mediated communication [CMC], including email, Instant Messaging, chats, social network sites, etc.; art and entertainment uses, including audio and video production and distribution; shopping; religion online [Ess 2007a], etc., etc.) has become more and more a requirement and presumed feature of everyday life in the developed world – more and more of us who are not computer specialists face an increasing range of ethical issues and difficulties that are not directly addressed by a professional ethics that is powerfully but narrowly focused on the needs and experiences of the comparatively few technical experts.

D. Ethics for the rest of us?

As Barbara Paterson has pointed out:

³ ACM: Code of Ethics.

*"Deborah Johnson (1999) predicts that because the majority of moral problems will be computer ethics issues, computer ethics will cease to be a special field of ethics (Bynum, 2000). Kristina Gõrniak-Kocikowska (1996) predicts that the computer revolution will give rise to a revolution of ethics and that computer ethics will become a global ethics relevant to all areas of human life. Bynum and Rogerson (1996) and Moor (1998) suggest that the second generation of computer ethics should be an era of global information ethics."*⁴

To say it again: within a very short period of time, ICTs have become increasingly ubiquitous in the developed world – so much so, in fact, that they now have become so interwoven in our lives that we are no longer so astonished, mystified, and occasionally terrified by them: rather, they are becoming more and more like refrigerators and automobiles – technologies that work largely in the background rather than the foreground of our lives. And as we will quickly see (below, "E"), ICTs are likewise diffusing rapidly throughout the world: while in many places they are not likely to become so ubiquitous in the ways that we now take for granted in the developed world - ICTs now connect over 1 billion people on the planet.

But this means in turn that we all use – or will need to use – ICE every day (apologies to "Numb3rs"!).

To my knowledge, however, such a "pedestrian" – rather than specialized and professional – ICE is only now starting to emerge. Certainly, there are many excellent texts and courses now available for teaching ICE (e.g., Tavani 2007) – but, to my knowledge at least, these remain largely in the province of specialized courses in the curricula for computer science and library science. At the same time, at least to my knowledge, the topics and problems of information ethics are not widely represented in the various anthologies used to teach ethics and applied ethics in the U.S. (e.g., Boss, 2005).

So a primary goal of contemporary ICE is to attend and respond to the multiple ethical issues that confront more or less everyone who uses a computer to receive, manipulate, present, and distribute

⁴ Paterson, Barbara: We Cannot Eat Data: The Need for Computer Ethics to Address the Cultural and Ecological Impacts of Computing. 153

information. The list here is extensive – ranging from:

- simple netiquette and related politeness rules for using email and participating productively in listserves, chatrooms, Instant Messaging, etc.;
- ethical dimensions of social networking software such as Facebook, including how far such communications can be considered private and/or protected under free speech, etc.;
- ethical dimensions of blogs and blogging, such as what may be fairly cited without permission, what requires permission, etc.;
- posting photos and videos online – with or without restrictions, with or without permissions, etc.;

to the "big ticket items" such as:

- privacy issues – both local, as in the post 9/11 United States, and global, as different countries and traditions establish different expectations regarding privacy and correlatively different data privacy protection codes and laws;
- copyright / copyleft and Intellectual Property (IP) rights;
- cross-cultural communication online: freedom of self- and cultural expression vis-à-vis "computer-mediated colonization," violating and/or offending important cultural and religious taboos, etc.
- various issues surrounding such practices as hacking, surveillance, cyber-stalking, "cyber-bullying," sexual predation and abuse
- the digital divide and related issues of social justice, etc., etc.

If anything – as ICTs continue to diffuse around the world and throughout our lives, both individually and collectively, we can expect the list of ethical issues to expand proportionately.

E. A global information ethics? Basic requirements

It is helpful to begin with a quick review of the dramatic scope and speed of *global* ICT diffusion.

The Internet, beginning with 213 hosts in 1981, counted ca. 376,000 hosts by 1991. At the time of this writing (April, 2007), there are more than 433,193,199 hosts (Internet Systems Consortium, 2007). Building on the Internet, the World Wide Web was first instantiated in 1991 and expanded to include just 26 servers world-wide by November, 1992 (BBC, 2006): currently, there are over 113,658,468 websites online (Newman 2007). *Culturally*, as late as 1998, the Internet and the Web remained solidly in the cultural domains of its English, European, and U.S. inventors: indeed, ca. 84% of Web users were located in the United States (GVU, 1998). Now, a scant eight years later, over one *billion* (1,114,274,426) persons throughout the planet have access to the Web: of these, Asian users constitute 35.8% of the Web population, while Europeans make up 28.3 % of world users – and North Americans only 20.9% (Internet World Stats, 2007).

For our purposes, there are at least two immediate consequences of this global diffusion. The first is usually couched in terms of the **digital divide**: the distribution of ICTs globally generally follows pre-existing structures of wealth, power, and status, both between nations and within nations. Certainly, many early proponents of the so-called Information Revolution or the "electronic global village" ardently hoped and argued that ICTs would bring about greater freedom, equality, and economic opportunity – and certainly, we can find heartening examples that support this hope. But by and large, it appears that ICTs work here – as they do elsewhere – as something like social and political *amplifiers*. Because of the associated economic start-up costs and, equally importantly, what Bourdieu has helpfully identified in terms of *social capital* (1977), the poor and socially marginalized face often insurmountable obstacles to joining the so-called revolution. Crudely, but importantly, here – as elsewhere – the poor stay poor and the rich get rich ... ⁵

⁵ The Digital Divide was a primary theme, of course, in our conference, beginning with its central importance for Topic Three, "Development, poverty and ICT." In addition, Ms. Sarah Kaddu (2007) documents in great detail how various deficits in social capital led to a number of very regrettable failures in ICT4D (ICTs for Development) projects in Uganda – just one example, unfortunately, of a very broad trend in ICT4D work.

The second has to do with matters of cultural identity, diversity, and the *irreducible differences* that establish and define the multiple lines between "Us" and "Them". Briefly, as Soraj Hongladarom points out (2007), until relatively recently, Computer Ethics – in parallel with ICTs themselves, as emerging primarily in the Western / North / English-speaking world – have remained largely the work of Western ethicists. Of course, contemporary Western ethical traditions are themselves diverse and in some ways irreconcilable – e.g., to name only some of the most prominent:

- utilitarianisms
- deontologies
- virtue ethics
- feminist ethics and ethics of care
- environmental ethics.

Nonetheless, these ethical traditions rest upon shared assumptions – first of all, regarding the nature and reality of the *individual* and related assumptions about the relative role and importance of the *community* and other forms of *relationship* to the identity and function of the individual.

As we are about to see, these and related contemporary *Western* assumptions come to the foreground as we consider non-Western ethical traditions, such as

- African thought
- Confucian traditions
- Buddhist traditions
- Indigenous traditions
- and so forth.

That is, as we undertake the work of *comparative philosophy*, both *shared commonalities* and *irreducible differences* between these diverse traditions become clear and explicit. So, for example, we will see that many of these non-Western traditions share an understanding of the *individual* as a *relational being*, one whose identity and reality essentially turns on his or her relationships with others in the larger community (and, perhaps, nature and/or divinity itself). So Barbara Paterson (2007), drawing on the work of Menkiti (1979) and Shutte (1993), suggests that *in general*

"In African philosophy, a person is defined through his or her relationships with other per-

sons, not through an isolated quality such as rationality (Menkiti, 1979; Shutte, 1993)."

This means in turn that

"African thought sees a person as a being under construction whose character changes as the relations to other persons change. To grow older means to become more of a person and more worthy of respect."

Finally,

*"In contrast to Western individualism and its emphasis on the rights of the individual Menkiti (1979) stresses that growth is a normative notion: "personhood is something at which individuals could fail" (p. 159). The individual belongs to the group and is linked to members of the group through interaction; conversation and dialogue are both purpose and activity of the community."*⁶

Hence, these irreducible differences between cultures are not trivial. Rather, they work to define the differences between cultures – and thereby between individuals as shaped by these cultures. To say it differently, these foundational differences are essential to defining our *identities* as cultures and members of cultures.

I will assume here (though I have argued elsewhere – Ess, 2007b) that persons and cultures have a basic *right to identity*. Such rights are spelled out, for example, in UNESCO's Universal Declaration on Cultural Diversity – and, as Rafael Capurro points out, the *Declaration of Principles* of the World Summit on the Information Society (WSIS) in 2003

⁶ Paterson, *op cit.* 157-158. In his keynote address opening the first African Information Ethics Conference, Rafael Capurro (2007) helpfully focused on *ubuntu* as a particular expression of what we may now think of as the more communitarian or collective emphasis described here by Paterson, as characteristic of not only African traditions but, as we will further see, of Buddhist and Confucian traditions, as well as others around the world. I will return to the implications of these linkages for the development of an *African* Information Ethics by way of conclusion.

Linux users will recognize *ubuntu* from the (excellent) Ubuntu distribution of the Linux OS – see www.ubuntu.com.

explicitly addresses "Cultural diversity and identity, linguistic diversity and local content" in Point 8, including the affirmation that:

52. Cultural diversity is the common heritage of humankind. The Information Society should be founded on and stimulate respect for cultural identity, cultural and linguistic diversity, traditions and religions, and foster dialogue among cultures and civilizations. The promotion, affirmation and preservation of diverse cultural identities and languages as reflected in relevant agreed United Nations documents including UNESCO's Universal Declaration on Cultural Diversity, will further enrich the Information Society.⁷

Alongside these sorts of commitments to honor and foster the irreducible differences that define our individual and cultural identities – as we seek to develop a *global ICE*, we must do so in ways that simultaneously foster and sustain a *shared ethos* or set of ethical practices. That is,

just as we require commonly shared technical standards if our computers are to "talk" with one another around the globe;

and just as we require a common language, a shared *lingua franca*, if we are to be able to communicate and mutually understand one another;

so it seems that in an "electronic global village"

– better, an electronic global metropolis (Hjarvard 2002), in which, as we have seen, ca. 1/6th of the world's population are now able to communicate with one another (more or less) directly and instantaneously –

we will also require a shared *ethics* that guides our uses and expectations surrounding the use of ICTs.

This requirement for a shared *ethos*, we may notice, is itself an assumption *shared* by all major ethical traditions. That is, every major ethical system, both East and West, assumes that a shared ethics or *ethos* is necessary, however much they may vary as

to the *content* of that shared *ethos*. So, for example, *deontologists*, especially following the German philosophers Kant and Habermas, take up a rationalist emphasis on (near-absolute) rights, duties, etc., as universal – an emphasis further embedded in such documents as the United Nations Universal Declaration of Human Rights (1948). As Bernd Carsten Stahl goes on to observe, French moralism in Montaigne and Ricouer is by contrast *teleological*, i.e., oriented towards the goal or *telos* of discerning and doing what necessary for the sake of an ethical and social order that makes both individual and community life more fulfilling, productive, etc., through "the propagation of peace and avoidance of violence" (Stahl 2004, 17). Still again, ethics in the Anglo-American world tends to emphasize a *utilitarian* interest in "the greatest good for the greatest number" as the primary ethical norm towards which all actions should aim – while various *communitarian* views emphasize the good of the community in still other ways, e.g. the Confucian emphasis on communal *harmony (te)*, the African emphasis on community well-being; the Aristotelian emphasis on harmony, development of the *polis*, etc.; and the Buddhist emphasis on compassion as a *practice* essential both to individual Enlightenment and community peace and harmony.

In addition to what we might think of as a *formal* requirement of an ethical system, i.e., this aim towards a shared set of norms, procedures, etc. – we should also note that there are also *contents* shared among the major ethical systems and religions of the world. So, to begin with, we can find a version of "the Golden Rule" in the Abrahamic religions (Judaism, Christianity, Islam), Confucian thought [e.g., *Analects* 15.23], Taoism, Shinto, Hinduism [*Mahabharata* 5:151], Jainism, Sikhism, and Native American traditions (Granoff 2003). Other candidates for "content universals" include those offered by Tu Wei-Ming: the Golden rule; a sense of justice / fairness; rules of civility; a notion of wisdom as an important goal in individual development and as a respected quality; and *trust* as a basic social glue. Finally, the venerable James Moor argues that all human groups focus on the values of "life, happiness, freedom, knowledge, ability, resources, and security" – and thereby privacy (2002, 204; cf. Moore 2003 – both cited in Hongladarom 2007, 110).

F. A global ICE: ethical pluralism and "intercultural information ethics"

These two requirements then lead directly to what many of us now regard as a central issue in ICE: if

⁷ World Summit on the Information Society (2004). Online: <<http://www.itu.org/wsis/>>. Cited in Capurro, 2006.

an information ethics is to be genuinely *global* – i.e., achieve normative legitimacy among a wide diversity of cultures and ethical traditions – such an ethics must:

- (a) address both local and global issues evoked by ICTs / CMC, etc. ,
- (b) in ways that both sustain local traditions / values / preferences, etc. and
- (c) provide *shared*, (quasi-) universal responses to central ethical problems.

Or, as Soraj Hongladarom puts it more succinctly, specifically with regard to the issue of privacy and in light of the radical differences between Eastern and Western conceptions of privacy:

*"The task for the theorist is then to search for a system of justification of privacy which respects these diverse cultural traditions, but at the same time is powerful enough to command rational assent of all involved."*⁸

Ethicists and philosophers will recognize that the challenge of creating such a global ethics is in fact an ancient one – and in a little while I will explore two ancient solutions to the problem, namely, Plato's interpretive pluralism and Aristotle's subsequent *pros hen* or "focal" pluralism.

In the context of ICE, our colleague Rafael Capurro articulated this difficulty very early on. As Barbara Paterson points out:

*"The pressing issue is not providing access to technology in order to turn more people into receivers of information that was created elsewhere and may not be useful to them, but, as suggested by Capurro (1990), it is to find ways that African countries can promote their identities in information production, distribution, and use. In terms of a global information ecology, he stresses the importance 'of finding the right balance ... between the blessings of universality and the need for preserving plurality' Capurro (1990)."*⁹

Preserving this *plurality* – in my terms, the irreducible differences that define individuals and cultures –

is thus one of the central tasks of what Capurro has subsequently come to call "intercultural information ethics."¹⁰

One of the conditions of developing such an IIE or global ICE, finally, is that these ethics must emerge from cross-cultural *dialogues*, marked by a fundamental respect precisely for the irreducible differences that define our cultures and our identities. As Barbara Paterson points out, "a great conversation is necessary that transcends limitations of discourse among members of particular social groups" – a conversation that has been called for by Berman (1992), Moor (1998), and as early as 1990 by Rafael Capurro (1990).¹¹

G. Variations on the theme: how far ought we go towards "the Other"?

As I have explored these matters over the past few years, it has become increasingly clear to me that we must ask still one more question before proceeding to develop a global ICE – and that is, How far do we want / need / ought to go to meet "the Other"?

This question is central because our responses to it will determine how far we may remain satisfied with an ethics that emphasizes *shared* assumptions and obligations *only* – and how far we may be willing, if not required, to take up additional ethical obligations necessary in order to honor and foster the irreducible differences that define our cultural and individual identities. In the following, I begin to sketch out the characteristics of each of these responses. In my conclusion (**IV**), I will return to these two possible approaches to ICE – and summarize a number of concrete suggestions especially regarding the second possibility (what we will see referred to in terms of a "resonance ethics" or Good Samaritan ethics) that emerge in some of the most recent work on ICE.

1. Minimal standards – emphasis on commonalities

Briefly, we can identify what might be thought of as a set of minimal ethical standards for the electronic global metropolis – ones that emphasize commonalities more than differences for the sake of largely pragmatic economic interests.

⁸ Hongladarom, Soraj. Analysis and Justification of Privacy from a Buddhist Perspective. 115

⁹ Paterson, Barbara: *op cit.* 162

¹⁰ Capurro, Rafael: Privacy: An Intercultural Perspective.

¹¹ Paterson, Barbara: *op cit.* 162.

As an initial example, Johnny Søraker has pointed out that *pragmatic* arguments – i.e., arguments that appeal to our shared economic interests – are strong candidates for inclusion in a global ICE, precisely because they largely bypass foundational cultural and political differences. So he argues, for example, that both the Western nations and China might be persuaded to agree on less regulation for the Internet at its basic levels (physical infrastructure, TCP/IP protocols, etc.) rather than more, despite the radical differences between them – simply because agreements on sharing identical infrastructures at these base levels are economically less expensive for all participating parties. If there is to be regulation, he argues – especially as based on political or moral concerns specific to a given country – such regulation can be carried out more effectively and economically at the "upper" levels of the Web and the Net, namely, at the layers of applications, etc. (Søraker 2006).

There is certainly warrant in *praxis* for this approach. For example, China has agreed to the Human Subjects Protections endorsed by the World Health Organization as required for medical research – even though these protections are quite alien to the philosophical foundations of Chinese cultures and earlier medical practices. The *motivation* for accepting these Protections was simple: the WTO made acceptance of these Protections a requirement for joining the WTO, as China did in 2001 (Döring, 2003). In addition, as we will see below (III. C), shared *economic* interests are driving China and other Asian nations to move towards at least limited but nonetheless recognizable conceptions of privacy and data privacy protection – despite radical differences with the assumptions and values that underlie Western notions of privacy and data privacy protection.

Similarly, as Dan Burk points out (2007), the European Union's (comparatively) rigorous Data Privacy Protection requirements have managed to spread around the world – including into non-Western cultures – in what he characterizes as "viral" fashion. Quite simply, the EU privacy protections include the stipulation that EU countries may not share personal information with countries outside the EU unless those countries also insure data privacy protections equivalent to those specified in the EU Data Privacy Protection acts. Very simply, if countries outside the EU want to enjoy the economic benefits of trade with the EU – insofar as such trade entails the sharing of private data, those countries are then required to meet the EU data privacy protection standards (Burk, 2007). Again, as

Søraker has suggested, pragmatic concerns – including economic self-interested – may motivate diverse countries and individuals to agree upon a shared set of standards, despite their radical differences.

Finally, we may expect a global ICE to include agreements on *identical* values and standards because globalization – as fueled by ICTs themselves – fosters a cultural *hybridization* and the creation of "third identities" (i.e., syntheses of two distinct cultural values, practices, beliefs, etc.) that represent precisely a shared, global identity. One of the clearest examples of such a third identity is again in the domain of *privacy*. As a number of commentators have observed, young people in Asian countries – specifically Japan, Thailand, and China – increasingly insist on a Western-like practice of *individual* privacy, one that directly contradicts traditional Asian notions (see Nakada & Tamura 2005, Rananand 2007, and Lü 2005, respectively). Clearly, young people in these countries are influenced by their exposure to Western notions of *individual* privacy – and, coupled with the growing *economic* prosperity that makes individual privacy possible – are coming more and more into agreement with their young counterparts in the West. Insofar as there is a shared, indeed, *identical* set of understandings and values surrounding notions of *individual* privacy in both East and West, then we may expect that a global ICE will be able to develop a single, (quasi-) universal set of norms and practices for protecting that privacy.

2. Towards Resonance: online Good Samaritans and a new Renaissance?

But is that all? What happens as the irreducible differences defining diverse cultures and identities are not eradicated or overshadowed by such hybridizations and homogenizations?

Again, how can we craft a global ICE that will preserve such irreducible differences?

As I've suggested, our answers to this question depend in part on how far we believe we ought / need / want to go beyond pragmatic relationships, motivated primarily by economic self-interest, relationships that emphasize our shared *commonalities* – and thus, how far we are prepared to engage "the Other" as Other, i.e., in ways that recognize, respect, indeed foster our irreducible *differences*.

To highlight the contrasts I see at work here, allow me to introduce what I believe is a central – and centrally important – model for encountering "the

Other" – namely, the Japanese Buddhist and comparative philosopher Kitarō Nishida's understanding of *resonance*. This notion of resonance, we will see, is of interest in part because it represents a notion that is shared between such Western philosophers as Plato and Aristotle, and such Eastern philosophers as Confucius – as it is also found in Daoist and Buddhist traditions. As well, if our goal in the intercultural engagements made possible by ICTs in the electronic global metropolis is to take up relationships with "the Other" that seek to foster the irreducible differences that makes these *resonances* possible, then we will find that our global ICE will look somewhat more complex – and demanding – than a global ICE based primarily on pragmatics and commonalities.

a. Nishida and resonance

Nishida draws on the language of German philosophy, so as to emphasize that our relationships with one another always take place across the difference of "absolute opposites" [*Entgegengesetzter*] if we are to preserve our identities as irreducibly distinct from one another. But obviously, if only sheer difference defines our relationship – then there will be no connection or unity [*Vereinigung*]. To describe human relationships as a structure that holds together both irreducible difference and relationship, Nishida turns to the term and concept of *resonance*.

How do we know the Other as absolute Other? In part...

"Through the resonance [hankyō] of my personal behavior [with you] I can know you, and you can know me through the resonance of your personal behavior [with me]."

This resonance clearly entails relationship – specifically "... a "speaking with one another" [*miteinander Reden*] and an answering to one another." But at the same time, this relationship sustains the irreducible differences required to keep our identities and awareness separate:

"Even if I know the thoughts and feelings of the other human being – this is not a simple unification [Vereinigung] of me with the other human being: my consciousness and the consciousness of the other must remain absolutely distinct from one another."

What emerges, then, is the conjunction of what appears to be contradictory – i.e., connection alongside irreducible difference:

"The mutual [gegenseitige] relationship of absolute opposites [Entgegengesetzter] is a resonant [hankyō] meeting or response. ... Here we encounter a unity of I and You and at the same time a real contradiction."¹²

b. Resonance and pluralism

It is important to note – especially for the philosophers and political scientists – that this notion of resonance is deeply implicated with the lengthy and extensive discussion of pluralism in both *ethics* and *political philosophy*. To begin with, as I have developed more fully elsewhere (Ess, 2006a), resonance and an affiliated pluralism are central to the work of eco-feminist Karen Warren (1990) and specifically the information ethics of Larry Hinman (1998). Similar notions of resonance emerge in contemporary political philosophy, most specifically in the work of Charles Taylor. Attempting to move beyond both a *modus vivendi* pluralism that "lets differences lie," i.e., tolerates difference by not insisting on connection, and John Rawls' notion of "overlapping consensus," Charles Taylor seeks a stronger notion of connection in the face of difference – in part, as Madsen and Strong point out, as Rawls' notion still runs the risk of allowing radical difference to lead to the dehumanization of "the Other" (Madsen & Strong 2003, 12). In order to fully accommodate difference, Taylor takes up a notion of *complementarity* understood as a **coherency** between two irreducibly different entities, where this coherency emphasizes a positive engagement between these two as one side enhances and expands on the characteristics of the other. So Taylor says:

"The crucial idea is that people can bond not in spite of but because of difference. They can sense, that is, that their lives are narrower and less full alone than in association with each other. In this sense, the difference defines a complementarity."¹³

Moreover, this strong notion of resonance is not restricted to other human beings. We may further seek – or believe ourselves required to seek – such resonance with

¹² Nishida, Kitarō: *Nishida Kitarō Zenshū*, 1988ff., Vol. 6, 391f., cited in Elberfeld 2002, 138f. Translation from the German by CE.

¹³ Taylor, Charles: *Democracy, inclusive and exclusive*. 191

the larger community, and/or

the natural order, and/or

perhaps even divinity (so far as we believe divinity to exist).

Broadly speaking, the further we understand our interrelationship with "the Other" to extend, the more extensive our ethical obligations will become.

Between Nishida and Taylor, then, we can discern models of resonance and complementarity for our engagements with "the other" – whether in human, natural, and/or divine form – that insist on preserving and fostering the irreducible differences that define our identities as distinct from one another, while simultaneously sustaining relations that, ideally, foster the flourishing of all. In particular, in contrast with a Rawlsian approach that requires us, as it were, to leave our metaphysics – our cultural worldview and affiliated values, practices, etc., - at home before we seek to develop an overlapping consensus in the political sphere, as Soraj Hongladarom and I further develop these notions of resonance, harmony, and pluralism, they allow us precisely to bring our metaphysics to the table of ethical discussion (see **III.D**, below).

This understanding of the sorts of *harmonies* we are to strive for, moreover, is not restricted to Nishida's Buddhism and Taylor's political philosophy. On the contrary, as we have seen – and as we will explore still more fully below – such notions of harmony guide the ethical and political thought of a range of world traditions, including Aristotle, Confucian thought, African thought, etc. At the same time, this emphasis on harmony is likewise a theme shared by contemporary virtue ethics, ecofeminism and environmental ethics. Hence these notions of resonance, complementarity, and harmony appear to offer a kind of ethical *lingua franca* that may serve as common grounds for a global ICE. But we will also see that the ethical demands and obligations these notions entail go well beyond those that follow from an initial – but minimal – emphasis on commonalities alone. These additional demands, that is, may be required of us as we seek to foster engagements with "the Other" via ICTs distributed globally in ways that preserve the irreducible differences at work in such resonant relationships.

In particular, these additional ethical requirements may emerge as necessary conditions for a global ICE that includes both shared norms and values, but precisely as these can be (rationally) endorsed from

the perspective and standpoint of particular and distinct cultures and individuals. In the next section, I turn to the possible ways – first in theory and then in *praxis* – of developing such a global ICE, one that constructs a *pluralism* constituted by shared ethical norms and values alongside multiple *interpretations* or *applications* of these values as refracted through – and thus reflecting and preserving – irreducibly different cultural traditions, practices, etc.

II. Ethical pluralism West and East

Because the difficulty of developing an ethics that works across diverse cultures and traditions is an ancient problem – we should not be surprised to discover that the ancients in both Eastern and Western traditions have developed often highly sophisticated ways of resolving the apparently conflicting demands between agreement and difference. But what is striking – and, at the same time, heartening for those of us hoping for a global ICE that will conjoin shared norms with individual and cultural differences, including the differences between Eastern and Western traditions – is just that the ancient Western and Eastern solutions in fact closely resemble one another in several fundamental ways. In this first section, I explore these close resemblances – what I will eventually call their resonances and harmonies – as a way of bringing to the foreground, first at a theoretical level, central notions of *judgment*, pluralism, harmony, and resonance as these appear to bridge Eastern and Western traditions in ways that in turn suggest that we may build a global ICE on such notions, and thereby progress towards the goal of an ICE that incorporates both shared norms as well as the irreducible differences that define individual and cultural identities. In the following section, I will then turn to examples drawn from contemporary *praxis* – i.e., norms and values articulated in diverse instances of cross-cultural ICE – that thus make clear that ethical pluralism is not simply a theoretical possibility but also a practical reality in an emerging global ICE.

A. Ethical Pluralism West: Plato, Aristotle, phronesis and "cybernetic pluralism"

Both Plato and Aristotle – and subsequently, Aquinas – responded to this complex requirement in at least two key ways. To begin with, Plato develops a view that I have characterized as "interpretive pluralism" (Ess, 2006a). On this view, as elaborated especially in *The Republic*, we may conjoin shared

ethical norms with irreducible differences by recognizing that diverse ethical *practices* may represent distinctive *interpretations* or *applications* of those shared norms. Such differences, that is, do not necessarily mean, as ethical relativists would argue, that there are no universally legitimate ethical norms or values: rather, such differences may mean only that a given norm or value is applied or understood in distinctive ways – precisely as required by the details of a given context as shaped by a particular tradition, cultural norms, and practices.

So, for example, elderly persons suffering kidney disease are treated differently in different cultures and places. In the United States – at least for those able to afford health insurance with good coverage – such a person may reasonably expect to receive the kidney dialysis treatments required to sustain her life, despite their great expense, without restriction, e.g., as determined by age. In the United Kingdom, by contrast – the national health care system has imposed an upper age limit of 65 on patients for whom it will subsidize such treatments (Annis 2006, 310). Finally, in the harsh environment of the Canadian arctic, at least early in this century, an elderly member of the community who was no longer able to contribute to the well-being of the Kabloona community might voluntarily commit a form of suicide (Boss 2005, 9f.). Again, for the ethical relativist, these three different practices might be thought to demonstrate that there are no values or norms shared universally across cultures. Alternatively, however, we can also understand these three practices as three diverse *interpretations*, *applications*, and/or *judgments* as to how to apply a single norm – namely, the health and well-being of the community – in three very different environments and cultures. Quite simply, at least the well-to-do in the United States can afford the health insurance that will provide kidney dialysis without age limit – while a nationalized health system, even in a relatively wealthy country such as the United Kingdom, would quickly go bankrupt unless it imposed limits on subsidized health care. Similarly, in the unforgiving environments of the Kabloona, the well-being of the community would be jeopardized if scarce resources were diverted to caring for those who no longer could contribute to the community – and hence such care is literally not affordable by the community, nor, apparently, expected by the individual.

Secondly, Aristotle builds on Plato's teaching in several ways, beginning with his notion of *pros hen* or "focal" equivocals. Such equivocals stand as linguistic middle grounds between a homogenous

univocation (which requires that a term have one and only one meaning) and a pure *equivocation* (as a single term may have multiple but entirely unrelated meanings – for example, "bat" can refer both to a winged mammal and a wooden stick used in baseball). *Pros hen* or focal equivocals, by contrast, are terms with clearly *different* meanings that simultaneously relate or cohere with one another as both point towards a shared or focal notion that anchors the meaning of each. Aristotle uses the example of "healthy" to illustrate his point: "... the term 'healthy' always relates to health (either as preserving it or as producing it or as indicating it or as receptive of it" (*Metaphysics* 1003b2-4; cf. 1060b37-1061a7). In his later elaboration on Aristotle's understanding of such equivocals, Aquinas illustrates the point more fully:

"... there is the case of one word being used of two things because each of them has some order or relation to a third thing. Thus we use the word 'healthy' of both diet and passing water, because each of these has some relation to health in a man, the former as a cause, the latter as a symptom of it."¹⁴

So we could say, for example, that a particular diet is healthy₍₁₎ – and good kidney functioning may also be said to be healthy₍₂₎: but the two terms are not univocals – that is, they do not have precisely the same meaning. On the contrary: with healthy₍₁₎, we mean that the diet contributes to the state of being healthy – while healthy₍₂₎ means that good kidney function is a reflection of the state of being healthy. At the same time, however, precisely because healthy₍₁₎ and healthy₍₂₎ refer to the same "state of being healthy" that, as a shared *focal* point, thus grounds their meanings – their differences in meaning are thus conjoined with a coherence or connection alongside these differences.¹⁵

¹⁴ Aquinas, Thomas: *Summa Theologiae* 1A. 13, 5. 208

¹⁵ Aquinas's example apparently draws from Aristotle's discussion of *pros hen* equivocals in *The Topics*: "... 'healthy' means 'producing health' and 'preserving health' and 'denoting health,' ... (I.xv, 106b35-37: 1960, 315). We should also note that there are important differences between the *pros hen* and analogical equivocals that both Aristotle and Aquinas make use of – but these differences, so

For Aristotle (as well as for Aquinas) this linguistic analysis is significant because language is assumed to reflect the structure of reality itself. In particular, Aristotle says rather famously that *being* itself is such a focal or *pros hen* equivocal: "...there are many senses in which a thing is said to 'be,' but all that 'is' is related to one central point, one definite kind of thing, and is not said to 'be' by a mere ambiguity" (*Metaphysics* 1003a33; Burrell's translation, 1973, 84). That is, all things *are* – in ways that are both irreducibly *different* and yet at the same time inextricably *connected* with one another by way of reference to a single focal point.

For Aristotle, our ability to negotiate the complex ambiguities of *pros hen* equivocals is affiliated with a particular kind of *practical judgment* – what Aristotle calls *phronesis*. Just as we can recognize and appropriately utilize terms that hold different but related meanings – so *phronesis* allows us to discern what and how general ethical principles apply to diverse contexts, thereby making ethical decisions and actions possible. As Aquinas puts it:

*"Practical reason ... is concerned with contingent matters, about which human actions are concerned, and consequently, although there is necessity in the general principles, the more we descend to matters of detail, the more frequently we encounter deviations.... Accordingly, in matters of action, truth or practical rectitude is not the same for all in respect of detail but only as to the general principles, and where there is the same rectitude in matters of detail, it is not equally known to all."*¹⁶

This is to say: *phronesis* allows us to take a general principle (as the ethical analogue to the *focal* term ground two *pros hen* equivocals) and discern how it may be interpreted or applied *in different ways* in *different contexts* (as the ethical analogues to the two *pros hen* equivocals – i.e., that are irreducibly different and yet inextricably connected). But what *phronesis* thereby makes possible is an *ethical pluralism* that recognizes precisely that shared ethical principles and norms will necessarily issue in *diverse* ethical judgments and interpretations, as

far as I can see, are not significant for the current discussion.

¹⁶ Summa Theologiae, 1-2, q. 94, a. 4 responsio, cited in Haldane 2003, 91

required by irreducibly different contexts defined by an extensive range of fine-grained details.¹⁷

Such ethical pluralism, finally, as engaging such structures of connection alongside irreducible difference, and as rooted in a *phronesis* that is precisely the cultivated, experientially-informed ability to *judge* as to how to interpret and apply shared principles to diverse contexts, thereby carries us beyond Hinman's notion of "potential compatibility," and even Rawls' notion of overlapping consensus (again, see **III.D.**, below).

In fact, Aristotle's understanding of *phronesis* and thus of ethical pluralism is intimately connected with a central component of computation – namely, *cybernetics*. Of course, most of us are familiar with the term – as originally developed by Norbert Wiener – as referring to the ability of computer systems to self-regulate and self-correct their processes through various forms of feedback mechanisms. But what is apparently forgotten or unacknowledged, at least in more recent literature, is that "cybernetics" is derived from Plato's use of the *cybernetes*. The *cybernetes* is a steersman, helmsman, or pilot, and Plato uses the *cybernetes* as a primary model of *ethical judgment* – specifically, our ability to discern and aim towards the ethically-

¹⁷ As I have pointed out earlier (2004, 164), *phronesis* for Aristotle is an excellence or virtue (*arete*), that consists in "a truth-attaining rational quality, concerned with action in relation to the things that are good for human beings" (*Nicomachean Ethics* VI.v.6). The Aristotle scholar Werner Jaeger describes Aristotle's notion of *phronesis* as "an habitual disposition of the mind to deliberate practically about everything concerning human weal and woe (1934, p. 83, referring to 1140b4 and 220). We should further note that Aristotle again follows Socrates and Plato here: as Jaeger comments, "To Socrates *phronesis* had meant the ethical power of reason, a sense modeled on the common usage that Aristotle restores to its rights in the *Nicomachean Ethics*" (1934, p. 83).

Indeed, as we are about to see, Aristotle's understanding of *phronesis*, as it derives from Socrates, is thus allied with Plato's use of the *cybernetes* – the pilot or steersman – as an exemplar of ethical or moral *judgment*.

For additional discussion of *phronesis* in recent ICE, see Dreyfus (2001) and Hinman (2004, 61).

justified path in the face of a wide range of possible choices. So Plato has Socrates observe in *The Republic*:

"... a first-rate pilot [cybernetes] or physician, for example, feels the difference between the impossibilities and possibilities in his art and attempts the one and lets the others go; and then, too, if he does happen to trip, he is equal to correcting his error."¹⁸

"Cybernetics," then, means more originally the capability of making *ethical* judgments in the face of specific and diverse contexts, complete with the ability to self-correct in the face of error and/or new information. This is to say, the *cybernetes*, as a model of *ethical* self-direction, thereby embodies and exemplifies the sort of ethical judgment that Aristotle subsequently identifies in terms of *phronesis* – i.e., precisely the ability to discern what general principles may apply in a particular context – and *how* they are to be interpreted to apply within that context as defined by a near-infinite range of fine-grained, ethically relevant details.

Given this conjunction between the *cybernetes* and *phronesis*, where *phronesis* is the ethical judgment capable of discerning what general principles may apply and how they apply in diverse ways as required by diverse contexts – we can then meaningfully speak of a "cybernetic pluralism" in Information and Computer Ethics. I thereby refer to precisely the ethical pluralism that follows from recognizing the role of *phronesis* / practical judgment in attempting to apply / interpret / understand ethical norms in diverse ways (depending on specific circumstances and larger cultural frameworks), one that is self-correcting in primarily *ethical*, not simply *informational* ways.

B. Bridge notions with Eastern thought: pluralism, harmony, and resonance in Confucian thought

Happily, these notions of judgment and pluralism are by no means restricted to these ancient Western thinkers. On the contrary, similar notions are found

¹⁸ Republic, 360e-361a, Bloom trans.; cf. Republic I, 332e-c; VI, 489c.

Following standard practice among Plato scholars, page references are to the Stephanus volume and page number.

throughout diverse religious and philosophical traditions – including, for example, Islam (Eickelman 2003) as well as Confucian thought. So Joseph Chan observes that "Insofar as the framework of *ren* [authoritative humanity or co-humanity¹⁹] and rites remains unchallenged, Confucians are often ready to accept a plurality of diverse or contradicting ethical judgments" (2003, 136). Chan's description of this Confucian pluralism thus closely parallels the interpretive pluralism we have seen in Plato, Aristotle, and Aquinas: in particular, Chan emphasizes the point that a shared ethical norm – in the Confucian case, *ren* – precisely allows for a diversity judgments as to how the norm is to be interpreted or applied in a given case: "If after careful and conscientious deliberation, two persons equipped with *ren* come up with two different or contradictory judgments and courses of action, Confucians would tell us to respect both of the judgments" (2003, 137). Here we can see, then, that Confucian thought thus closely parallels especially Aristotle's understanding of *phronesis* and the affiliated understanding that a *plurality* of judgments are not only possible, but are in fact required by the application or interpretation of a given ethical norm across diverse circumstances and contexts. That is – just as Being and the Good, as refracted through *phronesis*, allow for a diversity of legitimate meanings, interpretations, applications – so *ren* allows for different, even contradictory judgments in Confucian thought.²⁰

C. Metaphors of resonance, harmony as structure of pluralism: connection alongside irreducible differences.

These close similarities regarding basic understandings of judgment and pluralism, in fact, extend to the central metaphors used to describe such pluralisms. In particular, the German comparative philosopher Rolf Elberfeld has extensively described how the metaphors of *harmony* and *resonance* appear in both Western and Eastern traditions, beginning with Plato's account of the role of music as critical to education in *The Republic* (401d): we

¹⁹ See Ames and Rosemont 1998, 30.

²⁰ Similarly, Prof. I.J. Mosala, in his address to our conference, noted that "In culturally diverse communities it is quite likely that everybody will accept these [basic] principles [of information ethics], but the way that they strive to promote them could vary." Ethics and information exchange between diverse cultures. 5

can further note here that for Plato, justice itself emerges as the proportional *harmony* between the three distinct elements of the *psyche* or self (i.e., reason, spirit, and appetite) – just as justice in the ideal city is likewise a proportional harmony between the three classes (e.g., *The Republic*, 443b-445b).

Turning to China, Elberfeld points out that music – specifically, musical *harmonies* – are centrally important to education, as described in the *Liji (Book of Rites* – 3rd ct. B.C.E.). In ways closely similar to Plato, harmony [*he*] or *resonance* [*ganying*] are incorporated in education as a means of perfecting – understood precisely as *harmonizing* – the proper relationships first of all between [*zwischen*] human beings. Such harmony, it is hoped, will then further extend between human beings and the larger order, as well as, finally, between earth and *T'ian* ("heaven" – better, "... an inhering, emergent order negotiated out of the dispositioning of the particulars that are constitutive of it" – Ames & Rosemont 1998, 47). As is well-known, harmony [*he*] among these multiple spheres are the fundamental features and goals of classical Confucian ethics – what Elberfeld calls a "*Resonance Ethics*" [*Resonanz-Ethik*] (2002, 132-137).²¹

The metaphors of *resonance* and *harmony*, moreover, are clearly structures of pluralism: that is, these notions explicitly entail structures of connection alongside and in the face of irreducible difference. Specifically, the Chinese term *ying* (resonance) means precisely "a conjunction [*Zugleich*] of unity [*Vereinigung*] and division [*Trennung*]" (2003, 132).

Finally, Elberfeld demonstrates that these understandings of harmony, resonance, and a correlative ethical pluralism are found not only in Confucian

thought, but also in both ancient and contemporary Daoism and Buddhism (2002, 137f.) And, as we have seen, the highly influential Japanese comparative philosopher Nishida Kitarō takes up the Japanese version of resonance [*hankyō*] as key to our knowing one another as human beings.

There is good reason to think, then, that *theoretically* these notions of pluralism and resonance may also be shared cross-culturally – but, unlike simple commonalities, these notions further include the ability to articulate and preserve irreducible differences.

D. Examples of Ethical Pluralism in Contemporary Theories of Information and Computing Ethics

Indeed, there are at least two examples of such pluralism operating in contemporary theoretical work, beginning with Terrell Ward Bynum's synthesis of the work of Norbert Wiener and Luciano Floridi in what Bynum calls "flourishing ethics." Briefly, Bynum has argued that the ethics of both Wiener and Floridi converge towards the central values of: contributing to human flourishing; advancing and defending human values (life, health, freedom, knowledge, happiness); and fulfilling "the great principles of justice" drawn from Western philosophical and religious traditions. In fact, Bynum further points out agreement on these central values in the ethics of such computer ethics pioneers as Deborah Johnson, Philip Brey, James Moor, Helen Nissenbaum, as well as in my own emphasis on using computer-mediated communication (CMC) technologies in ways that preserve, to use Hongladarom's distinction (1998, 2000, 2001), "thick" or local cultures (Ess 2005).²² In this way,

²¹ We can further note here that while Plato's understanding of harmony in the *Republic* is focused on harmonies within the human being and then within the human community – Plato draws from the still older Pythagorean belief in "the harmony of the spheres," i.e., a kind of cosmic harmony thought to extend throughout the natural order as mathematically ordered in *musical* proportions. In this way, at least the larger philosophical background of what I have called Plato's interpretive or "cybernetic" pluralism thereby directly correlates with the Chinese notion of a "cosmic" harmony between humanity, earth, and *Tian*.

²² Soraj Hongladarom takes up Michael Walzer's distinction (1994) between "thick" and "thin" to suggest a model of global uses of CMC that holds both local or "thick" cultures (including local languages, practices, traditions, etc.) alongside a more global but "thin" culture, including the use of English as a *lingua franca* that makes global communication and interaction possible while nonetheless thereby preserving the irreducible differences that define specific cultures (1998, 2000, 2001). I have incorporated this model in my own work, so as to highlight additional examples from CMC usage around the globe that complement and reinforce Hongladarom's original model, as developed initially in the context of his analysis of Thai chatroom behavior.

these central values serve as contemporary examples of *pros hen* foci – of norms that may be shared across a wide range of thinkers and contexts, thereby issuing in an ethical pluralism that allows for considerable diversity in the interpretation and application of those norms.

Similarly, Luciano Floridi has developed more recently a conception of what he calls a "lite" information ontology – precisely with a view towards avoiding a cultural imperialism, on the one hand (resulting from unilaterally and homogeneously applying a single ethical framework across all cultures), while also avoiding, on the other hand, a merely relativist insistence on a local framework only, one that would thereby remain fragmented and isolated from other cultures and frameworks, as the effort to preserve their irreducible differences would (mistakenly) insist on avoiding all shared, putatively universal norms and values. So Floridi says:

"First, instead of trying to achieve an impossible "view from nowhere", the theory seeks to avoid assuming some merely "local" conception of what Western philosophical traditions dictate as "normality" – whether this is understood as post-18th century or not – in favour of a more neutral ontology of entities modelled informationally. By referring to such a "lite" ontological grounding of informational privacy, the theory allows the adaptation of the former to various conceptions of the latter, working as a potential cross-cultural platform. This can help to uncover different conceptions and implementations of informational privacy around the world in a more neutral language, without committing the researcher to a culturally-laden position."²³

A "lite" ontology, that is, can serve as a shared framework that allows precisely for a pluralistic diversity of understandings and applications of a shared notion of informational privacy, as, in effect, the focal, *pros hen* notion referred to by specific understandings and implementations of privacy within specific – and irreducibly different – cultural settings. Indeed, Floridi makes explicit here that his

notion of a "lite" ontology is intended precisely to avoid the cultural imperialism of imposing a single norm, language or culture across the globe: rather, his vision is of a pluralistic structure of a shared framework – in this case, information ontology as something of a shared language – alongside the diverse languages and practices of diverse cultures:

"No universal language or culture should be expected to arise across all the various information societies around the world. However, in the same way as people will increasingly often speak not only their own idioms and native dialects but also some form of basic English good enough to communicate with each other, likewise, an informational ontology will probably represent the shared koiné among future netizens."²⁴

The suggestion here that the pluralism intended by Floridi's "lite" informational ontology requires our fluency in (at least) two "languages" – i.e., our own native language, along with a globally shared *koiné* – thereby echoes the similar point made by Brenda Danet and Susan Herring: as the history of cultural hybridization shows, people are indeed capable of the linguistic *diglossia* required to maintain both a local language (and with it, given the integral role of language in defining and articulating a culture's worldview, values, practices, etc.) and a more formal *lingua franca* used for broader communication (Danet and Herring 2003). Moreover, Floridi further echoes here Soraj Hongladarom's strategy of applying Michael Walzer's distinction between "thick" and "thin" to a develop a model of global uses of CMC technologies that, as we have seen,²⁵ conjoins both local but "thick" cultures (including defining languages, values, practices, etc.) with a global but "thin" culture (including the use, for example, of English as a *lingua franca*) – so that the global, "thin" culture facilitates global communication and interaction, while allowing local, "thick" cultures to continue to thrive and develop (Hongladarom 1998, 2000, 2001). More specifically, we will in fact see in *praxis* the sort of pluralism Floridi outlines here in theoretical terms – precisely with regard to the notion of privacy (**III.C**).

So, while these prominent theorists have thus incorporated strong notions of pluralism into their

I am further very grateful indeed to Terry Bynum for confirming account of his work that I provide here as an example of *pluralism*: personal email to the author, 27 September, 2005.

²³ Floridi, Luciano: Four Challenges for a Theory of Informational Privacy, 113

²⁴ *Ibid.*: emphasis added, CE.

²⁵ See note 23.

approaches to ICE – the critical question remains: can this pluralism *work* in *praxis* – i.e., "on the ground" in an emerging ICE?

Happily, a number of important examples instantiate such pluralisms in *praxis*. I review these in the next section, to illustrate *how* pluralism works "on the ground" – and that pluralism is not simply a nice theoretical construct, but a realizable component of real-world ethics.

III. Ethical Pluralism in a global ICE: Examples from Praxis

A. Emancipation across culture and gender

Building on his previous work (Stahl 2004), Bernd Carsten Stahl has more recently developed an account of what he calls "critical reflexivity" as a *procedurally*-oriented approach to ICE (2006). Here Stahl addresses the wide range of philosophical problems – including the twin problems of ethical relativism and ethical absolutism – that confront any effort to develop ethical norms to be shared across cultures. Stahl seeks to thereby make possible what he calls "critical research in information systems" (CRIS) – research intended precisely for a world made up of dynamic cultures interconnected with one another through ICTs and the processes of globalization: as neither relativistic nor naively imperialistic, CRIS rather seeks to become critically aware of potentially ethnocentric assumptions in any efforts towards emancipation and development, precisely in order to avoid imperialism. In doing so, Stahl then takes up the central difficulties of defining 'emancipation' in a way that would work cross-culturally. This requires, on his showing, a shift from what we might think of as a content-oriented or *substantive* approach that would attempt to develop a concrete definition of emancipation: any such effort, he points out, will always run the risk of overlooking – or, worse, overriding – local cultural preferences and values. Instead, Stahl turns to a *formal* approach (one rooted in Habermas) that instead emphasizes creating "...procedures that allow the individuals or groups in question to develop their own vision of emancipation or empowerment" (2006, 105). Such a procedural approach, Stahl argues, has the advantage that "the critical researcher will not prescribe certain features that she believes to be emancipatory, but that she gives the *research subjects* the chance to define *their* version of emancipation" (*ibid*, emphasis added, CE). This means more particularly that critical re-

searchers can endorse democratic participation, freedom of speech, and/or stakeholder inclusion. As Stahl points out, "These do not constitute emancipation but they are the necessary conditions of determining what emancipation means" (*ibid*).

Critical reflexivity, as Stahl makes clear, thus requires of us constant reflection on our own basic norms, assumptions, practices, etc., precisely as they appear to *differ* from those norms, assumptions, practices, etc., that define "Others" cultures: such critical reflexivity is needed, first of all, in order to avoid naïve ethnocentrism in the form of a presumed universality of our own norms, assumptions, practices, etc. – and thereby to avoid the imperialism and colonialism that such ethnocentrism often fuels.

Such critical reflexivity and its allied procedural approach to defining central norms, moreover, directly issues in a *pluralism* that recognizes and respects the irreducible differences defining individual and cultural identities. Stahl sees such pluralism emerging from the application of this procedural approach to debates regarding government and the democratic uses of ICTs (2006, 105). Even more strikingly, Deborah Wheeler (2006) documents how women in Jordan have been able to take up ICTs in ways that are indeed *emancipatory* – where 'emancipation,' precisely as Stahl describes, emerges from the agency of local actors who seek to determine the meanings and practices of 'emancipation' that make sense and work best within their specific cultural frameworks and real-world contexts. In my terms, Stahl's critical reflexivity and procedural approach to defining central norms such as "emancipation" thus issues here – not simply theoretically but also *practically* – in "emancipation" as a *pluralistic* concept, one that allows for diverse interpretations and implementations across different cultures.

B. Maja van der Velden: "encoding pluralism" (my term) in Indymedia

Maja van der Velden has helpfully documented how a robust form of pluralism has emerged in the development of independent media – specifically, in the form of software written to support open, web-based publishing.

Van der Velden first points out how the *Confederated Network of Independent Media Centers* (CNIMC) developed as a loose conglomerate devoted to supporting its members around the world in their efforts to develop independent media oriented towards social, environmental and economic

justice. The members of the CNIMC agree upon a shared set of "Principles of Unity," including the principle of Open Publishing:

"All IMC's, based upon the trust of their contributors and readers, shall utilize open web based publishing, allowing individuals, groups and organizations to express their views, anonymously if desired."²⁶

But this principle allows for – in fact, as the diverse contexts and settings in which participants seek to realize this principle *require* – diverse *interpretations*, applications, or understandings of the principle: indeed, the very source code written to support their work instantiates a *plurality* of such interpretations and applications. As van der Velden describes it:

"The first source code, Active, was developed by activists in Australia to run a small activist media center. In the same year, the software was adapted and used for the independent media center in Seattle, Washington, during the activities surrounding the World Trade Organization (WTO) meeting in 1999. The success of the media center in Seattle led to the establishment of many more Independent Media Centers."²⁷

Perhaps not surprisingly, however, as the *Active* source code was taken up in diverse countries, cultures, and contexts, it was modified to reflect local conditions, including specific legal contexts:

"For example, Mir [an instantiation of Active] was developed for the German IMC site, reflecting "a legal environment which prohibits racist, hateful, and revisionist speech in ways that necessitates prior restraint story moderation in a way that many IMCs are uncomfortable with" (Hill, 2003, p. 5). Other spinoffs dealt with the authentication process. Active had no authentication process, allowing anonymous postings. This is still possible with IMC software such as DadaIMC. Other IMC softwares now require a

name, while some also allow you to post under a nickname."²⁸

The result is an ethical *pluralism* at the level of source code:

"What the variety of IMC source codes shows is that there are different interpretations of open publishing possible within the Principles of Unity. These interpretations are politically motivated and "grant us a meaningful form of freedom, the independence to choose the socio-technical terms on which we communicate" (Hill, 2003, p. 8). The ongoing negotiations in the Indymedia network in order to balance unity, difference, and autonomy show that part of these negotiations need to be expressed on the level of the source code, the software programs on which the individual IMCs run. New participants in the Indymedia network can choose which source code serves their values best or develop a new one."²⁹

Again, the emergence of diverse understandings of what open publishing means nicely fits with the structure of interpretive pluralism and *pros hen* equivocal: open publishing in particular and the Principles of Unity in general stand as the ethical focal points of diverse groups in different cultural and legal environments – these groups in turn are able to *interpret* and instantiate what these norms and values mean within those environments, precisely in order to make these values and norms applicable to and workable within those environments.

C. Pluralism in definitions of privacy – U.S. / Germany / Hong Kong / China

As I have documented extensively elsewhere (Ess 2006a), a similar pluralism is emerging – again, on a global scale and across the significant cultural differences defining East and West – with regard to the basic notion of *privacy* and affiliated codes and laws defining data privacy protection. Briefly (but in ways we will explore more fully in the next example), Western conceptions of privacy and data privacy protection rest on a generally *atomistic* conception of the individual as a moral *autonomy* (in Kantian terms, the source of its own law – a founda-

²⁶ Indymedia Document Project, cited in van der Velden, Maja: Invisibility and the Ethics of Digitalization: Designing so as not to Hurt Others. 86

²⁷ van der Velden, Maja: Invisibility and the Ethics of Digitalization: Designing so as not to Hurt Others. 86

²⁸ van der Velden, Maja: *op cit.* 87

²⁹ *ibid.* emphasis added, CE

tional conception of Western *democratic* theory). In the United States, as Deborah Johnson has nicely summarized, in the United States we have developed justifications of privacy as both an *intrinsic* good (i.e., one that requires no further justification) and as an *extrinsic* or *instrumental* good: first of all, privacy is needed for the autonomous self in order to develop a sense of self and personal autonomy, along with intimate relationships and then the capacity to engage in debate and the other practices of a democratic society (2001). In contrast with what Henry Rosemont, Jr., helpfully characterizes as this "peach-pit" conception of the individual (i.e., as holding a central, core reality-identity that does not change over time, whatever happens to the surface appearances of the person – 2006) – Buddhist and Confucian (as well as African, as we have seen) conceptions of the self instead stress the person as a *relational* and/or "processional" being (Ames and Rosemont 1998, 22ff.). In particular, in the case of Buddhism, the "peach-pit" or autonomous "self" foundational in the modern West is seen as not simply an *illusion* – but, indeed, as the central *delusion* that is responsible for human suffering. Hence, in societies deeply shaped by Buddhism, such as Thailand and Japan, individual "privacy" is seen *negatively*. So, for example, Japan's *Jodo-shinsyu* (Pure Land) Buddhism emphasizes *Musi*, "no-self," as one of the goals of the religious practitioner. One way to achieve *Musi* – to purify and then eliminate one's "private mind" – is to voluntarily share one's most intimate and shameful secrets. That is: what is seen in the West as a core, *positive* reality, with which are affiliated *positive* rights to privacy, is seen in the case of Japanese Pure Land Buddhism as a deceptive illusion, whose "privacy" is best – and voluntarily – overturned for the sake of genuine salvation (Nakada and Tamura 2005).

In the light of these radical differences, we should expect equally radical differences with regard to conceptions of data privacy protection. To be sure, these differences clearly exist: but at the same time, at least limited privacy rights and data privacy protections are emerging in Thailand, China, and Hong Kong – but justified, as we might imagine, on entirely different grounds than we find in the West. Briefly, at least limited data privacy protection is justified primarily on *economic* grounds: in ethical terms, such protection is seen as an instrumental good – one that contributes towards *economic* development as online commerce becomes increasingly important in these economies. In this way, we again see a pluralistic, *pros hen* structure emerge. Privacy and data privacy protection serve as the ethical focal points towards which both Western and

Eastern societies orient their laws – but each society *understands* and *interprets* the meaning of privacy and data privacy protection in ways that fit their specific context, traditions, values, norms, practices, etc. (Ess 2006a).³⁰

D. Hongladarom: Theravadan and Mahayana Buddhist approaches to privacy vis-à-vis modern Western notions of individual privacy

More recently, Soraj Hongladarom has taken up these apparent conflicts between Western and Eastern conceptions, with particular attention to the Buddhist traditions (Theravadan and Mahayanan) that have deeply shaped and defined Thai society (2007). To begin with, he extends our understanding of the contrasts between Western and Eastern views by taking up Nagasena's refutation of the *psyche* – the Greek conception of a unifying "soul" or self that synthesizes diverse components of sense-knowledge (sight, taste, touch, hearing, smell) into a unitary experience (Hongladarom 2007, 116ff.). While this appears to radicalize the contrast between Western and Eastern views, Hongladarom goes on to point out that Western traditions *also* include more relational or communitarian approaches that somewhat offset the "peach-pit" notion with an emphasis on one's relationships with the larger community. As we have seen, these approaches include Aristotle's virtue ethics, feminist ethics and ethics of care, environmental ethics, and, finally communitarian traditions since Hegel (cf. Tu 1999; Froehlich 2004). At the same time, Hongladarom shows how Nagarjuna develops a distinction between empirical-conventional reality, on the one hand, and ultimate reality on the other: given this distinction, Buddhism is perfectly capable of endorsing and taking the individual self as real – at the empirical-conventional level. Indeed, the Buddhist striving towards Enlightenment (*nirvana*, the "blown-out" self) *requires* individual effort and responsibility – manifest, e.g., in the injunction to cultivate compassion towards others (Hongladarom 2007, 118). For Hongladarom, this means that Buddhist societies such as Thailand have a *prima facie* reason to protect the privacy of such (empiri-

³⁰ Kei Hiruta has developed an extensive analysis and helpful critiques and suggestions to my earlier work on pluralism (Hiruta 2006). I've attempted to acknowledge the saliency of those critiques in the development of this paper – primarily, by shifting away from the political justifications that he finds problematic.

cal-conventional) individuals, especially as part of a movement towards establishing a more democratic society in Thailand. That is, the Buddhist injunction, in which each person is responsible for his or her own liberation, thereby sustains notions of equality and democracy that are at least closely similar to those developed and endorsed in Western societies.

In my terms, there emerges here yet again an interpretive pluralism regarding conceptions of the self and privacy as *pros hen*, ethical focal points, as these are interpreted and understood across the considerable divides between East and West. To say it slightly differently: the irreducible differences marking the contrast between modern Western notions of the self (as an ultimate reality whose privacy is a positive good) and Buddhist conceptions of the self (as an empirical-conventional reality whose privacy requires at least a modest level of governmental protection, especially for the sake of democratic polity) can be seen as diverse *interpretations* or *understandings* of notions of self and privacy – and thereby as conceptions that may nonetheless resonate or harmonize with one another. Taken together with the previous examples of privacy East-West, the Thai example again marks out in *praxis* as well as in theory the possibility of a *global ICE* – one constituted by shared ethical focal points (i.e., shared norms, values, etc.) that are nonetheless articulated and instantiated in diverse ways as these focal points are interpreted and applied in distinctive cultural contexts.

Indeed, the resonance emerging here compliments similar alignments or harmonies across East and West, such as the one pointed out by Theptawee Chokvasin between Buddhist versions of autonomy and Kantian and Habermasian notions (Chokvasin 2007, 78f.). For our part, Hongladarom and I have suggested that this harmony further extends between the Buddhist notion of *Attasammapanidhi*, of ethical self-direction and self-adjustment, and Plato's model of the *cybernetes*, the pilot or steersman who symbolizes a similar capacity for ethical self-correction (Hongladarom & Ess 2007, xix). Finally, Hongladarom points out that Buddhist ethics closely resemble Western-style virtue ethics and the pragmatic ethics of Richard Rorty. Hongladarom's analysis thus identifies and reinforces a further deep resonance between Western and Eastern thought – namely, between Western virtue ethics (whether in Socratic, Aristotelian, and/or contemporary feminist forms) and the ethical systems of Confucian thought and Buddhism.

Finally, these various structures of pluralism – precisely as they require the interpretation or application of a shared focal norm or value within the diverse contexts established by distinctive cultural values, traditions, practices, etc. – distinguish our approach from Rawls' notion of "overlapping consensus" in a political liberalism (2005). For Rawls, we may arrive at such a consensus by bracketing our diverse metaphysical beliefs – leaving them at home, so to speak – and engaging with our fellow citizens simply on the basis of what is politically expedient. Moreover, Rawls' account focuses on what takes place *within* a liberal state. By contrast, our conception of ethical pluralism extends globally and includes states and regimes that are clearly *not* liberal or democratic. Despite these radical cultural and political differences, however, we believe that the sorts of focal, *pros hen* pluralism that we have articulated make possible ethical alignments – indeed, *resonances* and *harmonies* – between diverse cultural traditions and ethical systems. In such pluralistic resonances or harmonies, as we have put it most recently,

"these diverse systems and traditions do not have to leave their metaphysics at home; on the contrary, they bring their specific backgrounds to the table of philosophical dialogue and debate and search for ways in which their systems could or could not be aligned with the others. In the case of personal privacy, this would mean that the Buddhist tradition and the Western secular tradition compare and contrast their similarities and differences without (echoing Michael Walzer, 1994) each leaving its thick backgrounds and operating with its fellows on thin air."³¹

IV. Emerging Rights / Duties?

In light of the theoretical foundations and practical expressions of *pros hen* or focal pluralism in an emerging and genuinely global ICE, what conclusions can we draw regarding the rights and obligations that may emerge therein "for the rest of us," as we take up ICTs more and more into the fabric of our lives?

I can see three layers of responses to this question.

³¹ Hongladarom, Soraj and Ess, Charles: Introduction. xv

A. Conflict arising out of irreducible differences is inevitable and not always resolvable

The *possibility* of pluralistic resolutions to ethical conflicts emerging from the irreducible differences defining individual and cultural identities is just that – *possibility*. While we've now seen multiple instances which realize the possibility of resolving ethical differences within the resonance or harmony articulated by a *pros hen*, interpretive pluralism – manifestly, not all such conflicts will allow for such resolutions. So, for example, Dan Burk (2007) documents the intractable differences between U.S. and European Union approaches to copyright – with the U.S., *property-oriented* approach currently dominating over the E.U., *author-oriented* approach. Similarly, Pirongrong Ramasoota Ranand suggests that however much Buddhist approaches to privacy may resonate with Western ones being imported into Thailand – the tradition and affiliated customs of the "surveillance state" may succeed in keeping "privacy" an interesting idea, but not a right articulated and defended in law (2007).

But, there is, to paraphrase Spivak (1999), no reason to throw up our hands – or to acquiesce to ethical relativism and fragmentation (including reinforcement of local identities through violence). Rather, there are at least two ways in which an emerging ICE can respond to the irreducible differences defining distinctive cultural identities.

B. Minimal requirements – shared commonalities

As we have seen, it is possible to begin our encounters with one another globally via ICTs with the reasonable and understandable search for commonalities, including a set of minimal rights and obligations towards one another, justified at least by shared economic interests (what Søraker has helpfully identified as pragmatic arguments – 2007).

So far as I can tell, what emerges from this approach is what Westerners will recognize as familiar but primarily *negative* obligations: don't violate another person's privacy, right to intellectual property, etc. – by not sharing passwords and/or hacking where you don't belong, copying illegally, etc. That is, as Henry Rosemont, Jr., has made very clear – like first-generation rights to life, liberty, and pursuit of property, I can respect your rights by largely leaving you alone (Rosemont 2006).

To be sure, the terms "minimal" and "negative" may sound unnecessarily derogatory here: hence, let me stress that arriving at – and following out – global

agreements of these sorts would represent an enormous ethical advance forward in the emerging global ICE. Nonetheless, such minimal rights and negative obligations are only part of the story ...

C. Maximal requirements: meeting "the Other" online

More broadly, as I tried to suggest by posing the question towards the end of the opening section (I.G) – our emerging and global ICE depends very much on how far we want / will / need / ought to go in meeting "the Other" online. Presuming that we seek to meet with and engage "the Other" in a more robust way – i.e., one defined by our willingness to acknowledge not only commonalities but also the irreducible differences that define our individual and cultural identities – we are apparently required to move to a more complex mode of thinking and behaving, one shaped precisely by the structures of pluralism and harmony, as these hold together both similarity and irreducible difference.³²

Given our desire and/or need to move in these more robust directions, we can perhaps draw at least initial guidance from the following considerations.

1. Cross-cultural communication ethics?

While much is known about cross-cultural communication offline – astonishingly little is known about cross-cultural communication online, including the centrally important task of "building bridges" across

³² Thomas Herdin, Wolfgang Hofkirchner, and Ursula Maier-Rabler make this same point in developing their model of cultural connection and difference: "Cultural thinking that reconciles the one and the many is achievable only on the basis of an integration and differentiation way of thinking. It integrates the differences of the manifold cultural identities and differentiates the common as well" (2007, 65).

They see such structures of connection and difference at work in Welsch's notion of *transculturalism* (1999), Robertson's well-known notion of *glocalization* (1999), and in the cultural hybridization represented in the "... *new mestizaje* (a term coined by John Francis Burke in "Reconciling Cultural Diversity With a Democratic Community: Mestizaje as Opposed to the Usual Suspects" in Wieviorka (2003)...." (Herdin, Hofkirchner & Maier-Rabler 2007, 65).

cultures.³³ To be sure, we can learn lessons from successful efforts at such bridge-building. As we have seen, Bernd Carsten Stahl, for example, emphasizes the importance of *critical reflexivity*, a constant reflection on our own basic beliefs, views, practices, etc., as these differ from those of "the Other," if we are to avoid naïve ethnocentrism (2006). More broadly, two of the most important factors of successful cross-cultural communication that sustains the irreducible differences defining individual and cultural identities are *trust* and the ability to recognize and effectively respond to the linguistic *ambiguity* that thereby allows for a *pluralistic* understanding of basic terms and norms as holding different interpretations or applications in diverse cultures (Ess and Thorseth, 2006).

Such pluralism allows precisely for a structure of both shared commonalities and irreducibly different understandings and practices that emerge from our distinctive cultures: thereby, pluralism and ambiguity are necessary conditions for cross-cultural encounters with one another that preserve these irreducible differences as part of the *resonance* that describes such engagements. Unfortunately, these dimensions of trust, ambiguity, and resonance may be *hindered* rather than fostered by online environ-

ments (cf. Søraker 2006; Grodzinsky & Tavani 2007).

Moreover, these elements of human communication finally require the now familiar work of *judgment* – beginning with judgments as to how far or close one's meaning is understood by "the Other," and in turn, how far one understands the meanings of the Other: even though we may use the same word or term, their differences in our diverse cultural settings require such careful attention and judgment to determine whether or not we are sliding into equivocation and mis-understanding. But: earning and sustaining trust, successfully recognizing and comfortably negotiating linguistic ambiguities, and utilizing the needed judgment in establishing and sustaining *resonant* relationships that preserve our irreducible differences – these capacities are not easily captured in analytical frameworks, much less taught in any formal way. They can, of course, be learned, as humans have always learned them, through example and experience with *embodied* teachers – but this again means that the most important elements of successful cross-cultural communication may not be best learned in the *disembodied* context of contemporary online venues (cf. Dreyfus, 2001).

2. Social justice and positive duties: information justice and the cultivation of character?

Any number of observers have argued that the rights-based approaches of the West will not work well in "other" cultures. Such approaches, as we have now seen in multiple ways, emphasize the autonomous individual – apart from his or her connection with the larger community. Such an approach is deeply out of sync with the basic assumptions regarding the individual as a *relational being* first and foremost that shape the more communitarian / collectively-oriented cultures and traditions of Africa, indigenous peoples, those countries shaped by Confucian and Buddhist traditions, etc. In particular, Maja van der Velden concludes her chapter in our anthology precisely by pointing out that "Designing so as not to Hurt Others" means going beyond rights-based approaches (2007, 83).

For his part, Hongladarom argues that the more radical Buddhist solution to the problem of protecting privacy is not simply to erect laws and create technological safeguards: it is rather to attack the root cause of our motivations to *violate* privacy in the first place – namely, egoism and its affiliated greed (2007, 120f.) Similarly, Lynette Kvasny (2007) has argued that if we in the United States genuinely

³³ To my knowledge, the most important effort in this direction is the extensive annotated bibliography developed by Leah Macfadyen and her colleagues (Macfadyen, Roche, & Doff 2004). So far as I'm aware, however, no one has developed a comprehensive, systematic, and theoretically grounded set of guidelines and best practices for cross-cultural communication online that would match the extensive literature on offline cross-cultural communication. In Ess (2006b) I attempt to summarize such guidelines on the basis of recent work from the biennial conferences on "Cultural Attitudes towards Technology and Communication" (CATaC) – but these guidelines are oriented exclusively towards website design. In the conclusion here, I attempt to offer some general guidelines that would extend to other online venues of cross-cultural communication: but while these guidelines and suggestions, I hope, are helpful, much clearly remains to be done to develop a literature for online cross-cultural communication that begins to compare with the detail and scope of the literature for offline cross-cultural communication.

seek to overcome the digital divide – as it affects, for example, African American communities – we must come to grips with the evil of systemic racism: and such racism, she argues, is embedded in the very statistics and demographic categories used by otherwise well-meaning academics and policy-makers in attempting to document the digital divide for the sake of overcoming it.

Indeed, one of the contributors to our volume on East-West Information Ethics – a Thai computer scientist – has argued that in the face of the social and familial fragmentation effected by ICTs, what is needed to raise a new generation of young people who will use these technologies in ethical rather than harmful ways is a restoration of *religion* as an environmental framework (Bhattarakosol, 2007).

These prescriptions, no doubt, will sound odd to Western ears – in part, I suggest, because our mainstream ethical traditions have tended to separate ethics from religion first of all (as they must in the modern Western liberal state), and secondly because our ethical systems tend to emphasize following a minimum of rules that articulate obligations to others, precisely in the name of preserving individual (and largely *negative*) freedoms. Nonetheless, a global ICE that seeks to move beyond shared commonalities (and comparatively negative) requirements will apparently call upon us to take up a range of *positive* obligations and duties, as these are required if we are to preserve irreducible differences while simultaneously engaging in dialogue with "the Other."

Happily, these *positive* obligations and duties are not entirely foreign to the Western traditions. Especially ancient and contemporary feminist virtue ethics and ethics of care move us in these directions, as do the deontological ethics of Kant and others. But let me close by suggesting that, at the risk of violating copyright and trademark – a major U.S. software company has asked the right *ethical* question when it comes to ICTs:

where do you want to go today?

As we work – individually and collectively, and especially cross-culturally to develop a global ICE, part of our response, as I hope I've shown with some clarity, depends on how we respond to a second question:

how far am I prepared to go today – i.e., how well am I prepared to take up relationships with "the Other" that entail not simply

comparatively straightforward commonalities and pragmatic agreements,

but further entail the difficult efforts to understand and negotiate ambiguity and irreducible difference, precisely in the name of preserving individual and cultural differences –

perhaps, as Paterson argues, even preserving the environment

where such negotiations will require the skills – learned only slowly and over a lifetime – of judgment,

and the cultivation of compassion and care?

Again, the cultivation of such virtues is not entirely alien to Western traditions: on the contrary, I have argued elsewhere, echoing in part the work of Cees Hamelink (2000), for the necessity of an *education* that fosters Socratic critical thinking and moral autonomy, as key to moving beyond one's own culture towards a more encompassing understanding of a wide diversity of cultures – a movement captured in Plato's Allegory of the Cave, and further exemplified in our notions of Renaissance women and men who attain multiple cultural, linguistic, and communicative fluencies that allow them to comfortably live and work with "Others" around the globe. *Contra* "cultural tourists" and "cultural consumers" whose ethnocentrism may only be reinforced rather than challenged by their online engagements, such a Socratic-Renaissance education would further foster, following Habermas and feminism, an empathic *perspective-taking* and *solidarity* with one's dialogical partners – including our sister and fellow *cosmo-politans* (world citizens).³⁴ Of course, such education aims towards the development of *phronesis*, the practical wisdom required to negotiate the multiple contexts of ethics and politics, with the goal of achieving *eudaimonia*, human contentment, and harmony in one's own society and the larger world (Ess 2004, 164). And, in terms that have emerged here, such an education would further highlight the importance of moving beyond pragmatic commonalities and shared economic

³⁴ That Habermas may be salient in an African context is in fact argued by conference participant Azelarabe Lahkim Bennani, in his "The public sphere's metamorphosis. The triangular relation between the n.g.O, State, and globalization."

interests to the pluralism of the *cybernetes*, the one who is able to discern what ethical course to pursue in a specific context – including the often radically diverse contexts of irreducibly distinct cultures – and who is able to correct her errors when they are made. Resonant with Socratic, Aristotelian, and feminist virtue ethics, such an education would further seek to foster the virtues of compassion and care. Such compassion and care, after all, are essential to healing the ruptures that follow upon the mistakes we will inevitably make, especially in our first efforts to understand, work, and live with "the Other" – and most especially as we venture out into new linguistic and cultural settings. Such compassion and care, finally, are essential to building and sustaining the *trust* essential to all human interactions.

While such an education for exemplary persons (to use the Confucian phrase) may be desirable – it is clearly a rare privilege, if not still largely a utopian ideal. Hence, I do not want to argue that everyone must take this second step. To echo Judith Jarvis Thomson's famous distinction between "minimally decent" and "Good Samaritan" ethics (1974), the latter requirements – at least here and now – strike me as morally admirable (what ethicists like to call *supererogatory*) values and acts, but not morally *necessary* or required. That is, while we can establish such duties and goals as exemplary, we cannot *require* them of everyone – first of all, because to fulfill these duties may exceed the resources and opportunities of many persons, especially as they depend on an education and experience with "the Other" (such as living for an extended period of time outside one's own country) that remain luxuries rather than everyday practice for the majority of the world's peoples.

That said, ICTs continue their apparently inexorable expansion throughout the world – meaning, they are taken up by more and more people in diverse cultural contexts and settings: it seems certain that if we are to avoid a homogenous world culture – what Benjamin Barber famously called "McWorld" (1995)³⁵ – more and more of us will need to take up

³⁵ Of course, a central focus during our conference was precisely the ways in which Africa and African cultures in particular are profoundly threatened by the homogenizing forces of globalization. This point was made with especial force by our colleagues in Theme Group 8, Ismail Abdullahi (Cultural Diversity, globalization, and ethical issues), Anthony Löwstedt

the moral postures and communication skills of the Good Samaritan *cybernetes*, rather than simply pursuing commonalities, pragmatics, and economic self-interest. Perhaps the dramatic scope and speed of cross-cultural encounters made possible precisely by ICTs might help more and more people recognize the need for such exemplary ethics and cultivation of character: but such hopes, of course, must recognize the multiple ways in which most of our online engagements rather foster the minimal obligations entailed by seeking out simply shared interests and pragmatic commonalities, especially as these engagements are oriented towards easy consumption.

Where do you want to go today?

thus requires us to further ask:

Whom do you want to meet today – "the Other" as s/he is like you, and/or "the Other" as s/he is both similar to you and irreducibly different?

And, finally, if the last,

what *positive* ethical *virtues* – practices, habits, postures, attitudes, etc. – must we cultivate in order to become the sort of *person* who can indeed thus meet "the Other" *qua* Other?

Or, to recall Nishida:

what virtues must we practice, what sort of *person* must you become, in order to be capable of knowing "the Other" in a *resonant* meeting and response that conjoins commonalities with our acknowledging, respecting, and fostering the irreducible differences that distinguish us (as individuals and as members of diverse cultures) from one another?

I close by noting that these sorts of questions – along with the emphasis on *judgment*, pluralism, and *harmony* in the larger community that they implicate – may well *resonate* in African contexts. As we have seen, such judgment and pluralism are found in Islam (Eickelman 2003) – and hence should be no strangers to the African countries and traditions deeply shaped by Islam. Moreover, we have

(Cultural Extinction as an Aspect of Current Globalization Trends), and Chibueze C. Udeani (Cultural Diversity and Globalisation).

further seen that African thought more broadly stresses that persons are "beings under construction": in the terms of both Western virtue ethics and Confucian thought, it takes *practice* to become a more complete human being. By the same token, this *practice* is oriented towards the *harmony* of the larger community – again, a foundational understanding in Western virtue ethics and Confucian thought that appears to be perfectly resonant with African thought.³⁶

These strong resonances between the ethical pluralism I have traced out in both Western and Asian traditions, on the one hand, and the broad outlines of African traditions and thought, on the other, suggest – at least as a starting point – that this ethical pluralism may likewise succeed in the African context both to foster the development of shared ethical norms in the domain of Information and Computing Ethics and to sustain and foster the irreducible differences that define both individuals and cultures in Africa. Happily, I can report that much in our presentations and dialogues during the first African Information Ethics conference – including the discussions and findings of our Theme Group on "Cultural Diversity and Development" – provided at least initial confirmation of this hypothesis.

But of course, such pluralism requires precisely the dialogical participation of those who themselves stand in the cultural contexts and histories of Africa in any development of a *pluralistic* global ICE that would seek to discern and articulate shared norms that are, at the same time, interpreted, understood, and applied in diverse ways by diverse individuals and communities – i.e., in ways that precisely and directly reflect, in this case, *African* values, traditions, histories, practices, etc. Given the scope of this ethical pluralism across a wide range of global and radically diverse cultures, and given the strong resonances between African traditions and the other traditions in which pluralism is now well documented – it seems very probable that this pluralistic approach will succeed in the African context as well. First of all, such pluralism would forbid both homogenization and colonization of the sort that has devastated Africa (as well as much of the rest of the world) for too much of her history. But as we have learned in other contexts previously – we will only know if such a global, pluralistic ICE will "work" in Africa as our African colleagues seek to take it up in

their own distinctive ways, as one approach among many in their development of an African Information Ethics.

References

- Abdullahi, Ismail. (2007). *Cultural diversity, globalization, and ethical issues*. African Information Ethics Conference: Ethical Challenges in the Information Age. Pretoria, 5-7 February 2007. IRIE document.
- ACM (Association for Computing Machinery). (1992). *Code of Ethics*. <<http://www.acm.org/constitution/code.html>>
- Ames, Roger, and Rosemont, Henry. (1998). *The Analects of Confucius: A Philosophical Translation*. New York: Ballantine Books.
- Annis, Joseph. (2006). *Reports Of Council On Medical Service*. (American Medical Association). Retrieved April 8, 2007, from <http://www.ama-assn.org/ama1/pub/upload/mm/38/a-06cms.pdf>
- Aquinas, Thomas. (1969). *Summa Theologiae. Vol. 1: The Existence of God: Part One: Questions 1-13*. Garden City, NY: Image Books.
- Aristotle. (1968). *Metaphysics I-IX (Vol XVII, Aristotle in twenty-three volumes)*. H. Tredennick, trans. Cambridge, Mass: Harvard University Press.
- Aristotle. (1960). *Posterior Analytics, Topica*. H. Tredennick & E. S. Forster, trans. Cambridge, Mass: Harvard University Press.
- Barber, Benjamin. (1995). *Jihad vs. McWorld: How Globalism and Tribalism Are Reshaping the World*. New York: Ballantine Books.
- BBC News. (2006). *Fifteen years of the web*. Retrieved April 8, 2007, from <http://news.bbc.co.uk/2/hi/technology/5243862.stm>
- Bennani, Azelarabe Lahkim. (2007). *The public sphere's metamorphosis. The triangular relation between the n.g.O., State, and globalization*. African Information Ethics Conference: Ethical Challenges in the Information Age. Pretoria, 5-7 February 2007.
- Berman, B. J. (1992). *The state, computers, and African development: The information non-revolution*. In S. Grant Lewis & J. Samoff (Eds.), *Microcomputers in African development: Critical perspectives*, 213-229. Boulder, CO: Westview Press.
- Bhattachakosol, Pattarasinee. (2007). *Interactions among Thai Culture, ICT, and IT Ethics*. In S. Hongladarom and C. Ess (eds.), *Information*

³⁶ Paterson, Barbara: We Cannot Eat Data. 157f. Cf. Capurro (2007) on *ubuntu*.

- Technology Ethics: Cultural Perspectives*, 138-152. Hershey, PA: Idea Group Reference.
- Bourdieu, Pierre. (1977). *Outline of a Theory of Practice*. Trans. R. Nice. Cambridge: Cambridge University Press.
- Boss, Judith. (2005). *Analyzing Moral Issues*, 3rd ed. Boston: McGraw-Hill.
- Burk, Dan. (2007). *Privacy and Property in the Global Datasphere*. In S. Hongladarom and C. Ess (eds.), *Information Technology Ethics: Cultural Perspectives*, 94-107. Hershey, PA: Idea Group Reference.
- Burrell, David. (1973). *Analogy and Philosophical Language*. New Haven: Yale University Press.
- Bynum, Terrell Ward. (2000, Summer). *A very short history of computer ethics*. Newsletter of the American Philosophical Association on Philosophy and Computing. Retrieved April 8, 2007, from http://www.southernct.edu/organizations/rccs/resources/research/introduction/bynum_shrt_hist.html
- Bynum, Terrell Ward. (2001). □Computer Ethics: Basic Concepts and Historical Overview□, *Stanford Encyclopedia of Philosophy*. Retrieved April 9, 2007, from <http://plato.stanford.edu/entries/ethics-computer/>
- Bynum, Terrell Ward. (2006). *A Copernican revolution in ethics?* In G. Dodig-Crnkovic & S. Stuart (Eds.), *Computing, philosophy, and cognitive science*. Newcastle-upon-Tyne, UK: Cambridge Scholars Press.
- Bynum, Terrell Ward, & Rogerson, Simon. (1996). *Introduction and overview: Global information ethics*. *Science and Engineering Ethics*, 2, 131-136.
- Terrell Ward Bynum & Simon Rogerson (Eds.). (2004). *Computer Ethics and Professional Responsibility*. Malden, Mass.: Blackwell Publishing
- Capurro, Rafael. (1990). *Towards an Information Ecology*. Contribution to the NORDINFO International seminar "Information and Quality", Royal School of Librarianship, Copenhagen, 23-25 August 1989. *Proceedings: I. Wormell (ed.), Information Quality. Definitions and Dimensions* (London, Taylor Graham), pp. 122-139. Available online: <http://www.capurro.de/nordinf.htm>
- Capurro, Rafael. (2005). *Privacy: An Intercultural Perspective*. *Ethics and Information Technology* 7 (1: March): 37-47.
- Capurro, Rafael. (2006). *Intercultural Information Ethics*. In Rafael Capurro, Johannes Frühbauer, Thomas Hausmanninger (Eds.): *Localizing the Internet. Ethical Issues in Intercultural Perspective*. ICIE Series Vol. 4, Munich: Fink. Available online <<http://www.capurro.de/iie.html>>
- Capurro, Rafael. (2007). *Information Ethics for and from Africa*. Keynote address to the Africa Information Ethics Conference, Pretoria (South Africa), 5 February 2007. Retrieved April 8, 2007, from <http://www.capurro.de/africa.html>
- Chan, Joseph. (2003). *Confucian Attitudes towards Ethical Pluralism*. In Richard Madsen and Tracy B. Strong (eds.), *The Many and the One: Religious and Secular Perspectives on Ethical Pluralism in the Modern World*, 129-153. Princeton: Princeton University Press.
- Chokvasin, Theptawee. (2007). *Mobile Phone and Autonomy*. In S. Hongladarom and C. Ess (eds.), *Information Technology Ethics: Cultural Perspectives*, 68-80. Hershey, PA: Idea Group Reference.
- Danet, Brenda, and Herring, Susan. (2003). *Introduction: The Multilingual Internet*. *Journal of Computer-Mediated Communication* 9 (1). Retrieved April 9, 2007, from <http://jcmc.indiana.edu/vol9/issue1/intro.html>
- Döring, Ole. (2003). *China's struggle for practical regulations in medical ethics*. *Nature Reviews | Genetics* 4 (March), 233-239.
- Dreyfus, Hubert. 2001. *On the Internet*. New York: Routledge.
- Eickelman, D. F. (2003). *Islam and Ethical Pluralism*. In Madsen and Strong (eds.), *The Many and the One: Religious and Secular Perspectives on Ethical Pluralism in the Modern World*, pp. 161-180. Princeton and Oxford: Princeton University Press.
- Elberfeld, Rolf. (2002) *Resonanz als Grundmotiv ostasiatischer Ethik [Resonance as a Fundamental Motif of East Asian Ethics]*, in Rolf Elberfeld and Günter Wohlfart (eds.), *Komparative Ethik: Das gute Leben zwischen den Kulturen [Comparative Ethics: The Good Life between Cultures]*, 131-141. Cologne: Edition Chora.
- Ess, Charles. (2004). *Computer-Mediated Colonization, the Renaissance, and Educational Imperatives for an Intercultural Global Village*. In Robert Cavalier (ed.), *The Internet and Our Moral Lives*, 161-193. Albany, NY: SUNY Press.
- Ess, Charles. (2005). *What is Information Ethics?* <<http://www.drury.edu/ess/CAP04/cap04infoethics.html>>
- Ess, Charles. (2006a). *Ethical Pluralism and Global Information Ethics*. In Luciano Floridi and Julian

- Savulescu (eds.), *"Information Ethics: Agents, Artifacts and New Cultural Perspectives,"* a special issue of *Ethics and Information Technology* 8 (4: November), 215 – 226.
- Ess, Charles. (2006b). *From Computer-Mediated Colonization to Culturally-Aware ICT Usage and Design.* In P. Zaphiris and S. Kurniawan (eds.), *Advances in Universal Web Design and Evaluation: Research, Trends and Opportunities*, 178-197. Hershey, PA: Idea Publishing, 2006.
- Ess, Charles. (2007a). *Cross-cultural perspectives on religion and Computer-mediated communication. Introduction to special issue on "Religion on the Internet: Cross-Cultural Approaches to Conflict, Dialogue, and Transformation,"* *Journal of Computer-Mediated Communication* 12 (3 – April). Retrieved from <http://jcmc.indiana.edu/vol12/issue3/ess.html>
- Ess, Charles. (2007b). *Universal Information Ethics? Ethical Pluralism and Social Justice.* In Emma Rooksby and John Weckert (eds.), *Information Technology and Social Justice*, 69-92. Hershey, PA: Idea.
- Ess, Charles, and Thorseth, May. (2006). *Neither relativism nor imperialism: Theories and practices for a global information ethics,* *Ethics and Information Technology* 8 (3), 91-95.
- Floridi, Luciano. (2006). *Four Challenges for a Theory of Informational Privacy, Ethics and Information Technology*, 8(3), 109-119. Available online: <http://www.philosophyofinformation.net/>
- Froehlich, Thomas J. (2004). *Feminism and Intercultural Information,* *International Journal of Information Ethics* Vol. 2 (11/2004). Available online: www.i-r-i-e.net/inhalt/002/ijie_002_12_froehlich.pdf
- Galston, W. A. (2003). *Liberal Egalitarian Attitudes toward Ethical Pluralism.* In Madsen and Strong (eds.), *The Many and the One: Religious and Secular Perspectives on Ethical Pluralism in the Modern World*, pp. 25-41. Princeton and Oxford: Princeton University Press.
- Granoff, Jonathan. 2003. *Peace and Security.* Speech presented at the 4th World Summit of Nobel Peace Laureates, Rome, November 28, 2003. Reprinted in Boss (2005), 696-699.
- Gòmiak-Kocikowska, K. (1996). *The computer revolution and the problem of global ethics.* *Science and Engineering Ethics*, 2, 177-190.
- Grodzinsky, Frances S. and Tavani, Herman T. (2007) *Online Communities, Democratic Ideals, and the Digital Divide.* In S. Hongladarom & C. Ess (eds.), *Information Technology Ethics: Cultural Perspectives*, 20-30. Hershey, PA: Idea Group Reference.
- GVU (Graphic, Visualization, and Usability Center, Georgia Technological University). (1998). *GVU's 10th WWW User Survey.* Retrieved April 8, 2007, from http://www.gvu.gatech.edu/user_surveys/survey-1998-10/
- Haldane, John H. 2003. *Natural Law and Ethical Pluralism.* In R. Madsen and T. B. Strong (eds.), *The Many and the One: Religious and Secular Perspectives on Ethical Pluralism in the Modern World*, 89-114. Princeton: Princeton University Press.
- Hamelink, Cess. 2000. *The Ethics of Cyberspace.* London: Sage.
- Hauptman, Robert (Ed.) (1991). *Ethics and the Dissemination of Information.* *Library Trends* 40 (2) 199-375.
- Herdin, Thomas, Hofkirchner, Wolfgang, and Maier-Rabler, Ursula. (2007). *Culture and Technology: A Mutual-Shaping Approach.* In S. Hongladarom & C. Ess (eds.), *Information Technology Ethics: Cultural Perspectives*, 54-67. Hershey, PA: Idea Group Reference.
- Hill, Benjamin M. (2003). *Software(,) politics and indymedia.* Retrieved April 9, 2007, from http://mako.cc/writing/mute-indymedia_software.html
- Hinman, Lawrence. (1998). *Ethics: A Pluralistic Approach to Moral Theory.* Fort Worth: Harcourt, Brace.
- Hinman, Lawrence. (2004). *Virtual Virtues: Reflections on Academic Integrity in the Age of the Internet.* In Robert Cavalier (ed.), *The Internet and Our Moral Lives*, 49-68. Albany, NY: SUNY Press.
- Hiruta, Kei. (2006). *What pluralism, why pluralism, and how? A response to Charles Ess.* *Ethics and Information Technology* 8 (4: November), 227-236.
- Hjarvard, Stig. 2002. *Mediated Encounters. An Essay on the Role of Communication Media in the Creation of Trust in the 'Global Metropolis.'* In Gitte Stald and Thomas Tufte (eds.), *Global Encounters: Media and Cultural Transformation*, 69-84. Luton: University of Luton Press.
- Hongladarom, Soraj. (1998). *Hongladarom, Soraj (1988). Global Culture, local cultures and the Internet: the Thai example,* in C. Ess and F. Sudweeks (eds.), *Cultural Attitudes toward Technology and Communication / Comportement cul-*

- turel en verse le progres technique et la communication. *The Electronic Journal of Communication / La Revue Electronique de Communication*, vol. 8, nos. 3 & 4. <www.cios.org/www.ejc/v8n398.htm>
- Hongladarom, Soraj. (2000) 'Negotiating the global and the local: How Thai culture co-opts the Internet'. *First Monday* 5(8) <http://firstmonday.org/issues/issue5_8/hongladarom/index.html>.
- Hongladarom, Soraj. (2001) 'Global culture, local cultures and the Internet: the Thai example', in C. Ess (ed.) *Culture, Technology, Communication: Towards an Intercultural Global Village*, 307-24. Albany: State University of New York Press.
- Hongladarom, Soraj. (2007). *Analysis and Justification of Privacy from a Buddhist Perspective*. In S. Hongladarom and C. Ess (eds.), *Information Technology Ethics: Cultural Perspectives*, 108-122. Hershey, PA: Idea Group Reference.
- Hongladarom, Soraj and Ess, Charles. (2007). Introduction. In S. Hongladarom and C. Ess (eds.), *Information Technology Ethics: Cultural Perspectives*, xi-xxxiii. Hershey, PA: Idea Group Reference.
- Internet Systems Consortium. (2007). *Internet Domain Survey, January, 2007*. Retrieved April 8, 2007, from <http://www.isc.org/index.pl?/ops/ds/>
- Internet World Stats. (2007). *INTERNET USAGE STATISTICS - The Big Picture: World Internet Users and Population Stats*. Retrieved April 8, 2007, from <http://www.internetworldstats.com/stats.htm>
- Jaeger, Werner. (1934). *Aristotle: Fundamentals of the History of His Development*. London: Oxford University Press.
- Johnson, D. G. (1999). *Computer ethics in the 21st century*. In *Proceedings of ETHICOMP99, Rome, Italy*.
- Johnson, Deborah. (2001). *Computer Ethics*, 3rd ed. Prentice-Hall, Upper Saddle River, New Jersey.
- Kaddu, Sarah. *Information and Communication Technologies' (ICTS) Contribution to the Provision of Agricultural Information to the Rural Women in Selected Districts of Uganda*. Doctoral dissertation, Makerere University, Kampala, Uganda.
- Löwstedt, Anthony. (2007). *Cultural Extinction as an Aspect of Current Globalization Trends*. African Information Ethics Conference: Ethical Challenges in the Information Age. Pretoria, 5-7 February 2007.
- Lü, Yao-huai. (2005). *Privacy and data privacy issues in contemporary China*. *Ethics and Information Technology*, 7, 7-15.
- Macfadyen, L. P., Roche, J. and Doff, S. 2004. *Communicating across Cultures in Cyberspace: A Bibliographical Review of Online Intercultural Communication*. Hamburg: Lit-Verlag.
- Menkiti, I. A. (1979). *Person and community in African traditional thought*. In R. A. Wright (Ed.), *African philosophy*, 157-168. New York: New York University Press.
- Moor, James. (1985). *What is computer ethics?* In T. W. Bynum (Ed.), *Computers and ethics*, 266-274. Oxford: Blackwell.
- Moor, James. (1998). *Reason, relativity, and responsibility in computer ethics*. *Computers and Society*, 28, 14-21.
- Moor, James. (2002). *Toward a theory of privacy in the information age*. In R. M. Baird, R. Ramsower, & S. E. Rosenbaum (Eds.), *Cyberethics: Social & moral issues in the computer age* (pp. 200-212). Amherst, NY: Prometheus Books.
- Moore, Adam. (2003). *Privacy: Its meaning and value*. *American Philosophical Quarterly*, 40(3), 215-227.
- Mosala, I.J. *Ethics and information exchange between diverse cultures*. Address, African Information Ethics Conference, 5-7 February 2007. Pretoria, South Africa.
- Nakada, Makoto, & Tamura, Takanori. (2005). *Japanese conceptions of privacy: An intercultural perspective*. *Ethics and Information Technology*, 7, 27-36.
- Newman, Amy. (2007). *April 2007 Netcraft Survey, a New Player Emerges*. (ServerWatch). Retrieved April 8, 2007, from <http://www.serverwatch.com/stats/article.php/3670036>
- Paterson, Barbara. (2007). "We Cannot Eat Data: The Need for Computer Ethics to Address the Cultural and Ecological Impacts of Computing." In S. Hongladarom and C. Ess (eds.), *Information Technology Ethics: Cultural Perspectives*, 153-168. Hershey, PA: Idea Group Reference.
- Rananand, P.R. (2007). *Information Privacy in a Surveillance State: A Perspective from Thailand*. In S. Hongladarom and C. Ess (eds.), *Information Technology Ethics: Cultural Perspectives*, 124-137. Hershey, PA: Idea Group Reference.

- Rawls, J. (2005). *Political liberalism*. New York: Columbia University Press.
- The Republic of Plato*. (1991). Translated, with Notes, an Interpretive Essay, and a New Introduction by Allan Bloom. New York; Basic Books.
- Robertson, R. (1992). *Globalization*. London: Sage.
- Rosemont, Henry, Jr. (2006). *Individual Rights vs. Social Justice: A Confucian Meditation*. Lecture, Drury University, April 6, 2006.
- Rorty, R. (1975). *Philosophy and the mirror of nature*. Princeton, NJ: Princeton University Press.
- Shutte, A. (1993). *Philosophy for Africa*. Cape Town: University of Cape Town Press.
- Søraker, Johnny. (2006). *The Role of Pragmatic Arguments in Computer Ethics, Ethics and Information Technology*, 8(3):121-130.
- Spivak, Gayatri Chakravorty. (1999). *A Critique of Postcolonial Reason: Toward a History of the Vanishing Present*. Cambridge, Mass. & London: Harvard University Press.
- Stahl, B. C. (2004). *Responsible management of information systems*. Hershey, Pennsylvania: Idea Group Publishing.
- Stahl, B.C. (2006). *Emancipation in cross-cultural IS research: The fine line between relativism and dictatorship of the intellectual, Ethics and Information Technology* 8 (3: July), 97-108.
- Tavani, Herman. (2007). *Ethics and Technology: Ethical Issues in an Age of Information and Communication Technology*, 2nd ed. New York: John Wiley
- Taylor, Charles. (2002). *Democracy, inclusive and exclusive*. In R. Madsen, W. M. Sullivan, A. Swiderl, & S. M. Tipton (Eds.), *Meaning and modernity: Religion, polity, and self*, 181-194. Berkeley: University of California Press.
- Thomson, Judith Jarvis. 1971. *A Defense of Abortion*. *Philosophy and Public Affairs* 1 (1), 47-66.
- Tu, Wei-Ming. (1999). *Humanity as Embodied Love: Exploring Filial Piety as a Global Ethical Perspective*. In Marko Zlomislic and David Goicoechea (eds.), *Jen Agape Tao with Tu Wei-Ming*, 28-37. Binghampton, NY: Institute of Global Cultural Studies, 1999.
- Udeani, Chibueze C. (2007). *Cultural Diversity and Globalisation: An Intercultural Hermeneutical (African) Perspective*. *African Information Ethics Conference: Ethical Challenges in the Information Age*. Pretoria, 5-7 February 2007. IRIE document.
- United Nations. (1948). *Universal Declaration of Human Rights*. Retrieved April 8, 2007, from <http://www.un.org/Overview/rights.html>
- van der Velden, Maja. (2007). *Invisibility and the Ethics of Digitalization: Designing so as not to Hurt Others*. In S. Hongladarom & C. Ess (eds.), *Information Technology Ethics: Cultural Perspectives*, 81-93. Hershey, PA: Idea Group Reference.
- Walzer, M. (1994). *Thick and thin: Moral arguments at home and abroad*. Notre Dame, IN: University of Notre Dame Press.
- Warren, K. J. (1990). *The power and the promise of ecological feminism, Environmental Ethics* 12: 2 (Summer), 123-146.
- Welsch, W. (1999). *Transculturality—The puzzling form of cultures today*. In M. Featherstone, & S. Lash (Eds.), *Spaces of culture: City, nation, world*, 194-213. London: Sage. Retrieved February 2, 2006, from <http://www2.uni-jena.de/welsch/Papers/transcultSociety.html>
- Wheeler, Deborah. (2006). *Gender sensitivity and the drive for IT: Lessons from the NetCorps Jordan Project, Ethics and Information Technology* 8 (3: July), 131-142.
- Wiener, Norbert. (1948). *Cybernetics: or Control and Communication in the Animal and the Machine*. New York: John Wiley.
- Wieviorka, M. (2003). *Kulturelle differenzen und kollektive identitäten*. Hamburg: Hamburger Edition.
- Zins, Chaim. (2007). *Conceptual approaches for defining data, information, and knowledge*. *Journal of the American Society for Information Science and Technology* 58 (4), 479-493.

Azelarabe Lahkim Bennani

The Public Sphere's Metamorphosis – The Triangular Relation Between the NGO, the State, and Globalization

Abstract:

The issue we will discuss is related to the use of the Internet by the non-governmental organizations (NGOs) to improve the social development in the African and international context. We will also discuss the philosophical background of the notion of 'public sphere' by the German philosopher Jürgen Habermas.

Departing from the situation in Morocco, we observe that the lasting democratization process aims to improve the participation of the public sphere in the agency of social life. Taking for granted that society is not homogeneous as expected, we observe that it is divided into the political establishment, including the state, parliament, and the political institutions; in the social, religious and cultural institutions and the civil society. The state aims to enhance the participation of the other social spheres in the programme set by the government. The task is to engage the public sphere in the so called 'partnership' in the realization of its social programmes.

Agenda

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What is the first superficial reproach to this initiative?

According to some political leaders, the latent task of the state is to substitute the political opposition by non-political structures i.e. NGOs.

Despite this objection, there is no doubt that the impact of the public sphere is more and more noticed in the country.

What is the purpose?

But a more philosophical and decisive objection comes from the political idea of sovereignty, which contradicts the idea of public sphere. The main purpose of the paper tries to save the pertinence of the idea of public sphere against the traditional idea of the omnipotence of the state.

The official adoption of the ideology of modern notion of society in Morocco is an adoption of the discuss-ideology in the civil society.

Historically, the discuss-ideology by Habermas aims to confront the challenges of the absolute sovereignty by C. Schmitt. This German philosopher of law mentions the Spanish philosopher Donoso: "Es liegt (...) im wesen des bürgerlichen Liberalismus, sich in diesem Kampf nicht zu entscheiden, sondern zu versuchen, statt dessen eine Diskussion anzuknüpfen. Die Bourgeoisie definiert er geradezu als eine 'diskutierende Klasse', una clase discutidora. Damit ist sie gerichtet, denn darin liegt, dass sie der Entscheidung ausweichen will. Eine Klasse, die alle politische Aktivität ins Reden verlegt, in Presse und Parlament, ist einer Zeit sozialer Kämpfe nicht gewachsen."¹

The history of the concept

Habermas questions the notion of 'public sphere' as a crucial one for democratic theory: "What are the social conditions, he asks, for a rational, critical debate about public issues conducted by private persons, willing to let arguments and not statuses

determine decisions? This is inquiry at once into normative ideals and actual history."²

The subject by Habermas "is the historically specific phenomenon of the bourgeois public sphere created out of the relations between capitalism and the state in the seventeenth and eighteenth centuries. Habermas sets out to establish what the category of public sphere meant in bourgeois society and how its meaning and material operation were transformed in the centuries after its constitution."³

Originally, the political aspect was at random in the emergence of the phenomenon of the public sphere in the course of the 18th century. "Unlike the Greek conception, individuals are here understood to be formed primarily in the private realm, including the family. Moreover, the private realm is understood as one of freedom that has to be defended against the domination of the state."⁴ The salons, coffee houses were the host places of this new phenomenon of the private autonomy against the Diktat of the State. Hence, "civil society could be understood as neutral regarding power and domination."⁵ For example, literature was also the first factor responsible of the birth of public sphere, thanks to the journals created by the literary public sphere.

Habermas shows also "the intimate involvement of print media in the early extensions of market economies beyond local arenas. Long distance trade, for example, meant traffic in news almost as immediately as traffic in commodities. Merchants needed information about prices and demand, but the newsletters that supplied those needs, very quickly began to carry other sorts of information as well. The same processes helped to engender both a more widespread literacy and an approach to the printed word as a source of currently significant 'public' information."⁶

¹ Carl Schmitt : Politische Theologie. Vierte Auflage : Duncker & Humblot/ Berlin 1985.

² Craig Calhoun: Introduction: Habermas and the public Sphere. In: Habermas and the public sphere. Edited by Craig Calhoun: The MIT, Cambridge, Massachusetts, and London England 1992.

³ Ibid. p. 5.

⁴ Ibid. p. 7.

⁵ Ibid. p. 16.

⁶ Ibid. p. 8.

The Moroccan situation

In contemporary Morocco, the public sphere includes about 35,000 organizations which work in the fields of development of rural areas, in human rights and in cultural fields. These organizations are related to some international institutions like the UN, and to those which are dependent on it. Despite the fact that this triangular relation between the public sphere, the state and the international institutions may be successful, the range of organizations which are present in the mass media remains modest.

Mass media (television, radio and press... etc.) don't endeavour the lobbying strategy in favour of the NGOs, which means that they don't have special programmes to present the diverse NGOs in order to engage a large social discussion about the social engagement of these organizations.

It is evident that the number and the scope of the NGOs isn't clearly represented in the mass media because the main purpose of the mass media is at first to represent the state's interests, the official opinion of the government, and to manipulate the public opinion. The state has acquired the ability to magnify its political figures and ideology through the mass media image. In contrast to this 'media fact', the absence of a pertinent policy of information ethics in the presentation of the NGOs in the traditional mass media, and the fact that the public opinion, the alleged voice of the public sphere, is not really sufficiently present in the traditional mass media, makes the role of new mass media crucial, because they are perhaps less dependent on the official political line of thinking. Thus, the Internet can play this role.

The monopoly of the state over the traditional mass media urges the organizations to use the new ways of self presentation. In regard to the prevailing situation in Morocco, we must find valuable alternatives, taking into account the restrictions of the ways of sharing opinions in the public sphere. Therefore, when seeking new alternatives, we may overcome the shortcomings of the mass media when they are anchored and linked to the traditional role of the political regimes. For this reason, the situation stressed by Habermas in his work published in 1962 isn't true in Morocco. For him, the public sphere "could only be conceptualized in this full sense once the state was constituted as an impersonal locus of authority. Unlike the ancient notion of the public, therefore, the modern notion

depended on the possibility of counterposing state and society."⁷ According to the framework of the C. Schmitt's political theology, the authority is becoming personal, when decision is seen necessary in 'exception state' or in regard to territory problems. To some extent, in Morocco we have an analogous public sphere as Habermas described in the bourgeois society. We can only assume that the NGOs represent the heart of the public sphere in Morocco. Besides, Nancy Fraser contends that, "oddly, Habermas stops short of developing a new, post-bourgeois model of the public sphere. Moreover, he never explicitly problematizes some dubious assumptions that underlie the bourgeois model. As a result, we are left at the end of Structural Transformations without a conception of the public sphere that is sufficiently distinct from the bourgeois conception to serve the needs of critical theory today."⁸

Moroccan scholars and politicians have adopted a new liberal conception of modernity in order to find balance between state and society. This assumption is an equivocal claim. Morocco is a strange mixture of an archaic state and a new liberal ideology. This situation suffers from the deficits related to this strange stated mixture. Pauline Johnson says: "The fallacy of liberal democracy's metaphysical attachment to the ideals of the public reason rests on the unrecognized incompatibility of the distinctive norms that govern liberalism and democracy. Democracy, Schmitt insisted, refers to the ideal of the self sovereign society while liberalism principled commitment to pluralism renders incoherent any appeal to the 'self' needed to make sense of this ideal."⁹

This strange mixture of sovereignty and liberalism doesn't enable the traditional mass media to undertake a free policy toward the partners of the public sphere. With the rise of 'new' private channels of satellite television and broadcast, we hope, that the Internet will enrich the discussion given by these traditional mass media in the African and international contexts.

⁷ Ibid. p. 8.

⁸ Nancy Fraser: Rethinking the public Sphere. P. 111-112. In: Habermas and the public sphere. Craig Calhoun eds. The Mit Press, Cambridge, Massachusetts, and London, England. 1992.

⁹ Pauline Johnson: Habermas. Rescuing the public Sphere: Routledge Studies in Social and Political Thought 2006.

The task of global public sphere

A main work on the phenomena of public sphere in Germany was written by J. Habermas.¹⁰ But Habermas has given a response to an earlier critique by Nancy Frazer and has attempted to deepen the analysis of the post-bourgeois public sphere to cope with the challenges of globalization. As Pauline Johnson notices, "Habermas has outlined the urgency of the project of building a global public sphere. He does not underestimate the challenge and does not ignore the adverse signs."¹¹

In regard to the persistence of common illiteracy, poverty and health problems in the entire continent, we favour Habermas' claim that "a global public sphere offers the only way forward and is persuaded that there are reasons to believe that this utopian aspiration is still worth investing in."¹²

The utopian project must avoid the ideas of a 'national identity' and of a prejudiced 'community of fate', which contradicts the 'constitutional patriotism' and "collides with the universalist rules of mutual coexistence for human beings."¹³ The new cosmopolitan policy must work for the aim of a democratized welfare project. The traditional rights, as human rights and rights of political participation, must be translated 'in terms of enjoyment of social and cultural rights'.¹⁴ The project of globalizing modern democracy requires efforts to build 'transnationalized welfare projects' and 'solidarity between strangers' in our multicultural transnational society, in the perspective of 'a post-national public sphere'. "Habermas sees the best hope in the pressures that can be exerted by interest groups, NGOs and civilly

active citizens... The only viable and effective solution is to exert more pressure for the creation of supra-national political institutions that are really responsive to democratic constituencies."¹⁵

The Moroccan public sphere, represented by NGOs, is part of the global public sphere. For us, this concept is less controversial than that of 'globalization'. The centre of the 'global public sphere' is focussed on the local problems of democracy, poverty, segregation against women in the workplace, homeless children, sickness, illiteracy, etc. To the contrary, the centre of 'globalization' is represented by interests of little concern with everyday life. When we ask the question: who talks for humanity from the perspective of people's everyday concerns? The civil NGOs are concerned with the positive or the negative effects of the state's measures in the citizen's everyday life. The government itself is unable to translate its strategy into the concrete reality because it falls short of the overt commitment to all the partners who are involved in the successful execution of policy. For this reason, the government has concluded various ways of partnerships with the organizations in civil society. Despite the fact that many observers suspect that these forms of 'partnerships' borrow money from international foundations, these partnerships are very important because the governments are in need of a real strategy to work with the actual recipients and they work in synergy with other regional partners on the continent. For this reason, the Internet is a device from the perspective of ethics of information.

The government cannot, on its own, execute the programs or achieve the tasks at which it is aiming. A main obstacle to its strategy is the lack of a comprehensive understanding of all the factors that has to be taken into account. Therefore, the intervention of NGOs must compensate for this highly disadvantageous situation of the state.

Conclusion: Collegiality and partnerships

In the analogous manner in which ministers collaborate with colleagues in the world, the privileged partners of NGOs are in the same way analogous organisations with analogous prospects. What helps reaching a narrow collaboration in the region or the

¹⁰ Jürgen Habermas: "the Structural Transformation of the public sphere": An Inquiry in a category of Bourgeois Society: Cambridge 1989. Original: Strukturwandel der Öffentlichkeit : Luchterhand Verlag 1962).

¹¹ Pauline Johnson: Rescuing the public sphere: Routledge 2006. p. 100.

¹² Pauline Johnson: Ibid. p. 100.

¹³ J. Habermas : 'Yet again : German identity - A unified Nation of Angry DM - Burghers, In H. James and M. Stone (eds.), When the Wall Came Down: Reactions to German Unification, New York and London, Routledge 1992. In: Pauline Johnson. P. 103.

¹⁴ Pauline Johnson p. 104.

¹⁵ Pauline Johnson p. 107.

continent is the existence of structurally similar social challenges. The political regimes may be indifferent or antagonistic to each another from country to country, but the degree and quality of the social problems may be the same. The governments are so structured, that to each minister in one state there is a corresponding colleague in another state. Similarly, the very prospects engaged by NGOs are the common factor that links organizations. Thus, the misunderstanding clashes between states can in the long run be overcome thanks to the cooperation between similar organizations in these countries. The international foundations can in this range sustain the endeavours of the collegue-ship or partnerships between these organizations in many fields, as in the disease prevention in the case of SARS, AIDS and avian flu ... etc. The efficiency to prevent similar global problems underlines the need for efficient partnerships between similar organizations in order to find international and successful aid.

Thus, the use of the highly advanced mass media, especially the Internet, helps NGOs to find organizations with similar goals around the continent, since some organizations cannot achieve their task once they are disconnected from similar organizations on the continent, and also to find similar financial support from international foundations.

Michael Nagenborg

Artificial moral agents: an intercultural perspective

Abstract:

In this paper I will argue that artificial moral agents (AMAs) are a fitting subject of intercultural information ethics because of the impact they may have on the relationship between information rich and information poor countries. I will give a limiting definition of AMAs first, and discuss two different types of AMAs with different implications from an intercultural perspective. While AMAs following preset rules might raise concerns about digital imperialism, AMAs being able to adjust to their user's behavior will lead us to the question what makes an AMA "moral"? I will argue that this question does present a good starting point for an intercultural dialogue which might be helpful to overcome the notion of Africa as a mere victim.

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Introduction

At a first glance the concept of „artificial moral agents“ (AMA) looks quite spectacular from the perspective of Western philosophy. As I will show in the first paragraph, it's less utopian than one might assume. But the concept still raises serious questions from an intercultural perspective as I will demonstrate in the final paragraph. Since one may ask, if AMAs are a fitting subject for intercultural information ethics, I will point to the relevance of the concept in the context of Africa in the second paragraph.

The purpose of the paper is to show that we need to look at AMAs from an intercultural perspective. Since AMAs are currently used and developed mostly in information rich countries, there is little questioning on their intercultural impact. But since AMAs are designed to follow and enforce moral standards we should be aware that they may cause concern in non-western cultures. They may also be perceived as a tool of the information rich countries which is likely to widen the digital divide between the South and the North.

What is a “artificial moral agent”?

Before asking what is an artificial moral agent, I would like to ask what is an “artificial agent” (AA)? Since I will define an artificial agent first, one might assume correctly, that I do consider AMAs to be a subclass of AAs.

In this paper I will focus on autonomous software agents, although the concept of AMAs is mostly discussed in the context of machine ethics and autonomous robots are a prime example of AAs (Allen et al. 2006). This should also help us to avoid the dangers connected to the humanlike appearance of some robots, which might lead us to accept them as “artificial persons” more easily.

So, what is an “artificial software agent”? One might begin by asking, what is an “agent”, but starting with a general definition might again mislead us: Since animals and human beings are considered as “agents”, one may think of “artificial agents” as something like “humans” or “animals.” Therefore, I will define a “software agent” in contrast to a traditional “software program.”

One major difference between a “program” and an “agent” is, that programs are designed as tools to

be used by human beings, while “agents” are designed to interact as partners with human beings. I put a special emphasis on “designed ... as”, because most of the questions, like “is it an agent, or just a program?” (Franklin/Graesser 1996), arise when looking at an existing product. Thus, I suggest that the categories “programs” or “agents” are especially helpful as part of a strategy in software development.¹

The concept of delegation is a characteristic feature of agents: „An agent is a software thing that knows how to do things that you could probably do yourself if you had the time“ (Borking/Van Eck/Siepel 1999: 6). Also, agents may delegate task to other human or artificial agents, or collaborate with other agents. They are designed to perceive the context in which they operate and react to it. Also agents are proactive, therefore one does not need to start an agent (in contrast to a program), but they are designed to decide for themselves when and how to perform a task. Therefore, they may be perceived as autonomous artefacts.

Of course, we have to differentiate between different types of agents according to their capabilities and the degree of autonomy they have. Agents may serve as an interface for human-machine-interaction by acting as an artificial personality, or they might be designed to observe and report on computer systems, aso. What makes the idea of agents interesting with regards to information ethics is that they do raise questions upon the responsibility of the designers as well as the users for the actions carried out by (more or less) autonomous agents. In this paper, however, I will discuss agents on a more general level, since I only want to show that we should have a look at AMA from an intercultural perspective.

From the perspective of Western philosophy one has to be very careful to avoid misunderstanding the concept of “autonomy” in the context of AAs. Surely,

¹ This may be become more obvious by thinking of complex ICT systems which might consist in parts of agents. In the case of internet search engines e. g. web bots might be considered as artificial agents, which are part of a more complex system. This system might also include ‘traditional’ programs. Does this make a search engine an artificial agent? Although we might ask this question when looking at a specific search engine I assume that such questions do not arise during the design process.

"autonomy" is a central concept at least for the Kantian tradition,² but in the context of AA "autonomy" first of all means, that an agent is capable to fulfil a task without direct interference by a human being. One delegates a task to an agent and gets back the results. Here, we should keep in mind the distinction between a "free chooser" and an "autonomous person": A person might be regarded as free, when doing whatever she or he would like to, but we expect an autonomous person also to be someone who thinks about what she or he is doing and does make choices for some reason. I do not want to imply that an autonomous software agent is able to make conscious decisions based on reason, but I do suggest that we expect more than the random results which a free chooser might produce as well. Thus, we expect an artificial agent to fulfil a task while being guided by norms or values. We might expect, e. g., an agent designed to search for scientific literature not to present documents that are obviously not fitting to scientific standards.

Given the explanation of an AA, it is easy to provide a definition of an AMA now: An AMA is an AA guided by norms, which we as human beings consider to have a moral content. To stay with the example of a web bot: One might think of certain content (pornography, propaganda, aso.) as conflicting with moral norms. Thus, an AMA might respect this norms while searching the internet and will not present this kind of content as result unless explicitly being told to do so.

It is important to make a difference between two types of AMAs: Agents may be guided by a set of moral norms, which the agent itself may not change, or they are capable of creating and modifying rules by themselves.³ But before addressing the two types of AMAs and their different implications, I

² The idea of the "autonomy of the practical reason" is a key feature of Kant's moral theory and is closely linked with the concept of being a person and being able to act according to one's own free will. Autonomy may also be considered to be at the core of human dignity, therefore we should be very careful when applying the concept in the narrow Kantian meaning to artificial agents.

³ Since "autonomous" might be translated as "one who gives oneself its own law", we might assume that not all of these norms are built into the software from the beginning, but the agent is capable of creating new rules for itself.

will ask, why AMAs should be included in the ongoing discussion on intercultural information ethics.

The possible impact of *artificial agents* on Africa

As pointed out by Willy Jackson and Issiaka Mandé (2007: 171):

"We have to notice that the ICT are part of all the great issues of globalization Unfortunately, we can notice that only a minority take advantage of ICT and thus worsen the inequalities between the rich and the poor, both between the nations and even within the nations. This phenomenon of exclusion and division is particularly visible in the African countries which are the victims of the world economic system."

There is hope that providing access to ICT and the Internet will provide a link between the information poor and information rich. But as Johannes Britz (2007: 273ff.) has demonstrated there are certain and serious limitations to using the Internet to alleviate information poverty. He pointed out to the importance of physical infrastructures for information societies, the FedEx Factor. Another of these limiting factors is that the content available on the internet is rather useless from the perspective of many non-Western cultures: "... there is indeed more information 'out there', but less meaning" (ibid., 277).

The last point made is important to our subject since artificial agents are designed to help the users to reduce the information overload by filtering and structuring content with regard to the specific needs of the individual users (cf. Kuhlen 1999). Therefore agents are more likely to be used by information rich. This will probably worsen the inequalities between information rich and information poor, since the use of agents may change the nature of the content of the internet. The content will become be less structured according to the needs of human beings, but become more and more accessible to artificial agents. Thus, not having access to agents as mediators to the internet may become a new barrier. Therefore, it is important to keep in mind that changes occurring in information rich countries may indeed have a strong impact on information poor countries.

AAs also may become part of surveillance infrastructures. Here one has to be aware – and this is rather unpleasant to me for being an European author –

that already today critics speak of the panoptical fortress of Europe (Davis 2005). As the report on the surveillance society published by the Surveillance Studies Network (2006: 1) points out:

It is pointless to talk about surveillance society in the future tense. In all the rich countries of the world everyday life is suffused with surveillance encounters, not merely from dawn to dusk but 24/7.

Again, the increasing significance of surveillance in rich countries is not restricted to the citizens of these countries but also concerns those intending to (regularly or irregularly) immigrate into these countries (cf. Broeders 2007). Thus, robotic AAs such as the SGR-A1 security system⁴ are considered to be only the tip of the iceberg (Rötzer 2006), which should not mislead us to underestimate the importance of AAs with regard to the digital borders limiting the free movement of people as well as information.

But AAs might also provide a better interface for illiterate people, since the idea of speech-based computer-human interaction comes along with the concept of agents as partners.⁵ Speech-based AAs serving as interfaces for accessing and creating information might have a great impact on Africa, when considering the already wide spread use of mobile phones.⁶ As Rhett Butler (2005) pointed out: "Since computers are rare in much of the region due to poor wire-line infrastructure ... and unreliable electrical grids, a technology that offers Internet access without a costly PC promises to pay dividends for Africans." Still, one has also to recognise the results of a case study carried out by Vodafone (2007) that the "use of text messaging in rural communities is much lower due to illiteracy and the many indigenous languages. This has implications for other technologies that use the written word,

such as the internet." Thus, providing a speech-based access to the internet by mobile phones might at least provide an opportunity to make more information on Africa by Africans available and accessible to others. Of course, we should not be overoptimistic given what Britz (2007: 274) calls the "Tower of Babel Factor".

Since AAs are designed to lift the weight of dealing with the information overload from the users, they might also help to overcome the "House on Sand factor" (Britz 2007: 277) by enabling users to find relevant information more quickly under the condition that AAs do not need expensive hardware to be used. When AAs are becoming part of online services and may be used in an inexpensive way (or for free), there is also hope that it becomes more and more easy to have access to information needed in a certain context.

I will stop pointing to different issues that may be raised by AAs for now, since the purpose of this paragraph was to demonstrate that AAs are a fitting subject for intercultural information ethics. It is important not to mistake them as too much of "high tech" even when most of the research in this area is carried out in rich countries at the moment, considering the possible positive or negative impact they might have on information poor countries.

What makes an AMA "moral"?

In the first paragraph of this paper I have defined AMAs as a subclass of artificial agents that include what Colin et al. (2006: 14) have called an "ethical subroutine". Further, I suggested to differentiate between AMAs that are guided by moral norms, which they are can't change, and AMAs that may produce moral norms by themselves.

AMAs not being able to change their "ethical subroutine" are autonomous in the action they take, but they are not able to do "bad things". A good example of such an AMA is the main character of the movie "RoboCop" (USA 1987), who is not capable to overcome the prime directives which he was programmed to follow. But search engines such as Google might be considered to be AMAs of this type as well, if we agree that they are AAs, too. At least, such search engines may be regarded as autonomous systems, since the results they produce may not be foreseen neither by the software developers nor the users. And especially services such as

⁴ http://www.samsungtechwin.com/product/features/dep/SSsystem_e/SSsystem.html > (retrieved on July 8, 2007)

⁵ One might think of the digital butler described by Negroponte (1995) as a good example of this type of AA.

⁶ When thinking about speech-based human-computer-interaction one should keep in mind that – to use the WSIS wording – the right to communicate does include the right to read and the right to write.

"Google Alerts"⁷ may be considered as AAs since they act without direct control of their human users. There might be arguing that these are very simple services, but we are not concerned with the level of autonomy here. What is more important is that they are autonomous and that they are – at least in Germany – limited by norms, which are considered to be moral norms. As already stated above it might be considered as a moral norm that no documents that may be harmful for children (like pornography, excessive depictions of violence, and hate speech) are presented to children. Thus, the German law does not allow to make this kind of documents available to persons under the age of 18, and also bans the distribution of certain documents at all. Now, there was some concern that these kind of online services undermine these legal standards (cf. Neuberger 2005), which lead to a voluntary agreement signed by all major search engines on not providing links to German users which point to documents banned in any other kind of media. Therefore, at least the German versions of these search engines might be regarded as AMAs, since they include services to be considered as AAs and they are limited by "ethical subroutines".

The question if such kind of censorship may be considered ethical is less important from an intercultural perspective than the question of the impact such AMAs may have on other cultures. Even without AAs on the Internet, there has been questioning about the values embedded unconsciously in computer-mediated communication by their Western designers (Ess 2007: 153). Thus, there must be questioning about what kind of "morality" will be fostered by AMAs, especially since now norms and values are to be embedded consciously into the "ethical subroutines". Will they be guided by "universal values", or will they be guided by specific Western or African concepts? Maybe, the kind of filtering in accordance with the German Law might be acceptable and even desirable from an African perspective. But how about AMAs designed to protect privacy? There are already first steps taken in the development of such AMAs which are also presented as an example in the context of machine ethics (Wallach et al. 2006: 13). What would be the impact of such AMAs on cultures, which are characterised by a more community based thinking and therefore do not value privacy in the same way as Western cultures (cf. Olinger et al. 2005)?

The second type of AMAs being able to create rules of behaviour by themselves for themselves in accordance to their users' preferences might be seen as an alternative in this perspective for they should be able to adjust to the specific cultural background of their users. Such an agent could learn, i. e., what kind of norms are followed by an European or an African user. Beside of the question how to deal with "bad users" training the AMAs to behave unethically, there should be questioning on what are the distinctive features of a moral norm and what makes such a norm different from, i. e., legal norms? And what should an agent do when it is given a task that an user finds to be legitimate and even necessary from the moral point of view, but is conflicting with legal norms?

The challenges arising from such questioning are not only to be considered pragmatically, but are also a good starting point on an intercultural dialogue on AMAs, which goes beyond the notion of "digital imperialism", an issue that might be raised with regards to the first type of AMAs presented above. That is not to say that digital imperialism is not to be regarded as an ethical issue; but thinking of the requirements of an AMA has to fulfil to be regarded as "morally" (in the limited sense introduced in the first paragraph) does offer a opportunity to go beyond the idea of Africa being a mere victim of Western technology. Rather, it will enable us to discuss the rich offers in African thinking on what it means to be an autonomous moral agent (cf. Sogolo 1993: 129ff) by asking what we are going to expect from AMAs and which is truly a moral agent and not just a learning agent.

References

- Broeders, D. (2007): *The New Digital Borders of Europe. EU Databases and the Surveillance of Irregular Migrants. In: International Sociology 2007, Vol. 22 (1), 71-82.*
- Butler, R. (2005): *Cell phones may help "save" Africa.* Online: <
http://news.mongabay.com/2005/0712-rhett_butler.html > (retrieved on July 8, 2007)
- Capurro, R., J. Frühbauer, T. Hausmanninger (Eds.): *Localizing the Internet. Ethical aspects in intercultural perspective.* München: Wilhelm Fink 2007.
- Colin, A., W. Wallach, I. Smit (2006): *Why Machine Ethics? In: IEEE Intelligent Systems, Vol. 21, No. 4, pp. 12-17.*

⁷ < <http://www.google.de/alerts?hl=eng> > (retrieved on July 8, 2007)

- Davis, M. (2005): *The Great Wall of Capital*. In: M. Sorkin (Ed.): *Against the Wall*. New York – London: The New Press, pp. 88-99.
- Ess, C. (2007): *Can the Local Reshape the Global? Ethical Imperatives for Humane Intercultural Communication* Online. In: Capurro/Frühbauer/Hausmanniger 2007, pp. 153-169.
- Franklin, St., and A. Graesser (1996): *Is it an Agent, or just a Program?* < <http://www.msci.memphis.edu/~franklin/AgentP rog.html> > (retrieved on July 8, 2007)
- Jackson, W., and I. Mandé (2007): "New Technologies" and "Ancient Africa": *The Impact of Information and Communication Technologies in Sub-Saharan Africa*. In: Capurro/Frühbauer/Hausmanniger 2007, pp.171-176.
- Kuhlen, R. (1999): *Die Konsequenzen von Informationsassistenten*. Frankfurt am Main: Suhrkamp.
- Negroponete, N. (1995): *Being digital*. New York: Alfred A. Knopf.
- Neuberger, C. (2005): *Function, Problems, and Regulation of Search Engines in the Internet (Extended Abstract)*. In: *International Review of Information Ethics*, Vol. 3 (06/2005). < http://www.i-r-i-e.net/inhalt/003/003_neuberger_ext.pdf > (retrieved on July 8, 2007)
- Olinger, H. N., J. J. Britz, M. S. Olivier (2005): *Western privacy and ubuntu: influences in the forthcoming data privacy bill*. In: P. Brey, F. Grodzinsky, L. Introna (Eds.): *Ethics of New Information Technology. Proceedings of the Sixth International Conference of Computer Ethics: Philosophical Enquiry (CEPE2005)*. Enschede, NL: CEPTES, pp. 291-306.
- Rötzer, F. (2006): *Kampfroboter zum Schutz von Grenzen, Flughäfen oder Pipelines*. Online: < <http://www.heise.de/tp/r4/artikel/23/23972/1.html> > (in German) (retrieved on July 8, 2007)
- Sogolo, G. (1993): *Foundations of African Philosophy*. Ibadan: Ibadan University Press.
- Vodafone (2007): *Impact of Mobile Phones in Africa*. Online: < http://www.vodafone.com/start/responsibility/our_social__economic/socio-economic_impact/impact_of_mobile_phones.html > (retrieved on July 8, 2007)

Bernd Frohmann

Assembling an African Information Ethics

Abstract:

The Tshwane Conference on African Information Ethics of 5-7 February 2007 forces the question, What is an African information ethics? This question is addressed with reference to the complexities of a distinctly African information ethics, taking into account the distinction between ethics and morality, and the assumptions of the language of the Tshwane Declaration on Information Ethics in Africa. Gilles Deleuze's concept of assemblage, analyzed from the perspectives of Bruno Latour's concept of "reassembling the social" and recent anthropological approaches to global assemblages are put to work to investigate possibilities of an African information ethics, with special attention to the concepts of universality and African identity. The task of assembling an African information ethics is then analyzed in terms of Latour's call for building "livable collectives".

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- Relevant publications:
 - *Deflating Information: From Science Studies to Documentation*. Toronto: University of Toronto Press 2004, x, 311 p.
 - Cyber-Ethics: Bodies or Bytes? *International Information and Library Review*, (2000) 32: 423-435.

An African Information Ethics?

The first African Information Ethics Conference was held in Tshwane, South Africa, on 5-7 February 2007; the conference's full name was *African Information Ethics Conference: Ethical Challenges in the Information Age*. But what is an African information ethics? Is there a distinctly "African" characteristic that distinguishes it from "Asian", "European", "North American", "South American", or "Australian" information ethics? Does "African" in this context denote a specific flavor of information ethics, analogous perhaps to distinctly African styles of music, fashion, or cuisine? The Tshwane conference meets an obligation of the new field of international information ethics, which was inaugurated at the ICIE Symposium 2004 in Karlsruhe, Germany, to think globally about information ethics. The Karlsruhe conference questioned locality in its problematic tension with "the horizon of a global digital environment" (International ICIE Symposium 2004). To distinguish kinds of information ethics according to national, and pan-national (e.g. continental) criteria is a state-centred interpretation of Karlsruhe's problem of local culture. But how effective are state boundaries as criteria of locality? And, can the continental boundaries of African nations map onto a distinct field of philosophical work in information ethics? If the locality in question when attempting to determine a uniquely African information ethics is the whole continent, then in terms of Karlsruhe's main theme the problem becomes simultaneously *large*—Africa is an immense "locality"—yet at the same time *small*, because it is *reduced* to ethical issues arising only within the continental boundaries of Africa. The question then becomes one of how *ought* global, digital information networks be installed in Africa in the light of a global, digital information environment?

That such a question avoids much of ethics can be seen by considering where it fits in a common and popular division—at least in Northern/Western thinking about ethics—of ethical theories into three main areas: metaethics, normative ethics, and applied ethics. Deployments in particular nations or continents of specific technological instrumentalities such as global, digital information networks pose problems in applied information ethics. Whatever might be particularly African about such problems derive from characteristics distinguishing the continent of Africa from—what? other continents? or specific African countries from countries in the rest of the world? There is no need to deny that the specificity of the problems many African countries

face, such as violence, poverty, armed conflict, disease, genocide, poverty, and the economic injustices of global, Northern/Western market domination raises questions about how information technologies and systems *ought* to be deployed according to specific moral codes. But does the moral imperative of *urgency* that applies to such African-specific problems justify directing less attention to problems Africa shares with other continents, or specific African nations share with nations in other parts of the world? The use, power, and value of the concept of the *nation-state* in pursuing an international information ethics pose *problems* rather than provide stable *resources* for ethical thinking.

Most of the work of the Tshwane conference was formal and documentary: creating moral codes governing the development of information systems and technologies in Africa. But *ethical work* is different: it questions the nature of ethical and moral reasoning, the reality of moral values, the meaning and truth value of moral judgments, the compatibility of differing values and moral judgments, the forms of philosophical justifications of consequentialist, deontological, or virtue-ethical conceptions of norms and values, the nature and practice of the virtues and the good. Roughly speaking, the distinction between ethics and morality maps onto the distinction between, on the one hand, metaethics and normative ethics, and on the other, applied ethics. Ethics questions the philosophical foundations of the good and of morality, whereas morality questions what is right and wrong according to specific moral codes. Ethics conceived as reasoning about the practice of virtue and the pursuit of the good can dispense with moral codes, whereas morality conceived in the modern sense cannot.

In spite of what actually occurred at the Tshwane conference, the references in its Declaration on Information Ethics in Africa to information ethics as "the field of critical reflection on moral values and practices" and "ethical reflection on norms and values" (African Information Ethics Conference 2007) suggest a recognition of a distinction between ethics and morality. Armed with such a distinction, we can pose the question, What is an African information ethics?, as one about whether and how African intellectual, cultural, and philosophical resources might broaden and deepen the field of *ethics*, where the adjective "African" does more than simply denote nations of the African continent.

The question of specifically African resources for developing an African information ethics quickly

confronts boundary problems and problems of scale. Africa is a vast territory, teeming with multiplicities of intellectual, cultural, and philosophical resources, and multiplicities of connections to the rest of the world. Consider, for example, the complexities of "African philosophy". Because Africa includes Muslim nations and peoples its philosophical resources therefore include Islamic philosophy, which itself traces influences from Chinese, Hindu, Persian, Greek and Roman, Ancient Egyptian and Phoenician philosophies, as well as influences on Jewish and early to modern European philosophies. As of April 2007, the Association of African Universities boasts 119 member universities from 31 countries. Many of the academic philosophers in those universities were trained in Northern/Western philosophical traditions, and are as familiar with and interested in their canonical texts and issues in logic, epistemology, metaphysics, ethics, or history of philosophy as their Northern/Western counterparts. Moreover, controversy about what constitutes African philosophy is itself a philosophical topic in both Africa and the African Diaspora, as just a small sample of book titles makes clear: *African philosophy: Myth or reality?* (Apostel 1981), *African philosophy: Myth and reality* (Hountondji 1996), *African philosophy in search of identity* (Masolo 1994), and *African philosophy: A historico-hermeneutical investigation of the conditions of its possibility* (Okere 1983). About a third of an early introductory reader in African philosophy is devoted to the question of whether there is a specifically African philosophy (Wright 1979).

Any hopes that might be raised for a manageable corpus of sources in African philosophy by the Library of Congress's list of only 188 items bearing the subject heading "Philosophy, African" is dashed upon comparisons to its lists of 111 items under "Philosophy, European", 174 under "Philosophy, French", and 295 under "Philosophy, German". The more comprehensive keyword search joining "African" and "philosophy" exceeds the display limit of 10,000 of the Library of Congress Online Catalog—and this from a library whose holdings are biased by the distortions of south-north information transfer! Library searches do not clinch an argument that there is something wrong with supposing the adjective "African" has a unified and coherent meaning when modifying the intellectual, cultural, and philosophical resources we might hope to find useful in developing a specifically *African* information ethics. But they do turn our minds not only to the multiplicities crisscrossing that vast continent but to asking similar questions about the concepts of European philosophy, Asian philosophy, or American philoso-

phy, to name just a few. Is there any reason to suppose that enlisting "African philosophy" in the service of developing an African information ethics is an imperative more urgent than enlisting "European philosophy" in the service of developing a "European information ethics"? Does "international information ethics" refer only to information ethics *other than* "European" or "Northern/Western" information ethics, or does it mean information ethics practiced deliberately *without regard* to nationality?

The very idea of an African information ethics is therefore bedeviled by suspicions about the coherence of grand, noble totalities conjured up by adjectives such as "African", "European", "Asian", "American", etc. in any meaningful sense beyond simply referring to national or pan-national political boundaries. If we mean by "African information ethics" the information ethics pursued only in Africa, the meaning is clear but philosophically uninteresting. But if we hope to *discover* a uniquely African information ethics in a meaningful conceptual sense that can perform useful work, we are likely to find neither a stable finished product in some hitherto neglected locality nor parts ready-to-hand for use in building it, such as specifically African thought-styles, ethos, philosophies, or ethical cultural traditions. What we are more likely to find are controversies, debates, and disputes in each of these areas, just as we find elsewhere on the terrain of ethical thought.

The problem is exacerbated by the way information ethics is framed in existing documents. The recently formulated Tshwane Declaration is a good example. Repeating the language of universal human rights inscribed in a long line of international agreements such as the Charter of the United Nations, its Universal Declaration of Human Rights, International Covenant on Economic, Social and Cultural Rights, and International Covenant on Civil and Political Rights, the Tshwane Declaration's statement of principles for information ethics in Africa asserts: "utilization of information in and about Africa should be grounded in an Ethics based on universal human values, human rights and social justice". African information ethics is treated as a plug-in to a system of stable phenomena already assembled together in a fixed totality by these three absolute and already stabilized virtues. The Declaration also refers to a number of "social objects" imagined as already given and sutured together into what we know to be among the most unstable of conceptions should the controversies surrounding it be taken seriously: "the global Information Society". The most prominent of these objects—sustainable development, freedom

and democracy, global Millennium development goals, the “development-oriented Information Society”, “Information and Knowledge Societies”—populate the document stripped of all their fierce controversies, fragile contingencies, and historical, political, economic and cultural singularities. The role envisioned for African information ethics is presented in terms of an imperative to plug into this set of taken-for-granted global arrangements, demonstrably to the profit of identifiable “players”. We are told that Africa should connect its special strand of information ethics into an international ethical machinery ethics already busily servicing a presumed global information society. Thus “the distinctive contribution to be made by African thinkers and intellectual traditions to the global information ethics community” is part of a wider “mobilization of academic research” presented as *what we already know* to be “crucial for sustainable social, economic, technical, cultural and political development”. “Africa”, we read, “should be a key player in [the] movement...towards Information and Knowledge Societies”, and to this end should strive to “make the global Millennium development goals a reality”. Insofar as Africa has something unique to contribute, there should be no doubt about the beneficiaries of its gift: “Indigenous knowledge and cultural diversity is a valuable contribution Africa can make to the global Information Society. It should be preserved, fostered and enabled to enrich the world body of knowledge” (there is no mention of how such preservation might enrich the *producers* of indigenous knowledge and cultural diversity). In issuing definitions of jobs serving invisible actors assumed to have already constructed the global information society to the “academics from the international community [who are] experts in the field of Information Ethics”, and the “African scholars in the field of information ethics within the international scholarly community”, the Declaration reflects the political reality of the Tshwane Conference, where instead of pursuing scholarly discussions of *ethics* in any philosophical sense the academic delegates were set the task of crafting a document—the Tshwane Declaration—only to find that none of their recommendations survived the final draft.¹

¹The political in contrast to the academic nature of the conference was highlighted by the conflict between two imperatives, the first to produce a document on information ethics for UNESCO, as stipulated by its representative, Boyan Radoykov (UNESCO, Information Society Division), and the

The combination of instrumentalization of scholarly intelligence such as that on display at the Tshwane Conference, easy references to taken-for-granted, large structural totalities such as those itemized above, and uncritical assumptions about indissoluble links between information access and democracy, peace, and social justice bureaucratizes African information ethics by reducing ethical thinking about information to the production of moral codes governing the installation on the African continent of information technologies for e-government, e-education, e-health, e-culture (e.g. digital heritage projects), and many other “e-projects”. Language that envisions African service to a taken-for-granted reality—the global information society—recalls for even moderately critical readers the analyses of critical global political economists who have labored to show that the primary advantages of such bureaucratization and service accrue to the owners and developers of those information systems who along with other corporate giants have long recognized the public relations value of installing ethical modules in their organizational structures.

How can we get a grip on the problems raised here? How can African information ethics, even international information ethics, engage a deeper, more fundamental ethical thinking that problematizes the very idea of information ethics? An important task for such thinking is to ask how and why, at particular historical instances, ideas such as information ethics, international information ethics, and African information ethics become problems that collect in specific constellations a wide variety of things, persons, institutions, ideas, documents, and many more heterogeneous elements. In my Karlsruhe paper (Frohmann 2007), I argued for the value to information ethics of the ethical thought of Michel Foucault and Gilles Deleuze. In this paper I develop Deleuze’s idea of *assemblages* to address some of the issues raised so far.

second to produce the Tshwane Declaration for the South African government. The latter imperative prevailed. The delegates were divided into working groups, each with a mandate to produce two sentences on topics previously specified in the Declaration draft. Because, to no one’s surprise, groups of academics can not easily condense their thoughts into just two sentences, especially when working collaboratively, their more fulsome work was ignored in the final draft, which was the product of a small group of conference organizers.

Assemblages

Agencement is a central concept of Deleuze's philosophy. Usually translated as "assemblage" or "arrangement", the concept has done important work in a variety of fields, from Deleuzian social theory (De Landa 2006), to Bruno Latour's actor-network theory (2005) and his studies of science and technology (1987; 1988; 1993; 1996; 1999), to recent anthropological approaches to globalization (Ong and Collier 2005).

In Deleuze's philosophy (see especially Deleuze and Guattari 1987), *agencement* is closely connected to the concept of *affect*, according to which the power of a body to act is analyzed in terms of its assemblage or arrangement with another body or bodies. His ethics proposes an ethos of *becoming*, analyzed in terms of a body's affective power to generate intensities in assemblages with another body or bodies, aimed at both resistance to the ways in which we are formed by what he calls lines of rigid segmentarity, and at freedom from the dominating effects of those lines through the practice of the three virtues of imperceptibility, indiscernibility, and impersonality (see Frohmann 2007). Assemblages are always individuated and singular. To study what they do by tracing the diagrams of their affective powers is to practice a mode of analysis called "transcendental empiricism". Ethics is therefore connected to singular, individuated assemblages through the concept of a body's affective power to escape rigid segmentarity made possible by the intensities generated in assemblages with another body or bodies. Deleuze's ethical thought leads us to the concept of *ethical assemblages*, which enact an ethos of freedom from domination.

Latour puts the concept of assemblages at the centre of his actor-network theory as elaborated in his 2005. He contrasts a *sociology of the social* to a *sociology of associations*. The former conflates two different meanings of "social", referring first to stabilized states of affairs, and second to a specific kind of matter or substance that distinguishes *social* worlds from *natural* worlds. When these two meanings are conflated, the "social" stands for stabilized states of affairs made of "social" stuff. This kind of sociology, Latour argues, is no longer capable of providing the understanding promised by sociology in its original sense of a "science of living together". He lists its main assumptions:

"there exists a social 'context' in which non-social activities take place; it is a specific domain of reality; it can be used as a specific type of

causality to account for the residual aspects that other domains (psychology, law, economics, etc.) cannot completely deal with; it is studied by specialized scholars called sociologists" (Latour 2005:3–4).

The sociology of associations, by contrast, makes neither mistake. It studies the composition of the social in terms of assemblages of heterogeneous elements, *none* of which are "social" in the sense of being made of social stuff—because there is no such thing. And rather than begin with stabilized concepts or states of affairs, it recognizes that the social is revealed most clearly by processes of assembly, whether in building associations between disparate kinds of elements, or when such associations break down, are interrupted or transformed from one assemblage to another. Once we see that the strength of these fragile assemblages extends no further than the contingent associations currently holding them in place, stability becomes a *problem*: how do specific assemblages get stabilized and how is their stability maintained? The main tasks of a sociology of associations are: (1) to follow controversies in order to identify the elements at stake in any future assemblage; (2) to follow actors in their work of stabilizing connections or associations holding assemblages together; (3) to compose assemblages for living together collectively in the face of contemporary crises—a political and ethical task of "assembling a common world" (Latour 2005:260).

Acknowledging the work of Deleuze and Latour, recent anthropological perspectives on globalization shared by a growing number of social scientists also make powerful use of the concept of assemblages (see Ong and Collier 2005). Rather than analyze globalization as a broad, structural phenomenon of planetary scale that enters social analysis as a stabilized, *global* state of affairs (e.g. Manuel Castells' (2000) "network society"), the anthropological approach stays much closer to Deleuze and Latour in analyzing globalization through investigations of specific kinds of ongoing processes of assembly and reassembly. In such a view, globalization is analyzed as a set of spaces where specific kinds *anthropological problems* arise—problem-spaces "in which the forms and values of individual and collective existence are problematized or at stake, in the sense that they are subject to technological, political, and ethical reflection and intervention" (Collier and Ong 2005:4).

This mode of analysis pays special attention to a broad range of "global forms", which assemble a

wide variety of people, institutions, technologies, things, discourses, values, disciplined routines, standards, documents, and many more disparate sorts of elements. Global forms

"have a distinctive capacity for decontextualization and recontextualization, abstractability and movement, across diverse social and cultural situations and spheres of life. Global forms are able to assimilate themselves to new environments, to code heterogeneous contexts and objects in terms that are amenable to control and valuation" (Collier and Ong 2005:11).

Global forms are not ideal types whose operations can be reduced to effects of stable causes, such as the "logic of capital" or the "invisible hand of the market". Instead, they are "delimited by specific technical infrastructures, administrative apparatuses, or value regimes" (11). In other words, they are "articulated in specific situations—or territorialized in *assemblages*" (4). This use of "assemblages" to emphasize that global forms are always singular and individuated reflects the influence of Deleuze and Latour. Stem cell research is an example, as Stephen J. Collier and Aihwa Ong explain with reference to Sara Franklin's paper in their collection: "Potentially, [stem cell research] bears on biological life—every human (and, presumably, nonhuman) being on the planet—and can transform how we understand, intervene in, and indeed, live human life *qua* biological life" (4). But what the authors call "the actual global" takes different forms in different assemblages: "the actual scope of stem cell research is determined by a specific distribution of scientific expertise and global capital...Also crucial are regimes of 'ethical' regulation instituted through the political system in various countries" (5). The United Kingdom, for example, has become a centre of stem cell research through a "relatively lenient regulatory regime", but in the United States research has been restricted by the success of connections to an "ethical regime" with a global character, invoking "a form of humanism that claims to be concerned not with a culture or a particular group but with human life as such" (5).

Global forms are therefore more like what Latour calls *mediators* rather than *intermediaries*. An intermediary "transports meaning or force without transformation"; "defining its inputs is enough to define its outputs". But mediators "transform, translate, distort, and modify the meaning or the elements they are supposed to carry"; "[t]heir input is never a good predictor of their output" and "their specificity has to be taken into account every time" (Latour

2005:39). From this perspective, the "ethical regimes" cited by Ong and Collier are not seen as stabilized states of affairs, but as dynamic assemblages of human and nonhuman actors whose connections and associations are revealed by studying their traces. Writing in a Latourian and Deleuzian spirit, Ong and Collier note that an assemblage

"is the product of multiple determinations that are not reducible to a single logic. The temporality of an assemblage is emergent. It does not always involve new forms, but forms that are shifting, in formation, or at stake. As a composite concept, the term 'global assemblage' suggests tensions: global implies broadly encompassing, seamless, and mobile; assemblage implies heterogeneous, contingent, unstable, partial, and situated" (Collier and Ong 2005:12).

Thinking about globalization through the concept of assemblages leads to the conclusion that "local" and "global" do not refer to two different *properties* distinguishing different kinds of stabilized states of affairs. They do not, for example, designate differences in spatial magnitudes or scale. *Localizing* and *globalizing* are what actors *do*. The actor-network approach investigates how, where, and through what connections or associations context, structure, macro-levels and global levels are constantly being assembled. Latour puts it this way:

"whenever anyone speaks of a 'system', a 'global feature', a 'structure', a 'society', an 'empire', a 'world economy', an 'organization', the first...reflex should be to ask: 'In which building? In which bureau? Through which corridor is it accessible? Which colleagues has it been read to? How has it been compiled?'" (Latour 2005:183).

The global is therefore made in sites as local as any. Relative scale is *assembled*: "the small is unconnected, the big one is to be attached" (Latour 2005:180). We need to "ferret out the places where 'up', 'down', 'total', and 'global' are so convincingly staged" (184). The work of putting something into a frame, of contextualizing and identifying a phenomenon as "global" is constantly being performed. But rather than take these frames, contexts, and the "global" as stabilized concepts readily available for deployment in social theory and analysis, Latour argues that "it is this very framing activity, this very activity of contextualizing, that should be brought into the foreground" (186). "'Ups' and 'downs', 'local' and 'global'", he argues, "have to be made, they are never given" (186).

An African Information Ethics

How can the concept of assemblages be put to work in thinking about the possibilities of an African information ethics? We might begin by following some implications of treating an African information ethics as an *ethical assemblage*. The strength of assemblages consist in their connections and associations: how many are there? how widely distributed are their elements? what degree of heterogeneity do they exhibit? Following Latour's (2005) rules of method, we would look for controversies that evidence actual or potential intensities for mobilizing the work of assembly and its stabilization.

Following controversies is radically different from deploying cherished certainties as stabilized resources. No matter how many people march in step to the beat of concepts like universal human values, human rights, and social justice, if their only connections are to each other the power of their small homogeneous assemblage will be feeble. There is little to be gained by restricting membership from the outset in the assemblages we want to create to those who share our convictions. Multiplicity and heterogeneity, not uniformity and universality, generate the intensities needed to build assemblages.

Universality

Dani Wadada Nabudere, a scholar of imperialism in Africa, presents an example of how some revered beliefs, even those enshrined in decades of United Nations charters, declarations, and statements, are put to the test, problematized, or become the subject of controversy. His study (Nabudere 2005) of how universalist conceptions of human rights actually interact in specific cases with cultural diversity and identity in Africa—an antagonism found on an abstract level in UN documents espousing both universal human rights and ethical imperatives to defend cultural diversity—demonstrates the value of approaching human rights not as stabilized states of affairs applied in the manner of universal standards but as assemblages territorialized and reterritorialized in particular sites. Donor aid to women's communities in north-east Ugandan villages in the early 1990s was provided under the umbrella of universal human rights to gender equality, a principle well established in UN documents. The female aid recipients soon discovered that their new "empowerment" undermined family cohesion by disempowering the men in their community. The women complained of increased drinking among the men and withdrawal

of their participation in family activities. The men expressed frustration about what they saw as a reconfiguration of community life around aid projects directed at just the women. Nabudere reports that only through a series of dialogues between husbands and wives—"generated by [the women's] own experiences to maintain family cohesion by bringing their men into their organizations" (Nabudere 2005:7)—were relations between them realigned, "without any external pressure and lectures being given about 'human rights' or 'gender equality' in the villages" (8). Nabudere observes that "the critical phase" was when "the women became concerned not so much about their 'rights' as women, but more importantly, their concern about their men being marginalized and being left out of the donor funding" (8). The "universal" human right to gender equality, which was forged through a long and conflicted history in Northern/Western nations, did not work as a universal standard, but was reconfigured in assemblage with elements of the specific community situation.

Collier and Andrew Lakoff explain "regimes of living" as "situated configurations of normative, technical, and political elements that are brought into alignment in problematic or uncertain situations"; "they may be conceived as abstract categories of ethical reasoning and practice that are incited by or reworked in problematic situations, taking diverse actual forms" (Collier and Lakoff 2005:31). In Nabudere's example, abstract categories of ethical reasoning about gender equality were reworked in Ugandan villages by the female recipients' appropriation of the universal right to gender equality attached to donor aid. The actual rather than the abstract relationship between these elements were assembled in this singular and specific situation. The case shows that to *see* what "universal human rights" actually *look like*, attention has to turn from *abstract ideas* to the *world*; one has to investigate the configurations of specific assemblages.

What Does It Mean To Be African?

Thinking about assemblages also helps with the question of what might be meant by a specifically *African* information ethics. It was suggested earlier that a continental meaning of "African" is problematic. Following Latour's (2005) advice to "feed off controversies", we can trace the fortunes of a particularly *African* information ethics by first seeking *claims* and *controversies* in a *variety* of sites about what it means to be "African": philosophy, art, religion, ethics, architecture, values, music, customs, fashion, cuisine, etc. Understanding what it

means to be African in the actual rather than the theorized world requires investigation of *where* controversies take place (eligible locations should not be restricted to African nations), *who* speaks (eligible speakers should not be restricted to those holding passports from African nations), *how* and *with what means* controversies get stabilized (the agents busily at work settling controversies should not be restricted to humans; see especially the chapter, "Third source of uncertainty: Objects too have agency", in Latour 2005), and the *number, kinds, and extensions* of the connections and associations made through the work of stabilization. An African information ethics can gain strength through connections and associations with *diverse* problematizations of what it means to be *African*.

African Ethical Assemblages

Ethical assemblages are constructed from the work of stabilizing controversies about values, norms, and ways of living together. Collier and Lakoff's "regimes of living" are ethical assemblages. They remark that to "say that such regimes relate to questions of *living* means: first, that they concern reasoning about and acting with respect to an understanding of the good; and second, that they are involved in processes of ethical formation—that is, in the constitution of subjects, both individual and collective" (Collier and Lakoff 2005:23).

Many regimes of living, the authors note, "illustrate the centrality of biopolitics and technology to contemporary ethical problems. In diverse sites, one finds forms of moral reasoning that are not linked by a common culture but whose shared characteristics can be analyzed in terms of intersections of technology, politics, and values" (23). The information technologies that produce many of the problems and controversies of information ethics also raise issues connected to globalization, because, as Ong and Collier note: "Technoscience—whether material technology or specialized social expertise—may be exemplary of global forms" (Collier and Ong 2005:11). Thus the *regime of living* at stake in the development of an African information ethics is implicated in the ongoing work of globalization through connections and associations already forged by the highly concentrated ownership and control of information technologies.

The problem of developing an African information ethics can be approached by following Latour's (2005) rules of method: first, identify sites of existing controversies, tracing the associations and connections between all the actors, human and

nonhuman; second, trace the means by which controversies are settled and assemblages are stabilized; third—and this is the stage of the politics of *assembling* an African information ethics—guide *intervention* in the processes of assembly by the knowledge gained in the first two steps.

Identifying sites of controversies can be guided by Foucault's ethical "recentering", thinking about information as he thought about sexuality: instead of looking for the forms of morality imposed upon us by such phenomena, locate the areas of experience and behavior regarding information that become problematized, that is, how they become "an object of concern, an element for reflection...a matter for debate...a domain of moral experience" (Foucault 1990:23–24). Such an approach to African information ethics implies *genealogical* work rather than generating declarations that limit debate from the outset by assumptions that the many problems and controversies about concepts like social justice, democracy, universal human rights, the global information society, and the value of access to information and communicative rights either do not exist or have already been settled. It might be worth asking about such concepts, who is speaking? from which position? to whom? in which institutions? to what effect? *Whose* problem is it, and *which* problems are championed as the most salient? Latour insists that the three steps of his method remain distinct and be carried out in the strict order indicated above. But the first and last step are connected, because the politics of "reassembling the social" by constructing *livable collectives*, as he puts it, involves identifying sites that bear upon the ethical matters considered to be most urgently at stake. This is not to suggest that his first step not be rigorously followed, but it is to acknowledge that his last step involves participating in controversies.

At the present time sites where at least some controversies relevant to an African information ethics flourish are not hard to find. Arguments about the role of civil society arising at the World Summit on the Information Society (WSIS) provide an example that illustrates the problem of selecting the most useful sites for assembling an African information ethics. Although the inclusion of civil society actors was acknowledged as a significant step forward, a recent study (Raboy and Landry 2005) of the first phase of WSIS in Geneva in 2003 documents controversies arising from the perspective of civil society. Limitations of space permit only a short list here of the most salient areas of contention:

(1) the structure of WSIS “innovated little compared to previous UN events” (Raboy and Landry 2005:26), upholding “the pre-eminence of governments in decisions on the major aspects of the Summit” (25), relegating civil society to the status of “actors who set directions for reflection and orientation that may or may not be addressed” (63), and limiting debate:

“controversial positions from civil society or positions that risk affecting a powerful State have very little chance of being adopted in this political and diplomatic arena. Certain governments did not see the WSIS as an event tackling broader questions of communication, and preferred to concentrate on specifically targeted issues. The United States, for example, was only interested in three items on the WSIS agenda: network security, infrastructure development, and human capacity building” (63);

(2) the Summit ignored rules of the UN Economic and Social Council that prohibit accreditation of members of the private sector, thus changing “the relationship established between the United Nations and civil society over the past fifty years”, weakening civil society, “whose influence was diluted amid private sector interests”, and raising “many questions about the legality of this practice within the UN framework” (30);

(3) the role of civil society was politicized through the use of its presence to legitimate governmental protection of commercial interests under the guise of “an equitable and development-centred information society” (31);

(4) a technological reductionism framed the Summit’s responses to civil society’s concerns about “universality of access to the information society”: “the universality of the ICTs will be achieved through the development of infrastructures and a climate conducive to investment”, a view “very strongly held in the private sector, and by some governments, led by the United States” (34);

(5) privileging among civil society representatives an elite group with funding and organizational resources: “many organizations and NGOs based in the South were excluded from the Summit because there were almost no financial and organizational structures to enable their meaningful integration” (65);

(6) weakening of a unified civil society position through ideological divisions, notably conflicts

among proponents of a *right to communicate* and opponents who saw such a right as imposing restrictions on freedom of expression, the latter supported by powerful media lobby groups (83–84).

The fortunes of civil society were not much improved in the second phase of WSIS in Tunis. The title of the Civil Society Declaration of 2005 is *Much more could have been achieved*; although acknowledging progress in some important areas, the Declaration observes that “WSIS documents... mostly focus on market-based solutions and commercial use” (World Summit on the Information Society 2005:13). Moreover, the language of the Declaration repeats much of the language of UN documents, suggesting the Declaration shares with them assumptions about universal human rights, the information society, sustainable development, etc. as already stabilized states of affairs.

The controversies about the role of civil society in the WSIS process raises questions about the value of particular kinds of assemblages in building an African information ethics. Latour observes that the political and ethical task of building *livable collectives* arises only as the work of *reassembling* the social. Once controversies get settled, consensus closes debates, and ideas are black-boxed, the work of assembly is finished: there is nothing more to do. If the connections between the human and non-human actors in UN and government-dominated assemblages are no longer open to reassembly, then there are no more ethical *problematizations* to drive ethical work. If, for example, UN and government-dominated assemblages primarily become documentary machines for production of documents whose stabilized language is repeated time and again, and for processing tolerable perturbations generated by marginalized actors such as civil society groups for their value as legitimations of commercial interests, perhaps it is time to seek out *smaller* and radically *singular* ethical problems.

Are there ethical problems regarding communication, information access and dissemination, and processes of identity formation or “subjectivation” through the use of information technologies (see Elichirigoity 2007) on a *scale* analogous to the problems of donor aid to Ugandan women investigated by Nabudere? Can the project of assembling a viable African information ethics learn from trying to build *small ethical assemblages* from *small problems*, which arise even at the level of the *village*, on a scale analogous to the small micro-lending assemblages of the Grameen Bank of Muhammad Yunus? Is it worth investigating controversies, difficulties,

debates, and conflicts occurring in sites of interest to African information ethics that are *impersonal*, *imperceptible* and *indiscernible* to the powerfully stabilizing assemblages of governments and commercial interest? What do such problems, which appear "small" to international, governmental assemblies, but not to the actors involved in those problems, have to offer an African information ethics? If Latour is right, we can expect to find in these "small" problems all the philosophies, moralities, norms, values, ideas about African identity, relations to technologies, connections to various kinds of practices, routines, institutions, organizations, and things (including documents, communications devices, libraries, the trading of information) we need to start thinking about how to assemble an African information ethics.

References

- African Information Ethics Conference. 2007. Tshwane declaration on information ethics in Africa. Adopted on 7 February: Tshwane, South Africa. Retrieved 7 May 2007 from <<http://www.africaninfoethics.org/tshwanedeclaration.html>>*
- Apostel, L. 1981. *African philosophy: Myth or reality? Philosophy and anthropology*. Ghent, Belgium: Story-Scientia.
- Castells, M. 2000. *The rise of the network society*. Oxford; Malden, Maryland: Blackwell.
- Collier, S. J., and A. Lakoff. 2005. *On regimes of living*. In *Global assemblages: Technology, politics, and ethics as anthropological problems*, ed. A. Ong and S. J. Collier. Malden, Maryland: Blackwell.
- Collier, S. J., and A. Ong. 2005. *Global assemblages, anthropological problems*. In *Global assemblages: Technology, politics, and ethics as anthropological problems*, ed. A. Ong and S. J. Collier, 3–21. Malden, Maryland: Blackwell.
- De Landa, M. 2006. *A new philosophy of society: Assemblage theory and social complexity*. London; New York: Continuum.
- Deleuze, G., and F. Guattari. 1987. *A thousand plateaus: Capitalism and schizophrenia*. Trans & foreword by B. Massumi. Minneapolis: University of Minnesota Press.
- Elichirigoity, F. 2007. *The Internet, information machines, and the technologies of the self*. In *Localizing the Internet: Ethical issues in intercultural perspective*, ed. R. Capurro, J. Frübauer, and T. Hausmanninger. Schriftenreihe des ICIE Bd. 4. Munich: Fink Verlag.
- Foucault, M. 1990. *The history of sexuality. Vol. 2, The use of pleasure*. Trans. R. Hurley. New York: Vintage Books.
- Frohmann, B. 2007. *Foucault, Deleuze, and the ethics of digital networks*. In *Localizing the Internet: Ethical issues in intercultural perspective*, ed. R. Capurro, J. Frübauer, and T. Hausmanninger. Schriftenreihe des ICIE Bd. 4. Munich: Fink Verlag.
- Hountondji, P. J. 1996. *African philosophy: Myth and reality. African systems of thought*. Bloomington: Indiana University Press.
- International ICIE Symposium 2004. *Localizing the internet: Ethical issues in intercultural perspective*. 4–6 October, 2004. Retrieved 7 May 2007 from <<http://icie.zkm.de/congress2004#introduction>>
- Latour, B. 1987. *Science in action: How to follow scientists and engineers through society*. Cambridge, Massachusetts: Harvard University Press.
- . 1988. *The Pasteurization of France*. Cambridge, Massachusetts: Harvard University Press.
- . 1993. *We have never been modern*. Trans. C. Porter. Cambridge, Massachusetts: Harvard University Press.
- . 1996. *Aramis or the love of technology*. Trans. C. Porter. Cambridge, Massachusetts; London: Harvard University Press.
- . 1999. *Pandora's hope: Essays on the reality of science studies*. Cambridge, Massachusetts; London: Harvard University Press.
- . 2005. *Reassembling the social: An introduction to actor-network-theory. Clarendon lectures in management studies*. Oxford; New York: Oxford University Press.
- Masolo, D. A. 1994. *African philosophy in search of identity. African systems of thought*. Bloomington; Indianapolis; Edinburgh: Indiana University Press; Edinburgh University Press.
- Nabudere, D. W. 2005. *Human rights and cultural diversity in Africa*. Association of Law Reform Agencies of Eastern and Southern Africa (ALRAESA) Conference on the Fusion of Legal Systems and Concepts in Africa, September 4–8. Imperial Beach Hotel, Entebbe. Retrieved 7 May 2007 from <http://www.doj.gov.za/alraesa/conferences/papers/ent_s4_nabudere.pdf>
- Okere, T. 1983. *African philosophy: A historico-hermeneutical investigation of the conditions of its possibility*. Lanham, Maryland: University Press of America.

Ong, A., and S. J. Collier, eds. 2005. *Global assemblages: Technology, politics, and ethics as anthropological problems*. Malden, MA: Blackwell Pub.

Raboy, M., and N. Landry. 2005. *Civil society, communication, and global governance issues from the World Summit on the Information Society*. New York: Peter Lang.

World Summit on the Information Society. 2005. *Much more could have been achieved: Civil Society Statement on the World Summit on the Information Society. Civil Society Declaration, Document WSIS-05/TUNIS/CONTR/13-E. Tunis. Retrieved 8 May 2007 from <<http://www.itu.int/wsis/docs2/tunis/contributions/co13.doc>>*

Wright, R. A. 1979. *African philosophy: An introduction*. Ed. R. A. Wright. Washington, D.C.: University Press of America.

Peter Fleissner

On the ambivalence of information and communication technologies

Abstract:

The diffusion of digital information and communication technologies (DICT) is strongly supported by many countries of the world. Today, as well as in the past, new technologies are charged with high expectations, but at a closer look one can see that these expectations then are very different from now. Today they depend on the various interests of different groups of people. Globally acting enterprises see DICT as essential strategic instruments in gaining competitive power; some governments hope to reach military hegemony, others to control terrorism and crime, while grass root movements expect to become more influential on some aspects of society. The paper identifies and analyses basic tendencies which promote the various hopes: the effects of DICT on reducing production and transaction costs, and the possibility to transform information goods into marketable services or commodities. The final part of the paper is devoted to a few examples of how the potential of DICT can be used for social improvements.

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 - Digital media – new possibilities for democracy and participation. P. Fleissner and V. Romano (Eds.). Berlin: trafo Verlag 2007, 244p. in German
 - Philosophy of Culture and the Politics of Electronic Networking. Volume 2. Cyberspace: A New Battlefield for Human Interests. P. Fleissner and J. C. Nyíri (Eds.) Innsbruck Wien Budapest: StudienVerlag and Áron Kiadó 1999, 174p.
 - Der Mensch lebt nicht vom Bit allein (Men shall not live by bit alone). P. Fleissner, W. Hofkirchner, H. Müller, M. Pohl, and Ch. Stary (Eds.). Frankfurt/Main: Peter Lang 1996, 1997, 1998, 328p.

The emerging information society, politically supported by the United States, the European Union and many other countries, is charged with high expectations. Such optimism is a phenomenon far from being new in history. Chappe's optical telegraph in the French Revolution¹, Henry Ford's assembly lines², and Lenin's statement³ in 1920 "Communism - that is Soviet power and electrification of the whole country" are prominent examples of technologies related to social improvements of one or another kind. But at a closer look one can see that the content of expectations is very different depending on the various groups involved.

To exploit the full social potential of digital information and communication technologies (DICT) it seems to be useful to analyse the basic economic tendencies that accompany them, particularly within the context of the African continent. The reason for this is that most relevant ethical decisions that could improve the socio-economic situation of disadvantaged groups will not go very far without a sound techno-economic base. Even though this condition is a necessity, in and of itself it is not sufficient for the success. Favourable political and institutional conditions have to support the momentum. Therefore the research method chosen here as appropriate is a combination of political economics and political philosophy.

Basic techno-economic and legal trends of information society

Technically speaking the development of the information society is deeply rooted in two basic technologies: the Internet and Wireless Communication.

While the basic intention of the Internet was to survive a nuclear attack by the decentralisation of nodes and to avoid combat damage by compromising the entire network, research institutions embraced the concept during its second stage. In the 1990s it gained new momentum and popularity after Tim Berners-Lee's creation of HTML, HTTP and the first Web pages at CERN, Geneva. In 2007 Internet

Usage Statistics indicates there are around 1.1 billion users world wide (16.9% of the world's population), with around 33 million users in Africa. The latter corresponds to a penetration rate of 3% and represents the highest growth of usage world wide (30,3% per year between 2000/2007).⁴ The annual growth of 23.7% (between 2000/2004) of mobile communication subscribers in South Africa is also remarkably high.⁵ The increased diffusion of these two kinds of DICT amplifies two essential economic effects: Falling transaction costs, increased commodification of information goods, and the commercialisation of communication.

Falling transaction costs

Although there are various definitions of transaction costs, their common denominator can be understood as the costs of making an economic transaction and/or the indirect production expenses, not including the direct production costs of material, energy, and labour. In a broader interpretation one can see them as all costs of information, communication, organisation, administration, coordination, negotiation and motivation. They are not only related to financial costs, but also to labour time or other efforts needed for improving the quality of a product or service. Although critics state that DICT could contribute to information overload and create other negative phenomena, it is evident that the use of DICT has a great potential to reduce transaction costs. The trend of falling transaction costs is closely linked to decreasing production costs of the basic active element of electronic technology: the transistor. Within two years (or even less) the costs to produce a transistor has been reduced by a factor of two. At the same time the size of transistors has shrunk considerably (see fig. 1 and 2).

From the point of view of an enterprise this means that the application of DICT will increase profits or the profitability of an investment. However, there is more than just cost reduction: Economists of the institutional schools⁶ have proven that the potential set of players to perform productive activities can change, e.g. small or medium sized enterprises

¹ Flichy, Patrice: *Tele. Geschichte der modernen Kommunikationsmedien*. 21ff

² Gramsci, Antonio: *Amerikanismus und Fordismus*. 303

³ Lenin, Wladimir Iljitsch: *Bericht über die Tätigkeit des Rats der Volkskommissare*. 483-515, 513

⁴ <http://www.internetworldstats.com/stats.htm>

⁵ <http://unstats.un.org>

⁶ See Williamson (1985) for a classical example: the end of the „putting-out-Systems“ and the birth of the „factory-Systems“ in Great Britain in early capitalism.

(SME) formerly bound to local markets, can now become global actors because of DICT. Technology can empower new individuals, groups or organisations to perform new activities, but can also bring traditional players under pressure.

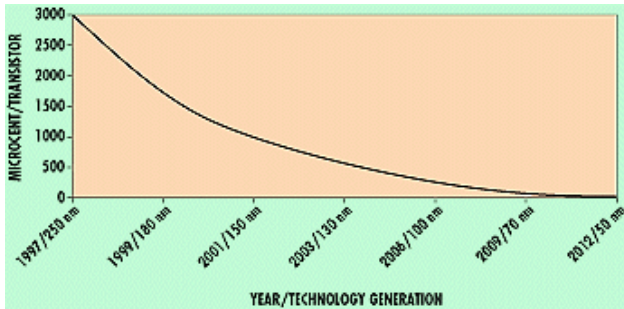


Figure 1: Falling costs per transistor⁷

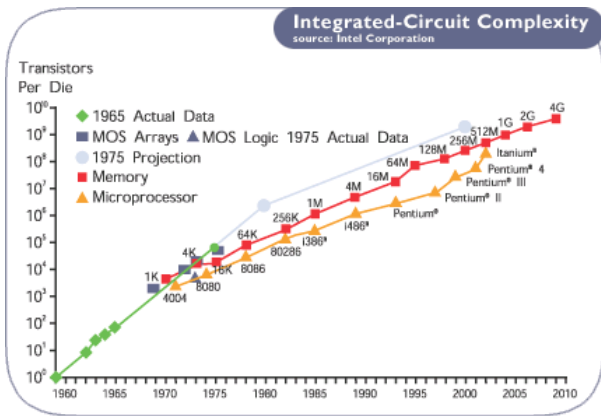


Figure 2. Increasing number of transistors per die⁸

Commercialisation and commodification

There is a growing tendency of the market to cover new fields of human activities (information, communication, knowledge, and other cultural acts) and to transform them into commodities. Let us take a closer look at the mechanism behind this socio-technological process. To understand the notion "commodity" which is used here a small excursion into the basics of political economics is needed.

⁷ Source: www.micromagazine.com/archive/98/03/9803m51b.gif

⁸ Source: http://www.research.philips.com/pass-word/archive/16/images/PW16_moore-1.gif

Since Aristotle (Adam Smith⁹ and Karl Marx¹⁰ continued this tradition) we know that a commodity shows two essential properties: it has *value in use* (a thing is useful for somebody for any reason) and *value in exchange* (a thing has a value for other people than the producer. They pay for them in the market).

*"The one is peculiar to the object as such, the other is not, as a sandal which may be worn, and is also exchangeable. Both are uses of the sandal, for even he who exchanges the sandal for the money or food he is in want of, makes use of the sandal as a sandal. But not in its natural way. For it has not been made for the sake of being exchanged"*¹¹

But what about human activities which will not result in a physical product? Can they be called commodities? In the language of economists these human activities function under the term "services". They disappear after production and are at the same moment consumed. There is a problem with live human activities if they should be sold on the market. They can be sold only once, they are volatile and can neither be stored nor accumulated.

A large part of human activities consists in live acts (speaking, singing, dancing, writing, creating poetry, researching, programming etc). They represent "pure" use values. Many acts of human culture are of this type.

The contribution of DICT to commercialisation

DICT can have two major effects on volatile human activities. The first one is related to space. By means of electronic devices all kinds of information can be transferred from one place to another. It is the essence of a well known quote to describe the effects of information society: "The world has become smaller". We all are confronted with a changed topology of physical space because of the possibilities of electronic transfer of information. Of

⁹ Smith, Adam: *The Inquiry into the Nature and Causes of the Wealth of Nations*. Book 1, Chapter 4.

¹⁰ Marx, Karl: *Das Kapital*. Vol. 1. See <http://www.marxists.org/archive/marx/works/1867-c1/ch01.htm#S1> for the English translation.

¹¹ Aristoteles: "De Rep." l. i. c. 9. See also <http://www.econlib.org/library/YPDBooks/Marx/mrxCpANotes.html>, footnote 47.

course we have experienced a predecessor of this effect: fixed-line telephony. But now the possibilities of cellular phones and the Internet have "extended" the range of shrinking space much more and have transformed personal communication and private talk into a commercialized service one has to pay for. New markets have been opened up which have become very profitable beyond the borders of Europe.

The contribution of DICT to commodification

The second effect is related to time. Like in a time machine, DICT enables live cultural activities to be *frozen* and to *reify* them in a physical object (data carrier) on a large scale. Information is stored either by permanent structural changes of the carrier or by providing different levels of energy to it for a certain period of time. By that DICT *transforms use values* from a volatile form *into a stable material* form (e.g. DVD, CD-ROM, Hard Disk, Memory chip, USB-Stick etc.).

Digital technology also allows the production of cheap copies of the frozen activities and to distribute them worldwide via the Internet. Because anybody could do the copying at nearly no cost, no market can be established. It is not possible to make profits. To allow for profits, another innovative step is needed.

The role of the law

To enable the establishment of a market and to create full-fledged commodities out of volatile services, capitalist countries developed specific legal instruments combined with appropriate technologies to restrict the possibility of copying. The EU and the U.S. established legal means to deter the violation of copy-protection mechanisms.

Back in 17th century in England,¹² experts of law invented an obstacle to the limitless use of, and universal access to, information goods now possible by means of DICT – Intellectual Property Rights were put in place.

¹² After the advent of the printing press and with wider public literacy the Licensing Act of 1662 was established by the King's prerogative. He was concerned by unfair copying of books and established a register of licensed books. It required a copy to be deposited with the Stationers Company. <http://en.wikipedia.org/wiki/Copyright>

Enterprises seek to control the former identical copies at the technical level by adding unique identity codes, licences, keys etc. Each copy is individualized and can be distributed like traditional material commodities. If the copies are not individualized, the information content is generally be protected against so called "unfair use" by Intellectual Property Rights.

By this interaction of technology and law, firstly, use values are reified in digital carriers; secondly, they are transformed by copy-protection into commodities which can also have exchange value. By this combination of measures a large scale global market for digital carriers is enabled, as well as a secondary market for freezing and unfreezing technologies (like digital cameras, camcorders, DVD players, iPod etc) and for the creation of corresponding infrastructures.

Contradictory effects of commercialisation and commodification

Above we have seen that DICT adds a necessary condition to human activities to transform pure use values into marketable products or services. Although at a first glance there is no difference between commercialisation and commodification, a closer look allows a more differentiated understanding. While commodification is always connected to commercialisation, commercialisation does not necessarily lead to commodification. The difference can be seen in the analogy of the difference between goods and services. In economic terms (physical) goods can increase and add to the accumulatable part of output created in the economy, while services cannot do that. Services can neither be stored, nor resold nor accumulated. They do not have the potential for existing longer than in the moment of their production which is also the moment of their consumption.

Under capitalist relations of production the difference cannot be seen at the surface, because goods and services can be sold with a profit. If one abstracts from this disguise, it becomes immediately clear, that an economy based on services only cannot exist in the long run. All available resources would be depleted. Goods (commodities) can refill the depleted stocks, whereas services (commercialized use values) cannot. To keep the story short: Goods can contribute to long term economic growth; services as such are not able to do so.

By commercialisation and commodification many areas of human activities, culture, knowledge, arts, research, entertainment become subject to the market. As a consequence their price excludes people with limited financial means from using them.

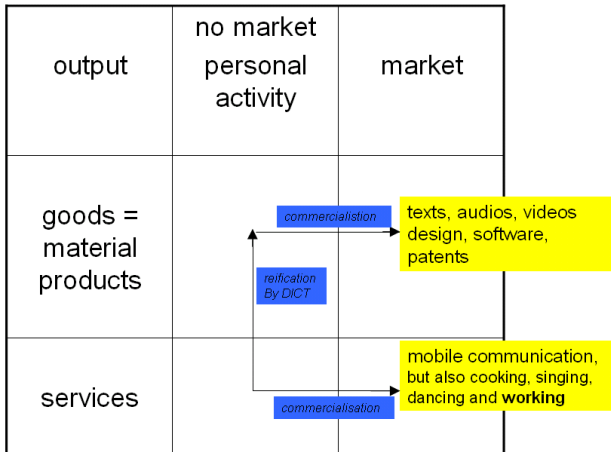


Figure 3: Commercialisation and commodification in the information society

Many people see the exclusive effect of pricing only in a negative way: People cannot participate in certain forms of consumption and are therefore excluded from, or restricted in, social and cultural participation. Consequently the argument is extended to the thesis that in such a framework people cannot improve their own social condition, they cannot escape poverty and ignorance. While this is true without any doubts, one should also take into account the positive effects of commercialisation and commodification. It is a similar argument like the one on the extraordinary scientific and cultural achievements at the courts of the Renaissance princes in the north of Italy. These cultural achievements of Feudalism have created new ways of understanding the world and looking at it, which has become common heritage of humankind we would not like to miss today.

Mobile telephony has overcome many restrictions of direct communication. Neither distance nor location of the communication partners matter any more. It is advantageous to large trans-national and global enterprises. It also gives rise to patterns changing for the better in such diverse areas as family life, youth culture, small and medium sized business,

emergency services, NGO activities, and development policies, etc.¹³

Although commercialisation and commodification processes have already changed the character of the Internet compared to the 1980s, research scholars would not be able to live without it. Now they have access to information and knowledge world wide and are able to do global research projects. Even if education and training activities will become commodified, in some fields this change could result in a better quality of products.

This development can be compared by extension and importance with the *commercialisation of work* which happened during the first half of the 19th century in England which was described by Karl Polanyi¹⁴ in his book "The Great Transformation" (1944). There he located the transformation of capitalist *economy* into capitalist *society*.

Growing resistance

As it was the situation in the 1800s, also now these contradictory and ambivalent processes give rise to resistance. But in contrast to traditional class struggles related to the fight between capitalists and the working class, the contemporary struggles focus on the cultural heritage in a very broad meaning of the term. It is the question of availability and universal access to cultural products which is not only related to manual workers, but also to middle classes, intellectuals, artists and to parts of the capitalist class itself.

Accordingly one can see growing resistance in many areas at the same time. Even the European Parliament was reluctant to subscribe a directive of patents on software or on the human genome. Free/libre software, open source¹⁵, intellectual property rights, creative commons¹⁶, GNU Licences

¹³ Castells, Manuel et al: mobile communication and society. 1-6

¹⁴ Polanyi, Karl: The Great Transformation.

¹⁵ e.g. Open Source Yearbooks (annually, since 2004) <http://www.opensourcejahrbuch.de/>; Fuchs, Christian: Cyberprotest und Demokratie. 57-86

¹⁶ Lessig, Lawrence: Free Culture – How Big Media uses Technology and the Law to lock down culture and control creativity.

etc. have become new battlefields for the appropriation of their own culture by the people. But there could be more...

DICT-assisted “joy of sharing knowledge”?

If the above-mentioned trends are correctly reflected, one has to think about the role and the conditions under which DICT can be usefully implemented to fight poverty and illiteracy, and how one could improve the low quality of life of poorer and excluded people - as it is declared in the South African Constitution (as adapted in May 1996), the Bill of Rights included in the Constitution, and the 1994 Reconstruction and Development Programme (RDP). This is not an easy task at all. Although during the last decades huge amounts of money have been spent on investments in large corporations, including South Africa, to increase the number of jobs and to create employment and income, the effects were disappointing. A rather extreme example in South Africa¹⁷ showed that for the refurbishing of a mine 320 million RAND = 40 million EUR were spent for a net-gain of thirteen jobs. In fairness, it also changed the productivity of the existing jobs. Another example is the case of the South African Motor Industry Development Programme, which did not have any positive net effect on employment. On the contrary, from 1988 - 2000 the car assembly industry shrank from 35.000 to 32.300 jobs, the component industry from 60.000 to 38.500.

The United Nations have submitted a report that this strategy has produced an increase of unemployment, poverty, and violence:

“As a result, the Human Development Index has worsened (from 0.73 in 1994 to 0.67 in 2003), poverty still engulfs 48.5% of the population (21.9 million in 2002), income inequality has increased (from 0.60 in 1995 to 0.63 in 2001), the majority of households have limited access to basic services, and the official unemployment rate has sharply increased to more than 30% in 2003... The economy provided only 11.56 million jobs for 16.81 million

economically active South Africans in March 2003, resulting in 5.25 million unemployed, or an official unemployment rate of 31.2 per cent, which is substantially higher than the 19.3 per cent unemployment rate in 1996.”¹⁸ The poverty level of the population varies according to different sources ranging between 40 and 50%.¹⁹

For this reason the paper invites a discussion about how to contribute alternatively to the fight against poverty and ignorance. This is based on experiences in other countries like Frithjof Bergmann’s “New Work” Communities²⁰ in the United States of America, on Targeted Intelligence Networks²¹, and on the institution of “misiones” in Venezuela²². These initiatives are described below.

The presented examples are not thought to be applied as they are, but should be modified and rethought to take on board the new opportunities of DICT²³. Their ambivalences should also be taken into account. Enabling and empowering techniques and basic infrastructure have to be provided to create the necessary skills and the possibility of universal access, even if the falling transaction costs allow performing information and communication activities to be provided cheaply. The commercialisation and commodification of information goods can be challenged by legal support of Open Source/Free Software and by fostering Copyleft licenses. Linked to these examples the author proposes an integrated effort to combine grass roots movements, transportation, DICT and other infrastructures, and financial, institutional and legal support by the state to improve the socio-economic and cultural situation in Africa.

¹⁷ Danoens, Maylene Y., and Alan Simon: An analysis of the impact of the first phase of South Africa's Motor Industry Development Programme (MIDP), 1995-2000. 251-269, 261/262

¹⁸ <http://www.undp.org.za/NHDR2003.htm>

¹⁹ South African Department of Social Development: Ageing and poverty in South Africa. iii

²⁰ Bergmann, Frithjof, and Stephan Schuhmacher: Neue Arbeit, neue Kultur.

²¹ http://iqw.tuwien.ac.at/peterf/Fleissner_e.pdf; <http://www.rosalux.de/cms/index.php?id=10268>

²² <http://www.misionesbolivarianas.gob.ve/>

²³ Fleissner, Peter: Max Webers Bürokratietheorie im Lichte elektronischer Kommunikationsmedien. 127-135

Frithjof Bergmann's "New Work" paradigm

Stanford Professor Frithjof Bergmann developed the "New Work" paradigm during the crisis of U.S. car industries in the early 1980s. Prof. Bergmann gained a lot of experience in the implementation of Communities of New Work in many countries all over the world. The network formed stretches from the Ukraine, to India, to countries in Europe (in particular in Germany and Austria), but also to Japan and South Africa, where it found support by the Department of Social Development.

In sharp contrast to the paradigm of economic development based on job-creation which exerted control during the last decade core of the "New Work" Communities is the idea of development through building up high technology platforms that enable communities to produce for themselves the requisites for a fulfilling life. DICT should be one of the high level technologies used. By promoting DICT infrastructure to the entire country, and by guaranteeing universal access to it, one could also improve the general level of computer literacy and create new opportunities for small scale businesses. On the other hand it is evident, that technical Internet access alone without measures to increase computer literacy will not bring the desired results.

Prof Bergmann's Communities of New Work could mean an alternative to the traditional approach of development by using advanced technologies in the service of the poor. A workplace in such a Community promises to be much cheaper than the capital investment needed for a new workplace in manufacturing industries.

The implementation of "New Work" is a stepwise procedure. While this community oriented approach firstly offers the people opportunities to produce their own foodstuff and water supply within a social network they are used to live in. The question of competitiveness of these enterprises is of secondary importance at this stage. As a next step they could produce surplus to be sold to their community or even be exported. The basic steps will lay the groundwork for further developments, e.g. the production of washing-machines where filters allow for reusing the water up to ten times. Besides the economic effects the production of water filters itself, the product could improve the general social and physical well-being of countless South African communities where water is scarce.

Targeted Intelligence Networks (TIN)

TINs²⁴ were identified in the context of the crisis of the welfare state in Central Europe. The following existing examples of alternative institutions were found:

"*Peer Group Care*" is a complementary small group personal support structure for the elderly, poor, disabled and other outsiders (established in Germany and Austria, supported by faith communities);

"*Study Circles*" to complement traditional schools (established in Scandinavian countries as secularised forms of bible reading groups). Karlsson/Fleissner²⁵ describes how they are already linked to DICT;

"*Workers' Health Assurance Groups*" to improve the occupational ill-health status (in the 1970s they were operational in Italian enterprises, initiated by trade unions), and

"*Intrapreneurial Groups*" against alienation on the workplace and to provide a training ground for taking over responsibility and the ability of decision making (not yet realized fully, approximated by autonomous groups of workers at the car maker Volvo in Sweden).

As examples to illustrate how self-empowerment and auto-determination can be trained they share the following common features:

- Voluntary cooperation in small groups towards a shared goal and an integrated effort to combine grassroots movements, technical infrastructure, in particular DICT, and financial and legal support by the state to create a better quality of life, in particular for the more vulnerable groups of society
- An institutional framework has to be created within that these new forms can emerge. Financial, infrastructural, material and educational resources are needed to empower people to take over their new tasks voluntarily.

²⁴ For more details see <http://members.chello.at/gre/fleissner/documents/work/work.pdf>. 8

²⁵ Karlsson, Lars, and Peter Fleissner (ed.): Study Circles in Targeted Intelligence Networks. <http://www.jrc.es/home/pages/detail.cfm?prs=329>. www.jrc.es will be changed to ipts.jrc.ec.europa.eu.

- This implies also certain ways of compensation and remuneration for their efforts and their contribution to society.
- Other already existing social activities and features of the welfare state should be complemented and not replaced by TINs.
- A very important issue: how should the TINs be monitored and controlled to create a process of self-improvement?

The establishment of TINs will depend among others on the existing level of income, on the amount of leisure time left over after the necessities of work, on the psychological status of the majority of people, on increased experience of crisis symptoms, on increased feelings of anxiety and stress, and on the availability of political support. The involvement of people in social affairs could afford them more direct experience with the destructive tendencies of societal changes and that will probably sharpen their awareness and motivation to fight against negative tendencies of social change.

Bolivarian Missions

As a final example, new institutions are presented that are already established successfully, maybe because of particularly favourable conditions brought about by political leaders. Still there is much work to do on how to combine these institutions with DICT.

Oil profits, being about US\$25 billion in 2004, have allowed the Chávez administration in Venezuela to establish special social programmes – the "Bolivarian Missions."²⁶ They include a remarkable increase in spending on social programs. The Chávez administration has built free health care clinics, subsidized food and created small manufacturing cooperatives. The programs have constructed and modernized thousands of public medical and dental clinics, launched massive literacy and education initiatives (it is said that these initiatives made more than one million adult Venezuelans literate), subsidized food, gasoline, and other consumer goods, and established numerous worker-managed manufacturing and industrial cooperatives. Critics allege that these programs are corrupt and inefficient, while a number of international organizations — including the UN, UNICEF, and the WHO — have praised the programs as positive models for bringing about social development. There have been also marked

improvements in infant mortality rates between 1998 and 2005.

The Missions have overseen widespread experimentation in what Hugo Chávez's supporters term *citizen- and worker-managed governance*, as well as the granting of thousands of free land titles, reportedly to formerly landless poor and indigenous communities. In contrast, several large land estates and factories have been, or are in the process of being, transferred to the hands of the workers.

The author had the opportunity to experience the mood of the people at the occasion of the presidential elections in December 2006. He is the more convinced about the success of Missions since he had found data on the rate of unemployment for the last six years:

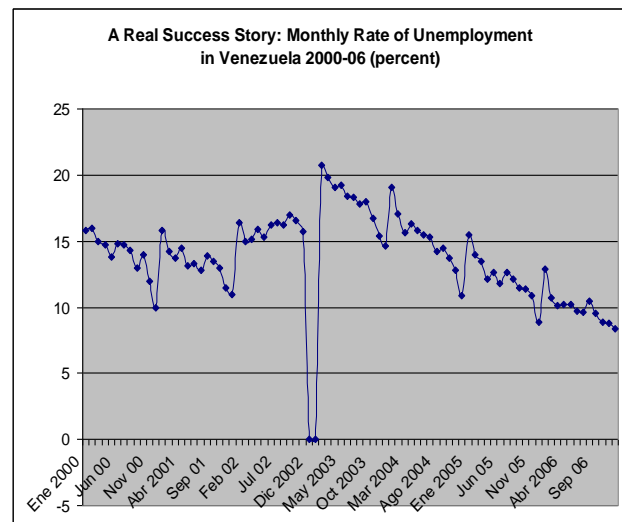


Figure 4: Unemployment Rate in Venezuela 2000/06²⁷

The examples above provide some food for thought about the directions the new initiatives in South Africa could take by embracing the positive side of DICT. Most certainly this is not the end of the debate.

References

Bergmann, Frithjof (author) and Stephan Schuhmacher (translation): *Neue Arbeit, neue Kultur. Ein Manifest*. Freiburg, Arbor Verlag 2004.

²⁷ <http://www.ine.gov.ve/hogares/SeleccionHogares.asp>

²⁶ http://en.wikipedia.org/wiki/Bolivarian_Missions

- Bergmann, Frithjof, and Kerstin Mauersberger: *Neue Arbeit kompakt*. Freiburg, Arbor-Verlag 2007.
- Castells, Manuel et al: *mobile communication and society. A global perspective*. Cambridge, Mass., MIT Press 2007
- Danoens, Maylene Y. and Alan Simon: *An analysis of the impact of the first phase of South Africa's Motor Industry Development Programme (MIDP), 1995-2000*, in: *Development Southern Africa*, Vol. 21, No 2, June 2004. 251-269, 261/262
- Fleissner, Peter: *Max Webers Bürokratiethorie im Lichte elektronischer Kommunikationsmedien*. in: F. Huber-Wäschle, H. Schauer und P. Widmayer (Eds.) *GISI 95. Herausforderungen eines globalen Informationsverbundes für die Informatik*. Berlin, Springer 1995. 127-135
- Flichy, Patrice: *Tele. Geschichte der modernen Kommunikationsmedien*. Frankfurt/New York, Campus 1994. Original French version published in 1991
- Fuchs, Christian: *Cyberprotest and Demokratie*, in: Fleissner, Peter, and Vicente Romano (Hg.): *Digitale Medien – neue Möglichkeiten für Demokratie und Partizipation*. Berlin, Trafo Verlag 2007. 57-86
- Gramsci, Antonio: *Americanismo e Fordismo. The Prison Notebooks 9. written in 1929-32, first published in 1949*. German translation: Haug, Wolfgang Fritz, and Klaus Bochmann (Eds.): *Gefängnishefte Band 9, Heft 22 -29*. Berlin, Berliner Institut für Kritische Theorie 2004. 303
- Karlsson, Lars, and Peter Fleissner (ed.): *Study Circles in Targeted Intelligence Networks*. Seville, Institute for Prospective Technological Studies of the European Commission 2000. <http://www.jrc.es/home/pages/detail.cfm?prs=329>
- Lenin, Wladimir Iljitsch: *Bericht über die Tätigkeit des Rats der Volkskommissare. VIII. Gesamtrussischer Sowjetkongress. 22. Dezember 1920*, in: Lenin, W. I., *Werke, Band 31*, Berlin, Dietz Verlag 1962. 483-515, 513
- Lessig, Lawrence: *Free Culture – How Big Media uses Technology and the Law to lock down culture and control creativity*. New York, The Penguin Press 2004
- Marx, Karl: *Das Kapital. Band 1*. in: Karl Marx und Friedrich Engels, *Wekre, Bd. 23. Erster Abschnitt. Ware und Geld*. Berlin, Dietz Verlag 1962
- Polanyi, Karl: *The Great Transformation*. Frankfurt am Main, Suhrkamp 1978. Original English version published in 1944
- Smith, Adam: *The Inquiry into the Nature and Causes of the Wealth of Nations*. First published 1776. Book 1, Chapter 4.
- South African Department of Social Development: *Ageing and poverty in South Africa*. Dar es Salaam 2003. iii. <http://www.un.org/esa/socdev/ageing/workshops/tz/south%20africa.pdf>
- Williamson, Oliver E.: *The Economic Institutions of Capitalism*. New York, The Free Press 1985. paperback

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The Nature and Accessibility of E-Government in Sub Saharan Africa

Abstract:

Electronic government (e-government) is a phenomenon that is linked to the information society and the advantages associated with it. E-government allows government departments to network and integrate their services using information and communication technologies (ICTs) in order to improve service delivery and enhance the relationship between the government and the public. The major ingredients of e-government are infrastructure, human resources and information. The reality in Sub Saharan Africa (SSA) is that all these ingredients are insufficient. The ICT infrastructure is not widely available to rural populations. In most cases, both government officials and the people who may want to use government services online lack basic skills. Government information is not properly organized as records management systems in many countries are collapsing.

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Background and introduction

Information and communication technologies (ICTs) have changed the process of governing in the world. Power relations between governments and the governed have been transformed from being mainly vertical and hierarchical and structured along rigid and well-defined departmental boundaries to being horizontal, networked and participatory. According to Manuel Castells:¹

We are living through one of those rare intervals in history. An interval characterized by the transformation of our "material" culture by the works of a new technological paradigm organised around information technologies.

Information technologies have brought about an epoch in history that has been described using labels such as the network age,² information society and knowledge economy.³ Governments in the developed world have responded to the opportunities offered by the information society to offer value-added services to their citizens through electronic government (e-government).

However, countries in Sub Saharan Africa (SSA) have not adequately restructured public bureaucracies in response to the demands of the information society. Many governments are still hierarchical and lacking accountability and transparency. Public bureaucracies still enjoy the monopoly of power and authority. Elected officials rarely relate closely with the electorate, and only consult with them when they need their votes after every four or five years. Government information systems are still mainly manually operated and paper-based.

The situation in SSA is compounded by the fact that some bureaucrats and politicians view the ICT revolution as a "highly political affair and not a technical challenge".⁴ There is need for change management and the change of the mindsets of many governments in SSA if e-government initiatives were to succeed. Governments in many developed countries shifted from being public bureaucratic-oriented and unrepresentative to being citi-

zen-oriented as a result of the challenges and opportunities posed to government processes by the information revolution. They have taken advantage of the information "revolution" to make government processes, services and information available online in an interactive and open manner. That response has been characterized as e-government.

E-government promotes a better life characterized by representative and participative democracy, transparent, open and collaborative decision making, close relation between government, business and citizens, enhanced service delivery, new infrastructure and info-structure, integrated and seamless government services that cut across departmental boundaries and providing a convenient and timely one-stop service to the citizens, and equity in the provision of government services.^{5,6} Put differently, e-government has a possibility of increasing honesty, efficiency and effectiveness, accountability and participatory democracy in the interaction between the government and the citizens.

Many governments in SSA recognize the potential benefits they can get from the information society and knowledge economy that is driven by ICTs. However, there are factors linked to the infrastructure and info-structure which inhibit their fully participation in the information-intensive society that exploits new archetypes of knowledge creation and distribution.

Defining e-government

The definitions of e-government abound.^{7,8,9} Table 1 at the appendices depicts a variety of definitions that have been proposed. The twelve definitions converge around the use of technology and the provision of service delivery in the conduct of government business. Although e-government is often defined as "online government" or "Internet-based government," many non-Internet "electronic government" technologies such as telephone, fax, short message service (SMS), multimedia messaging service (MMS), wireless networks, Bluetooth, televi-

¹ Castells, 1996, 29.

² Castells, 2001.

³ Heiskanen and Hearn, 2004.

⁴ Wilson III, 2004, 6.

⁵ Lenihan, 2002.

⁶ Zakareya, Zahir and Sarmad, 2004.

⁷ Curtin, Sommer and Vis-Sommer, 2003.

⁸ Oliver and Sanders, 2004, 5, 2.

⁹ Yong and Hiap Koon, 2005, 11.

sion and radio-based delivery of government services can be used in the context of e-government.^{10,11}

From the definitions in Table 1, we may characterize e-government as an innovative attempt to take advantage of ICTs to facilitate the citizens' access to government information and services in order to support social, economic and political development, improve the quality of public services, and provide an avenue for citizens to interact with government institutions and processes in a democratic, transparent and equitable way.

Drivers of e-governance

The major drivers of e-government have been sketched as technological,^{12,13,14} organisational and environmental.¹⁵ Technology should not be emphasized at the detriment of other factors such as politics, legal frameworks and the environment. Technological determinism does not fully explain the evolution of e-government. While technological progress in government, ITC infrastructure and available ICT expertise may influence the implementation of e-government, the support and active commitment of influential politicians may play a significant role in promoting e-governance "buy in".¹⁶ According to Ernest Wilson III, if politics is wrong then the other major drivers of e-government will not work. Leadership should be committed to "press changes in the face of institutional rigidity, technological backwardness, and political resistance".¹⁷

SSA leaders have not shown full commitment to improve the ICTs infrastructure in order to transform government processes. The adoption of the African Information Society Initiative in 1996 held

hope for Africa.¹⁸ The initiative aimed at providing an action framework to build Africa's information and communication infrastructure, but little progress was witnessed due to lack of resources and political will. Perhaps, SSA should pin its hopes on the New Partnership for Africa's Development (NEPAD) which partly aims at championing ICT development in Africa.

E-government can be implemented successfully if it is regulated by a legal framework.¹⁹ Legal issues revolve around cyber-security, digital signatures and personal data protection and confidentiality. Digital signatures should be recognised by the law so that they have the same integrity as paper-based ones. Laws limiting the government's power vis-à-vis the individual in terms of the control of personal information should be passed. SSA has been very slow in enacting privacy laws and access to information legislation. Principles of fair information practices and data protection laws are not prevalent in SSA. Citizens may not be confident to participate in e-government programmes and trust the system if their privacy is not guaranteed.

Models of e-government

Studies on electronic government have been definitional, evolutionary and stakeholder-oriented.²⁰ Evolutionary studies focus on what Layne and Lee refer to as "stages of growth" models for fully functional e-government.²¹ The model-based paradigm has dominated the theoretical framework used in e-government research.²² Although, these models appear to be mechanistic in approach, they provide a useful tool to evaluate the development of e-government in a given context. A summary of some of the stage-models presented in Table 2 at the appendices is given in the following texts.

Models used to depict e-government suggest that there are a number of distinct phases in the development of e-government.^{23,24,25,26,27,28,29} There is

¹⁰ Anttiroiko and Malkia, 2006.

¹¹ Heeks, 2004.

¹² Culbertson, 2004, 59.

¹³ Hai Suan, 2005, 450.

¹⁴ OECD, 2000.

¹⁵ Zakareya, Zahir and Sarmad, 2004.

¹⁶ *Ibid.*

¹⁷ Wilson III, 2004, 13.

¹⁸ African Information Society Initiative, 1996.

¹⁹ Hai Suan, 2005, 450.

²⁰ Gil-Garcia and Martinez-Moyano, 2007.

²¹ Layne and Lee, 2001.

²² Heeks and Bailur, 2007.

²³ Elmagarmid and McIver, 2001.

limited Internet presence in the first phase of the development of e-government, and information is static and basic with a one way interface between citizens and the government. Angola, Botswana, Burundi, Cape Verde, Central African Republic, Ethiopia, Gabon, Gambia, Guinea, Lesotho, Madagascar, Malawi, Mali, Niger, Seychelles and Togo are becoming e-government players and they are estimated to be at this stage.³⁰

Dynamic and enhanced online information is made available to the citizen during the second stage, but the communication is still mainly one way.³¹ Internet portals are designed to integrate government activities and processes to facilitated online interaction between the citizens, business and other stakeholders. Benin, Burkina Faso, Cameroon, Cote d'Ivoire, Ghana, Kenya, Mauritania, Mozambique, Namibia, Nigeria, Rwanda, Senegal, Sierra Leone, Swaziland, Tanzania, Uganda, Zambia and Zimbabwe appear to be at this stage.³²

The third phase provides more interactive interfaces between all stakeholders. At this stage, e-government integrates "the complete range of government services, provides a path to them that is based on need and function, not on department or agency".³³ For instance, citizens may be able to register a birth or death, apply for a social welfare grant, pay taxes, access government legislation and find information on activities of their representatives in parliament and local government without having to leave their homes and offices. Mauritius and South Africa are believed to be reaching this stage. For instance, citizens can file income tax returns interactive online systems. However Internet access is still beyond the reach of many citizens in these countries.

Although the fourth phase is an improvement on the third one, it offers more customized and secure services as there is provision for passwords and other security features. All the stakeholders begin to realize the benefits of e-government such as fostering democratic processes, promoting accountability, increasing citizen participation and engagement and delivering of efficient and effective government services. Some models go further than four phases,³⁴ however, the first four stages seem to provide the fundamental features of the evolution of e-government in varying details and complexity. The other models that go further than four phases offer some variant on the four-phase "web development stage-model". No country has achieved the fourth stage of e-government development in SSA.

Using the framework given above and the 2001 United Nations e-government index which classified countries as having high e-government capacity with a score of 2.00-3.25, medium e-government capacity (1.60-1.99), minimal e-government capacity (1.00-1.59) and deficient e-government capacity (below 1.00) it is apparent that more than 60% of the countries in SSA have a score below 1.00.³⁵ Some countries might have moved steps closer to e-government in the interim, but the conclusion that e-government is still in infancy in SSA is inescapable.

Many government websites are not fully functional and they are populated with information that does not enhance service delivery and participatory democracy. A fully functional e-government website should have an e-participation framework which provides e-information on policies and programmes, budgets, laws and regulations, e-consultation mechanisms and tools, and e-decision making.³⁶ Governments with an e-participation framework are participatory and inclusive.³⁷ In many instances citizens are still obliged to visit government offices even if they may download certain documents from government portals as they may not be processed online. The possibility of coming face-to-face with the bureaucratic red tape practices and an odd

²⁴ Gil-Garcia and Martinez-Moyano, 2007.

²⁵ Layne and Lee, 2001.

²⁶ Sahraoui, 2007.

²⁷ Symonds, 2000.

²⁸ United Nations, 2002.

²⁹ Watson and Mundy, 2001.

³⁰ Department of Economic and Social Affairs, 2003.

³¹ United Nations, 2002.

³² Gil-Garcia and Martinez-Moyano, 2007.

³³ Symonds, 2000.

³⁴ See, for example, Gil-Garcia and Martinez-Moyano, 2007 and United Nations, 2002 in Table 2.

³⁵ United Nations, 2002.

³⁶ Department of Economic and Social Affairs, 2003.

³⁷ *Ibid.*

inefficient and corrupt government official still exist in many countries in SSA.

E-government is attainable: lessons from elsewhere

Countries such as Canada, Singapore and New Zealand are among the top-twenty leading countries in relation to e-government.^{38,39,40} In Singapore, for example, citizens can pay parking tickets, job-seekers can search for employment, people can change their postal addresses, debtors can petition for bankruptcy, and public trustees can file an application for estate administration using opportunities provided by e-government.⁴¹ Singapore's e-government project was built on a strong ICT foundation and a dynamic e-Government Action Plan.⁴² Canada's e-government project tapped on the high level of connectivity and high ICT literacy or e-literacy levels of Canadians.⁴³

In New Zealand, it was driven by a central coordinating organization, the E-Government Unit (EGU) which:⁴⁴

- developed an e-government strategy;
- formulated standards and guidelines;
- provided leadership to facilitate the achievement of the e-government vision and strategy;
- identified and coordinated opportunities for collaboration across government departments; and
- monitored progress towards achieving e-government.

It is evident from these examples that e-government is attainable. The implementation of e-government programmes mainly hinges on a sound ICT infrastructures, clearly defined e-government strategy

and vision, strong government commitment, information literacy and e-literacy, and connectivity.

Unfortunately for SSA, many countries lack an e-government strategy and vision. Many citizens are IT-illiterate and the quality of government information is poor. Standards to ensure interoperability and portability of government information systems are inadequate. Human resources are scarce due to the brain drain and lack of capacity building programmes. Many governments do not have laws, policies and standards for privacy protection and information access. Many government websites do not have a privacy policy. Concerns about privacy and confidentiality impede the development of e-government. Governments departments to coordinate and oversee the implementation of e-government projects are absent in many countries in SSA, and they are grossly under resourced in instances where they exist.

Challenges facing SSA in the road to e-government

Seventeen challenges and opportunities of e-government implementation have been outlined in the literature.⁴⁵ They include infrastructure development, law and public policy, digital divide, e-literacy, accessibility, trust, privacy, security, transparency, interoperability, records management, permanent availability and preservation, education and marketing, public sector and private sector partnerships, workforce issues, cost structures and benchmarking.⁴⁶ The next texts collectively deal with some of these overlapping challenges.

Access to information and telecommunication technologies in Africa

ICTs provide information and services to the people cheaply, efficiently and effectively.^{47,48,49} The use of

³⁸ Curtin, Sommer and Vis-Sommer, 2003, 8.

³⁹ Department of Economic and Social Affairs, 2003.

⁴⁰ United Nations, 2002.

⁴¹ Henderson, 2002.

⁴² Lim and Low, 2003, 21.

⁴³ D'Auray, 2003, 33.

⁴⁴ Boyle and Nicholson, 2003, 90-1.

⁴⁵ Information for Development Program (*infoDev*), 2002.

⁴⁶ *Ibid.*

⁴⁷ Elmagarmid and McIver, 2001.

⁴⁸ Henderson, 2002.

⁴⁹ McClure, 2001.

ICTs can "systematize the transparency of governance" by "providing relevant and timely information in large quantities".⁵⁰ Although the implementation of e-government programmes involves the use of many ICT applications, it is the Internet that is the most widely recognized and identifiable component driving e-government.⁵¹

The lack of telecommunication infrastructure in Africa has seriously restricted the use of the Internet and the adoption of e-government in SSA. Furthermore, Internet connection charges are beyond the reach of the average citizens in many countries in SSA. One in 40 people have a fixed line, one in 130 has a PC and one in 160 uses the Internet in SSA.⁵²

Most of the existing telecommunications infrastructure does not reach the bulk of the population. In fact, Tokyo "has more telephone lines than sub-Saharan Africa put together".⁵³ Fifty per cent of the available lines are concentrated in the cities, where only about 10 per cent of the population lives. ICT foundation is weak and there is no universal access to the Internet. Irregular or non-existent electricity supplies are a major barrier to use of the ICTs, especially outside the major towns. Power outages are also experienced. For instance, a cyber café had to close shop in Kenya as result of unreliable power supply.⁵⁴

Bandwidth is also a problem in some countries in SSA. For instance, the World Bank Report on "African Region Communications Infrastructure Programme" of 2007 pointed out that the east and southern African region suffers bandwidth deficiency as it accounts for less than one per cent of the world's international bandwidth capacity.⁵⁵ Limited connectivity and costly access hinders the potential of SSA to utilize ICTs to promote social participation and improve government efficiency and transparency.

Inequitable access to ICTs such as personal computers, Internet, telephones, cable and other Internet-related technologies by individuals or groups of people in their countries in order for the citizens to benefit from the government processes driven by ICTs is another challenge facing governments in SSA. The disparities related to accessing ICTs have been characterized as the "digital divide". The level of e-government readiness in a country is partly measured by access to ICTs. The United Nations E-government Readiness Index of 2003 showed that South Africa was the only country in SSA that was among the top 100 countries in relation to e-readiness.⁵⁶ The index of United States, the leading country in the world, was 0.927 and South Africa was pegged at 0.515. The fifth country in SSA was Namibia with a ranking of 0.34. South Africa remained among the top 100 countries in the Economist Intelligence Unit's e-readiness ranking of 2006 and it was joined by Nigeria.⁵⁷

Information literacy and e-literacy

Information literacy is fundamental to the use of information resources in the knowledge age.⁵⁸ Information literacy refers to the person's ability to "recognise when information is needed and have the ability to locate, evaluate and use effectively the needed information".⁵⁹ Literacy today also means ICT literacy and skills.⁶⁰ ICT literacy among the citizens has significant role to play implementing e-government as it is fundamental to the ability of citizens to access and use electronic information. Information literacy policies are deficient and literacy levels are extremely low in SSA.

Information management: Achilles' heels of e-government in Sub Saharan Africa

Government's provision of access to information is the foundation of a democratic society. Information partly facilitates decision making, citizen oversight of

⁵⁰ Kim *et al.*, 2005.

⁵¹ United Nations 2002.

⁵² African Internet-a status report, 2002. The situation has not changed drastically ever since the report was compiled.

⁵³ Mbeki, 2000.

⁵⁴ Kathuri and Nyasato, 2007.

⁵⁵ World Bank, 2007b.

⁵⁶ Department of Economic and Social Affairs, 2003.

⁵⁷ Economist Intelligence Unit, 2006.

⁵⁸ Braaksma, 2004, 151.

⁵⁹ American Library Association, 1989.

⁶⁰ Department of Economic and Social Affairs, 2003.

government departments and their decisions, and citizen debate on policy issues and policy formulation.⁶¹ Information management in general and records management in particular, is a cornerstone to government information systems and effective access to information.

The advent of ICTs has brought about a paradigm shift in the production of government information. Government processes are mainly generating electronic records as evidence of government's conduct of business. This is all happening at time when many records managers in SSA do not have the necessary professional capability to deal with electronic records. Weak institutional capacity and the absence of comprehensive records management policies, guidelines and practical standards have aggravated the situation.^{62,63} The management of e-records will continue to pose the greatest challenge to the implementation of e-government until the capacity of SSA to handle e-records is enhanced. Building an e-government environment which provides authentic and reliable information for decision making and holding the government accountable would remain elusive if SSA does not have the "capacity to create, manage, share and use electronic information (and related technology) to improve governance as well as to sustain international trade and innovation; improve global security and support other activities in our increasingly interconnected and inter-dependent world".⁶⁴

Conclusion and recommendations

It is evident that e-government has the possibility of making government processes transparent accountable. However, SSA has to overcome obstacles such as the lack of infrastructure and info-structure before it can have fully functional e-government programmes. E-government "readiness strategies and programmes will be able to be effective ...only if, people at the very minimum, [had] functional literacy and education, which includes knowledge of

computer and Internet use; all are connected to a computer; and all have access to the Internet".⁶⁵

The education system should be sensitive to the challenges ushered in by e-government and come up with strategies to equip students with skills required in the e-government environment. Governments in SSA should utilize the existing information infrastructure based on libraries and telecentres rather than starting from scratch when implementing e-government programmes. These facilities are accessible to many people and some of them are close to rural populations. For instance, public libraries have become de facto e-government access points in states such as Florida in the United States.⁶⁶ What is required of governments in SSA is just to increase funding to these institutions so that they will be able to provide access to computing and Internet services to support e-government.

References

- African Information Society Initiative*. 1996. <http://www.uneca.org/aisi/aisi.htm> (Accessed 11/03/2007).
- African Internet - a status report*. 2002. <http://www3.sn.apc.org/africa/afstat.htm> (Accessed 25/02/2007).
- American Library Association*. 1989. Presidential Committee on Information Literacy. Final report. Chicago: American Library Association.
- Anttiroiko, Ari-Veikko. and Malkia, Matti*. 2006. Encyclopedia of digital government. Hershey, PA: Idea Group Reference (IGI) Publishing.
- Braaksm, Betty*. 2004. "A million hits won't get you far": information literacy and the engaged citizen. In: Oliver, E. Lynn and Sanders, Larry. (eds). E-government reconsidered: renewal of governance for the knowledge age. Regina, Sask.: Canadian Plains Research Center. pp. 151-160.
- Bertot, John Carlo., Jaeger, Paul T., Langa, Lesley A. and McClure, Charles R.* 2006. *I want you to deliver e-government*. Library Journal, 131(13): 34-37.
- Boyle, Brendan. and Nicholson, David*. 2003. *E-government in New Zealand*. In: Curtin, Gregory. G., Sommers, Michael. H. and Vis-Sommer, Veronika. (eds). The world of e-government.

⁶¹ Eschenfelder and Miller, 2007, 83.

⁶² Ngulube and Tafor, 2006, 58.

⁶³ Wamukoya and Mutula, 2005, 72.

⁶⁴ Lipchak and Donald 2003, 2.

⁶⁵ Department of Economic and Social Affairs, 2003.

⁶⁶ Bertot *et al.* 2006.

- New York: The Haworth Political Press. pp. 89 - 105.
- Castells, Manuel. 1996. The rise of the network society. Oxford: Blackwell Publishers.
- Castells, Manuel. 2001. The Internet galaxy: reflections on the Internet, business and society. Toronto: Oxford University Press.
- Culbertson, Stuart. 2004. Building e-government: organisational and cultural change in public administrations. In: Oliver, E. Lynn and Sanders, Larry. (eds). E-government reconsidered: renewal of governance for the knowledge age. Regina, Sask.: Canadian Plains Research Center. pp. 59-75.
- Curtin, Gregory. G., Sommer, Michael. H. and Vis-Sommer, Veronika. 2003. Introduction. In: Curtin, Gregory. G., Sommers, Michael. H. and Vis-Sommer, Veronika. (eds). The world of e-government. New York: The Haworth Political Press. pp. 1-16.
- D'Auray, Michelle. 2003. The dual challenge of integration and inclusion: Canada's experience with government online. In: Curtin, Gregory. G., Sommers, Michael. H. and Vis-Sommer, Veronika. (eds). The world of e-government. New York: The Haworth Political Press. pp. 31- 49.
- Department of Economic and Social Affairs. 2003. World public sector report 2003: e-government at the crossroads. New York: United Nations. <http://unpan1.un.org/intradoc/groups/public/documents/un/> (Accessed 25/02/2007).
- Economist Intelligent Unit. 2006. The 2006 e-readiness rankings: A white paper from the Economist Intelligence Unit. http://graphics.eiu.com/files/ad_pdfs/2006Ereadiness_Ranking_WP.pdf (Accessed 01/05/2007).
- Elmagarmid, Ahmed. K. and McIver, William. J. 2001. The ongoing march toward digital government. IEEE Computer, 34(2):32-38.
- Eschenfelder, Kristin. R. and Miller, Clark. A. 2007. Examining the role of web site information in facilitating different citizen-government relationships: a case study of stte chronic wasting disease web sites. Government Information Quarterly, 24(1):64-88.
- Gibbins, Roger. 2004. Federalism and the challenge of electronic portals. In: Oliver, E. Lynn and Sanders, Larry. (eds). E-government reconsidered: renewal of governance for the knowledge age. Regina, Sask.: Canadian Plains Research Center. pp. 33-42.
- Gil-Garcia, Ramon. J. and Martinez-Moyano, Ignacio. J. 2007. Understanding the evolution of e-government: the influence of systems of rules on public sector dynamics. Government Information Quarterly, 24(2): 266-290.
- Hai Suan, Bok. 2005. Making e-governance happen – a practitioner's perspective. In: Yong, James, S. L. (ed.) E-government in Asia: enabling public service innovation in the 21st century. Singapore: Times Editions-Marshall Cavendish. pp. 446-470.
- Heeks, Richard. 2004. E-government for development basic definitions page. <http://www.egov4dev.org/egovdefn.htm> (Accessed 25/02/2007).
- Heeks, Richard. and Bailur, Savita. 2007. Analyzing e-government research: perspectives, philosophies, theories, methods, and practice. Government Information Quarterly, 24(2):243-265.
- Heiskanen, Tuula. and Hearn, Jeff. 2004. Information society and the workplace: spaces, boundary and agency. London: Routledge.
- Henderson, J. D. 2002. E-government: the "next big thing" in high technology. Notes 5. UCLA Journal of Law and Technology 6(2). <http://www.lawtechjournal.com/notes/> (Accessed 15/03/2007).
- Information for Development Program (infoDev). 2002. The e-government handbook for developing countries. <http://www.infodev.org> (Accessed 15/03/2007).
- Kathuri, Benson. and Nyasato, Robert. 2007. High phone charges hamper region' growth, says W Bank. <http://allafrica.com/stories/printable/200704100060.html> (Accessed 02/05/2007).
- Kim, P., Halligan, J., Cho, N., Oh, C. and Eikenberry, A. 2005. Toward participatory and transparent governance: report of the sixth global forum on reinventing government. Public Administration Review, 65(6):646-654.
- Layne, Karen. and Lee, Jungwoo. 2001. Developing a fully functional e-government: a four stage model. Government Information Quarterly, 18(2):122-136.
- Lenihan, Donald. G. 2002. Realigning governance: from e-government to e-democracy. <http://www.crossingboundaries.ca/files/cg6.pdf> (Accessed 15/03/2007).
- Lim, Siew. and Low, Yin Leng. 2003. E-government in action: Singapore case study. In: Curtin, Gregory. G., Sommers, Michael. H. and Vis-Sommer, Veronika. (eds). The world of e-government. New York: The Haworth Political Press. pp. 19-30.

- Liikanen, Erkki. 2003. *eGovernment: an EU perspective*. In: Curtin, Gregory. G., Sommers, Michael. H. and Vis-Sommer, Veronika. (eds). *The world of e-government*. New York: The Haworth Political Press. pp. 65-88.
- Lipchack, Andy. and McDonald, John. 2003. *E-government and e-records: e-records readiness capacity building*. <http://www.irmt.org/download/> (Accessed 02/05/2004).
- McClure, David. L. 2001. *Electronic government: Federal initiatives are evolving rapidly but they face significant challenges*. *Testimony before the Subcommittee on Government Management, Information and Technology, House Committee on Government Reform, on behalf of the U.S. General Accounting Office, May 22, 2000*. <http://www.gao.gov/archive/2000/a200179t.pdf> (Accessed 21/02/2007).
- Mbeki, Thabo. 2000. *Keynote address of the President of the ANC to the National General Council*. <http://www.anc.org.za/ancdocs/speeches/> (Accessed 15/04/2006).
- Milner, Eileen. M. 2002. *Delivering the vision: where are we going?* In: Milner, Eileen. M. (ed). *Delivering the vision: public services for the information and knowledge economy*. Routledge: London. pp. 172-174.
- Ngulube, Patrick. and Tafor, Vivan. F. 2006. *An overview of the management of public records and archives in the member countries of the East and Southern Africa Regional Branch of the International Council on Archives (ESARBICA)*. *Journal of the Society of Archivists*, 27: 58-83.
- OECD. 2000. *Government of the future*. Paris: Organisation for Economic Co-operation and Development.
- Oliver, E. Lynn and Sanders, Larry. (eds). 2004. *E-government reconsidered: renewal of governance for the knowledge age*. Regina, Sask.: Canadian Plains Research Center.
- Sahraoui, Sofiane. 2007. *E-inclusion as further stage of e-government*. *Transforming Government: People, Process and Policy*, 1(1):44-58.
- Sakowicz, Marcin. 2003. *Electronic promise for local and regional communities*. *LGB Brief*, 24-28.
- Symonds, Matthew. 2000. *Government and the Internet – the next revolution*. *The Economist*, June 24. <http://www.economist.com/surveys/index> (Accessed 10/05/2007).
- United Nations. 2002. *Benchmarking e-government: a global perspective*. *Assessing the progress of the UN member states*. <http://unpan1.un.org/intradoc/groups/public/documents/> (Accessed 10/05/2007).
- Wamukoya, Justus. and Mutula Stephen. M. 2005. *Capacity-building requirements for e-records management: the case in East and Southern Africa*. *Records Management Journal* 15(2): 71-79.
- Watson, Richard. T and Mundy, Bryan. 2001. *A strategic perspective of electronic democracy*. *Communication of the ACM* 44(1):27-30.
- Wilson III, Ernest. J. 2004. *The information revolution and developing countries*. Boston: Massachusetts Institute of Technology.
- World Bank. 2007a. *E-government*. <http://web.worldbank.org/> (14/03/2007).
- World Bank. 2007b. *Addressing Africa's 'Missing Link' Regional Communications Infrastructure Program (RCIP)*. <http://go.worldbank.org/> (14/04/2007).
- Yong, James, S. L. and Hiap Koon, Lim. 2005. *e-Government: enabling public sector reform*. In: Yong, James, S. L. (ed.) *E-government in Asia: enabling public service innovation in the 21st century*. Singapore: Times Editions-Marshall Cavendish. pp. 3-21.
- Zakareya, Ebrahim., Zahir Irani and Sarmad, Al Shawi. 2004. *Factors influencing adoption of e-government in the public sector*. Paper read at the European and Mediterranean Conference on Information Systems, 25-27 July 2004, Tunis, Tunisia.

Appendices

Source	Definition
1	The use of any and all forms of information and communication technology (ICT) by governments and their agents to enhance operations, the delivery of public information and services, citizen engagement and public participation, and the very process of governance. ¹
2	A way to strengthen the flow of information to citizens, and to improve citizen access to government programs and services. There is also an assumption that the resulting transformation will make government more efficient, more responsive, more accountable, and perhaps even more democratic. ²
3	The use of information and information technologies in government settings. ³
4	The use of information and communication technologies (ICTs) to improve the activities of public sector organizations. ⁴
5	Is about facilitating the life of citizens and businesses by increasing the efficiency, quality and user-friendliness of government, as well as improving governance. ⁵
6	Refers to government's use of technology, particularly web-based Internet applications, to enhance the access to and delivery of government information and service to citizens, business partners, employees, other agencies, and government entities. ⁶
7	The response by government to the economic and social demands of an information society and a knowledge-based economy. ⁷
8	The use of ICTs to transform government by making it more accessible, effective and accountable. ⁸
9	Utilizing the internet and the world-wide-web for delivering government information and services to citizens. ⁹

¹ Curtin, Sommer and Vis-Sommer, 2003, 2.

² Gibbins, 2004, 33.

³ Gil-Garcia and Martinez-Moyano, 2007, 266.

⁴ Heeks, 2004.

⁵ Liikanen, 2003, 84.

⁶ McClure, 2001.

⁷ Milner, 2002.

⁸ Sakowicz, 2003.

⁹ United Nations, 2002.

10	Is a government that applies information and communication technologies to transform its internal and external relationships. ¹⁰
11	The use by government agencies of information technologies (such as Wide Area Networks, the Internet, and mobile computing) that have the ability to transform relations with citizens, businesses, and other arms of government. ¹¹
12	The use of technology by government to enhance access to and delivery of public services to benefit, business partners and employees. ¹²

Table 7 Selected definitions of e-government found in the literature

¹⁰ Department of Economic and Social Affairs, 2003.

¹¹ World Bank, 2007a.

¹² Yong and Hiap Koon, 2005, 11.

Source	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 6
1	One-way communication	Two-way communication	Complex transactions	Integration across government processes ¹³			
2	Initial presence (individual web pages with static information)	Extended presence (dynamic information with links to other government pages)	Interactive presence (portal with secure access)	Transactional presence (detailed portal providing secure electronic payments of fines and taxes)	Vertical integration (government processes and structures integrated)	Horizontal integration (government services cut across boundaries)	Totally integrated presence (vertical and horizontal integration) ¹⁴
3	Publish (using ICT to expand access to government information)	Interact (broadening civic participation in government)	Transact (making government services available online) ¹⁵				
4	Catalogue (downloadable forms)	Transaction	Vertical integration (systems hierarchically connected with limited functionalities)	Horizontal integration (systems integrated) ¹⁶			

¹³ Elmagarmid and McIver, 2001.

¹⁴ Gil-Garcia and Martinez-Moyano, 2007.

¹⁵ Information for Development Program (*infoDev*), 2002.

¹⁶ Layne and Lee, 2001.

5	Information in brochure-like form	Citizens use technology to interact with government (one-way interaction with government)	Online transactions and sending of tender information	Integrated portal for all government services and information ¹⁷			
6	Emerging presence (static organizational information)	Enhanced presence (dynamic information and publications)	Interactive presence (access to government institutions and services)	Transactional presence (complete and secure transactions)	Seamless or fully integrated (services fully available) ¹⁸		
7	Initiation	Infusion	Customization ¹⁹				

Table 8 Models of the development of e-government found in the literature

¹⁷ Symonds, 2000.

¹⁸ United Nations 2002.

¹⁹ Watson and Mundy, 2001.

Toni Carbo

Information Rights: Trust and Human Dignity in e-Government

Abstract:

The words "Rights," "Trust," "Human Dignity," and even "Government" have widely varying meanings and connotations, differing across time, languages and cultures. Concepts of rights, trust, and human dignity have been examined for centuries in great depth by ethicists and other philosophers and by religious thinkers, and more recently by social scientists and, especially as related to information, by information scientists. Similarly, discussions of government are well documented in writings back to Plato and Aristotle, with investigations of electronic government (often referred to as e-government) dating back only to the early 1990s with the advent of the Internet and the World Wide Web. At first e-government was described in glowing, positive terms. Little, if any, attention was paid to two critical questions: 1) Will people trust e-government? and 2) How will cultural differences affect individuals' trust in government and their perceptions of government's effect of their human dignity? Examinations of trust and distrust by individuals within organizations have addressed questions of motives and intentions, expectations of behavior, protection of interests, confidence in accuracy and reliability of information, vulnerability, and reciprocity, among other complex topics. Establishing e-government services often requires going through several phases: 1) publish (using ICT to improve access to government information), 2) interact (broadening participation in government through 2-way communications, and 3) transact (making actual services available online; and 4) transform (fundamentally changing government to make it truly citizen-centric). Building and maintaining trust in e-government require developing an understanding both of the many levels of interactions where trust must be earned and of cultural differences. Another challenge in developing such a framework is that e-government, itself, is very dynamic, changing rapidly over time. Trust in content or a system available one day may not carry over when the content and/or system changes dramatically. Components of a framework must include the following dimensions: conceptual domains, cultural dimensions, information content dimensions, and system dimensions. Of course, these dimensions must be considered within the context of rapidly changing governments, ICT services, the digital divide, and other factors. This paper provides a very brief overview of some of the notions of trust and distrust, concentrating on those concerning trust as it relates to notions of power, trust in organizations, and trust in information and information systems as one part of a framework to address the question of trust in e-government. It also makes a few recommendations for how to build citizen-centric e-government to ensure information rights through a focus on human dignity, fundamental human rights, and earning trust.

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Rights, Trust and Human Dignity

The words, "Rights," "Trust," "Human Dignity," "e-Government" (electronic or digital government), and even "Government" have widely varying meanings and connotations, differing across time, languages, and cultures. Notions of rights, trust, and human dignity have been examined for centuries in great depth by ethicists and other philosophers and by religious thinkers, and more recently by social scientists and, as related to information, by information scientists. Similarly, discussions of government are well documented in writings back to Plato and Aristotle, with investigations of electronic government (usually referred to as e-government) dating back only to the early 1990s with the advent of the Internet and later of the World Wide Web (WWW). Much of the work on e-government has been undertaken by political scientists, economists, lawyers, and information scientists. This paper will not provide an extensive review of previous studies, but will instead provide one individual perspective (one from an individual from a limited, Northern and Western background). It will draw upon some writings on trust and human dignity and relate them to information rights and the development of e-government.

Rights and Human Dignity

Although certainly well known to the readers of this journal, it bears repeating that the Fundamental Moral Experience integrates basic respect for human beings and incorporates compassion, hope and affectivity. This is the foundation for many philosophical concepts and religious beliefs and for Information Ethics, and this foundation affirms the notion that each individual has basic rights and is deserving of respect and the preservation of human dignity. Early examples range from Aristotle to Tibetan Buddhism and, in 1948 were articulated in the United Nations Declaration of Human Rights. For example, the Dalai Lama refers to the concept of *nying je*, generally translated as compassion, but connoting ". . . love, affection, kindness, gentleness, generosity of spirit, and warm-heartedness." In its Article 1, the UN Universal Declaration of Human Rights also states:

All human beings are born free and equal in dignity and rights. They are endowed with reason and conscience and should act towards one another in a spirit of brotherhood.

These oft-repeated principles must always provide the foundation for discussions of trust, information rights, and governance at all levels. The World Summit on the Information Society (WSIS) used this foundation in their international discussions to shape their common vision of the Information Society:

. . . to build a people-centred, inclusive and development-oriented Information Society, where everyone can create, access, utilize and share information and knowledge, enabling individuals, communities and peoples to achieve their full potential in promoting their sustainable development and improving their quality of life. . .

The Declaration also states:

. . . reaffirm the universality, indivisibility, interdependence and interrelation of all human rights and fundamental freedoms. . . . also reaffirm that democracy, sustainable development, and respect for human rights and fundamental freedoms as well as good governance at all levels are interdependent and mutually reinforcing."

In reviewing these statements, several points of focus emerge: 1) the emphasis on the Fundamental Moral Experience and the concepts of freedom, equality, dignity and rights; 2) the critical need for compassion (or more broadly, *nying je*) and the spirit of brotherhood; and 3) the importance of a people-centered society with the key role throughout entire life-cycle of information to empower individuals to achieve their full potential and improve the quality of their lives. With this basic set of principles in mind, we can address the notions of trust and its role in effective e-government.

Trust

Views of trust as a foundation for social order span many disciplines, including psychology, philosophy, several social sciences, and business and management.¹ Examinations of trust and distrust by individuals within organizations have addressed questions motives and intentions, expectations of behavior, protection of interests, confidence in accuracy and reliability of information, vulnerability, and reciprocity, among many complex topics. As Sissela Bok has so eloquently stated: "Whatever matters to

¹For example, Lewicki et al., 1998; Baier, 1986; Doney et al., 1998

human beings, trust is the atmosphere in which it thrives."² However, Baier reminds us that

*. . . not all the things that thrive when there is trust between people, and which matter, are things that should be encouraged to thrive. Exploitation and conspiracy, as much as justice and fellowship, thrive better in an atmosphere of trust. There are immoral as well as moral trust relationships, and trust-busting can be a morally proper goal.*³

Of course, there are many levels and types of trust and these levels and types of trust often change over time based on changes in relationships, personal experiences and other factors. For example, building on the work of Fiske and others, Sheppard and Sherman,⁴ propose four fundamental grammars, or relational forms based on human relationships (communal sharing, authority ranking, equality matching, and market pricing) and depth of relationship (shallow dependence, shallow interdependence, deep dependence, and deep independence). They define trust as: ". . . the acceptance of the risks associated with the type and depth of the interdependence inherent in a given relationship."⁵

They also note that: "In all relational forms, however, trust involves the belief that features of the other, the relationship, or the context in which the relationship is embedded will mitigate the risks associated with that relational form."⁶ Pettit, while noting that trust can be used in connection with relying on natural phenomena as well as with relying on people, indicates that the most general use of trust

*. . . would equate trust with confidence that other people will treat you reasonably well, confidence that they will not waylay or cheat you, for example. We speak in this sense of trusting our fellow citizens or trusting the institutions under which we live.*⁷

His focus is on "active reliance." These are cases in which

*. . . you rely on others to the extent of making yourself vulnerable to them, voluntarily or under the force of circumstances . . . you rely in your own individual right on another person. . . . in other cases you may rely . . . on a corporate or collective agent that itself involves a number of people.*⁸

Understanding trust within the complex series of relationships in which an individual lives and works is key to understanding the interaction of an individual with a government and its representatives. The different types of relationships, levels of government, individuals within the governments and interactions among people all raise a series of issues directly relevant to ethical reflection and moral actions in developing and implementing e-government systems and services. Equally important is the need to address the notions of risk, reliability and vulnerability as essential components of trust. What level of risk is an individual taking by placing trust in an institution and/or information? What are the consequences if that trust is violated? How does one measure the reliability of information? How vulnerable is one willing to be to trade off access to services or information? These and other related questions should be addressed at the beginning of planning and well before implementation.

Related to the issues of risk, reliability and vulnerability is the question of power. For this paper, particular emphasis is placed on those concepts of trust and distrust related to notions of power, of individuals, information content and institutions. For example, as Baier notes:

*Trust alters power positions, and both the position one is in without a given form of trust and the position one has within a relation of trust need to be considered before one can judge whether that form of trust is sensible and morally decent.*⁹

Related to trust, of course, is the topic of privacy, especially the different understandings of the concept of privacy by people from different cultural backgrounds. Because this topic is being discussed

² Bok, 1978, 31.

³ Baier, 1986, 231-232.

⁴ Sheppard and Sherman, 1998, 423-425.

⁵ Ibid., 425.

⁶ Ibid., 426.

⁷ Pettit, 204.

⁸ Ibid., 204

⁹ Baier, 1986, 240

in depth by others in this issue, it will not be included in this paper.

With human rights, dignity and trust as the foundation – all within a rapidly changing global society – we can begin to address the role of government and the use of technology to provide government information and services. Technology has been a fundamental component of governments from the earliest days of using the technology of the human voice (such as within Greek and Roman forums, in town meetings, or through town criers or travelling story tellers and historiographers); to the use of film, teletype, and radio during the first half of the 20th Century; to early presidential debates on television, 24-7 news networks, satellites, and other technologies beginning in the 1970s. The introduction and widespread use of Information and Communication Technologies (ICT), especially the Internet and the WorldWide Web (WWW) have provided opportunities for improved governance and for governments that are more focused on their citizens.

Government and e-Government

Governments

In considering the interaction between individuals and their governments, it is important to consider the level of government (e.g., local, groupings of local such as county, provincial or state, national, regional and international, and others); the types of interactions (e.g., gathering information, making a transaction, providing information, etc.); and the sociocultural aspects (e.g., language, cultural background of the individual, etc.). Of course, individuals may interact with different levels of government and for different purposes over time, and, individuals have both perceptions of their own power, risks, and vulnerability, which may differ from their actual power, risks, and vulnerabilities. The nature of the government, the government's stated mission, its actual practices (which very often differ from stated missions), and – most importantly – the nature and practices of the individuals, themselves, are all critical factors in the effectiveness of the government and its services. All of these are enhanced and expanded by the use of ICT, which adds many other dimensions including, but not limited to: 1) wide variations in access as a result of the Digital Divide, differing information literacy skills, disabilities, restrictions placed by governments, differing laws for intellectual property protection, numerous policies on transparency, etc.; 2) language and

cultural factors; 3) variations and limitations in content resulting in omission of indigenous knowledge or of material in appropriate formats (such as those for oral cultures); 4) differing norms for moral conduct (e.g., payments to government employees seen by some as appropriate gratuities and by others as corruption); 5) variations in perceptions of credibility of information in digital form (See, for example, the extensive study by Metzger et al.¹⁰; and 6) lack of understanding of how to manage the life-cycle of digital information, especially the need for policies and practices for the preservation and removal of it. Early attempts to use ICT in providing government information and services did not consider all of these factors as fully as needed, but the movement to electronic or digital government, usually referred to as e-government moved ahead rapidly, beginning in North American and Europe and spreading quickly to most other continents.

E-government

E-government is "the use of information and communication technologies (ICT) to transform government by making it more accessible, effective and accountable."¹¹ Establishing the highest quality e-government services usually requires going through several phases: 1) publish (using ICT to improve access to government information), 2) interact (broadening participation in government through 2-way communications, and 3) transact (making actual services available online). In its *E-Government Handbook for Developing Countries*, InfoDev and CDT argue that successful transformation of government, not yet fully achieved, requires process reform, leadership, strategic investment, collaboration, and civic engagement. Among the key challenges for success is building "trust within agencies, between agencies, across governments, and with businesses, NGOs and citizens."¹² This *Handbook*, while somewhat dated now, is still a very valuable resource for those interested in developing citizen-centric e-government. Building and maintaining the trust referred to in the *Handbook* requires developing an understanding both of the many levels of interactions where trust must be earned and of the uniqueness -- including important cultural

¹⁰ Metzger et al., 2003.

¹¹ InfoDev and Center for Democracy and Technology, 2002, 1.

¹² *Ibid.* 15.

differences, vulnerabilities, potential risks, and the power -- of the individual citizen.

These interactions are complicated and multi-layered. Individuals interact with other individuals within their local communities (whether geographic or virtual), with their governments at all levels, with other governments, NGOs, and corporations. They also interact with information content, interfaces (such as Web Pages), and information and telecommunication systems. An individual may trust information content, but not the system, thinking it is not secure; a Web Page may offend an individual's sense of dignity causing him or her to distrust the government that created it; or one individual or government may distrust another government's information because that government exercises tight controls over its information and monitors citizens' searches. A conceptual model is needed for use in framing questions of trust and e-government. Attempts at cultural taxonomies (e.g., Doney's framework linking Clark's conceptual domains and related cultural taxonomies with Hofstede's cultural dimensions and associated societal norms and values and his own categories of influence on trust-building process)¹³ are useful building blocks but have not been used extensively to address questions such as attitudes toward government.

Another challenge in developing and using such a framework or taxonomy is that e-government, itself, is very dynamic, changing rapidly over time. Trust in content or a system available one day may not carry over when the content and/or system changes dramatically. Components of a framework must include the following dimensions: conceptual domains, cultural dimensions, information content dimensions, and system dimensions. Of course, these dimensions must be considered within the context of rapidly changing governments, ICT services, the digital divide, and other factors. Pertinent to the need to link these dimensions and e-government is the 7th Global Forum on Reinventing Government which was held in June 2007¹⁴. The theme of this forum was "Building Trust in Government," and this forum may well result in new perspectives to help shape this framework.

¹³ Doney et al., 1998, 609.

¹⁴ United National 7th Global Forum on Reinventing Government, 2007.

Recommendations

Frameworks and taxonomies, as described above, should be developed and tested in real-world situations in different communities, and **this must be done within the context of the fundamental background of human dignity, basic human rights and earning trust**. It would be useful for collaborations among representatives (both senior officials and individuals at the front line of service provision) of governments at all levels, academics (including ethicists, political scientists, librarians, information scientists, and others), and citizens from differing ethnic, cultural and age groups to be formed to apply these frameworks and taxonomies in developing and assessing different e-government services as they are re-designed to be truly citizen-centric. Building on what has been learned at the first African Information Ethics Conference, earlier conferences, and the work of the International Center for Information Ethics community, collaborations at all levels can be built to address these critical issues. It is only by such collaborative efforts and transformation of government to meet citizens' needs that true information rights can be preserved.

Coetzee Bester kindly wrote the following addition to provide a perspective, as suggested by the reviewers of this article, from an African leader to help others use this article as part of his or her mental blueprint to guide in shaping the e-government of the future in Africa. I am very grateful to him for this very thoughtful addition:

"It is furthermore important to bear in mind that the position in many traditional African communities towards trust in e-governance is based on the description and significance of the concept of trust and human dignity within the framework of the social infrastructure of these communities. Trust for example is sometimes more related to knowledge of the person him/herself or personal interaction with these role players than a declaration on paper. This trust-in-person mindset should direct the information practitioner in Africa towards a relationship with the authority rather than to the position of the authority when trust in e-governance is developed. The grammar and meaning of trust is therefore rather to be found in the cultural relationship to an individual and not necessary based on a researched and scientific prove of an experience.

Information practitioners and policy makers in Africa should be aware of the influences of traditions and cultural dynamics that will impact on the processes towards trust in e-governance. Practical guidelines

to manage the impact will have to be developed but guiding principles towards trust in e-governance would include; a service and development orientation, person-to-person support during the implementation phases of e-governance, language and terminology assistance for users and technical back-up to ensure continuous service. These services would include electricity, well-managed service providers and well-trained staff to assist the users of e-governance.

The growth towards trust in e-governance is a process and not an event or an announcement. In addition to the challenges in creating trust in e-governance the path towards this technology in Africa is filled with thorny issues of new technology and terminology, cultural orientations and traditions as well as a complete different social interaction based on a method of humanity and not yet exclusive use of technology."¹⁵

References

- Accenture. Leadership in Customer Service: Building the Trust. 2006. http://www.accenture.com/xdoc/en/industries/government/acn_2006_govt_report_FINAL2.pdf.
- Baier, Annette. "Trust and Antitrust" Ethics. 96(2) 1986, pp. 231-260.
- Bester, Coetzee. Personal email. June 14, 2007.
- Capurro, Rafael, Frühbauer, Johannes, Hausmaninger, Thomas (eds). Localizing the Internet: Ethical Aspects in Intercultural Perspective. Schriftenreihe des ICIE, Band 4, Munich 2007.
- Cassell, Justine and Bickmore, Timothy. "External Manifestations (sic) of Trustworthiness in the Interface." Communications of the ACM 43(12), p. 50.
- Council for Excellence in Government. E-Government: The Next American Revolution. Washington, D.C., 2000.
- Cox, Richard J. Ethics, Accountability, and Record-keeping in a Dangerous World: Principles and Practice in Records Management and Archives. London: Facet Publishing, 2006.
- Curral, Steven C. and Judge, Timothy A. "Measuring Trust Between Organizational Boundary Role Persons" Organizational Behavior and Human Decision Processes. 64(2), 1995, pp. 151-170.
- de Laat, Paul B. "Trusting Virtual Trust" Ethics and Information Technology. 7(3), 2005, pp. 167-180.
- Doney, Patricia M, Cannon, Joseph P, and Mullen, Michael R. "Understanding the Influence of National Culture on the Development of Trust" The Academy of Management Review. 23(3), pp. 601-620.
- Economist Intelligence Unit Ltd., The 2006 E-Readiness Rankings: A White Paper from the Economist Intelligence Unit. 2006. http://a330.g.akamai.net/7/330/25828/20060531184642/graphics.eiu.com/files/ad_pdfs/2006Ereadiness_Ranking_WP.pdf.
- Friedman, Batya and Kahn, Peter H. Jr., Howe, Daniel C. "Trust Online". Communications of the ACM, 43(12), 2000, p. 34.
- InfoDev and The Center for Democracy & Technology. The E-Government Handbook for Developing Countries: A Project of InfoDev and the Center for Democracy & Technology. Washington, D.C., November 2002. <http://www.cdt.org/egov/handbook/2002-11-14egovhandbook.pdf>.
- Lewicki, Roy J., McAllister, Daniel J. Bies, Robert J. "Trust and Distrust: New Relationship Realities." The Academy of Management Review. 23(3) 1998, pp. 438-458.
- Marsh, Stephen and Dibben, Mark R. "The Role of Trust in Information Science and Technology." in Blaise Cronin (ed) Annual Review of Information Science and Technology. Medford, NJ: Information Today, Inc., 37, 2007, pp. 465-498.
- Metzger, Miriam J., Flanagin, Andrew J., Eyal, Keren, Lemus, Daisy R. and McCann, Robert M. "Credibility for the 21st Century: Integrating Perspectives on Source, Message, and Media Credibility in the Contemporary Media Environment. In Pamela J. Kalbfleisch (ed) Communication Yearbook 27, London: Lawrence Erlbaum Associates Publishers, 2003, pp. 293-335.
- Nissenbaum, Helen. "Securing Trust Online: Wisdom or Oxymoron?" Boston University Law Review. 81, June 2001, pp. 635-664.
- Pettit, Philip. "The Cunning of Trust" Philosophy and Public Affairs, 24(3) 1995, pp. 202-225.
- Ross, Seamus and McHugh, Andrew. "The Role of Evidence in Establishing Trust in Repositories. D-Lib Magazine 12(7/8), 2006. <http://www.dlib.org/dlib/july06/ross/07ross.html>
- Sheppard, Blair H. and Sherman, Dana M. "The Grammars of Trust: A Model and General Impli-

¹⁵ Bester, Coetzee, 2007.

cations." The Academy of Management Review 23(3), 1998, pp. 422-437.

United Nations. 7th Global Forum on Reinventing Government. "Building Trust in Government" Vienna 26-29 June 2007.

United Nations. Universal Declaration of Human Rights, 10 December 1948.
<http://www.un.org/Overview/rights.html>.

World Summit on the Information Society. Declaration of Principles. 12 December 2003.
<http://www.itu.int/wsis/docs/geneva/official/dop.html>.

Zogby International. Honesty and Trust in America Survey. Zogby International, 22 May 2006.
<http://www.zogby.com/Lichtman%20Final%20Report%205-22-06.pdf>.

Jacques C. du Plessis

The Spirit of Open Access to Information as a Key Pillar to the African Renaissance

Abstract:

This article explores the future impact of an African renaissance with a specific emphasis on information ethics to address the needs of the emerging virtual realm. The four main focus areas include the technological challenges to deploy ICT infrastructure to enable the delivery of information to the people and to allow for new means of communication. The second focus considers the economic obstacles that need to be considered in the quest to empower average citizens to exercise their right to access information. The third focus addresses the linguistic and cultural realities that hinder the adoption of some ICTs. The final focus considers the legal framework that has to be developed and strengthened to establish citizen's rights of access and privacy in cyberspace.

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Introduction

This paper explores the role of ethics, and in this case, information ethics as a key factor to sustain and expand the momentum of the pan-African ideal of an African Renaissance.

Africa has had periods in its history when regions on the continent flourished intellectually, economically, and culturally. Today, despite many profound challenges, there is a spirit of hope, a deep-felt sense that we have an opportunity to seize an opportunity to bring about a rebirth of the intellectual, economic, and cultural potential of Africa. To bring the ideal of the African Renaissance to fruition, the vision has to be propagated in the hearts and minds of Africans as well as to many beyond the continent's borders. As we consider the potential ways in which this renaissance can be expressed and sustained, we have to consider the role of one of the most profound technological changes in human history – the emergence of a new layer of existence: the virtual world.

The African Renaissance

If we look at Asia first, we readily recognize how the term "The Chinese Century" was a faint whispering in selected circles some decades past. In the 21st century the emergence of the Chinese economic might has undoubtedly impressed the international community (Fishman, 2004)¹. There is an awakening in China. There is a growing belief that their economy will become the biggest in the 21st century (Shenkar, 2005²; Sing, 1988³). The Chinese are

¹ Fishman, Ted (2004). The Chinese Century. (Online) Available at <http://www.nytimes.com/2004/07/04/magazine/04CHINA.html?ex=1246680000&en=127e32464ca6faf3&ei=5088&partner=rssnyt>

² Shenkar, Oded (2005), The Chinese Century – The rising Chinese economy and its impact on the global economy, the balance of power, and your job. Wharton School Publishing, Upper Saddle River, NJ

³ Sing, S.K. (1988). China: Will the 20th century giant become a 21st century superpower? [Online] Available at <http://www.globalsecurity.org/military/library/report/1988/SSK.htm>

demonstrating the ability to nurture this dream. They are demonstrating zeal to infect their people with hope and the faith to become powerful and great.

How about Africa? Is there a similar awakening in Africa? Is there a similar sense of greatness and a zeal for the continent to achieve its own greatness?

The Soil is Everything

To answer this question whether the Chinese Renaissance can be done in Africa as well, the wisdom of an old French saying offers the following, "Le germe n'est rien, c'est le terrain qui est tout;" translated as, "The germ (seed) is nothing, the soil is everything." In short, to grow fruit, one needs the magic of the right temperatures, fertile soil, humidity, light, and time. That would constitute an ideal environment. Can the collective faith in the future of Africa be harnessed and orchestrated to germinate this vision and commitment for Africa? Bertrand Russell, British mathematician and philosopher (1872-1970) said, "Without civic morality communities perish; without personal morality their survival has no value."

It can be said that any environment is fertile ground for something, even if it is for the undesirable. The magnitude of the challenges that faces Africa imposes a reality check about the current environment in Africa and whether this environment can be favorable for an emerging renaissance.

On the one side there is a hope for a renaissance. At last Africa is now seen as free from colonial oppression. There is zeal to acquire as much education as possible and to fulfill the dreams and aspirations of previous generations whose aspirations were stunted by powers from abroad. Those with hope see Africa for its potential, emerging as an ideal environment that fosters strong socio-economic, cultural, and intellectual growth.

On the other side are the skeptics that point to the vexing challenges of Africa – the grave issues of usurped political power, economic instability, infrastructure reversals, a continent-wide brain drain, chronic underfunded education, military overspending, endemic corruption, large deficits, serious

health issues, tribalism, and the corrosive impact of high crime. (Diallo, 2004⁴; Herbert, 2002⁵).

The Digital Era

In the midst of this ambivalence about the future of Africa, the emerging digital revolution has introduced variables of great importance with the promise to profoundly change every country on the globe. To understand the long-term impact of the digital revolution, there is merit in stepping back for a moment to first consider the global impact of the industrial revolution. The surge of new technology changed the way products were designed, created and delivered. Many new products were introduced (e.g. the automobile) that changed habits and cultures, and wants into needs. Some of the new products were also new tools that introduced new ways of doing or speeded up or in other ways improved the way things were done. Today a similar and expanded ripple effect is part of the digital revolution. The pace of improvements in hardware, network technology and throughput, software capabilities and workflow processes, etc. happens so fast, that the question is not only how society can transition to the use of a new product, but it is vital to also consider how to adapt to change as a constant – how to cope and flourish in an environment wherein change happens at a seemingly exponential pace. Change is not only a celebrated event anymore; it is a routine, a constant process. To be able to make this transition to the required mindset to flourish in the digital era requires a break from the past in some respects. The previous and much of the current ways of commerce, the ways of learning and instruction, and the means of communication have become dated. The new generation has to develop and blaze the trail to develop and engineer new social networking behaviors and to develop a mindset in which average citizens become empowered with previously unimaginable means of access to information and means of communication and social networking. This transformation of the current

mindset requires attention to the following two issues: (i) an established framework of information ethics to formalize and protect the digital rights of access and privacy of all citizens, and (ii) an adaptation in cultural behavior to harness the affordances of the digital era. This paper centers on the establishment of a framework to protect the digital rights of access and privacy of all citizens.

Information Ethics: Establishing, Securing And Opening Up The Flow Of Information

Referring back to the French saying, access is the soil, not the germ – it is everything. As the Americans would say, lacking access is a show stopper. If access to information is a right, then there is an imperative to empower citizens to exercise this right. The obstacles to exercising this right include technological challenges, economic impediments, cultural and linguistic exclusion, and a legal environment that needs to protect the openness of information.

Technological Challenges

There is progress in addressing some of the technological hurdles to access. Keniston and Dumar (2003)⁶ point out that,

"At one extreme are the United States and the 'Nordic' countries like Sweden, Germany, Finland, and Iceland, where household telephone connectivity is well over 90%, computer saturation is over 50%, and home-based Internet connectivity averages over 50%. At the other extreme lies most of Africa, most of South America, South Asia, China, Indonesia, and so on -- the 80% of the world where telephone connectivity is 3% or less (less than 30 million/1 billion in India), home computer ownership is 1 - 2% and Internet connectivity less than half of that."

In Southern and Eastern Africa, several governmental and non-governmental groups are collaborating

⁴ Diallo, Mamadou (Aug, 2004) *Memorandum on the Guinean Paradox*. [Online] Available at <http://www.guinea-forum.org/Analyses/index.asp?ana=20&Lang=A>

⁵ Herbert, Ross (2002). *Implementing NEPAD: A Critical Assessment*. African Report: Assessing the New partnership. pp 93-134. [Online] Available at http://www.nsi-ins.ca/english/pdf/africa_report/ch5_herbert_e.pdf

⁶ Keniston, Kenneth and Deepak Dumar, eds. (2003). *The Four Digital Divides*. [Online] Available at http://web.mit.edu/~kken/Public/PAPERS/Intro_S_age.html

to address what is called the 'missing link', which is the lack of connectivity of Southern and Eastern Africa to the world's fiber networks. "The 'missing link' explains why the region accounts for less than one percent of the world's international bandwidth capacity" (World Bank, April 2, 2007⁷). The East African submarine cable system (EASSy) is one such project to provide a cable network along Africa's eastern coast line (World Bank Group Support (n.a)⁸). This document further says, "The proposed Regional Communications Infrastructure Program (RCIP) was developed at the request of the NEPAD Heads of State. It will finance a submarine fiber cable along the East Coast of Africa and connect countries in the region to the global telecommunications network, either directly or through terrestrial links." This expansion will bring relief to the region where the region has the "highest communications costs in the world. International wholesale bandwidth prices are 20 to 40 times higher than in the United States, and international calls are on average 10 to 20 times more than in other developing countries" (World Bank, April 2, 2007⁹). These plans will greatly contribute to an infrastructure that will enable the region to have world-class access to the Internet and help diminish Africa's vulnerability to exploitation due to its information and communication deficit.

The development of the infrastructure has to remain a top priority. If African governments are not able to overcome inertia due to Africa's challenges such as the persistent brain drain, poverty, and corruption, the economy will suffer and the region will remain vulnerable to economic, intellectual, and cultural exploitation.

The Afrikaans saying, "Kennis is Mag," translates to "Knowledge is Power." In the digital age, if the data does not flow, neither does information flow; and information does not flow, how can knowledge be developed? And if knowledge is not generated,

where is the power? The grand idea and attempts at an African renaissance will remain limited in its potential unless the African virtual space does not become a reality for Africa to take its rightful role as the materialized and dematerialized worlds interface in today's knowledge economy.

Economic Impediments

The role of governments to champion the cause of establishing the infrastructure cannot be ignored. African governments struggle with internal issues that discourage investment and economic growth like nepotism, exclusive contracts, nationalization, and business under the table. Asia has overcome many of these human frailties and flourished economically. There is a growing voice within Africa to find solutions to nepotism and corruption. On April 2, 2007¹⁰, President Thabo Mbeki of South Africa said that corruption

"emasculates development and democracy and undermines the fight against poverty by diverting key resources away from programmes designed to improve the quality of life especially of the poor, globally." anticipation is that much is of this space in conducting commerce, competing, generating and sharing knowledge, and connecting the key stakeholders in virtually every international endeavor."

In the same speech, Mbeki concludes that

"As we engage in the global fight against corruption, let us also be fully conscious of the need to work on all the varied tracks and affirm a clear role for the responsive democratic state in the fight to eradicate poverty, unemployment and underdevelopment. As an affirmation of our resolve to defeat corruption and its outcomes, we must work together to deal with market related and market induced inequalities. We must provide equality of opportunity to all our citizens. We must work to develop social cohesion. We must promote peace and stability in our countries, as well as regionally and globally."

⁷ World Bank (2007). *Addressing Africa's 'Missing Link'*. [Online] Available at <http://go.worldbank.org/DGMGL3AB40>

⁸ World Bank Group Support (n.a) *The Africa Regional Communications Infrastructure Program*. [Online] Available at http://siteresources.worldbank.org/EXTAFRREGINI/COO/Resources/RCIP_WSIS_Briefing_nov.pdf

⁹ World Bank (2007). *Addressing Africa's 'Missing Link'*. [Online] Available at <http://go.worldbank.org/DGMGL3AB40>

¹⁰ MBeki, Thabo. (April, 2007) *Fighting Corruption And Safeguarding Integrity*, Address given at the opening ceremony of the UN Global Forum, Sandton, South Africa. [Online] Available at http://www.sarpn.org.za/documents/d0002472/Fighting_corruption_Mbeki_Apr2007.pdf

This kind of resolve at the highest circles need to trickle down in a new consciousness and resolve for a better future where the spirit of Ubuntu strengthens the commitment of Africans to each other, rather than the individual exploiting a situation for personal gain.

Cultural and Linguistic Exclusion

The ability of the majority of citizens in a country to access information depends not only on the availability of information. The linguistic and cultural factors that promote or impede access greatly impact the success of participation in virtual space. Keniston and Dumar (2003¹¹) point out that non-English cultures are at a great disadvantage to access on the Internet, since there is so little of relevance in their own languages. They say, "To linguistic inaccessibility in India is added the absence of culturally relevant content. The number of Web sites in 2000 in India is small in any case, but the number of sites in Indian languages is miniscule." Governments have to prioritize for the development of content and services in underserved languages. Yet, in much of Africa where literacy is inadequate, that demand is tied the success of enabling those people to exercise their right of access to information in virtual space.

The second priority of African governments is the instruction of English as a second or foreign language. It is an internationally recognized fact, that English has become the lingua franca in the digital era. Learning English does not imply submission to the values and trends emanating from the USA and the UK. According to O'Neill, Lavoie, and Bennett (April, 2003¹²), more than 70% of the Web is in English, with no other language having more than 10% of the Web. This indicates the significance of a loss to access to information it signifies if the user is not able to read English. Preparing the new generation to function in English is a vital to more effec-

tively access information and communicate in the international arena.

Selwyn (2002¹³) said, "access to a technology is useless without the requisite skills, knowledge and support to use it effectively. As we can already see, the digital divide is not solely about purchasing power and physical access." Preparing the citizenry at large to migrate to the digital era and to integrate ICT's in daily living is so essential that information literacy has to be a priority in every school.

Providing information that considers the cultural and linguistic realities of ordinary citizens, and facilitating their ability to interact with digital technologies will promote a faster adoption rate to the point that the migration will drive itself as robust communities of practice take root and grow. Then the 'locals' will take ownership of their participation and destiny within the virtual infosphere.

Legal Barriers – Open Access, A Basic Human Right

More than a century ago, Lord Acton warned that "power corrupts, and absolute power corrupts absolutely." (Acton, 1887¹⁴). If certain categories of information is not treated as a public good, if information is an exclusive commodity, it disempowers the public to know. It is the right to information that confirms good governance, or exposes an environment that does not promote the vision of the African Renaissance. As citizens we will only have this right to access information if our governments and multinational corporations are held accountable to embrace of ethics that offers us the lifeline and the counter measures to that spirit of raw politics and power. Upholding ethics requires a magnanimous collective commitment of society from the top down. It is this commitment by the powerful to accept bounds to the use of their power and to exercise self-restraint not to exploit the power with which

¹¹ Keniston, Kenneth and Deepak Dumar, eds. (2003). *The Four Digital Divides*. [Online] Available at http://web.mit.edu/~kken/Public/PAPERS/Intro_S_age.html

¹² O'Neill, Edward T., Lavoie, Brian F., and Bennett, Rick (April, 2003) *Trends in the Evolution of the Public Web 1998 - 2002*, D-Lib Magazine 9(4). [Online] Available at <http://www.dlib.org/dlib/april03/lavoie/04lavoie.html>

¹³ Selwyn, Neil. (2002) *'Defining the Digital Divide: Developing a Theoretical Understanding of Inequalities in the Information Age'* Cardiff University School of Social Sciences Occasional Paper 49, ISBN 1-872-330-967, 36 pages. [Online] Available at <http://www.cardiff.ac.uk/socsi/ict/definingdigitaldivide.pdf>.

¹⁴ Lord Acton, letter to Mandell Creighton, April 5, 1887.—Acton, *Essays on Freedom and Power*, ed. Gertrude Himmelfarb, pp. 335–36 (1972).

they are entrusted. Ethical behaviour is the fruits of hope by all sectors of a society to act in the best interest of the whole. Ethics offers hope to opportunity the poor, and it is a commitment by the rich and powerful not to exploit the poor. With ethics our main charge is a moral obligation to fairness. It builds a trust between those with power (especially economic and political) and the disadvantaged and marginalized. It provides common ground to embrace principles of honesty, respect for others, honour and integrity in our commitments and obligations, compassion, and respect for laws and humanity.

However there has to be a palpable spirit valuing open access that has to underlie any legal framework in order to maintain openness. Otherwise, no law will be able to protect the people who are not vigilant to protect their rights. This spirit was well illustrated with the race to complete the human genome project. Two former colleagues parted ways. Craig Venter set up private corporation to map the human genome. Francis Collins stayed on as head of the government sponsored Human Genome Project (HGP). The fear that a private company might withhold this valuable information from the public domain sparked great interest for the publicly funded project to win. In the end the race was a duel and today the information is in the public domain (Shreeve, 2004:15). This example reflects the importance of public support to not lose unfettered access to information that is vital to society.

Conclusion

The African renaissance is a most noble pursuit. The observer to Africa quickly notices the energy of the upcoming generation to learn English, to gain a good education, and to achieve their potential and dreams. For problems of this magnitude, the solutions are complex. This paper highlights the technological challenges, the economic impediments, cultural and linguistic exclusion that have to be overcome as Africa is engaging in the establishment of legal framework to sustain the needed improvement in education, commercial competitiveness, and knowledge building as some of virtual space's achievable blessings – promises that play a key role in sustaining this already unfolding reality of an African renaissance.

References

- Lord Acton, letter to Mandell Creighton, April 5, 1887.—Acton, *Essays on Freedom and Power*, ed. Gertrude Himmelfarb, pp. 335–36 (1972).
- Diallo, Mamadou (Aug, 2004) Memorandum on the Guinean Paradox. [Online] Available at <http://www.guinea-forum.org/Analyses/index.asp?ana=20&Lang=A>
- Fishman, Ted (2004). *The Chinese Century*. [Online] Available at <http://www.nytimes.com/2004/07/04/magazine/04CHINA.html?ex=1246680000&en=127e32464ca6faf3&ei=5088&partner=rssnyt>
- Herbert, Ross (2002). *Implementing NEPAD: A Critical Assessment. African Report: Assessing the New partnership*. pp 93-134. [Online] Available at http://www.nsi-ins.ca/english/pdf/africa_report/ch5_herbert_e.pdf
- Keniston, Kenneth and Deepak Dumar, eds. (2003). *The Four Digital Divides*. [Online] Available at http://web.mit.edu/~kken/Public/PAPERS/Intro_Sage.html
- MBeki, Thabo. (April, 2007) *Fighting Corruption And Safeguarding Integrity, Address given at the opening ceremony of the UN Global Forum, Sandton, South Africa*. [Online] Available at http://www.sarpn.org.za/documents/d0002472/Fighting_corruption_Mbeki_Apr2007.pdf
- O'Neill, Edward T., Lavoie, Brian F., and Bennett, Rick (April, 2003) *Trends in the Evolution of the Public Web 1998 - 2002*, *D-Lib Magazine* 9(4). [Online] Available at <http://www.dlib.org/dlib/april03/lavoie/04lavoie.html>
- Selwyn, Neil. (2002) 'Defining the Digital Divide: Developing a Theoretical Understanding of Inequalities in the Information Age' *Cardiff University School of Social Sciences Occasional Paper 49*, ISBN 1-872-330-967, 36 pages. [Online] Available at <http://www.cardiff.ac.uk/socsi/ict/definingdigitaldivide.pdf>.
- Shenkar, Oded (2005), *The Chinese Century – The rising Chinese economy and its impact on the global economy, the balance of power, and your job*. Wharton School Publishing, Upper Saddle River, NJ.
- Shreeve, James (Jan. 2004). *The Genome War: How Craig Venter Tried to Capture the Code of Life and Save the World*. Knopf Publishers.
- Sing, S.K. (1988). *China: Will the 20th century giant become a 21st century superpower?* [Online] Available at

<http://www.globalsecurity.org/military/library/report/1988/SSK.htm>

World Bank (2007). Addressing Africa's 'Missing Link'. [Online] Available at <http://go.worldbank.org/DGMGL3AB40>

World Bank Group Support (n.a) The Africa Regional Communications Infrastructure Program. [Online] Available at http://siteresources.worldbank.org/EXTAFRREGI/NICOO/Resources/RCIP_WSIS_Briefing_nov.pdf

John N. Gathegi

Intellectual Property, Traditional Resources Rights, and Natural Law: A Clash of Cultures

Abstract:

Western nations, through international treaties and bodies such as the World Trade Organization, the World Intellectual Property Organization, and economic and political pressures on many governments, are to a large degree succeeding in strengthening protection of intellectual property rights as they are understood mainly within the western context. Framing the debate within Locke's theory of natural law, the paper discusses the extent to which this strengthening of intellectual property rights is appropriate for developing countries, especially within the African context.

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Introduction

The legal history of the United States in intellectual property (IP) demonstrates considerable effort in detaching IP from natural law and the notion of labor, especially in the idea/expression dichotomy, which basically expresses the legal doctrine that ideas are not protected but that the expression of those ideas is, and that the "sweat of the brow" is not translated to IP. However, recent trends in Europe and even the US itself demonstrate a return to Lockean natural law theory of property as labor attached to resources.

We will address the conflict arising out of the laborer's claims (whether individuals or multinational companies) and the fundamental entitlements of the public, both indigenous and as mainstream economic players, within the context of Locke's "no-harm principle."

We will also explore the nature and scope of traditional resources rights and the extent to which they are affected by notions of western IP, and how natural law, from both a Universalist and an African perspective would help untangle the mess. We will especially address the question of "individual" versus collective ownership of resources, and how IP plays into that debate, examining how the Locke proviso of "enough and as good" plays in the theater of the extraction and propertization of indigenous knowledge and resources from developing countries by multinational countries, especially by the pharmaceutical industry. In effect, we will discuss the question whether there is a net harm to other persons in the acquisition of IP through labor, and whether this acquisition is "legitimate" in more than the legalistic sense, as, for example, from an ethics perspective.

Natural Law and the Lockean Genesis of Western IP Law

In his *Two Treatises of Government*, John Locke essentially viewed natural resources as available for all to partake, and that what one was able to retrieve from its natural state by one's labor belonged to the laborer. Gordon [1544-45] summarizes the logic:

"Labor is mine and when I appropriate objects from the common I join my labor to them. If you take the objects I have gathered you have

also taken my labor, since I have attached my labor to the objects in question. This harms me, and you should not harm me. You therefore have a duty to leave these objects alone. Therefore I have property in the objects."

Locke thus viewed labor as the foundation for property. One has the same duties that others owe to him. If one has labored to acquire property therefore, one would be obliged to respect others' rights to their property [Gordon, 1541]. But these rights come with a modifier: persons have a duty not cause harm to others, absent extreme need [Gordon, 1542]. There is also the moral claim: in times of extreme need and provided it does not threaten one's own survival, one "has a duty to let others share in her resources (other than her body) [Gordon, 1543].

The genesis of the western concept of IP has its origin in this Lockean view of labor-based property. Although not tangible, the resulting product was a result of one's intellectual labors. Because of its special characteristics, however, it was difficult for the creator to retain ownership of the IP once he had shared it with society, which had an interest in the creation. To ensure that the "creator" would keep creating, therefore, society made a pact that would give the creator certain privileges in exchange for the creation, thus hopefully providing an incentive for continued creation.

The view of the western IP system, which covers such disparate areas as patents, copyrights, trademarks, trade secrets and related rights, is therefore bifurcated into two schools: one that views IP as an element of public policymaking and one that views it as a system of economic rights. [WIPO, 2]. According to the World Intellectual Property Organization (WIPO) IP should be seen as not a monolithic entity, but rather as a "complex composite network of international treaties and national laws, together with the business and social practices that have developed around each distinct area of IP" [WIPO, 3]

IP Law within the US context

IP is territorial, and generally IP legislation is effective only within the legislating country's borders. The IP system in the United States traces its origin to at least as far back as the US Constitution, which in its Article I, Section 8, gives Congress the power to encourage creativity and innovation by providing limited incentives to authors and inventors. It is thus

clear that the US Congress was trying to create that elusive balance between incentive to create and the public's right to access the creations.

Recent developments in US IP law, such as the extension of the term of copyright protection and the enlarging of the scope of patentability, have brought into focus the:

"basic question at the heart of Lockean natural law: what happens when a conflict arises between fundamental entitlements of the public, and the moral claims that a creative laborer possesses by virtue of having created an intellectual product?" [Gordon, 1544].

This has been complicated further by the fact that individual creators have been supplanted by corporate interests (e.g., the individual author versus Walt Disney Corporation), to the extent that it is no longer clear for whose benefit the current IP system is. In the words of WIPO, there seems to be "a separation between genuine creativity and the business models that have developed to produce, publish and distribute creative products" [WIPO, 7]. Notwithstanding these concerns, the United States, in concert with much of the western world has in the lately been engaged in aggressive marketing of strong IP protections regimes around the world, shoring up the IP expansion that has already occurred over the years in many countries.

IP Law Projected to the African Context

For the majority of African countries, the IP systems are generally a legacy from the colonial era, and used as legislative bases the laws of the former colonizing powers. With independence, these countries incorporated the existing IP legislation into post-colonial legislation, initially with few changes, but eventually with significant revisions.

As well as being members of the African Union, most African countries are also members of the United Nations. As such, they were in accord with the 1974 Agreement between the United Nations and WIPO that recognized WIPO's role as the:

"promotion of creative intellectual activity and the facilitation of the transfer of technology related to intellectual property to the developing countries in order to accelerate economic, social and cultural development" [Agreement Between

the United Nations and the World Intellectual Property Organization, Article 1]

because though still steeped in the western concept of IP private rights, nevertheless seemed favorable to these countries.

The IP landscape was considerably altered by the negotiations coming out of the Uruguay Round of the General Agreement on Tariffs and Trade (GATT), which created the World Trade Organization and resulted in the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS). TRIPS was the result of a successful effort by:

"a coalition of private, American high-technology firms in linking intellectual property protection to trade and to the GATT/WTO framework. This coalition, known as the Intellectual Property Committee (IPC), was formed in the early 1990s with two major aims. The first was to make IPR protection a central part of United States foreign trade policy. The second was to use this new prominence of IPR protection in the domestic foreign trade policy context to improve international IPR protection, primarily through new internationally-binding minimum standards that would be adopted in the course of the Uruguay Round and enforced by the WTO" [Gathij, 753]

This agreement at once moved IP issues into world trade negotiations, and seemed to supplant much of WIPO's authority in this area. TRIPS essentially obliged countries to have strong patent protection schemes, and specifically provided for the protection of plant variety rights, with a proviso (Article 27.3(b) that allows countries to elect patent protection or develop *sui generis* legislation for such protection. For the majority of the African countries (Kenya and South Africa are examples of a few exceptions), plant variety protection was a deviation from the then prevailing paradigm of widespread knowledge sharing [Cullet, 122]. The situation was exacerbated by the time pressure African countries were put in by TRIPS implementation deadlines.

The requirement for plant variety protection should not be confused with the protection of biological diversity. A 1992 instrument, the Convention on Biological Diversity (CBD) was already evidence of concern with the depletion of biological diversity as a result of human activity, taking the view that the conservation of biological diversity is a common concern of humankind but that States have sovereign rights over their own biological resources [UN CBD, Preamble], and

that there should be "fair and equitable sharing of the benefits arising out of the utilization of genetic resources, including by appropriate access to genetic resources and by appropriate transfer of relevant technologies" [CDB, Article 1].

Concern with biodiversity is of special significance here within the context of IP rights, as pharmaceuticals from developed countries have been accused of engaged in bio-piracy, -essentially removing large amounts of unique plant material from developing countries for use in drug research. In this regard, it is significant that the forests in the developing countries hold the vast majority of the world's biodiversity [AgBioWorld], most of it in Africa [UN Population Fund].

Traditional Resources Rights and Western IP Law

Indigenous peoples, including those in Africa, have over the years developed and built detailed information and knowledge bases on various aspects of their cultures and their natural environment, including detailed knowledge of plant and animal species, soils, seasons and weather patterns. This knowledge is a result of an accumulation of experimentation and experiences over a long period of time, to determine, for instance, that a certain plant has curative or preventive properties over certain diseases. As Bastida-Muñoz and Patrick [281] describes it: "The universe of knowledge held by indigenous peoples is a result of a diachronic, intergenerational, communal and holistic collection of 'in-corporated' information about their local environment." Traditional resources rights therefore refer to systems for the conservation, protection, and compensation to communities holding this knowledge.

That indigenous knowledge is valuable can be illustrated by the fact that "indigenous knowledge of medicinal plants and food decreases research and production costs by 40% or by \$200 million a year" [Bastida-Muñoz and Patrick, 260]. This value attracts western economic sectors, such as the pharmaceutical industry. But a clash of cultures is immediately apparent, when the industry seeks to appropriate this knowledge as property.

In the Anglo-American system, property is characterized by the ability of the owner to use the property, to alienate (or transfer) the property to someone else, and a right to exclude others from using the property [Gordon, 1550]. Two problems emerge

in the attempts of the western pharmaceutical industry (and other industries) to appropriate the traditional knowledge: the first is that the indigenous notion of property is different from the western notion of property; for the former property, especially in traditional resources, is collective while for the latter, property rights are private. The other problem is collorary and comes from the convenient appeal by the pharmaceutical industry to Lockean philosophy that since there are no private rights in the traditional knowledge, then this knowledge must be treated as a commons, and the pharmaceutical company having mixed its research labor into the resources identified by this knowledge, is now entitled to the laborer's reward of property in the product. This of course runs smack against the notion of national sovereignty.

Enmeshing public policy within international trade

As we have noted above, one of the major results of the TRIPS Agreement was to introduce IP into the ambit of world trade negotiations. TRIPS itself was predated by the International Convention for the Protection of New Varieties of Plants (UPOV) and provided for private property rights in plant varieties. These rights were not patents, but under the 1991 UPOV version plant breeders have rights analogous to weakened patents, with only a nebulous distinction between the two concepts [Cullet, 100].

Given that the TRIPS Agreement provides for the protection of plant variety protection, and given that Article 27.3(b) of the agreement allows members who do not want to give this protection by way of patents to formulate substitute property rights systems through *sui generis* laws to effect their obligations under the agreement, developing countries have recently been under tremendous pressure to adopt UPOV as a compliance tool for such a protection scheme [Cullet, 100].

TRIPS is in marked contrast to the Organization of African Unity's (now the African Union) Model Law dealing with access to biological resources and rejecting patents of life or exclusive appropriation of life forms [OAU Model Law]. The Model Law recognizes:

'the rights of local communities over their biological resources, knowledge and technologies that represent the very nature of their livelihood systems and that have evolved over generations

of human history, are of a collective nature and, therefore, are a priori rights which take precedence over rights based on private interests” [Preamble].

And more specifically refers to these rights as “inalienable” [Part I, Objectives].

The problem is that unlike other international law treaties, TRIPS is non-derogable, such that without the consent of all parties, countries cannot make reservations. Furthermore, under the Generalized System of Preferences, preferential access to the United States market for developing country imports was made subject to signing on to TRIPS [Gathii, 762-63]. This makes efforts by African countries to buck the private property system, such as in the OAU Model Law, effectively toothless.

Gathii [762] puts it succinctly:

“The sovereignty that countries had in the pre-TRIPS era to determine how far to extend IPR protection was lost. (For example, in the pre-TRIPS era, a variety of developing countries had decided not to extend patent protection to pharmaceuticals. The reason was to ensure the availability of medicines to their citizens at affordable prices.) In other words, some countries had chosen not to extend monopoly protection to certain products in the public interest. The post-TRIPS international environment narrowed the sovereignty of countries bound by TRIPS to determine appropriate levels of IPR protection.”

This narrowing of sovereignty is especially evidenced by the fact that the United States singled out for unilateral punitive sanction countries that were opposed to the TRIPS agreement, prompting many to sign on both under this threat and the promise of access to the US market [Gathii, 755-56].

TRIPS and its strong IP protection regime brings into sharp focus such ethical issues as the balance between the needs of low-income pharmaceutical consumers facing a life-threatening disease like AIDS, and the pharmaceutical producers’ interests. Gathii [735] and Gellman [A1] report, for example, that:

“the pharmaceutical industry has quietly argued that selling AIDS drugs at discounts in sub-Saharan Africa portends doom with respect to the ability to finance further research and development. In effect, it argues that the AIDS crisis in Africa is intractable because providing

AIDS drugs, which still enjoy patent protection in Western markets, conflicts with its commercial objectives.”

This attitude has even been projected to actions occurring pre-TRIPS. Brazil, for example, has long had a policy of free access to AIDS drugs, that has resulted in a tremendous reduction in deaths due to opportunistic infections, by as much as 60-80% between 1996 and 1999 [Gathii, 734-5]. The country has done this by invested heavily in generic drug production projects. The United States initial response was to ask the WTO to investigate the legality of Brazil’s compulsory licensing legislation. Subsequently, however, in another similar dispute, former US President Clinton would sign an Executive Order for Sub-Saharan African countries, as well as an understanding with South Africa on the relationship between public health and pharmaceuticals, following that country’s efforts at fighting AIDS [Myers, A8].

Relying on the concept of Boyle’s “romantic author”, TRIPS insistence on strong IP protection tools such as patents devalues sources such as the traditional knowledge and plant specimens that go into developing drugs [Boyle], leading to no compensation, as only the scientific research is deemed worthy of compensation [Gathii, 758]; a decidedly western orientation of IP. It does, however, attempt to balance public policy concerns against private interests, as in Article 8’s recognition of members’ rights to adopt measures for public health and for prevention of IP property rights abuse [TRIPS, Article 8].

Back to Locke: dealing with the “no-harm” principle

We have seen that the western notion of IP rights is antithetical to the African philosophy of common ownership and sharing, especially in the area of traditional resources and knowledge, and certainly in agriculture which even in modern African governments was kept out the patent zone based on elements of public morality [Cullet, 109; Gathii, 761]. Western IP instead turns to Locke for inspiration, even though, especially in the case of the US, some aspects of IP law such as copyright have made an express effort in divorcing IP protection from results of labor. The case of *Feist v. Rural Telephone* in the US drew the line between “originality” and mere labor, with the Supreme Court ruling that the white pages of a telephone directory could not be protected by copyright, as it did not

have the requisite originality [Feist]. Since then, however, legislation protecting databases in Europe [EU Directive] and legislation outlawing the circumvention of electronic fences in information content [DMCA] have brought IP full circle back to Locke.

However, even while appealing to Lockean notions in IP protection, there are significant departures from some of the central tenets of the natural law philosophy. Laying aside for the moment the argument that natural resources found in a country belong to that country and cannot be considered by other countries as their "commons" [CBD, Article 15], and assuming that it is possible, for example, for pharmaceutical companies to claim property interests in the parts of the commons to which they have attached their "labor," there is still the conundrum that one's liberties in the use of one's property has limitations under natural law. One such limitation is the duty to refrain from harm. Also, "even if a laborer is ordinarily at liberty to keep the benefits she can draw from her product, the natural law imposes on her an obligation to share her plenty with those in extreme need" [Gordon 1550-51]. Such extreme needs would presumably include the prevention of deaths from AIDS, and not sharing would harm those in need.

The ethics of strengthening IP Law in the African Context

For Locke, the laborer was justified in property rights from the results of his labor in appropriating from the commons of nature, provided that after such appropriation, there was "enough, and as good left in common for others" [Gordon 1562]. When a pharmaceutical company leverages traditional knowledge and traditional resources to patent a drug, however, it is unclear that there is enough and as good left in common for others. The resource country, for example, cannot produce the same drug from the same resources.

A cynic might say that as long as the extraction does not deplete the particular plant resource, there is still enough and as good left for the community members and they can continue utilizing the plant for medicinal purposes as they always have. A glaring problem, however, is that should the community find itself with later scientific sophistication, it will have to contend with issued patents. As Gordon [1563-64] notes, "creators should have property in their original works, only provided that such grant of property does no harm to other per-

sons' equal abilities to create or to draw upon the preexisting cultural matrix and scientific heritage."

What is left after extraction may be enough, but not as good, a result based on a reliance argument. Once a new drug has been developed, those who used the plant for medicinal purposes cannot be confined to their original resource: they are equally entitled to the new invention, because:

"Intellectual products, once they are made public in an interdependent world, change that world. To deal with those changes, users may have need of a freedom inconsistent with first creators' property rights. If they are forbidden to use the creation that was the agent of the change, all they will have to work from will be the now devalued common" [Gordon, 1570].

Developed countries' patenting of drugs derived from traditional knowledge and plant sources imposes a duty on community members in their use of the common; especially should these communities want to develop the drug themselves. This then begs the question of the moral validity of bestowing exclusive property rights in the laborer (the pharmaceutical company) at the expense of devaluing the common. As Gordon argues, where there is a conflict between the bequeathing property rights to the laborer and causing harm to the commons, Locke dictates that the common should prevail [Gordon, 1560-61].

The global pharmaceutical industry is estimated to have made billions of dollars in annual revenues partly due "the illegal seizure of traditionally used medicinal plants and the uncompensated taking of the associated knowledge regarding their preparation for specific ailments" in what has come to be known as 'the green gold' of multinational business [Bastida-Muñoz, 260].

But IP rights resulting from this green gold come at a cost, including "1) destruction of biodiversity, communal rights, innovations, and traditional ways of life; 2) usurpation of indigenous traditional knowledge; 3) a new technological protectionism logic; 4) denial of access to indigenous medical knowledge" [Bastida-Muñoz, 273-74]. This cost appears high enough to warrant a reexamination of the underlying ethics.

Conclusion

The Convention on Biological Diversity was formulated to facilitate the fair and equitable sharing of research results arising out of the utilization of genetic resources. This sharing is supposed to be on 'mutually agreed terms' [CBD, Article 15]. Developing countries, however, and African countries in particular, are hardly in a position to negotiate on such sharing, and the mutual agreement is for the most part an illusion, especially since the concept of informed consent is equally empty. With respect to obligations imposed by TRIPS, for example, these countries have neither the fiscal nor the institutional assets to take any advantage of TRIPS there may be [Gathii, 765], especially its Article 27.3(b) *sui generis* provision.

It is interesting, however, to see flashes of conscience from some of the pharmaceutical companies, with some giving free or reduced-cost drugs to some developing countries, or allowing the production of generics while the patent is still in force. This social conscience, however, invariably runs against the companies' fiscal obligations to their investors; the question starkly becoming: what is the optimal point between maximum profit and unnecessary deaths?

Strengthening IP protection in Africa will, while arguably benefiting some sectors in the modern economy, nevertheless result in net harm for the majority of the communities in those countries, and it is imperative that this realization be factored into any IP regimes adjusting discussions, including TRIPS-like negotiations.

References

- AgBioWorld*. Retrieved 12May07
<http://www.agbioworld.org/biotech-info/topics/dev-world/challenge.html> 5:02 EDT
- Bastida-Muñoz, Mindahi Crescencio and Geraldine A. Patrick: Traditional Knowledge and Intellectual Property Rights: Beyond TRIPS Agreements and Intellectual Property Chapters of FTAs*, 14 Mich. St. J. Int'l L. 259 (2006)
- Boyle, James: "A Theory of Law and Information: Copyright, Spleens, Blackmail, and Insider Trading."* 80 Cal. L. Rev. 1413 (1992)
- Cullet, Philippe: Plant Variety Protection in Africa: Towards Compliance with the Trips Agreement*, 45 Journal of African Law 197 (2001)
- Feist Publications v. Rural Telephone Service*, 499 U.S. 340 (1991)
- Gathii, James Thuo: Construing Intellectual Property Rights and Competition Policy Consistently with Facilitating Access to Affordable AIDS Drugs to Low-End Consumers*, 53 Florida Law Review 727 (2001)
- Gellman, Barton: An Unequal Calculus of Life and Death: As Millions Perished in Pandemic, Firms Debated Access to Drugs*, Wash. Post, Dec. 27, 2000, at A1.
- Gordon, Wendy J. A: A Property Right in Self-Expression: Equality and Individualism in the Natural Law of Intellectual Property*, 102 Yale L.J. 1533 (1993)
- Myers, Steven Lee: South Africa and U.S. End Dispute Over Drugs*, N.Y. Times, Sept. 18, 1999, at A8
- Organization of African Unity: OAU Model Legislation for the Protection of the Rights of Local Communities, Farmers and Breeders, and for the regulation of Access to Biological Resources (OAU Model Law)*. Algeria, 2000
- United Nations Conference on Environment and Development: Convention on Biological Diversity*, 31 I.L.M. 818 (1992)
- UN Population Fund*. Retrieved 09May07
<http://www.unfpa.org/swp/2001/english/ch02.html> at 4:36 PM EDT
- World Intellectual Property Organization. Report on the Online Forum on Intellectual Property in the Information Society*. WIPO/CRRS/INF/1 2005. p.2

Peter Johan Lor

International advocacy for information ethics: the role of IFLA

Abstract:

This paper focuses on IFLA's international advocacy role. It explores the relationship between library advocacy and information ethics, before outlining the ethical thrusts of IFLA's advocacy and describing IFLA's international advocacy work, with special emphasis on Africa.

Agenda

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Introduction

When we look back on the last decades of the twentieth century one of the features that strikes us is the number of world summits held in an attempt to deal with deep-seated human problems at an international level. Well-known examples are the Earth Summit (United Nations Conference on the Human Environment, Rio de Janeiro, 1992), the Fourth World Conference on Women (World Women Summit, Beijing, 1995), the Millennium Assembly (New York, 2000), and the World Summit on Sustainable Development (Johannesburg, 2002).

This trend was accompanied by a significant increase in the international advocacy role of non-governmental organisations (NGOs), or more generally, of "Civil Society". Initially at least, NGOs were not particularly welcome at the conference table, which was seen as the preserve of government delegations. But while these delegations continued with their complex, formalised, and often cynical diplomatic rituals, civil society was busy at the fringes, observing, learning, adopting the Internet to communicate and organise its supporters, and "working the system" to insert its concerns into the discussions and influence the outcomes. This was very evident at the World Summit on the Information Society (WSIS), held in Geneva and Tunis in 2003 and 2005 respectively. WSIS may not have yielded much of concrete significance, but arguably it represented a breakthrough for Civil Society, which there achieved a degree of recognition and influence not seen before.¹

One of the organisations active at the two WSIS summits was IFLA, the International Federation of Library Associations and Institutions. This paper focuses on IFLA's international advocacy role. It explores the relationship between library advocacy and information ethics, before outlining the ethical thrusts of IFLA's advocacy and describing IFLA's international advocacy work, with special emphasis on Africa.

In the following Venn diagram, the focus of this paper is depicted by the intersection of the three circles:



Library advocacy

Library advocacy can have both political and ethical motivations. In the political sphere library advocacy is primarily concerned with resource allocation. The emphasis is on putting the library on the political agenda of the governmental or institutional decision-makers to ensure that adequate resources are allocated to enable the library to serve its clientele. This can involve such issues as the distribution and location of library service points, their accessibility and service hours, and the matching of facilities, collections, staff and services to the anticipated needs of clients, including clients from disadvantaged and marginalised groups. A typical example is the Campaign for America's Libraries, a five-year project of the American Library Association launched in 2001. It had five goals:

1. Increase awareness and support for libraries
2. Increase library usage
3. Promote recruitment to the profession
4. Bring libraries to the table on public-policy issues
5. Impact funding for libraries (Advocacy... 2004)

In the context of this campaign advocacy was defined as follows: "Advocacy is turning passive support into educated action by stakeholders." (P. G. Schuman, cited in *Advocacy... 2004*:32)

In the context of the Information or Knowledge Society the survival and continued centrality of the library and its place in relation to other, competing or complementary agencies are prominent concerns. Such concerns can be linked to self-preservation or

¹ This view is contested. See for example Gurstein (2005) and Currie (2005).

survival needs of institutions and professional groups as much as to ethical motivations.

Ethical basis of library advocacy

More distinctly ethical motivations for library advocacy can be related to three key ethical principles that are referred to in this paper as (1) Freedom, (2) Equity and (3) Inclusion. All three of these are related to the essential mediating role of the librarian. As stated in the first three of Ranganathan's Five Laws of Library Science, librarians bring together information ("books") and users ("readers"):

1. Books are for use.
2. Every person his or her book.
3. Every book its reader.
4. Save the time of the reader.
5. The library is a growing organism (Ranganathan 1931)

The role of the library as an information intermediary is depicted in Figure 2.

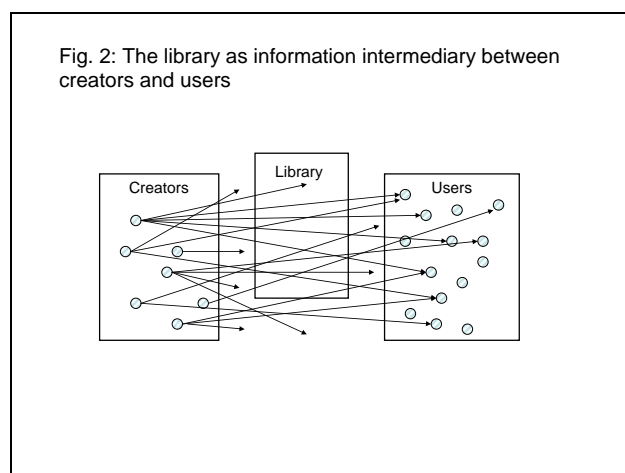


Figure 2 depicts two major kinds of failure that can occur: (a) information that is disseminated fails to reach users; and (b) users fail to receive information that is disseminated. In addition, delays and obstacles occur as a result of (c) a failure of effectiveness or efficiency on the part of the Library, as implied in Ranganathan's fourth Law.

In this paper failure of type (c) is not considered. Therefore, various aspects of library deontology are not discussed here, for example professional relations between colleagues, the custodial responsibilities of the librarian, and the tension between preservation and use.

The other two forms of failure can be caused by various societal filters or barriers that form obstacles to the creation, transmission and reception of information:

- Barriers of a political and cultural nature often take the form of censorship and pose threats to freedom of expression and freedom of access to information.
- Barriers of a legal and economic nature often take the form of intellectual property restrictions that pose threats to equitable access to information by users in less affluent communities and countries.
- Barriers of a socio-economic nature often take the form of social disadvantages in terms of educational, occupational and economic opportunities, and pose threats to social inclusion.

The mediating task of the librarian implies that the librarian is concerned with three ethical issues in respect of societal barriers: those of freedom, equity and inclusion respectively.

Freedom is concerned with freedom of access to information and freedom of expression. Article 19 of the Universal Declaration of Human rights provides a widely accepted basis for this principle:

Everyone has the right to freedom of opinion and expression; this right includes freedom to hold opinions without interference and to seek, receive and impart information and ideas through any media and regardless of frontiers.

It is comprehensive, because it deals with the rights of both creators and users of information. Creators need to be free to think independently, to create, and to disseminate their works whether they convey factual or fictional information ("information and ideas"). Users need to be free to seek and receive information. No distinctions may be made between categories of creators and users, e.g. in terms of gender, ethnic background, politics or religion (cf. Art. 2). Various forms of censorship deny these freedoms and form political obstacles to creation, transmission and reception. In the library context, there is particular emphasis on collections and services, as stated, for example in the IFLA/UNESCO manifesto on public libraries:

Collections and services should not be subject to any form of ideological, political or religious censorship, nor commercial pressures (IFLA 1994).

Equity refers to equitable or fair legal and economic relationships between the various role-players in the dissemination and delivery of information: creators (such as authors and artists), intermediaries (including publishers, booksellers, content aggregators and librarians), and consumers (users, readers, audiences, etc.), who themselves may also be creators. These parties depend on one another. All have rights (cf. Art. 27 of the Universal Declaration of Human Rights), but they have various degrees of power to exercise their rights. In an ideal world the rights and powers of the parties will be in balance. Imbalances in respect of power give rise to economic obstacles to creation, transmission and reception. In the conflicts that arise here the limitations of an approach based only on human rights become evident, and concepts of social justice, as developed for example by Britz (2004; in press) are needed to establish an ethical basis for discussion.

Social justice also forms the basis for the principle of *Inclusion*. It is mainly (but not exclusively) concerned with the users of information. There are economic and social factors that hold down or marginalise individuals and groups in society, depriving them of the benefits of information that is disseminated. It is not only that they lack access to information for enhancing their quality of life. More fundamentally they may lack the awareness that information can make a difference and they may lack the skills that are needed to seek and utilise it. Repression, discrimination and marginalisation create social obstacles to creation, transmission and reception. This situation is unacceptable in terms of human rights and social justice.

IFLA and international advocacy

IFLA, founded in 1927, is an international non-governmental organisation with members in some 150 countries. Its core values emphasise a number of essentially ethical principles:

1. the endorsement of the principles of freedom of access to information, ideas and works of imagination and freedom of expression embodied in Article 19 of the Universal Declaration of Human Rights
2. the belief that people, communities and organizations need universal and equitable access to information, ideas and works of imagination for their social, educational, cultural, democratic and economic well-being
3. the conviction that delivery of high quality library and information services helps guarantee that access
4. the commitment to enable all Members of the Federation to engage in, and benefit from, its activities without regard to citizenship, disability, ethnic origin, gender, geographical location, language, political philosophy, race or religion (IFLA 2005b).

IFLA consequently has a long history of advocacy in the field of library and information services. A strong focus has long been on promoting the development of librarianship and library services worldwide, through interlinked activities relating to:

- international library cooperation, for example, through the former core programmes of Universal Availability of Publications (UAP) and Universal Bibliographic Control (UBC)
- the development and dissemination of best professional practice, for example through the Preservation and Conservation (PAC) core activity
- stimulating and assisting library development in developing countries, through the Action for development through Libraries Programme (ALP)

The late 1990s saw the emergence of new IFLA core activities: the Committee on Copyright and Other legal Matters (CLM) and the Committee on Free Access to Information and Freedom of Expression (FAIFE). Both of these have a stronger advocacy focus, on the themes of Equity and Freedom issues respectively. The third advocacy theme, Inclusion, came to prominence as part of IFLA's advocacy activities during the WSIS process (2003-2005). An overview is now given of these three areas of advocacy activity.

Freedom of Information: FAIFE

FAIFE (Free Access to Information and Freedom of Expression) is the IFLA Core Activity promoting the freedoms that its name implies insofar that they impinge, directly or indirectly, on libraries and librarianship. The FAIFE initiative was started at the IFLA Conference in Istanbul in 1995 with the Council of IFLA's confirmation of the commitment to Article 19 of the Universal Declaration of Human Rights and the creation of the Committee on Access to Information and Freedom of Expression (CAIFE) to investigate the role of IFLA in addressing the constraints

on the right to information. In 1997, IFLA formalised the work of CAIFE by establishing FAIFE (Committee on Freedom of Access to Information and Freedom of Expression) as a core activity within the organisation. According to the 1997 resolution FAIFE's task is to:

advise IFLA on matters of international significance to libraries and librarianship in this area, including, but not limited to: censorship of library materials; ideological, economic, political or religious pressures resulting in limitations on access to information in libraries; restrictions on librarians and other information specialists who provide reference and other information services (cited in Sørensen 1998).

The establishment of the FAIFE Office in Copenhagen followed in 1998. In its first years FAIFE was financially supported by the City of Copenhagen, the Nordic library community, and the Danish International Development Agency (DANIDA). For the period 2005-2009 FAIFE has received substantial support from the Swedish International Development Cooperation Agency, Sida and will focus its work on the relationship between freedom of information and the struggle against corruption, poverty, and disease.

FAIFE operates independently and does not support any specific political, economic or other special interests except the promotion and defence of intellectual freedom through unrestricted access to information regardless of media.

FAIFE attempts continuously to monitor the state of intellectual freedom within the library community world-wide. In doing so it depends on networking and partnerships. The FAIFE Committee of some 27 members nominated by the library association and institutional IFLA members in their countries, is a basic component of the network.

In addition, FAIFE is a member of various international intellectual freedom bodies such as the International Freedom of Expression Exchange (IFEX). Freedom of information, like all freedom, is indivisible. Restrictions and abuses affecting journalists, authors and publishers, even if they do not involve libraries, restrict the range of information that librarians can offer their users. Although IFLA's limited resources impose limitations on the scope and emphasis of FAIFE, freedom of the media is critical, and cooperation between libraries and the media are important in the fight against censorship. Thus FAIFE participates in the Tunisia Monitoring

Group (TMG), a coalition of 15 IFEX member organisations. The TMG monitors free expression violations in Tunisia to focus attention on the country's need to improve its human rights record as the host of the November 2005 World Summit on the Information Society (IFEX 2006). In response to violations of freedom of expression, and only once these have been confirmed from independent sources, IFLA may issue press statements, which can be found on its web pages at <http://www.ifla.org/faife/faife/faife.htm>.

Research and publications form an important part of FAIFE's advocacy work. Since 2001 FAIFE has annually published a report based on international data collection that provides an overview of how libraries around the world are tackling barriers to freedom of access to information and freedom of expression. This provides invaluable baseline data against which progress or lack thereof in the intellectual freedom situation of libraries in many countries can be measured. The World Report Series comprises two sub-series: the *IFLA/FAIFE World Report*, based on questionnaire returns from over one hundred countries, is published every second year while the *IFLA/FAIFE Theme Report*, based on invited contributions from experts, is published in alternate years. Six reports have appeared to date.² The most recent report, the 2006 IFLA/FAIFE Theme report, *Libraries and the fight against HIV/AIDS, poverty and corruption*, contains contributions on the role of libraries in serving marginalised communities in Africa (Ocholla 2006) and in

² The following titles have been published:

2001: *The IFLA/FAIFE World Report on Libraries and Intellectual Freedom*

2002: *The IFLA/FAIFE Summary Report: Libraries, Conflicts and the Internet*

2003: *Intellectual freedom in the information society, libraries and the Internet (IFLA/FAIFE World Report)*

2004: *Libraries for Lifelong Literacy: Unrestricted access to information as a basis for lifelong learning and empowerment (IFLA/FAIFE Theme Report)*

2005: *Libraries, National Security, Freedom of Information Laws and Social Responsibilities (IFLA/FAIFE World Report)*

2006: *Libraries and the fight against HIV/AIDS, poverty and corruption (IFLA/FAIFE Theme Report)*

combating HIV/AIDS (Albright 2006). A contract for compiling the 2007 World Report has been awarded to the University of Pretoria in South Africa.

FAIFE supports IFLA policy development by conducting research and drafting policy statements and guidelines on various aspects of intellectual freedom in libraries. A good example is the *Internet manifesto*. This manifesto was prepared by FAIFE and adopted unanimously on 23 August 2002 at the 68th IFLA General Conference and Council, held in Glasgow, Scotland. The manifesto consists of four sections dealing with IFLA's position on access to information, the relationship between libraries and the Internet, principles of freedom of access to information via the Internet, and the implementation of the Manifesto.

Following the adoption of the *Internet manifesto*, it has thus far been translated into 19 languages. IFLA has encouraged national library associations to adopt it in their countries. The *IFLA/FAIFE world report*, referred to earlier, annually reports on this. As of now, national library associations in about 30 countries have formally adopted the manifesto, with many more planning to do so.

FAIFE's work on this topic did not end with the adoption of the *Internet manifesto*. A notable example of FAIFE's research work is Stuart Hamilton's PhD project in the Department of Library and Information Management at the Royal School of Library and Information Science, Copenhagen, Denmark. His thesis, entitled *To what extent can libraries ensure free, equal and unhampered access to Internet-accessible resources from a global perspective?* was completed and accepted in 2005 (Hamilton 2005).

Following on from its work on the *Internet manifesto*, FAIFE was awarded a grant by UNESCO's Information For All Programme (IFAP) to develop the *IFLA/UNESCO Internet Manifesto Guidelines* (IFLA 2006b), designed to help librarians all over the world to implement the Internet Manifesto in practice, taking into account in particular the needs of developing countries. Development of the guidelines was a participative and interactive process involving workshops in various parts of the world, and will be followed by a series of practical seminars to be held in the developing regions of Africa, Asia and Oceania, and Latin America and the Caribbean.

This illustrates the educational role played by FAIFE through seminars, workshops and professional programmes at IFLA's annual congresses. An

example of the latter was the "FAIFE debate" held at the 2006 IFLA World Library and Information Congress in Seoul, South Korea, on the controversy over the publication in the Danish newspaper *Jyllandsposten* of cartoons depicting the Prophet Mohammed. The cartoons offended many Muslims, raised important question about limits to freedom of expression and exposed the limitations of blind adherence to one particular article of a human rights statement (Sturges 2006).

FAIFE seminars and workshops on intellectual freedom issues are held in the developing regions of the world, including Africa. The most recent was a FAIFE workshop on Intellectual Freedom and the Information and Knowledge Society held at SCECSAL³ XVII in Dar es Salaam, Tanzania in July 2006 (IFLA 2006a). Mention should also be made here of the GIOPS-FAIFE⁴ African Seminar and post-WSIS Conference, held in Addis Ababa, Ethiopia, in March 2006, which dealt with the role of libraries in strengthening democratic progress and economic development through free access to information, especially government information (Kirkwood 2006b, 2006c). For the August 2007 IFLA Congress in South Africa, a FAIFE satellite meeting is being planned on the role of libraries in fighting corruption, censorship and poverty.

Information equity: CLM

The Committee on Copyright and other Legal Matters (CLM) is the IFLA Core Activity promoting fairness in intellectual property rights and measures affecting access to information through libraries. It was set up in 1997 to advise IFLA on:

Copyright and Intellectual Property, Economic and trade barriers to the acquisition of library material, Disputed claims of ownership of library materials, authenticity of electronic texts, Subscription and licence agreements, Other legal matters of international significance to libraries and librarianship (IFLA 1997).

Since then its scope has extended to such issues as access to digital resources, digital rights manage-

³ SCECSAL is the acronym for: Standing Conference of Eastern, Central and Southern African Library and Information Professionals.

⁴ GIOPS is the acronym for: IFLA's Government Information and Official Publications Section.

ment and anti-circumvention technology, public lending right, protection of indigenous knowledge, and treaties on cultural diversity and access to knowledge (Scott 2003; Tabb 2005).

What do all of these topics have in common? All have to do with legal and economic barriers to free and equitable access to information. In principle, information should flow from creators to users through intermediaries, to the benefit of all parties. Content creators (e.g. authors) should receive recognition and appropriate recompense. This can be a direct monetary reward, as in the case of authors of novels, children's books or textbooks, composers or performers. But the reward may also take the form of prestige and career advancement, as in the case of authors of articles published in scientific and scholarly journals. Users (e.g. readers) should benefit from access to information and works of the imagination which contribute to education, economic development, and both material and spiritual quality of life. Intermediaries (unless in the public sector) should derive a return on their investment in packaging and disseminating content. In the Gutenberg era a system of intellectual property evolved that sought to balance the interests of authors and their readers. But in the Information Society information has become a commodity. Modern information and communications technologies, globalisation, and the commodification of information have upset the balance, giving excessive power to intermediaries such as publishers who, rather than authors, tend to be the rights holders (Britz & Lor 2003; Lor & Britz 2005).

Inappropriate use of the power held by information intermediaries can present serious obstacles to the transmission of content to users, particularly users in developing countries. For example:

- Steeply rising, unaffordable prices (cf. Association of Research Libraries 2004; Dewatripont et al. 2006)
- Unfair licensing schemes
- Double dipping (in the case of scholarly publishing the client or the client's institution is made to pay twice, first for content creation, then for access to it)
- Excessive profits
- Predatory intellectual property tactics, including unreasonable extensions of the term of copyright, extension of copyright to content that is in the public domain, and anti-circumvention technology that, while pro-

tecting copyright, also locks up content that should be freely accessible.

Libraries and users in developing countries are most severely affected by these conditions (Britz, Lor & Bothma 2006), but even the wealthiest research libraries in the developed countries are affected. As the international body representing libraries and their users, IFLA regards this issue as one of major concern, and has formulated as one of its priorities: "balancing the intellectual property rights of authors with the needs of users" (IFLA 2001a).

In pursuit of this priority, CLM engages in a range of advocacy activities including research and policy development leading to the release of IFLA statements on important issues, awareness raising, networking and coalition building, and representation and intervention at meetings of international bodies. Like the FAIFE Committee, the Committee consists of members nominated by the library association and institutional IFLA members in their countries, who represent their own country or wider region, together with a small number of expert resource persons. Unlike FAIFE, CLM does not have a dedicated office or staff. In spite of this, CLM has an impressive record of achievement.

An important CLM activity has been raising awareness in the library community and providing guidance to the profession on issues that have implications for library collections and services, for example, in respect of electronic or digital resources. The growing importance of digital resources has proved to be a mixed blessing for libraries and their users. On the one hand, the digital environment opens up new possibilities to provide faster and more convenient access to resources. This enables librarians not only to enhance their services, but also to reach out to new or underserved library users, for example users in developing countries with very limited library resources. On the other hand, the digital environment offers the holders of content rights new means of controlling access to content and whittling away the amount of content which, in conventional printed formats, would have been freely accessible under fair use exemptions. Claiming that "digital is different", content owners have argued that such exemptions and limitations to copyright are not appropriate to digital content. However, IFLA's position, stated in its position statement *IFLA Position on Copyright in the Digital Environment*, developed by CLM, is that "digital is not different" (IFLA 2000).

The CLM followed up the position paper by preparing guidelines for the use of librarians having to negotiate licensed access to electronic resources. The *Licensing Principles* cover such aspects as sound legal practice, fairness in contracts, conditions of access and use, the position of end users, long-term access and archiving, pricing, provisions for interlibrary loan and document delivery, and access for distance education students (IFLA 2001b).

In 2004 IFLA issued a significant and comprehensive statement on *Limitations and exceptions to copyright and neighbouring rights in the digital environment: an international library perspective* (IFLA 2004). The document makes a case for preserving the balance originally established in copyright laws between creators and users of content.

The original purpose of copyright was to protect the author or creator in the wider public interest. We now live in a digital age and there is a danger of copyright becoming a legal protection mechanism for commercial conglomerates. There is a growing threat to the public interest aspect of copyright, with certain copyright owners wielding an enormous power to set their own rules and build a "private legislation" that does not necessarily take into account the balance created in copyright laws....

Although no one denies rights owners the right to obtain a return on their investment, limitations in the form of exceptions must be part of the equation to ensure that society may also obtain a similar return on its investment in education and research. Only in this way will a balance be achieved (IFLA 2004).

On behalf of IFLA and the international library community CLM has taken this battle to the international intellectual property arena, lobbying for example at the World Intellectual Property Organization (WIPO) and the World Trade Organization (WTO). In doing so CLM has also been concerned to raise general awareness of the issues, which may seem remote to librarians at the local level. An example is the publication *Tips for TRIPS* (IFLA 2002), intended to help the library community to understand what is at stake in the Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS). TRIPS brings intellectual property under the WTO's international trade regime and sets common standards for intellectual property for all WTO members. This has negative consequences for developing countries, which are coerced into enacting restrictive copyright legislation that is arguably

inappropriate to countries at that development stage, and certainly were not applicable to countries such as the United States when they were at a comparable developmental stage (cf. Khan 2007). It is well known that in the 19th century the works of the British author Charles Dickens were pirated on a large scale in the United States (Ward 2002; Wikipedia 2007).

CLM's international advocacy work covers a wide range of issues. It has been active at WIPO in the debates on the Access to Knowledge ("A2K") Treaty, and works with the World Blind Union on access to library materials for print-disabled readers. CLM was also active in recent meetings at UNESCO including meetings during 2001-2005 at which the UNESCO Convention on the Protection and Promotion of the Diversity of Cultural Contents and Artistic Expressions (popularly known as the Convention on Cultural Diversity) was hammered out. At the WTO, CLM has taken a keen interest in the General Agreement on Trade in Services (GATS) which, in opening up national markets for service industries and public services to international competition, may have unintended negative consequences for free public libraries.

In its advocacy work CLM does not work in isolation, but rather in close partnership with other organisations such as the European Bureau of Library, Information and Documentation Associations (EBLIDA) and Electronic Information for Libraries (eIFL). CLM also works closely with national associations and coalitions, e.g. the Library Copyright Alliance⁵ in the USA. CLM is represented in the IFLA/IPA Steering Group, a joint forum of IFLA and the International Publishers Association (IPA), where both matters of common concern and issues on which librarians and publishers disagree, are discussed (Tabb 2005).

The issues with which CLM is concerned are highly relevant to developing countries. In this context it is worth noting that an Africa Copyright and Access to Information Alliance was launched in November 2005 at the Africa Copyright Forum Conference, co-sponsored by IFLA, which was held in Kampala, Uganda. This is a potentially important development in the struggle for equitable access to information in

⁵ The Library Copyright Alliance is an alliance of the American Association of Law Libraries, the American Library Association, the Association of Research Libraries, the Medical Library Association, and the Special Libraries Association.

Africa, where governments are being pressurised into adopting extremely restrictive copyright legislation in order to qualify for so-called free trade agreements with developed countries (Nicholson 2006). Such restrictive legislation tends to eliminate fair use exemptions for libraries and academic use in spite of their being widely available to users in developed countries. It is also worth noting that in Africa there is an externally driven movement to set up reproduction rights organisations to collect royalties for rights holders when copies are made. Whilst authors and other creators are fully entitled to their royalties, in some African countries this is like setting up toll plazas before the toll roads have been constructed.

Inclusion: Information Society advocacy

IFLA's advocacy on the ethical theme of Inclusion is an activity that crystallised around IFLA's participation in the World Summit on the Information Society (WSIS). Here there is some overlap between the political and the ethical concerns outlined in the introduction to this paper, since in IFLA's advocacy work Inclusion has a twofold meaning, referring to the library as an agency of social inclusion and to the inclusion of the library as a key agency in the Information/Knowledge Society.

A World Summit on the Information Society (WSIS) was first proposed by the International Telecommunication Union (ITU), in 1998 and the proposal was endorsed by the United Nations General Assembly in December 2001. Unusually, WSIS took place in two phases. The first phase was held in Geneva on 10-12 December 2003 and the second phase in Tunis on 16-18 November 2005 (Berry 2006), preceded by further PrepCom and related meetings. In the course of this long process, the focus shifted from the somewhat technological emphasis of the ITU to a more balanced approach encompassing social, cultural, economic and political factors. The United Nations Educational, Scientific and Cultural Organization (UNESCO) came to play a more prominent role in the summits, along with a large number of non-governmental organisations (NGOs), referred to broadly as "Civil Society". One could say that there was a shift from the "digital divide", with its technological emphasis, to the "Information Society", a more multidimensional concept.

During the Geneva phase the broad themes concerning the Information Society were discussed and

two documents, a *Declaration of Principles* and a *Plan of Action* were prepared and adopted (WSIS 2003). This gave rise to questions as to what remained to be done in Tunis, where the focus was to be on implementation. The main outstanding issues that had not been resolved in Geneva concerned:

- Internet governance
- How to finance the bridging of the digital divide, and
- Modalities of follow-up (whether a new UN structure should be set up to monitor and evaluate progress following the Tunis summit)

At Tunis all three of these issues were hotly debated. Internet governance proved a sticking point until almost the last minute, when a compromise was reached according to which the Secretary General of the UN would set up a multi-stakeholder Internet Governance Forum with some moral authority but little else. The Governments of most developed countries proved unwilling to make a firm financial commitment to bridging the digital divide. Neither were they keen to see yet another agency added to the UN family to oversee the implementation of the WSIS action plans. Hence WSIS follow-up responsibilities are being distributed among a number of international agencies, with the ITU and UNESCO playing lead roles in respect of many of the action lines that had been defined in the Geneva action plan.⁶

Among Civil Society groups there was some anxiety that some of the commitments of principle made in Geneva might be watered down under pressure from certain governments. In particular, given the very poor human rights situation in the host country, Tunisia, it was anticipated that attempts might be made to water down the firm commitment to freedom of information that had been made in the Geneva document. In the event, a number of governments attempted to do this in Tunis, but they were unsuccessful.

Thanks to intensive and sustained advocacy work by IFLA and its allies (Byrne et al. 2004; Haavisto & Lor

⁶ Since the Tunis Summit the United Nations-wide follow-up of the WSIS summits is the responsibility of the Commission on Science and Technology for Development (CSTD) of the UN Economic and Social Council (ECOSOC).

2005; Kirkwood 2006a, Mahnke 2006), the principles and action plan document adopted in Geneva contained some very favourable language concerning the role of libraries in the Information Society. In the library community there were fears that some of these gains might be eroded during the second phase of the Summit. During the period between the two phases, IFLA continued to stress the value of libraries as agencies promoting national progress in the information society. IFLA's argument was that it is not necessary to invent new agencies to provide the peoples of the world with access to networked knowledge resources. Such agencies already exist – they are called libraries. In some countries libraries are already doing a great job in providing their people with access to networked information. In other countries only a modest additional investment would be needed to enable them to do this effectively. In November 2005, just before the Tunis summit IFLA, together with the Biblioteca Alexandrina, organised a pre-summit Conference in Alexandria, Egypt, on the theme "Libraries: the information society in action", in which success stories illustrating the role of libraries in the Information Society were showcased. At the end of the pre-summit IFLA launched its *Alexandria Manifesto on Libraries, the Information Society in Action* (IFLA 2005a).

In the event, the Tunis summit also provided IFLA with an excellent platform to promote the role of libraries in the Information Society. IFLA's efforts did not go unrewarded and the gains that had been achieved during the Geneva 2003 phase were successfully carried forward to the final document. In par. 90(k) of the *Tunis Agenda for the Information Society* (WSIS 2005), the key concluding document of the Tunis Summit, the role of libraries in providing equitable access to information and knowledge for all, is emphasised. The document reaffirms a commitment to "providing equitable access to information and knowledge for all" and to use ICTs as development tools by:

k. supporting educational, scientific, and cultural institutions, including libraries, archives and museums, in their role of developing, providing equitable, open and affordable access to, and preserving diverse and varied content, including in digital form, to support informal and formal education, research and innovation; and in particular supporting libraries in their public service role of providing free and equitable access to information and of improving ICT literacy and community connectivity, particularly in underserved communities;

From IFLA's perspective there are currently two main lines of follow-up of the WSIS summits. One concerns the Internet governance issue and the setting up of the Internet Governance Forum. The other concerns the eleven "action lines" described in the Geneva *Plan of action* (WSIS 2003). For each action line a UN organisation (e.g. ITU or UNESCO) has been appointed rather quaintly as "facilitator" or "moderator", with an individual being designated as the "focal point". Various "facilitation" and consultation meetings are taking place to set the follow-up activities in motion. IFLA has allocated priorities to each of the action lines, and is concentrating on the action lines of highest priority, namely:

Highest priority:

C3 Access to information and knowledge

High priority:

C1 Promotion of ICTs for development

C4 Capacity building

C8 Cultural diversity & identity, linguistic diversity and local content

C10 Ethical dimensions of the Information Society

Medium priority

C7 ICT applications (some of these are allocated a high priority)⁷

IFLA has set up a working group, designated as the President-elect's Information Society Working Group, to keep abreast of progress in respect of the action lines and other important issues (such as Internet governance) arising from WSIS, but not limited to it. An important objective of IFLA's post-WSIS advocacy has been the empowerment of the library profession at the national level to advocate for the inclusion of libraries in national information society strategies, information policies, and budgets. This is pursued by means of workshops and presentations at conferences such as the WSIS Follow-up Conference on Access to Information and Knowledge for Development, held in Addis Ababa in March 2006, where a workshop was held on building African capacity to implement the outcomes of WSIS in respect of libraries and access to knowledge. An analysis of the WSIS action lines and how they can be used in advocacy for libraries, is available on IFLA's website (IFLA 2006c).

Conclusion

Although they have here been discussed separately, the three advocacy themes are clearly interlinked. Freedom of information without equitable access regimes is a hollow promise. An equitable intellectual property regime is of little use to communities and groups that are excluded from the Information Society. Hence advocacy work should not be conducted within silos.

Responding to the clearly expressed need of its constituency for it to take the lead in international advocacy for libraries and access to information, IFLA is consolidating its advocacy efforts by setting up a small, professionally staffed advocacy unit at its headquarters in The Hague. The unit will focus on the three themes outlined here, but the themes will not be separated into three silos. Instead, it will seek to achieve synergy. Advocacy staff, supported by other Headquarters staff will be involved in the generic advocacy processes of research and monitoring, horizon scanning, policy development, net-

working, representation, education and awareness-raising.

Of course, one or two professionals cannot possibly cover all bases and be present in every forum where issues affecting libraries and access to information are decided. FAIFE, CLM and the WSIS team have achieved significant impact through the efforts of volunteers. IFLA will continue to rely heavily on the expertise and dedication of its members. In the advocacy unit the emphasis will be on mobilising the skills and expertise of the worldwide profession, on networking, facilitating and coordinating. Such an approach is appropriate to a profession that values freedom, equity and inclusion, and has a long tradition of expressing this through cooperation and sharing.

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References

- Advocacy grows @ your library.* 2004. *American libraries* 35(2):32-36.
- Albright, K. 2006. *Information vaccine: HIV/AIDS and libraries in Sub-Saharan Africa.* In: Seidelin, S. & Jensen, T.S. (eds.) *Libraries and the fight against HIV/AIDS, poverty, and corruption. Copenhagen: IFLA/FAIFE: 29-41.*
- Association of Research Libraries.* 2004. Framing the issue: open access. *Washington: ARL.*
- Berry, J.W. 2006. *The World Summit on the Information Society (WSIS): A Global Challenge in the New Millennium.* *Libri* 56(1): 1-15.
- Britz, J.J. 2004. *To know or not to know: a moral reflection on information poverty.* *Journal of information science* 30(3):192-204.
- Britz, J.J. (in press) *Making the global information society good: a social justice perspective on the ethical dimensions of the global information society.* *Journal of the American Society for Information Science and Technology.*
- Britz, J.J. & Lor, P.J. 2003. *A moral reflection on the information flow from South to North: an African perspective.* *Libri* 53(3):160-173.
- Britz, J.J., Lor, P.J. & Bothma, T.J.D. 2006. *Global capitalism and the fair distribution of informa-*

⁷ The short titles of the action lines can sometimes be misleading. The selected priorities make more sense when the full text of each action line is studied.

- tion in the marketplace. *Journal of information ethics* 15(1):60-69.
- Byrne, A., Koren, M., Shimmon, R. & Vitzansky, W. 2004. *IFLA and the World Summit on the Information Society*. *IFLA journal* 30(1):71-72.
- Currie, W. 2005. *Creating space for civil society in the WSIS*. Available <http://www.worldsummit2005.org>, accessed 2007-03-07.
- Dewatripont et al. 2006. *Study on the economic and technical evolution of the scientific publication markets in Europe: final report, January 2006*. Commissioned by DG-Research, European Commission. Brussels: the Commission. Available: http://ec.europa.eu/research/science-society/pdf/scientific-publication-study_en.pdf, accessed 2006-07-10.
- Gurstein, M. 2005. *Networking the networked/closing the loop: some notes on WSIS II*. Available <http://www.worldsummit2005.org>, accessed 2007-03-07.
- Hamilton, S. 2005. *To what extent can libraries ensure free, equal and unhampered access to Internet-accessible information resources from a global perspective? Unpublished PhD thesis, submitted to the Department of Library and Information Management, Royal School of Library and Information Science, Copenhagen, Denmark*. Available: <http://biblis.db.dk/uhtbin/hyperion.exe/db.stuha05>.
- Haavisto, T & Lor, P.J. 2006. *IFLA in action at WSIS*. IFLANET. [Online]. <http://www.ifla.org/III/wsisis/WSIS-report27-01-2006.html>. Accessed 2006-01-03.
- IFEX. 2006. *The Tunisia Monitoring Group*. Available: <http://campaigns.ifex.org/tmg/>, accessed 2007-01-28.
- IFLA. 1994. *IFLA/UNESCO public libraries manifesto 1994*. Available: <http://www.ifla.org/VII/s8/unesco/eng.htm>, accessed 2007-01-28.
- IFLA. 1997. *Committee on Copyright and Other Legal Matters: IFLA Council resolution, 5 September 1997*. Available: <http://www.ifla.org/III/clm/archive/clmcr97.htm>, accessed 2007-01-04.
- IFLA. 2000. *IFLA Position on Copyright in the Digital Environment*. Available: <http://www.ifla.org/V/press/copydig.htm>, accessed 2007-01-30.
- IFLA. 2001a. *IFLA's professional priorities*. Available: <http://www.ifla.org/III/misc/pp1.pdf>, accessed 2007-01-31.
- IFLA. 2001b. *Licensing Principles (2001) prepared by IFLA's Committee on Copyright and other Legal Matters (CLM)*. Available: <http://www.ifla.org/V/ebpb/copy.htm>, accessed 2007-01-30.
- IFLA. 2002. *Tips for TRIPS: A guide for libraries and librarians to the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS)*. Available: <http://www.ifla.org/III/clm/p1/tte.htm>, accessed 2007-01-30.
- IFLA. 2004. *Limitations and exceptions to copyright and neighbouring rights in the digital environment: an international library perspective*. Available: <http://www.ifla.org/III/clm/p1/ilp.pdf>, accessed 2007-01-30.
- IFLA. 2005a. *Alexandria Manifesto on Libraries, the Information Society in Action*. Available: <http://www.ifla.org/III/wsisis/AlexandriaManifesto.htm>, accessed 2006-09-21.
- IFLA. 2005b. *More about IFLA*. Available: <http://www.ifla.org/III/intro00.htm>, accessed 2007-01-27.
- IFLA. 2006a. *IFLA/FAIFE Workshop at SCECSAL XVII*. Available: http://www.ifla.org/faife/faife/SCECSAL_Workshop_Statement2006.htm, accessed 2007-01-28.
- IFLA. 2006b. *IFLA/UNESCO Internet manifesto guidelines*. Available: <http://www.ifla.org/faife/policy/iflastat/Internet-ManifestoGuidelines.pdf>, accessed 2007-01-14.
- IFLA. 2006c. *Libraries and the WSIS action lines*. Available: <http://www.ifla.org/III/wsisis/WSIS-Action-Lines.pdf>, accessed 2007-04-11.
- Khan, B.Z. 2007. *Does copyright piracy pay? The effects of US international copyright laws on the market for books, 1790-1920*. Available http://www.law.ucla.edu/docs/khan_copyright_piracy_jle_2007.pdf.
- Kirkwood, F.T. 2006a. *IFLA and WSIS: a common tapestry*. Paper presented at the Workshop on Building African capacity to Implement the Outcomes of the World Summit on the Information Society (WSIS) in the Sphere of Libraries and Access to Information and Knowledge, Addis Ababa, 27 March 2006. Available: <http://www.uneca.org/disd/events/2006/wsisis-library/presentations/IFLA%20and%20WSIS%20-%20a%20common%20tapestry%20->

- [%20Francis%20Kirkwood%20-%20EN.pdf](#), accessed 2007-01-31.
- Kirkwood, F.T. 2006b. *Report on the GIOPS-FAIFE African Seminar and post-WSIS Conference in Addis Ababa, Ethiopia*. Available: <http://www.ifla.org/VII/s17/pubs/s17-WSIS-Report2006.pdf>, accessed 2007-01-28.
- Kirkwood, F.T. 2006c. *Strengthening free access to information and free expression through libraries in Africa*. Paper presented at the International Seminar on the Strategic Management and Democratic Use of Government Information in Africa, Addis Ababa, 29 March 2006. Available: <http://www.uneca.org/disd/events/2006/wsisi-li-brary/presentations/Strengthening%20free%20access%20to%20information%20and%20free%20expression%20through%20libraries%20in%20Africa%20-%20Francis%20Kirkwood%20-%20EN.pdf>, accessed 2007-01-28.
- Lor, P.J. & Britz, J.J. *Knowledge production from an African perspective: international information flows and intellectual property*. *International information & library review* 37:61-76.
- Nicholson, D. 2006. *Africa Copyright and Access to information Alliance launched*. *LIASA-in-touch* 7(1):12.
- Mahnke, C. 2006. *WSIS, IFLA, UNESCO and GATS: networking for libraries on the international level*. *Library hi tech* 24(4):540-546.
- Ocholla, D. 2006. *Information accessibility by the marginalized communities in South Africa and the role of libraries*. In: Seidelin, S. & Jensen, T.S. (eds.) *Libraries and the fight against HIV/AIDS, poverty, and corruption*. *Copenhagen: IFLA/FAIFE*:15-27.
- Ranganathan, S.R. 1931. *The five laws of library science*. *Madras:Madras Library Association; London: Edward Goldston*.
- Scott, M. 2003. *Report to Council: Committee on Copyright Other Legal Matters (CLM)*. Available: http://www.ifla.org/IV/ifla69/council_no.15.htm, accessed 2007-01-04.
- Sørensen, B. 1998. *Free Access to Information and Freedom of Expression*. Unpublished paper presented at the BOBCATSSS Conference, Budapest, January 1998. Available: <http://www.ifla.org/faife/papers/others/sorens.htm>, accessed 2007-01-28.
- Sturges, P. 2006. *Limits to freedom of expression? Considerations arising from the Danish cartoons affair*. *IFLA journal* 32(3): 181-188.
- Tabb, W. 2005. *Report to Council: Committee on Copyright Other Legal Matters (CLM)*. Available: <http://www.ifla.org/IV/ifla71/clm-councilRep2005.html>, accessed 2007-01-04.
- Ward, M. 2002. *Copyright rows ring down the centuries*. BBC news 17 June 2002. Available <http://news.bbc.co.uk/1/hi/sci/tech/2002379.stm>, accessed 2007-03-07.
- Wikipedia. 2007. *Bestseller*. Available: <http://en.wikipedia.org/wiki/Bestseller>, accessed 2007-01-30.
- WSIS. 2003. *The Geneva Declaration of Principles and Plan of Action*. *Geneva: WSIS Executive Secretariat*.
- WSIS. 2005. *Tunis Agenda for the Information Society*. *WSIS-05/TUNIS/DOC/6 (rev. 1)*, available http://portal.unesco.org/ci/en/files/20687/11327/453881tunis_agenda_en.doc/tunis_agenda_en.doc, accessed 2006-09-21.

Anthony Löwstedt

Rights versus Diversity? The Accelerated Extinction of Languages and Cultures as an Aspect of Current Globalization Trends

Abstract:

This paper starts from the assumption that linguistic diversity, and more generally, cultural diversity, are intrinsically good. I will look at their opposites, linguistic and cultural poverty, and the current tendencies towards the latter within the globalization process. I will also briefly explore the relationship between human rights and cultural diversity, which may be viewed as somewhat problematic, but the emphasis will be on what I consider the essential aspect of that relationship, namely, the mutually reinforcing relationship between rights and diversity, and between their opposites, human rights violations and cultural uniformity (cultural poverty). In this context, the issue of legislative protection and promotion of cultural diversity will be investigated from a global perspective. Finally, I wish to assess the roles of Africa and of Africanity with regard to these issues.

Agenda

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The Impending Disaster

The forms in which information comes and goes is crucial, but they are sometimes overlooked or underestimated, in information ethics as elsewhere. Language is still the most conspicuous form of information and we tend to rush to use English although there might be other possibilities. Even philosophers and information theorists are usually more concerned with the subject matter of the language used, i.e. the meanings of the words and sentences, than with their linguistic forms. We therefore tend to see language as a means more than as an end. Yet, linguistic diversity is central to cultural diversity as well as to information ethics, and it is suffering appalling defeats today.

Because we think so much in words, the loss of languages limits the possibilities of human thought, knowledge, and communication. Indigenous knowledge is being lost as a result of the death of languages. More than half of the world's languages, perhaps even as much as 95 %, of the world's languages are threatened with extinction by the end of this century.¹

This high rate is perhaps unprecedented in human history. We and our children will therefore almost certainly live through the era during which most languages will die. And Africa is the continent that is hardest hit.²

Analysts mainly blame the spread of commercialism and consumerism, and, secondly, the rapid global spread of English, as the main factors behind this, perhaps the greatest threat ever not just to linguistic diversity but also to cultural diversity. But there are many additional factors, such as US- and UK-driven cultural imperialism, discriminatory short-sighted policies aimed to support members of linguistic minorities³, urbanization, monopolistic,

oligopolistic and expansionist developments in communications business and technology. Other factors include sharp population increases and territorial expansions of already large human populations, the spread of French, Arabic, and Chinese, or the spread of missionary religions.⁴

The International System

The concept of 'linguistic genocide' was defined separately from physical genocide and roundly condemned by the United Nations in the final draft of the 1948 Convention on the Prevention and Punishment of the Crime of Genocide. But then the article on linguistic genocide was voted down by only 16 members, most of them powerful north Atlantic states.⁵

Beyond outright genocide, it is likely that some other sort of oppression, whether classism or racism, is at work when linguistic diversity suffers. These may be the kinds of situations in which an indigenous language is not targeted, but it ends up as 'collateral damage'. Today, in so-called 'post-colonial' Africa, around 90 % of Africa's intellectual output is produced in European languages. Not even a single treaty between Europe and Africa exists in any African language. In more than half of Africa's countries the official language is different from the

be all-Bulgarian schooling for Roma children in Bulgaria. If anything, this policy is evidence of the decision-makers' failure to see the forest due to the overabundance of trees! These children will be behind their native English-speaking peers from the very start and will often never catch up. Most likely, they will be put in classes for students with learning disabilities and fall behind further. The solution is of course to offer schooling in both languages, but the moral dilemma, between the individual human right to choose education (for oneself or for one's child) and the duty to preserve and promote cultural diversity, will remain, at least on the individual and familial levels.

¹ United Nations Environment Programme: Press Release: Globalization Threat to World's Cultural, Linguistic and Biological Diversity; Skutnabb-Kangas, Tove: Human Rights and Language Policy in Education

² Foundation for Endangered Languages: Manifesto

³ One example would be offering schooling in English to indigenous Canadian non-English-speaking Inuit children, officially so that they can compete in the wider labor market. Another example would

⁴ Hamelink, Cees: Confronting Cultural Rights; Skutnabb-Kangas, Tove: Linguistic Genocide in Education – Worldwide Diversity or Human Rights?

⁵ Capotorti, Francesco: Study of the Rights of Persons Belonging to Ethnic, Religious and Linguistic Minorities. 37; Skutnabb-Kangas Linguistic Genocide in Education – Worldwide Diversity or Human Rights?

language most used, and only 13 per cent of African children are receiving primary education in their mother tongue.⁶

Africa's and much of the rest of the developing world's countries' answer so far has been to put the West to shame. India has 16 official languages. South Africa, a country with some 40 million inhabitants, embraced a total of 11 official languages after liberation from apartheid in 1994. In contrast, the European Union, an association of 27 economically well-off countries (most of whom joined after 1994), has only 26 official languages, less than one per country on average. The USA, the home of 300 million people, also has only one de facto official language. Canada, the second largest country in the world, has only two. And all of these North Americans only use European languages officially. On the other hand, an estimated 50 % of Native American languages, spoken in the continent before the invasion by Europeans, have died out or been killed off. Due to long-lasting centralized states and brutal histories of war and conquests, within their own continents as well as outside them, western Europe and North America today have the lowest rates of linguistic diversity in the world. Europe is by far the poorest continent with regard to linguistic diversity. Only 3 % of the world's languages are spoken there. The percentage of languages spoken in other continents is the following: 15 % in the Americas, 30 % in Africa, 32 % in Asia and 20 % in the Pacific region.⁷ Yet, nobody seems surprised today when someone says that "Europe is rich" or "Africa is poor".

The concept of globalization is often taken to involve progress beyond the nation-state, since transnational corporations now act regardless of state borders, but in fact the division of the world into a worldwide system of sovereign nation-states is a *pre-requisite* for globalization. The essential characteristics of this system is that the world is divided into around 200 sovereign nation-states typically covering huge tracts of territory and containing millions of people. A global market incorporates (or is superimposed upon) all of these states, but there is no global state to regulate the global market.

⁶ wa Thiong'o, Ngugi: A People without Memory Are in Danger of Losing Their Soul; Skutnabb-Kangas, Tove: Human Rights and Language Policy in Education

⁷ Cru, Josep & Ponce, Amélie: Exercise File: Linguistic Diversity in the World

Since there are 5,000-7,000 languages in the world today and up to 95 % of them are threatened by extinction within this century, we can see where we are rapidly heading if current trends prevail: towards a maximum of around 200 languages worldwide.

In order to save cultural diversity, we must realize that the global system of nation-states, both before and during globalization, is a huge disaster, leading us towards unprecedented global cultural impoverishment, and probably also to massive and otherwise avoidable human rights violations. The bankruptcy of the nation-state is not, however, a complete cultural bankruptcy. Obviously, nationality is part of cultural identity for billions of people. It is the sovereignty that is the problem. Africa should not consist of 54 countries, but rather of 2,500. That is the number of languages spoken on the continent at present. But the Africans were not allowed to draw their own borders. Not even the people of Europe were asked to draw their own borders. The European elites did it, all over the world. It is a political, democratic, and moral bankruptcy. And it is a cultural disaster.

There are precedents, though rather in the realm of religion than language. For example, the introduction of Christianity as the state religion of the late Roman Empire meant the persecution and deaths of the ancient Egyptian, Greek, Roman, and other religions. It probably resulted directly in hundreds of thousands of killings. Perhaps it also brought a fresh sense of identity to many people who had found less and less meaning in the old religions. Nevertheless, from the points of view of cultural diversity as well as of human rights, tolerance would have been far better.

Mainly a North Atlantic Responsibility

The north Atlantic elites do not seem to like to be told or reminded of these events or of their responsibility for it, but this is exactly what they must be told and reminded of if cultural and linguistic diversity are going to have any chance of escaping the most pessimistic prognoses. The abysmal record of the north Atlantic with regard to cultural and linguistic diversity, at home and abroad, must become a prioritized message of South Africa's and the rest of the world's ambassadors to the Western countries and to powerful globalized north Atlantic institutions such as the UN, the WTO, the IMF and the World Bank. Here, for once, South Africa is able to argue

from a position of strength, and, more importantly, from a moral high ground.

Not only knowledge is lost with the extinction of a language. Literature (oral as well as written) is also irreversibly lost, so is wisdom, and individual human lives, too. As Native Americans, Swedish Samiti, and Australian Aborigines lose their languages, knowledge, religions, and myths, they lose their bearings and place in the world, as well. Alcohol and drug abuse, high suicide and crime rates are almost inevitable consequences. Some try to fight back against the immediate threat, against the culture that is replacing theirs, for instance the militant Basques in Spain, and therefore lives are being lost outside the threatened ethnic groups, as well.

Cultural and linguistic diversity must, in my opinion, not be justified. Although they can be a means of survival (e.g. the use of Amazon herbal medicines to prevent cancer) or means of well-being (e.g. Hoodia, the plant used by the San to lose sensations of hunger, which can also be used by obese people to lose weight), they should also be seen as *intrinsically* good. Cultural diversity is not just good as a means, it is also an end in itself. It does not merely make the world a more interesting, a more beautiful, and a more fun place. It is good in and by itself.

Does this mean that, say, 6 billion different languages would be better than 3 billion languages for today's world? Not at all. Long-term viability and effects, such as the inevitable, constant mergers and fragmentations of languages must be taken into consideration. I am not extending an invitation to the Tower of Babel. People can learn additional languages more easily if they know their own well.

The current world language status of English enables communication between more people than ever before. (Unfortunately it seems so far mainly to consist of one-way communication *to* more people than ever before.) Yet the Jamaican and West African varieties of English are beginning to manifest characteristics of becoming more than just dialects, namely new languages. I believe Africans, at home and in the Diaspora, can teach many westerners that it is normal for one person to speak many languages. Cultural diversity does not end even with the individual human being, because each single one of us is a carrier of many cultures as well as a potential of new cultures.

The average number of native speakers of a language today is 5,000-6,000. The largest number is 850 million (Mandarin Chinese). Only 80 languages

are spoken by more than 10 million people. Such a high number is only achieved by means of imperialist expansion.⁸

A better distribution would be fewer mega-languages, fewer native speakers of the 80 mega-languages, and more substantial numbers of native speakers of threatened languages. Moreover, special efforts should be made to save language groups and isolates, e.g. the entire Khoisan language phylum of southern Africa, or the indigenous Japanese Ainu language, which has no known relatives and is spoken by only around 150 people today.

UNESCO Initiatives

Along with biodiversity, cultural diversity should perhaps take on and challenge 'human rights' as a rallying point for the 21st century. On the occasion of adopting UNESCO's 2001 Declaration on Cultural Diversity, the organization's Director-General expressed the hope that it would "one day acquire as much force as the Universal Declaration of Human Rights".⁹ Yet, most of the time, diversity does not contradict human rights. Rather, they reinforce each other. But so do their opposites.

Of all countries in the world, only the USA and Israel voted against UNESCO's legally more binding Convention on the Protection and Promotion of the Diversity of Cultural Expressions in 2005. The USA routinely vetoes international condemnation of Israel's violations of human rights. The US vetoes in favour of Israel in the UN Security Council since 1982 actually outnumber all other vetoes by all other permanent Security Council members combined. And so perhaps Israel feels obliged to assist the USA when the USA wants backing for less cultural diversity, and for more homogenized cultural products and markets at home and abroad. But the proliferation of overwhelmingly pro-Israeli cultural products of Hollywood and the other US media products (especially news products) dealing, if ever so slightly, with the Middle East, are of course also in Israel's interest.¹⁰

⁸ Cru, Josep & Ponce, Amélie: Exercise File: Linguistic Diversity in the World

⁹ UNESCO: Press Release, General Conference Adopts Universal Declaration on Cultural Diversity

¹⁰ Unescopress: General Conference Adopts Convention on the Protection and Promotion of the Diver-

Even if cultural diversity has a somewhat tense relationship with individual rights, under certain circumstances, they are in my opinion not antithetical concepts. I believe this is best seen by looking at the powers that regularly violate human rights and counteract cultural diversity, such as the USA and Israel.

The fate of global cultural diversity has ended up hostage to power politics and to insatiably profit-hungry media corporations and their advertiser clients. That is not acceptable. The opposite of cultural diversity is not unity. It is cultural poverty. But not only linguistic and cultural diversity are held hostage, human rights are, too.

In official comments on the devastating vote against the USA and Israel (148-2, with four countries abstaining), the USA said the UNESCO treaty is "deeply flawed," protectionist, and a threat to freedom of expression.¹¹ Freedom of expression is a basic human right (UN Universal Declaration of Human Rights, §19), and it appears far-fetched indeed that US cultural products could help to further freedom of expression more when the world is already full of them. It is my view a much graver threat to freedom of expression that so many cultural products need an unofficial go-ahead from the West nowadays in order to reach any mass audiences at all.

One rather covert apologist for the Americans, Joost Pauwelyn, suggests there are two ways of "how best to sustain minority cultures – through public institutions, subsidies and screen quotas, as the [UNESCO] convention implies, or rather by vigorous antitrust rules and the free flow of ideas, as its critics retort".¹² But he does not mention the obvious facts that vigorous antitrust rules for the global market (which is the mass media market of today) can only work through a global authority, i.e. a

world state, and that the USA is doing everything it can to prevent the appearance of an authoritative regulator of the global market, i.e. a world state.¹³ The US refusal to recognize the International Criminal Court, international conventions against torture, biological weapons, landmines, child labour, the Kyoto Protocol against climate change, and the UN Human Rights Council, are evidence of US opposition to any kind of global democracy or even pluralist global regulation.

The Most Daunting Threat to Cultural Diversity?

I agree with Pauwelyn that vigorous antitrust rules and the free flow of ideas could do much to sustain minority cultures, but the USA is too formidable an obstacle to even entertain the idea of ever implementing such rules, let alone executive powers that are not controlled by the USA itself.

Anthony Giddens and Will Hutton once wrote that a global antitrust regime (an 'International Competition Authority') is necessary to save democracy, and that the single most important business to regulate in this regard is the mass media, because the increasingly oligopolistic transnational mass media giants, whether they are Murdoch's News Corporation, Berlusconi's Fininvest, or the American-Japanese Time Warner Sony network, are hollowing out democracy worldwide.¹⁴ But this call for sanity has never been echoed by any US or European official. Herein lies the possibly most daunting threat to cultural diversity.

The US charge of protectionism against the UNESCO treaty is also suspect. Granted that WTO rules aim to overthrow protectionism, and that the EU member countries all voted for the UNESCO Convention for mainly selfish reasons such as saving their own film industries, it should be remembered that the WTO is an American invention and an arm of US power, and that cultural products cannot be treated like washing powder.¹⁵ Unfortunately, the economies of scale that now govern the global cultural market can currently only be limited by state protection. State *protection* in the UNESCO context is not

sity of Cultural Expressions; Mearsheimer, John J. & Walt, Stephen M.: The Israel Lobby and U.S. Foreign Policy; Löwstedt, Anthony: Apartheid – Ancient, Past and Present: Systematic and Gross Human Rights Violations in Graeco-Roman Egypt, South Africa, and Israel/Palestine

¹¹ Pauwelyn, Joost: The UNESCO Convention on Cultural Diversity, and the WTO: Diversity in International Law-Making?

¹² Pauwelyn, Joost: The UNESCO Convention on Cultural Diversity, and the WTO: Diversity in International Law-Making?

¹³ Monbiot: George: How to Stop America

¹⁴ Giddens, Anthony & Hutton, Will: Fighting Back

¹⁵ Monbiot: George: How to Stop America

'protectionism', it is a desperate, last resort to enable the possibility of survival.

Therefore, UNESCO's cultural diversity convention is the next best thing. Only a fully democratic world state with the authority and enforcement mechanisms necessary to implement vigorous global antitrust policies would be better. And the official US objections to the UNESCO treaty are nowhere near constructive criticism. From the point of view of cultural diversity, they are in fact destructive, and otherwise little more than self-serving hypocrisy.

Africa's Central Role in the Future

In my own view, some of the most important things that Africa can teach the rest of the world today is that cultural and biodiversity must prevail. And this can be done by practice as well as by teaching.

Another important, related thing that Africa can teach us is the unity of humankind: ethically, historically, socially, culturally, and even genetically. In my opinion, Africa has suffered and is still suffering greater ethical wrongs than any other continent. I am referring to the racist Transatlantic and Arab systems of slavery, as well as to colonialism, apartheid, and neo-colonialism, and more. Yet, still, there is astoundingly little vengefulness or even bitterness in African behaviour towards Europeans, Westerners, or Arabs. Historically, Africa is the source of civilization and through the ancient Egyptian civilization it is one of the most important roots (next to Sumer) of ancient Mediterranean and Levantine civilizations, including the three great monotheistic religions and the ancient Greek as well as the Roman civilizations, whose latter-day offshoots today dominate the world. In terms of human genetic variation, the rest of us humans all fit inside a mere parenthesis within the great spectrum of African genes. Africanity is a necessary complement to cultural diversity. As opposed to the uniformities and cultural poverty resulting from or imposed by global anarchic capitalism and by north Atlantic political, military and economic power, Africanity has always been and still is a unity which enables and promotes cultural diversity. I am not saying it is the only one. Humanity or, what I think is a better concept, *Ubuntu*, is another.

And if democracy is to progress at all, then there must be at least a vision of the global democracy to which I was referring above, in which the humble African peasant woman has a vote equal to that of the president of the USA, or to the European Com-

mission president, or to the chairman of the board of News Corporation International.

Finally, it appears to me that Information Ethics, whether African or not, must not merely be viewed with individual rights (or duties) in mind. Yes, human rights are good and crucial to human welfare, but if *only* understood as the rights of individuals, they will not be conducive to cultural diversity, nor to biodiversity, and therefore, not to Humanity or *Ubuntu*. Solidarity, tolerance, and social rights are lacking in today's world, and at least this may be shown to the impoverished parts of the world by Africa, not least with regard to its still wonderful cultural diversity.

References

- Capotorti, Francesco: *Study of the Rights of Persons Belonging to Ethnic, Religious and Linguistic Minorities*, New York: United Nations, 1979
- Cru, Josep & Ponce, Amélie: *Exercise File: Linguistic Diversity in the World*, Linguapax, no date, <http://www.linguapax.org/pdf/FileDiscoveryENG.pdf>
- Foundation for Endangered Languages: *Manifesto*, no date, <http://www.ogmios.org/manifesto.htm>
- Giddens, Anthony & Hutton, Will: *Fighting Back*, in Hutton, Will & Giddens, Anthony (eds.): *On the Edge: Living with Global Capitalism*, London: Jonathan Cape, 2000: 213-223
- Hamelink, Cees: *Confronting Cultural Rights, Media Development, No. 4, 2001*, World Association for Christian Communication, http://www.wacc.org.uk/wacc/publications/media_development/archive/2001_4/confronting_cultural_rights
- Löwstedt, Anthony: *Apartheid – Ancient, Past and Present: Systematic and Gross Human Rights Violations in Graeco-Roman Egypt, South Africa, and Israel/Palestine*, Wien: Gesellschaft für Phänomenologie und kritische Anthropologie, 3rd edition, 2007, <http://www.dada.at/gems/gesellschaft/Apartheid.pdf>
- Mearsheimer, John J. & Walt, Stephen M.: *The Israel Lobby and U.S. Foreign Policy*, London Review of Books, Vol. 28, No. 6 (March 23, 2006), <http://www.lrb.co.uk/v28/n06/mear01.html>
- Monbiot: George: *How to Stop America*, New Statesman, June 9, 2003, <http://www.monbiot.com/archives/2003/06/09/how-to-stop-america/>

Pauwelyn, Joost: The UNESCO Convention on Cultural Diversity, and the WTO: Diversity in International Law-Making? The American Society of International Law, November 15, 2005, <http://www.asil.org/insights/2005/11/insights051115.html>

Skutnabb-Kangas, Tove: Linguistic Genocide in Education – Worldwide Diversity or Human Rights?, Mahwah, New Jersey: Lawrence Erlbaum, 2000, Outline of the Book: <http://akira.ruc.dk/~tovesk/newbook.htm>

Skutnabb-Kangas, Tove: Human Rights and Language Policy in Education, Article for Encyclopedia of Language and Education, Volume 1, Political Issues, edited by Stephen May & Nancy Hornberger (in press)

wa Thiong'o, Ngugi: A People without Memory Are in Danger of Losing Their Soul, 4th Steve Biko Memorial Lecture, New African, December 2003: 50-55

UNESCO: Press Release, General Conference Adopts Universal Declaration on Cultural Diversity, November 2, 2001, http://www.unesco.org/confgen/press_rel/021101_clt_diversity.shtml

Unescopress: General Conference Adopts Convention on the Protection and Promotion of the Diversity of Cultural Expressions, October 20, 2005, Press Release N°2005-128, http://portal.unesco.org/en/ev.php-URL_ID=30298&URL_DO=DO_TOPIC&URL_SECTION=201.html

UNHCHR Submission on Linguistic Rights in Education, Submitted May 15, 1998, to the XVI Session of the Working Group on Indigenous Populations of the United Nations Centre for Human Rights, Geneva, July 27-31, 1998, UN Document E/CN.4/Sub.2/AC.4/1998/2

United Nations Environment Programme: Press Release: Globalization Threat to World's Cultural, Linguistic and Biological Diversity, February 8, 2001 <http://www.unep.org/Documents.multilingual/Default.asp?DocumentID=192&ArticleID=2765>

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Security Thought in Africa in the Context of Global Ethics

Abstract:

There are few themes today that bear as much political significance as that of security. As a philosophical concept security is an ancient human ideal to which individuals as well as communities have constantly aspired. This paper focuses not only on thought about security issues in Africa in the context of global ethics but also on the rule of the new drums and bells, namely the modern informational media, for the diffusion of knowledge in Africa. Internet, mobile phone etc. are to be seen and accepted by Africans as an essential part of modern world culture.

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 - Die Kulturentwicklung des Menschen nach Jean-Jacques Rousseau in ihrem Bezug auf die gesellschaftlichen Entwicklungen in Afrika, Stuttgart: Verlag J.B. Metzler 1996, 243 p.
 - Das Afrika-Lexikon. Ein Kontinent in 1000 Stichwörtern, Stuttgart and Wuppertal: Verlag J.B. Metzler and Peter Hammer Verlag 2001, 716 p. (Special Edition 2004).
 - Das Kleine Afrika-Lexikon. Politik – Wirtschaft – Gesellschaft, Stuttgart: Verlag J.B. Metzler 2002 and Bonn: Bundeszentrale für politische Bildung 2004, 225 p.
 - Mündliche und schriftliche Formen philosophischen Denkens in Afrika. Grundzüge einer Konvergenzphilosophie, Frankfurt am Main/Zürich/ New York/Paris: Peter Lang 2005, 508 p.
 - Anton William Amo interkulturell gelesen, Nordhausen: Verlag Traugott Bautz 2007, 120 p.

Introduction

Security is a political principle the primary function of which is to guarantee national and international peace. Thus, this concept cannot be viewed exclusively through its political or economic aspects, because it is a problem that encompasses all areas of life. Security is also an ancient human ideal to which individuals as well as communities have constantly aspired.

The politicisation of the question of security is indeed not new. In the time following September 11th 2001's apocalyptic attack on New York, the metropolis of modern capitalism, debates about security have taken on an unforgettable global dimension.

As the immediate victim, the USA not only inspired worldwide compassion, but also experienced an indescribable solidarity. Indeed the USA exploited this sympathy to gain the commitment of all western countries under their aegis, as well as many other governments, in the fight against terrorism. Meanwhile most countries treated defence against terror as an urgent duty for their own stability and security as well as for that of the international community.

Although terrorism is a global concern, the African governments cannot grant it such a high priority, as the international fight against it works to their disadvantage.¹ Apart from the fact that Africa has concerns of its own, security can only be an issue if people have serious worries and fears about their lives. In this light, security only becomes a truly global issue if there arises a threatening situation for the existence of humanity at large.

Whoever considers, for example, war, terrorism, AIDS, witchcraft, climate change, poverty, religious extremism, etc. as global concerns should at the same time search for universal concepts toward their solution. What is meant by 'universalism' is nothing other than a mode of thinking which is only realisable through a fusion of the awarenesses of multiple cultures. In the context of a universal awareness, the question arises whether approaches to security in Africa up until now can offer theoretic

cal foundations for a world or global ethic for such intercultural debates as those over security.

This paper focuses on thought about security concerns in Africa by reviewing the perspectives of modern thinkers in the written records without ignoring the oral tradition, which is still highly respected in African philosophy.²

Security in Oral Traditions

Especially in oral traditions, they are peoples who believe that security can be satisfied less by material goods than by a spiritual energy that counters negative intrusions on human life. This energy, also called 'vital force', embodies all constantly active immaterial forces in human beings providing not only good health, a balanced nature, satisfaction and thus security, but also transmitting the inner confidence that one does not have to be afraid of anything.

There are people in Africa who believe in the existence of such forces, which can protect them from unnatural death and incurable diseases as well as from witchcraft and magical attacks, that can cause mental and physical suffering.³ They believe that these forces make them immune. Along with faith in the positive effect of vital force, there is an almost boundless dominance of the spiritual self over the

¹ Njoh-Mouelle remarks: „Il faut distinguer entre les intérêts en Afrique et les intérêts de l'Afrique." Ebenezer Njoh-Mouelle, 2006: Jalons I. L'Africanisme aujourd'hui, 2. Ed. (Yaounde: Editions Clé), p. 19.

² Cf. Jacob Emmanuel Mabe (Ed.), 2001: *Das Afrika Lexikon. Ein Kontinent in 1000 Stichwörtern*, [The Encyclopedia of Africa. A Continent in 1,000 Words] (Stuttgart: J.B. Metzler – Wuppertal: Peter Hammer); Jacob Emanuel Mabe 2005: *Mündliche und schriftliche Formen philosophischen Denkens in Afrika. Grundzüge einer Konvergenzphilosophie* [Oral and written forms of philosophical thinking in Africa. Groundwork of a Convergence Philosophy] (Frankfurt – Berne – New York: Peter Lang); Paulin J. Hountondj (Ed) 1995: *Les savoirs endogènes. Pistes pour une recherche* (Paris: Karthala).

³ See Sophie B. Oluwole, 1992: *Witchcraft, Reincarnation, and the God-Head - Issues in African Philosophy* (Lagos: Excel Publishers); Meinrad Hebig, 1982: *Sorcellerie et prière de délivrance: réflexion sur une expérience* (Paris: Présence Africaine – Abidjan: INADES).

possession of material goods (money, wealth, food, accommodation, clothes etc.).

This view of security relying primarily on oral traditions, has a large influence both on ethno-philosophy as well as on other scientific disciplines dealing with traditional myths and rules of life. As far as vitality is concerned, its effect is interpreted in the oral-traditional metaphysics as a transcendent moment, whereby the soul moves between the sensory and extrasensory sphere and between this and the next world. This association of vital force and security may appear mystical, but it must not be attributed to superstition; rather it has a rational basis.

Beyond its rationality, the concept of security proves that the feeling of need in traditional Africa was no simple projection of emotions on social and cultural life, but was rather connected with intellectual life. The ensuing ideas have an integrating function, merging the concept of security with the concept of one's own life process, ultimately creating the idea that the protection of the individual is synonymous with the protection of the community.

The rationality of the oral-traditional consciousness is self-explanatory in its differentiation between security as a need based solely on sensations such as fear, isolation, mourning, powerlessness and desperation, etc., and security as the necessity of thinking reasonably in order to preserve one's life. It is precisely the confrontation with the circumstances of a mundane existence which forces human beings with a talent for common sense to use their vital force (and not magic powers) as well as their extrasensory or transcendent ability. Reason thereby has the function of increasing the sensitivity of a human being in such a way that he senses his vital force and can use it accordingly.

The belief also exists, however, that if a person has low vital force, his intrinsic sensitivity may not be sufficient for either recognizing his vital force or finding compensatory forces to strengthen mental and physical efficiency. It may be that one can attain security-autarchy by rescinding or compensating for one's insufficiency in spiritual energy. There is unfortunately not a single oral-traditional teaching that rationally explains what vital force is and how one obtains it.

It would be correct to say that one can make the connection to the other world by exact knowledge of the laws of nature, which one acquires by the methods of initiation, inspiration and mediation. In the oral tradition one speaks of contact with immaterial

essences, i.e. the ancestors, who allegedly determine the interrelation between the other world and this one. By so doing, the ancestors are regarded as intermediaries between the visible and the invisible world, between the living and dead. In all likelihood, memorial celebrations for the ancestors probably developed from the need to call for the assistance of the deceased.

Other peoples in Africa practice no ancestral cult but nevertheless regard their deceased relatives as companions of fate who are always present despite their invisibility, not only with them, but protecting them against any curse. Some who often visit fortune-tellers, oracles, clairvoyants, and visionaries wish through them to re-establish an interrupted link with the ancestors. Carrying talismans, amulets, pieces of bark and other jewellery made out of gold, silver or diamonds is linked, however, to the intention of preventing the entrance of evil and thus achieving a life absent of suffering without the direct effect of vital force.

During ancestral memorial celebrations, which symbolize the meeting between deceased and living persons and which are still practised in many parts of Africa, the dead are called upon to be constantly present among their living descendants as well as to provide for their security. But the ancestral faith in Africa has been able to last mostly because of the general attitude of malaise toward all cultural and social areas having to do with modern trends.

Through modernization, egoism, power, greed for money, individualism, fame, luxury, personal prestige etc. have caused the decay of traditional customs and morals. From this moral erosion, two almost irreconcilable and antagonistic developments have resulted: on the one hand, a return of superstition at an explosive rate, and on the other hand, a rapid return of the struggle toward the spiritual. It is precisely this dominance of the spiritual which proves that not all Africans are victims of moral perversion, but rather that many have remained faithful to their ethical and metaphysical traditions. Indeed, spirituality indicates a nostalgic striving both for proximity to the ancestors and for harmony. Security for most Africans is reached only if people live in harmony with themselves as well as with their environment and with fellow men.

Among the spiritual inheritances of the oral tradition lie the rituals, the customs, as well as the living norms documented in the various languages, which for generations have been the basis for the metaphysical, ethical, cosmological, logical aesthetic

thinking and behaviour of the African peoples. They are the most important indications of African spirituality and the fact that previous generations did not understand life as a random process but as a decision – a conscious act of free will. The oral-traditional inheritance may be based on unwritten theories; nonetheless it represents a substantial source without which a complete or adequate development of security consciousness is not possible in Africa.

Although the following security concepts have been passed on verbally from generation to generation, they still influence the thinking and behaviour of most African peoples:

- *Old-age security* by one's own child-bearing or by a close family bond and family loyalty;
- *Protection of the home* (mystical safety of house and property);
- *Physical and personal protection* (use of vitality for protection from unnatural death, voodoo, illnesses and suffering caused by witchcraft, accidents and other handicaps);
- *Protection of the soil* (spiritual safety of the soil or fields from infertility and possible harvest failures, which could be caused by others through envy, disfavour or jealousy);
- *Food-security or security of food resources.*

If these concepts are reminiscent of the intellectual achievements of generations that are now outdated, they nevertheless make it clear how people dealt with their existential fears in the past (fear of hunger, death, suffering, loneliness, etc.). This is because they could thereby also cultivate positive emotions (joy, peace, well-being, solidarity, love, compassion, etc.), in order to overwhelm negative emotions (mourning, rage, aggression, hate, egoism, envy, jealousy, etc.), which usually created uncertainty or insecurity.

In Africa's present societies most scholars no longer think only in terms of oral traditions. Rather they rely almost exclusively on philosophical methods and theories. Thus, they understand security as a term which can be interpreted as metaphysical, ethical, hermeneutical etc. But for the overwhelming majority of African sociologists, security is above all about protection from:

- political or religious prosecution,
- social inequality,
- racial and sexual discrimination,
- hunger and poverty,

- hate, envy and war.

Security and Modern State in Africa

The development of the contemporary security thought goes hand in hand with the developments of the natural sciences - from medicine through biotechnology and ecology up to energy technology - which, with ever new findings, claim to help people to have a more contented life. African intellectual culture did achieve new weight as a result of scientific innovations, but did not however gain moral and cognitive quality.

For most political philosophers of Africa the term 'security' represents a principle underlying all national actions, which pursues the goal of promoting economic and political development. This has led to African states always associating their familial, social and economic policy with the protection of families and human rights, the safeguarding of the right to work, the protection of mothers', women's and children's rights by acknowledging their dignity, with consolidation of peace outwardly by the military and inwardly by the police, with social safeguards, with the guarantee of good health care etc. If one translates the traditional behaviour and rules of thought into the current reality, then one can observe that the attitudes of Africans in matters of security have changed somewhat less socially and culturally than economically and politically.

The fact that the post-colonial states have so far not succeeded in fulfilling the desires of their citizens for security can be explained by the following line of argument: it is undeniable that those in the West, with the use of economic, developmental and security policies, have for decades restricted the freedom of action of the elite African leadership. However, since the independence of their countries, the latter have also made the error of exercising their authority for power instead of developing it through the acceptance of the population. Unfortunately, even some young rulers have continued this wrong strategy by continuing to rely on measures of intimidation of the population by the judicial authorities, the police, and the military. They thereby hope to promote the adjustment of their fellow citizens to the requirements of modern democracy and development. And thus, they find themselves in a dilemma. On the one hand they want to take care of everything themselves, including the citizen's individual security. On the other hand they demand

more self-initiative from their people, although they do not grant them any rights of liberty. In this way no durable positive effect has resulted from more than 40 years of synergy of state and development in the fight against the substantial number of infant deaths, malnutrition, insufficient medical treatment, low life-expectancy, etc.

Moreover, the failure of the old idea of authority with the associated expansion of the national power monopolies led to a troubling depoliticizing of the citizens. The displacement of the inhabitants has had many consequences, not the least of which being that the traditional authorities (sages, healers, fortune-tellers, etc.), which in the past embodied the familial and ethnical heritage and with whom people once sought protection, have almost lost their importance. But for some Africans the real problem of their countries lies primarily in their confidence in the State and the modernism of its political and university leadership elites, which for years have been destroying the oral along with all other cultural traditions in favour of modernization. An actual danger thereby exists in the neglect of verbal forms of predictions, foretelling, prophecy and sapience, which in the past served the organization and the co-operation of the community.

For Africa's contemporary state theoreticians security has a direct relation to dignity, liberty and well-being. Until 1960, colonial violence, oppression and exploitation stood at the centre of state-theoretical considerations. Aimé Césaire (*1913), Léopold Sédar Senghor (1906-2002), Kwame Nkrumah (1909-1972), Frantz Fanon (1925-1961) et al, as well as the pan-African civil rights activists from America were unanimous in their opinion that the Africans' uncertainty is to be attributed to the degrading of cultures as well as the destabilization of the African societies caused by colonization. In their opinion, because Africa had been condemned to liberty, one had to undertake everything possible to end the colonial subjugation and thus help Africans to restore their lost dignity.

From this assumption, Léopold Sédar Senghor and Aimé Césaire used poetry to try to communicate to Africans a new sense of self-value and security. Thereby they hopped to overcome the sense of shame and inferiority developed from racist discrimination which, in their opinion, made Africans feel insecure in their thoughts and acts. Frantz Fanon for his part recommended the use of force in order to counteract colonial oppression. It remains unclear however whether or not in so doing, he preferred military operations exclusively. In contrast to

this, Amílcar Cabral (1924-1973) postulated the use of magic, witchcraft, gris-gris, voodoo, amulets, etc. in the fight for independence, in order to blind and weaken the attacking enemies.

Apart from his untiring commitment to African unity, Nkrumah with his *Consciencism* tried to develop a society of equality on the basis of socialism. With his Ujamaa doctrine, Julius Nyerere (1922-1984) strived towards a socialism based on a fair distribution of goods. Being firmly convinced of the fact that only labour could ensure individual and collective security and liberty, Nyerere pursued the goal of not only removing the gap between rich and poor but by using Tanzania as an example, he showed how one could assure the right to work for each citizen of the state. Up until the current day, Samir Amin (*1931) still struggles for the substitution of the existing metropolitan world market order, which promotes the pauperization of the African and South American countries as well as some parts of Asia, to a capitalism-free and safe world.

All states which have become independent since 1960 have let themselves be influenced directly or indirectly by totalitarian ideologies, which declare the solution of all security questions including 'humanitarian security' (the protection of children, civilians, the disabled, the elderly, land, property etc.) to be the exclusive task of the state. According to Fabien Eboussi Boulaga⁴, the fact that all political strategies have so far failed can only be attributed to the ethical retardation of Africa. Without founded ethical bases, neither politics nor its different ideologies can meet the challenges of modern society.

Security and Well-Being

This paper limits itself to Ebenezer Njoh-Mouelle, probably the only modern professional philosopher who has dealt intensively with the term 'security'. The point of departure from which Njoh develops his concept of security lies beyond philosophical considerations that treat security as a biological instinct of self preservation. In his book: *De la médiocrité à*

⁴ See F. Eboussi Boulaga (1977): *La crise du muntu. Authenticité africaine et philosophie*, (Paris: Présence africaine).

*l'excellence*⁵ he draws a close correlation between security and well-being.

Njoh-Mouelle differentiated between two forms of security: security as a life-preservation and security as an accomplishment for the preservation of humanity. In the first case, security concerns the preservation and safe-guarding of earned life. In the second case it aims at the realization of humanity in mankind, i.e., in well-being for all. What then is well-being exactly? Njoh-Mouelle defines it as a condition of the healthy and balanced body and spirit which mindfully excludes desires for individual security based on luxury and abundance – desires for which human beings today strive worldwide.

Moreover, according to Njoh-Mouelle, well-being is synonymous with qualitative and objective security. Thus one should not confuse it with (non-qualitative conditions such as) greed or other quantifiable (but non-objective) insatiable material security needs. Objective security, which is at the same time well-being, goes beyond the material fortune of human beings to include physical, emotional and spiritual contentment through healthy living, healthy food and a healthy way of life. According to Njoh-Mouelle, the realization of well-being presupposes above all the use of intellectual means (by education and instruction), which helps people to become creative beings, humans who can secure their biological and spiritual existence through their own strength. This means that the striving for well-being accompanies the spiritual emancipation of human beings towards liberty and bliss.

If security needs are an instinct of self-preservation, then human beings who follow the law of nature create artificial means which can serve their preservation and the perpetuation of human kind. In opposition to this, Njoh-Mouelle believes that human beings, due to their ability to reason, are condemned to invent technical and other artificial means yet be unable to use them in such a way as to stand in contradiction to nature or to run contrary to their existence.

In this regard, security makes a demand for objectivity only if the human lifestyle corresponds to a large extent to the natural order as well as to social

harmony. Self-preservation thus includes not only life-preservation and self-realization, but also the preservation of the species and the achievement of the goals of mankind. Njoh-Mouelle therefore pleads that well-being, both as an ideal condition in life and as the goal of security, should be attained in dignity.

Security, Philosophy and Modern Information Media

This article concerns itself entirely with discerning the meaning of modern information media for the diffusion of knowledge in Africa. Since the dawn of man, humanity has constantly created instruments for communication, or the mutual exchange of information, knowledge, ideas and experiences. For this reason, *homo communicans* (the communicative being) is much older than the classical drummers of Africa and the bells of Europe, which were limited to closed communities and circumscribed areas.

The internet, the mobile phone, etc., are these drums and bells but with an infinitely higher audibility, which can reach people who are scattered around the world. According to the body of critical literature these new media are not extraneous, but are to be seen as an essential part of modern world culture, in that they shape thought and behaviour, in short the life of humanity.

As technologies, modern media are on the rise worldwide. Africa does not however need a kind of media that is oriented primarily toward economic profit, but one that is built upon an open communication among all strata of the population. They must provide for the construction of democratic and civil-societal structures in which they make the political decision-making and development processes public, especially those which have large significance for the security of the citizens. Despite the increasing drive for commercialisation, it is important to prevent new media from completely destroying spiritual life in Africa, the value of which has already suffered in the modern global community.

Indeed the modernisation of communication is indispensable in contributing to the body of literate and highly educated Africans. The latter have security needs (such as money, paid work, pension, education etc.), which cannot be satisfied by orally passed-down thought. Furthermore, the speed of globalisation is creating a radical transformation of the African community, as well as a significant reorientation of the institution of education toward communications systems. Whether this develop-

⁵ E. Njoh-Mouelle (1988): *De la médiocrité à l'excellence. Essai sur la signification humaine du développement. Suivi de: développer la richesse humaine*, 2nd. ed. (Yaounde: Editions Mont Cameroun).

ment is associated with the destruction of native languages and ethnic cultures cannot be predicted at this stage.

Many passed-down ways of living and thinking can only be salvaged, however, if philosophers especially stop treating new media, as they have in the past, as a contrivance that damages culture, but understand it instead as a useful art which can and should facilitate debates, even between scattered thinkers over great distances, about metaphysical, ontological, ethical, moral, logical, epistemological, hermeneutical, and historical questions, etc. For the first time in the history of humanity Africans, Europeans, Asians, Americans etc. are in the position to discuss commonly and to discourse about political and religious misjudgements as well as economic and social misdirections.

The new drums and bells should therefore be used sensibly and consequentially for inter-African debates in which philosophers can use all available speed in broadening their concepts and discussing them among one another before they offer their ideas to universal criticism. In this light, among the deliberations about global considerations can also be counted the readiness of philosophers to contribute serious thinking about their association with modern media. Philosophy is now required to formulate a new ethics which can see to it that the media technology generated by humanity itself does not conflict with human security needs.

References

- Bidima, Jean-Godefroy, 1995: La philosophie négro-africaine (Paris: Presse Universitaires de France).*
- Hebga, Meinrad, 1998: La rationalité d'un discours africain sur les phénomènes paranormaux (Paris: L'Harmattan).*
- Hountondji, Paulin J. (Ed.), 1995: Les savoirs endogènes. Pistes pour une recherche (Paris: Karthala).*
- Mabe, Jacob Emmanuel, 1996: Die Kulturentwicklung des Menschen nach Jean-Jacques Rousseau in ihrem Bezug auf die gesellschaftlichen Entwicklungen in Afrika (Stuttgart: J.B. Metzler)*
- Mabe, Jacob Emmanuel (Ed.), 2001: Das Afrika Lexikon. Ein Kontinent in 1000 Stichwörtern [The Encyclopedia of Africa. A Continent in 1,000 Words] (Stuttgart: J.B. Metzler – Wuppertal: Peter Hammer).*
- Mabe, Jacob Emmanuel, 2005: Mündliche und schriftliche Formen philosophischen Denkens in Afrika. Grundzüge einer Konvergenzphilosophie [Oral and Written Forms of Philosophical Thinking in Africa. Groundwork of a Convergence Philosophy] (Frankfurt – Berne – New York: Peter Lang).*
- Njoh-Mouelle, Ebenezer, 1988: De la médiocrité à l'excellence. Essai sur la signification humaine du développement. Suivi de: développer la richesse humaine (Yaounde: Editions Mont Cameroun).*
- Njoh-Mouelle, Ebenezer, 2006: Jalons II – L'africanisme aujourd'hui. (Yaounde: Editions CLÉ)*
- Odera Oruka, Henry, 1997: Practical Philosophy: In Search of an Ethical Minimum (Nairobi: East African Educational).*
- Oluwole, Sophie B., 1992: Witchcraft, Reincarnation, and the God-Head - Issues in African Philosophy (Lagos: Excel Publishers).*
- Tempels, P., 1959: Bantu Philosophy (Paris: Présence Africaine).*

Shana R Poneis

Implications of social justice for the pricing of information goods

Abstract:

During the past few years information has increasingly become a commodity. As a commodity the atypical cost structure of information goods in competitive markets result in the price of reproduction of information goods tending to zero implying that market failure is highly likely. Intellectual property rights prevent such market failure by protecting the ability of creators and/or distributors to charge for information goods and as such serve to stimulate and support the creation of information. But information also plays a vital role in enabling people's human rights in their everyday lives and it is therefore of paramount importance that such information be accessible. Pricing of information is one of the main factors determining accessibility and pricing strategies should aim to maximise access not just profit and thereby contribute to a socially just world. This paper examines the nature and pricing of information goods and suggests differential pricing of information goods based Rawls' principles of social justice.

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 - Poneis, S.R. and Britz, J.J. 2007. Are intellectual property rights the answer to combating piracy in the music industry? Proceedings of the Ninth International Conference ETHICOMP 2007, Volume 2, pp. 479-486.
 - Britz, J.J. and Poneis, S. R. 2005. Guidelines for Fair Distribution of Scholarly Information. *Musaion*, 23(2):230-241.
 - Britz, J.J. and Poneis, S.R. 2005. When is it good to steal? A Moral Reflection on Current Trends in Intellectual Property. In IFIP International Conference on Landscapes of ICT and Social Accountability, Turku, Finland, June 27 -29. Edited by Zielinski, C., Duquenoy, P., and Kimppa, K. pp.23-36.
 - Poneis, S.R. 2004. The Impact of Customer-Centric Data Warehousing in Organisations on the Privacy of the Individual as a Customer, Ethics of Electronic Information in the 21st Century Symposium, Memphis, TN, October 13-16, 2004.

The nature of information goods in the marketplace

Information goods, used here to denote information products, have certain characteristics that distinguish it from other economic goods. First, an information good is an *experience* good, that is, it must be used or consumed in order to demonstrate the good and to determine the associated value. Second, information goods are typically *non-rival*, that is, one person's consumption does not diminish another's ability to consume the same information good. Third, information goods can also be *non-excludable*, that is, one person's consumption cannot exclude another person from consuming the information¹ (or as Barlow² put it "information can be transferred without leaving the possession of the original owner"), particularly when in electronic format. In economic theory goods that are both non-rival and non-excludable are called public goods³.

Individual gain-seeking in the market does unfortunately not lead to efficient results with respect to public goods:

- Consumers can take advantage of public goods without contributing sufficiently to their creation (this is the so-called free rider problem); and
- The production of public goods results in positive externalities which are not remunerated. Since private organisations can't reap all of the benefits of a public good which they have produced, there may not be sufficient incentives to produce it.

Thus problems in the production of public goods may occur which in turn may lead to market failure. Market failure⁴ is a term used to describe a situation

in which markets do not efficiently allocate goods and services, where markets are unable to provide goods in the desired quantities, or situations where market forces do not serve the perceived public interest.

One solution to prevent such market failure is to create intellectual property laws, such as copyright or patents. The aims of these laws are to provide a legal mechanism to remove the natural non-excludability of information goods by prohibiting reproduction thereof for a limited period of time and at the same time to encourage the creation and sharing of non-rival goods. In this manner public goods are turned into private goods. Although intellectual property laws can solve the free rider problem (assuming the enforcement thereof), the limitation of these laws is that they, together with the unique characteristics of information, result in a propensity for monopolies or dominant players in the market to be created.

In addition to judicial means, technological developments can also provide the means to make information goods excludable, for example, encryption allows broadcasters to sell individual access to their broadcasts or digital rights management (DRM) allows control of the information goods' use by consumers according to the creators' and/or distributors' preferences.

Pricing of information products and services

One of the main mechanisms through which resources are allocated in a society is price^{5,6}. Price is the quantity of payment or compensation for an economic good. Competitive markets drive prices of all economic goods toward the marginal cost. Information goods, however, tend to have high fixed costs but low marginal costs, that is, creating the first copy is expensive but making a copy is relatively inexpensive. This implies that the price of information goods tend to zero. From an organisa-

may not be considered market failure by another since efficient resources distribution depends on the prior conceptions of what the distribution ought to be.

¹ Varian: Markets for Information Goods.

² Barlow: The Economy of Ideas: Selling Wine Without Bottles on the Global Net.

³ Note that goods termed public goods may be produced by the public sector but also by private individuals and organisations, by civil society, NGOs or other collective action, be available naturally like air or may even not be produced at all.

⁴ Note that market failure is a somewhat subjective term: what one considers to be market failure

⁵ Du Toit: Developing a price strategy for information products. 162

⁶ Rowley: Principles of price and pricing policies for the information marketplace. 179

tion's perspective an efficient price is a price that is very close to the maximum that consumers are prepared to pay in order to maximise profitability and must therefore be based on the value it offers the consumer. The rule of thumb is that the more it is worth to an individual the more that individual should pay to acquire it.

Price is therefore also a measurement or function of the value that a consumer (buyer) places on the good exchanged^{7,8}. Value is intrinsically related to the worth derived by the consumer or put another way: value is a measure of the worth that is based on the utility derived from the consumption of the good. Utility-derived value allows goods to be measured on outcome instead of demand and supply. The value that information can have varies and the same information can have more than one type of value which is determined by the use towards it is put.

According to economists, price discrimination⁹ is a pricing strategy that is particularly appropriate in monopolistic markets since the seller can charge higher prices than would be possible in a competitive market. According to Shapiro and Varian¹⁰ information goods can generate more revenue for sellers if they are offered in multiple versions catering to potentially different values consumers can place on a particular information good thus resulting in different prices. Price discrimination entails the sales of identical goods or services at different prices from the same provider to different groups of consumers or segments.

Shapiro and Varian¹¹ are of the opinion that a particular type of price discrimination is the only pricing strategy for information goods that can succeed in the marketplace, namely, second-degree price discrimination or what is popularly called 'versioning'. The perceived quality and its value or utility to

the customer determines the customer's willingness to pay a particular price and in this way customers segment themselves:

*"The version they choose reveals the value they place on information and the price they are willing to pay for it"*¹²

Such versioning can be performed on a basis of features offered, levels of performance, or timeliness.

Because the same information can have multiple uses and is non-rival, creating effective rate fences¹³ between the uses in terms of access is a particularly difficult undertaking; price discrimination is thus more common in services, where resale is not possible. Although consumers can jump the rate fence with respect to information goods¹⁴ this does not seem to present a major problem as it is still widely used with respect to information goods, for example, by book sellers like Amazon and publishers like Elsevier.

Next Rawls' principles of social justice are examined before considering the implication thereof on the pricing of information goods.

Social justice

According to the social contract tradition, justice is derived from the mutual agreement of everyone concerned or from what they would agree to under hypothetical conditions including equality and absence of bias. John Rawls¹⁵ argued from a hypothetical "original position" where everyone concerned would be behind a so-called veil of ignorance in order to arrive at principles of justice that would

⁷ Du Toit: Developing a price strategy for information products. 162

⁸ Rowley: Principles of price and pricing policies for the information marketplace. 180

⁹ "Price discrimination" is a technical term meaning differentiation in price. It does not imply unfair or biased behaviour.

¹⁰ Shapiro and Varian: Versioning: the smart way to sell information. 109

¹¹ Shapiro and Varian: Versioning: the smart way to sell information. 109

¹² Shapiro and Varian: Versioning: the smart way to sell information. 110

¹³ Rate fences prevent individuals from a higher price segment from purchasing goods at the prices available to members of a lower price segment. This is possible either by the individual purchasing the product at the lower price directly from the seller or indirectly by purchasing from an individual that bought from the seller at a lower price.

¹⁴ Britz and Ponelis: When is it good to steal? A Moral Reflection on Current Trends in Intellectual Property. 29

¹⁵ Rawls: A Theory of Justice.

be fair to all. He argues for the fair distribution of social goods in a society. In the context of this paper, society is seen as the global society as a whole since globalisation has essentially rendered the world a single market where organisations operate across borders.

Approaching justice as fairness is necessary to ensure that the basic rights and liberties of all are protected and that should social and economic inequalities exist these should still be to the benefit of all. Rawls formulated two principles of justice to ensure fair distribution of social goods in a society. These principles state that:

- *"Each person is to have an equal right to the most extensive total system of basic liberties compatible with a similar system of liberty for all"*¹⁶
- Social and economic inequalities that do exist are to be arranged so that they can be reasonably expected to be to everyone's advantage and be attached to positions and office that are open to all¹⁷.

These principles are in accord with the basic economic problem namely to:

*"allocate resources among members of the society to maximize the welfare of the society as a whole. To achieve this welfare objective, each resource should be utilized to perform a function in order that it contributes most efficiently to society"*¹⁸

The author proposes that these two principles of Rawls be used as a moral guideline to ensure that pricing information goods is socially just.

Socially just pricing of information products and services

Information can be used for many different purposes, for example, education, entertainment, and marketing, but some purposes are more fundamental than others and leads to the concept of essential information that is defined as:

*"information related to the basic minimum needs of humanity, information tools for trade and economic development, information essential to the development of backbone industries, basic science and survival services in health, education, welfare, agriculture and labour"*¹⁹

Thus information can be essential to human survival. In this context the information goods are very valuable and thus should translate into a high price. However, such prices will most likely exclude people with limited or no financial means from deriving any utility from them. Affordability plays a central role in the availability and access to information goods and is therefore a central to the concept in an information society and as such should be just.

According to the first principle all people are fundamentally equal, have equal intrinsic human rights together with the freedom to exercise them without infringement on the similar rights of others. These basic rights ought to form the foundation of the fair distribution of social goods in society. The right to access to essential information can be seen as such a basic right because of its essential nature in satisfying all basic rights and as such should be taken into account in the pricing of information products and services.

The second principle implies that information goods can be treated as commodities and be distributed and used unequally in a society. Thus fair compensation for authors through intellectual property rights is accommodated and the inequalities arising out of the competitive value of information justified. But there are some provisos: first, such information ownership rights are allowed only when it is to the benefit of all²⁰ and should this not be the case, it is unjust. Second, there should at least be equal opportunities for everyone to access essential information and have the opportunity to contribute as a creator of information goods. Last, the permissible inequalities are always secondary to the first principle²¹. The author is therefore arguing that the right to access to essential information can and must take precedence over the right to ownership of and profit from of information.

¹⁶ Rawls: A Theory of Justice. 60

¹⁷ Rawls: A Theory of Justice. 61

¹⁸ Du Toit: Developing a price strategy for information products. 162

¹⁹ Zielinski: The Changing Role of Information in Development.

²⁰ Rawls: A Theory of Justice. 64

²¹ Rawls: A Theory of Justice. 65

Since price discrimination as a pricing strategy for information goods does comply with the implications of the second principle it is important that organisations understand and take into account the implications of the first principle to ensure social justice is done. However, when second-degree price discrimination is very efficient production can be expanded but output can also decline when discrimination is more effective at extracting surplus from high-valued users (paying a premium price) rather than expanding sales to lower valued users (paying a relatively lower price). Thus the problem arises that those who are unable to pay the price that maximizes profit do not get access to the good.

Another form of price discrimination, third-degree price discrimination or group pricing, is thus more appropriate. With third-degree price discrimination selected groups with a lower willingness to pay, for example, senior citizens, students, veterans and others, are offered special discounts. Similarly, groups in both developed and developing countries can be offered such discounts particularly on essential information. This approach is arguably more profitable for the society as a whole, but it might be difficult to prove that it will maximize profits or efficiency for organisations that implement it. Although it is often implemented as a voluntary gesture, this approach to pricing can more easily be motivated to shareholders given the emphasis on ethics in business and corporate social responsibility since this approach is more socially just than the status quo. However, this does imply that rate fencing mechanisms must be effective to also ensure the economic survival of the organisations involved.

Conclusion

Rawls second principle justifies inequalities in a society but these cannot be to the disadvantage of those less privileged. Thus different goods with different prices are acceptable; pricing of essential information goods should be such that the less privileged price-sensitive consumers can also be accommodated. Third-degree price discrimination rather than the more popular second-degree price discrimination result in pricing of information goods are more socially just.

References

Barlow, J.P. 1993. *The Economy of Ideas: Selling Wine Without Bottles on the Global Net* [online].

<http://homes.eff.org/~barlow/EconomyOfIdeas.html> [accessed January 4, 2007].

Britz, J.J. and Ponelis, S.R. 2005. *When is it good to steal? A Moral Reflection on Current Trends in Intellectual Property*. In *IFIP International Conference on Landscapes of ICT and Social Accountability, Turku, Finland, June 27 –29*. Edited by Zielinski, C., Duquenoy, P., and Kimppa, K. pp.23-36.

Du Toit, A.S. 1994. *Developing a price strategy for information products*. *South African Journal of Library and Information Services*, 62(4):162-167.

Rawls, J. 1973. *A Theory of Justice*. Cambridge: The Belknap Press of Harvard University Press.

Rowley, J. 1997. *Principles of price and pricing policies for the information marketplace*. *Library Review*, 46(3):179-189

Shapiro, C. and Varian, H.R. 1998. *Versioning: the smart way to sell information*. *Harvard Business Review* (November-December):106-114.

Varian, H. R. *Markets for Information Goods* [online]. Available: <http://www.sims.berkeley.edu/~hal/Papers/japan/index.html> [accessed January 4, 2007].

Zielinski C. 2001, *The Changing Role of Information in Development* [online], IIS/IDF Conference, July 2001. Available: <http://www.iwsp.org/The%20Changing%20Role%20of%20Information%20in%20Development.htm>

Paul Sturges

What is this absence called transparency?

Abstract:

Campaigners against corruption advocate transparency as a fundamental condition for its prevention. Transparency in itself is not the most important thing: it is the accountability that it makes possible. Transparency itself is, in fact, a metaphor based on the ability of light to pass through a solid, but transparent, medium and reveal what is on the other side. In practice it allows the revelation of what otherwise might have been concealed, and it is applied in a social context to the revelation of human activity in which there is a valid public interest. It can be applied to all of those who hold power and responsibility, whether that is political or economic. More accurate definition of the term, including distinctions between open governance, procedural transparency, radical transparency, and systemic or total transparency is important. Various ways in which an observer can make use of transparency to scrutinise the activity of others, including freedom of information laws, accounting and audit systems, and the protection of public interest disclosure (whistleblowing) also need to be distinguished from each other.

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 - The Quiet Struggle: Information and Libraries for the People of Africa. With Richard Neill. 2nd ed. London: Mansell 1998, 244 p.

*A man that looks on glass,
On it may stay his eye
Or if he pleaseth, though it pass
And then the heavens espy.
George Herbert (1593-1633)*

Introduction

Transparency is a slightly curious concept, in that it is concerned with an absence: the absence of concealment. In that concealment permits corruption, transparency as the absence of concealment is a positive and important concept. A word or two on the significance of corruption provides a suitable introduction to the discussion of transparency. Corruption is universal and the misgovernment that it brings with it is almost as widespread. Wherever there are transactions that offer the opportunity for personal advantage or profit someone, somewhere will take advantage of that opportunity. Corruption can be such a part of life that citizens of a badly corrupt country may scarcely imagine that it can be reduced or eliminated. Nevertheless, condemnation of corruption is a universal theme of conversation and political debate worldwide. People long for an honest, predictable, corruption-free world. They also tend to despair that it can ever be achieved. The example of one country, Kenya, chosen almost at random, can illustrate this.

For reasons that may not seem wholly obvious, British politicians and diplomats have spoken out unusually sharply about corruption in Kenya in recent years. On an official visit in 2006, the UK Minister of State for Foreign Affairs said that:

Kenyans can be bought: from the person who works at the docks in Mombasa up to the government. You can buy off politicians; you can buy off policemen. The weakness has been recognised by drug traffickers and probably by terrorists too. (Rice, 2006)

Two years earlier, the UK High Commissioner in Nairobi, Edward Clay, had accused the Kenyan government of wholesale corruption.

Evidently the practitioners now in government have the arrogance, greed and perhaps a sense of panic to lead them to eat like gluttons. They may expect that we shall not see, or will forgive them, a bit of gluttony. But they can hardly expect us not to care when their gluttony causes them to vomit all over our shoes.' (Clay, 2004)

Britain, though not free of high level corruption itself, clearly fears the corrosive effects on trade and international stability of an excessively corrupt regime in Kenya. It had hopes that the problem in Kenya would be reduced with the election of the new government of President Mwai Kibaki in 2003 on anti corruption manifesto. However, the notorious corruption that pervaded every aspect of the country's life under his predecessor Daniel arap Moi was certainly not eliminated, and probably little reduced. It continues not only to effect the nation's international standing, but to make the lives of individual Kenyans even more painfully difficult than they need to be. The question that this raises is, if even politicians who are pledged to cleanse the system cannot resist temptation themselves and leave the problem unsolved, can anything be done at all? Are we condemned to accept corruption, however much we hate it?

This is where the concept of transparency comes into the equation. The introduction of transparency into governance is almost universally offered as the key to eliminating corruption, usually along with enforcement measures and relevant practical changes in modes of governance. In fact, it can be suggested that it is more than that: transparency is one of the key components of twenty first century governance, business and social organisation, but the use of the word threatens to become clichéd. Transparency has strong positive connotations, but do those who use it always have a clear and full idea of what they mean by it? Anyone who picks up a copy of a good newspaper is almost certain to find at least one reference to transparency somewhere in its pages. The frequency with which the presence or absence of transparency is commented upon, or with which some activity or transaction is described as transparent is too great for us to feel sure that it is always being used consistently. This is not a trivial matter. Transparency is important and it concerns us all in a multitude of ways.

Accountability

However, it is not actually transparency itself that is the most important thing. Transparency concerns us because it has a purpose. The purpose of transparency is accountability. Accountability is the reason why transparency is introduced into systems of public and corporate governance. Transparency allows examination of the stewardship that is expected of those who own or have the care of resources that are matters of public concern. Transparency is also introduced into what might at first

seem to be purely private matters because of the need for the public accountability of individuals for certain kinds of actions. Crime is the most obvious example. Nations have systems of criminal law because some conduct (theft, fraud, assault, murder and a host of other offences) by individuals who have no particular public office or status is regarded as not merely damaging to other members of society but to the fabric of the society itself (the 'peace' that the Crown offers to guarantee in Britain, for example). The individual's conduct is open to investigation and revelation in the courts of law for the ultimate purpose of preventing crime. For individuals to be accountable, there must be some kind of transparency regarding what they have done.

For accountability to be effective and fair to those whose conduct it reveals, a well worked-out concept of the public interest is required. The existence of a genuine need to know, generally spoken of as the public interest, is central to the rationale for all aspects of transparency. In a transparent system the emphasis switches from a presumption that the holders of information can decide whether there is a genuine public interest in the disclosure of information, to a presumption that it can be revealed. The exception to this principle applies when it can be shown that it is not actually in the public interest to do so. Decisions on what constitutes the public interest are often a matter that is left to the law courts to decide because of the delicate considerations that need to be balanced in some cases. The courts are presumed to rule on the basis of a balancing of the public need to know against the need of the state, business or even an individual to keep something concealed from public knowledge. The effectiveness of transparency in particular cases depends on how such questions are resolved. However, when we consider transparency generally, it is vital that there is a widely accepted consensus on what forms of transparency are in the public interest and what are not. Furthermore, anyone who uses information, works professionally with information, or is concerned about the role of information in society needs to understand transparency better. (Cox, 2006) In twenty first century society – the information society – this is becoming effectively everyone.

From the sublime to the ridiculous

At one extreme, transparency can be used as a means to great objectives. The South African Truth and Reconciliation Commission, set up under an Act of Parliament of 1995, was a national transparency

exercise aimed at healing the wounds of an exceptionally divided society. Its hearings were to allow the revelation of the truth about what actually happened in the enormous number of cases of human rights violations that had taken place under the apartheid system. The aims were to:

- Allow victims an opportunity to tell of the violations they suffered;
- Grant reparation to victims, provide for their rehabilitation and the restoration of their human and civil dignity;
- Grant amnesty to those who make full disclosure of the politically motivated acts they had committed against others.

This national exercise in catharsis brought a humane end to a period of institutionalised repression. For the oppressed to be able to tell of what they had suffered and to find out from the evidence of the oppressors what had actually happened to friends and family was an enormous release. For white South Africans it was often the first time they had been obliged to contemplate the depths that those who had acted on their behalf had plumbed. South Africa is still a society with problems to solve but after the work of the Truth and Reconciliation Commission it is better armed to solve them

At the same time, what might seem to be another type of exercise in transparency pervades twenty first century life. This is the response of the media to people's interest in the details of the lives of others, for what seems to be the sake of the details themselves. The lives of those who have some form of celebrity have come to be of consuming interest to large numbers of members of the public. This begins because performers of all kinds in the arts and sports, offer a kind of pseudo transparency for selected aspects of their life as part of the process of promoting their careers. The media then take this as licence to reveal as much as they can in addition, using journalists who specialise in celebrity stories, paparazzi photographers, and plots to entrap the subjects of curiosity into revealing more than they might wish. This idle and prurient interest in the lives of celebrities sells newspapers and attracts viewers to television programmes, but it tells us nothing that is actually useful to us. The public response to these types of revelation cannot be regarded as the same thing as a genuine public interest in the sense of a need to know for a purpose.

What is comparatively new is that some members of the public, most of whom have no solid prospect of

financial or other gain from it, are prepared to offer up a similar kind of exposure. In the past it might have been possible to assume that the desire for privacy would guide people's attitudes towards possible public revelations concerning themselves. Quite to the contrary, the taste for this type of exposure has proved infectious. Otherwise ordinary people queue to offer insights into their lives on TV programmes of the Jerry Springer kind. 'Coat me in chocolate and feed me to the lesbians' sings a character in Jerry Springer: The Opera, a satire on this type of television. In other words, I'll offer almost any kind of public exposure if it gets me the moment of fame that such programmes offer. Candidates for programmes of the Big Brother kind compete desperately to be allowed to subject themselves, their empty minds and sometimes their bodies, to the scrutiny of television audiences whilst they are in some kind of voluntary confinement. None of this is transparency in any valid sense of the word, because it has no serious purpose: it offers no element of accountability because the subjects have nothing of substance that it is in the public interest to reveal.

Definitions

So, what precisely does the word transparency mean? As with many words, it has several distinct meanings. In scientific terminology transparency means the transmission of electromagnetic rays without distortion, but this is not the way that the word is used in everyday speech. The ordinary, every-day meaning, and the way that dictionaries still usually define the word, is simply the condition of allowing light to pass through a medium such as glass so that clear vision of something on the other side is possible. It is a stronger term than the companion-word translucency, which refers to allowing light to pass through diffusely in a way that does not enable things on the other side to be seen distinctly.

The relevant meaning for our purposes is a metaphor stemming from the word's original meaning of allowing clear vision. This metaphorical transparency is a comparatively new usage that has emerged very strongly during the 1990s. Transparency used in this metaphorical way can be defined as:

The condition in which knowledge of activities that are of public interest is revealed so as to provide the potential for accountability.

This definition is broad enough to accommodate the wide range of ways in which the label of transparency is currently applied. It tells us that transparency is about making knowledge available. It answers the question 'What knowledge?' with the answer that it is knowledge about human activity. It tells us why: because the information is of public interest. It further qualifies that by saying that the intention is to make it possible to hold those concerned to account on the basis of what is revealed. Transparency allows voters knowledge of the actions of politicians so they can choose who they wish to elect. It provides details of the workings of business corporations so that investors can make sound decisions on what to do with their money. It allows illegal conduct to be identified and brought before the public tribunals. It even allows listeners, readers and viewers to work out for themselves how far to trust what they told in print and through the media.

As generally used, the word most usually indicates the way in which the conduct of those who have power, be it political, commercial or some other form, is exposed to the gaze of the rest of the world. The NGO Transparency International expresses this in a direct and practical way, calling transparency,

A principle that allows those affected by administrative decisions, business transactions or charitable work to know not only the basic facts and figures but also the mechanisms and processes. It is the duty of civil servants, managers and trustees to act visibly, predictably and understandably. (Transparency International, 2006)

Defined as above, transparency allows light to fall on matters about which people need to know, but which those directly concerned might wish to remain in darkness. Not everyone who uses the term does so with quite this implication. The current definition is beginning to accommodate the idea that in practice transparency is about voluntary disclosure. A current text aimed at the business community suggests that:

Transparency, as currently defined, is letting the truth be available for others to see if they so choose, or perhaps to look, or have the time, means, and skills to look. This implies a passive posture or motivation on the part of the individual or organisation under consideration. In today's broader public context, however, trans-

parency is taking on a whole new meaning: active disclosure. (Oliver, 2004, p.3)

The word clearly relates to a shifting and developing concept. However, that is not the only difficulty in pinning down what people mean when they use the word.

Difficulties with the definition

The word transparency's capacity to provide helpful metaphors threatens to become over-stretched and not all usages even have quite the significance we are discussing here. Sometimes the word is used in ways that are closer to the scientific usage of transparency: transmission without distortion. Thus transparency can be used to describe the way light passes through something (like glass or Perspex) as if there were nothing there. In other words, transparency can actually suggest concealment (of an intervening medium). This is the case in information technology where transparency usually refers to the operation of programs and applications that are not apparent to the user, as when the domain names system resolves authorised domain names into Internet protocol addresses. In this case transparency shields the user from the complexity of the system, rather than reveals it. References to network transparency are common in the literature of computing and they too carry this sense that the user works in an environment where there seem to be no barriers or intervening changes of system. It is important to be aware that this usage contrasts directly to the common tendency to refer to open source applications in computing as transparent. Open source is transparent because one is permitted to see through the surface and examine what is inside (the source code). It is the type of transparency represented by open source that concerns us here, rather than network transparency and other instances of transparency that contrive to make the user unaware, rather than aware, of the functioning of systems.

Some definitions of transparency describe it negatively: they tell us what it is not. This type of definition calls it the opposite condition to concealment and secrecy. Florini (2000, p.13), for instance expresses it precisely thus:

Put simply, transparency is the opposite of secrecy. Secrecy means deliberately hiding your actions; transparency means deliberately revealing them.

This is a pretty effective definition, except for the suggestion that transparency is always deliberately offered. Types of involuntary or imposed transparency undoubtedly exist and will be discussed at several points in the chapters that follow.

Some definitions go further than merely contrasting transparency with secrecy and refer to it as the opposite of privacy. A crudely administered regime of transparency can damage privacy, but this is not usually the ostensible intent behind its introduction. The overwhelming weight of use of the word transparency is not to indicate that it throws light into legitimate privacy, but that it exposes the kind of secrecy that is detrimental to society. In fact the particular value of transparency is its ability to reveal corrupt practices and show citizens how they can limit the damaging effects of corruption in their own lives. Brin (1998, p.334) sums up the relationship between transparency and privacy by saying:

Transparency is not about eliminating privacy. It is about giving us the power to hold accountable those who would violate it.

Bosshard (2005, p.22) memorably layers a further trope on the basic metaphor as to indicate the ability of accountability through transparency to bring about change for the good. His claim that 'Sunshine is the best disinfectant' elegantly captures the cleansing potential of a regime of transparency, without yet explaining quite how that might work.

Types of transparency

Transparency is a concept that is applied at all possible levels from international organisations, states, private corporations, civil society organisations, individuals and groups of individuals. Regulations for transparency abound at all these levels and the technology by which transparency can be enforced is hard to avoid. States can no longer easily conceal the movements of their armed forces or offer misleading estimates of their agricultural output when remote sensing from satellites records and passes on revealing data whether they like it or not. Likewise, individuals have their movements observed by closed circuit TV and their messages technologically monitored with greatly increasing frequency. In fact, some accounts of transparency merely equate it with the density and speed of transmission of sensing devices

It is possible to distinguish a number of levels at which the word is generally used in this broad

sense. The main levels or types of transparency are as follows:

1. The adoption of openness in public and private sector governance. This encompasses a broad view of what transparency means, including both a mentality and a system or set of systems. A state's own disclosure structures are sometimes referred to as domestic transparency. They are essentially directed towards permitting broad public knowledge of the actions of those who hold power, but also for purposes of crime detection and law enforcement..
2. A more limited procedural transparency can be identified in some usage of the word. In this sense, the simple existence of a set of provisions for making public, or allowing access to, details of the functioning of some or all of the activities of an organisation, is referred to as transparency.
3. Radical transparency, which is a management method by which almost all the decision making in an organisation is carried out publicly. The exceptions to transparency in such a system are matters such as personal privacy or the security of systems. It is regarded as more appropriate in working environments based on the Internet or intranets that do not suffer from the potential for the transmission of errors inherent in oral communication. It connects directly with the open source movement, which embodies the spirit of radical transparency.
4. The potential for a kind of systemic or total transparency in which the actions of absolutely everyone are exposed to the eye of interested parties. This idea is based on the existing capacity for deep surveillance that can provide detail about the life of anyone, in the interests of effective administration and policing, and to the private sector, for purposes of more accurately targeted business activity, to the state itself so that its policy can be monitored internationally. It is sometimes referred to as imposed transparency. It is the nightmare transparency of Orwell's *Nineteen Eighty Four*.

Although the meanings of transparency set out above undoubtedly have some negative connotations, it is chiefly used in a strongly positive way.

Related terms

There are a number of words that are regularly associated with transparency or are used in ways that share some of the meaning of the term. It is worth identifying the main ones here. They can be grouped according to what Oliver (2004) identifies as the three elements in transparency: the observed, the observer and the means or method of observation.

Broadly speaking, the observed include government, the corporate sector, and also those responsible for the dissemination of knowledge, who might be referred to as the knowledge sector.

A driving principle behind transparency in the public sphere is **open government** – a concept that sets the context for transparency in the sphere of governance. Systems of open government will usually include facilities for observation of official meetings by members of the public, public consultation processes for planning and decision-making, and statutory rights of access by the public to official information, usually expressed in freedom of information laws. Open government is also furthered by **regulatory systems** – the state's favoured method of intervening in both the business and public service provision environments in the latter part of the twentieth century.

These form part of what is sometimes termed a **national integrity system**: a set of institutions and procedures that offers to check corruption its various forms. A national integrity system includes at the most basic level the institutions of a democratically elected legislature, an executive answerable both to the legislative body and to an independent judiciary. More than this, however, it should also include a supreme audit institution, regulatory bodies, ombudsmen, and independent anti-corruption agencies.

The private sector is observed because of the need for business integrity and **corporate social responsibility**, which represents an ethical and accountable approach to corporate governance. Corporations that embrace the concept monitor and offer up for audit their social performance, environmental impacts, employee relations and a range of other ethically sensitive aspects of business. Formal reporting of non-financial matters complements the financial accounting already required by national laws and international agreements. This reporting is usually on an annual basis, and is often verified by independent and external third parties. It represents

a considerable contribution to corporate transparency.

The knowledge sector includes the press and media, the ethical standards of which are crucial to effective transparency. Scholarly integrity and publishing and broadcasting standards are also highly important. There is also, however, the **open access** movement to take into account. Open access, open archives and open source are ways of referring to aspects of a movement that challenges the dominant modes of defining intellectual property, with their associated financial and other restrictions on the use of information. Open access encourages the creators of intellectual property, particularly that which is based on publicly-funded work, to make the documentation freely available to readers, probably through electronic open archives, rather than distribute it through conventionally published books and journals. Open source counters the control of software as intellectual property arguing that it should be seen as a common resource with its code available to all for them to customise, modify and improve as best they can. Open access can be seen as a substantial contribution to a transparent research and development environment.

We can think of the observer or observers, as members of **Civil Society** – unfortunately as yet an imprecisely defined term. Although it may seem to refer to society as a whole it is generally used to refer to the non-governmental organisations (NGOs) and networks and the social movements that they represent. Civil society is a distinct third element alongside the long-accepted public sector – private sector duality. Unfortunately the clarity of this is muddled in some countries by the lumping together of the non-governmental sector and the private sector as civil society. Civil society organisations are the chief source of pressure for openness and accountability in both public and private sectors throughout the world. The observer is also anyone who works with information, whether they regard themselves as socially involved and aware and involved or not.

As for the methods of observation, terms that apply include the following

Audit describes, in the first place, the sets of legal requirements by which society monitors the honesty and efficiency of financial dealing by those who handle money and other resources on behalf of others. The requirement to submit publicly available and independently audited accounts is one side of the bargain by which the state offers various forms

of legal protection for business activity in exchange for openness on the part of the company or other organisation. The association of the term with financial matters is not an accident as probably the longest-established systems of accountability are the sets of procedures to monitor the legality of public and private financial transactions. However, the term audit is now not solely attached to financial matters, and there are various other forms of audit that allow the examination of many aspects of public and corporate life.

Scrutiny – This is often used as yet another general term for the citizen's use of transparency to know more about the workings of government. It has more recently become used in a more specific sense referring to systems by which government and local government representatives can be subject to public questioning.

Disclosure – disclosure is both a general term for opening up to transparency, and also a specific process in legal practice (sometimes referred to as full disclosure) where the evidence for each party in a case before the courts is made open to the other.

Freedom of information laws provide formal disclosure procedures in the public sector. Disclosure is particularly significant when it is carried out in the public interest against the will of those whose concealment is broken. This public interest disclosure is usually known as **whistleblowing**.

Conclusion

A better understanding of the concept of transparency and a recognition that part, at least, of the work of any information professional can be identified as contributing to transparency is a major step forward in the creation of a well-governed and corruption-free world. Those who work with information, whether they be journalists, writers, editors, publishers, booksellers, Internet service and content providers, web designers, database managers, records managers, archivists or librarians, are not merely observers, but also agents of transparency. Some of these professions consciously see themselves in this way. Others more normally regard their work in terms of the neutral provision of facilities and content. A better understanding of transparency brings with it the recognition that whether we intended it or not, and whether we like it or not, we take on responsibilities to society when we remove any of the layers of concealment in which corruption and misgovernment thrive. Transparency is not merely an absence. It is an indispensable

requirement for good governance that needs capable professionals to ensure its presence, continuance and effective use.

References

- Bosshard, P. (2005) *The environment at risk from monuments of corruption*. In: *Transparency International, Global Corruption Report 2005*. London: Pluto Press. Pp. 19-23.
- Brin, D. (1998) *The transparent society: will technology force us to choose between privacy and freedom?* Reading, Mass: Addison-Wesley.
- Clay, E. (2004) *Kenya's government is full of corrupt gluttons*. *Independent* [London], 16th July p.27.
- Cox, R. (2006) *Ethics, accountability and record-keeping in a dangerous world*. London: Facet Publishing.
- Florini, A. (2000) *The end of secrecy*. In: Finel, B. and Lord, K. *Power and conflict in the age of transparency*. Basingstoke: Palgrave. Pp.13-28.
- Oliver, R.W. (2004) *What is transparency?* New York: McGraw-Hill.
- Rice, X. (2006) *Our man in Africa: lovely people, but it's just a pity you're corrupt from head to toe*. *Guardian* [London] 11th November, p.3.
- Transparency International (2006) *Frequently asked questions about corruption*. Available at http://www.transparency.org/news_room/faq/corruption_faq [Accessed 21.12.2006].

Marsha Woodbury

Information Integrity in Africa: Exploring Information Corruption Issues

Abstract:

This paper examines information integrity, with the premise that sound, dependable information enhances the values of the entire society. Several issues about information integrity of great concern to Africa are access to information, the right of individuals to correct records that are erroneous, accurate and culturally appropriate translations, and the standard of freedom of the press. The basis for this paper is human rights doctrine largely embodied in the ethical principals of the international informatics community.

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Introduction

As our world becomes more interconnected, especially through computers and cell phones, we theoretically should have more accurate information spread to a larger population. A person selling goats in remote farming country needs to know the market price of her animals, or she will be swindled by a local go-between. The remote vender needs the facts, and modern technology can help her get them.¹ However, a miscommunication could cost her money. In the same spirit, a person suffering from HIV/AIDS could be saved or killed depending on the integrity of the information received.

The price of a goat or the best treatment for HIV/AIDS is part of the information life cycle, the functions through which information is handled. The stages are acquiring, processing, storing, disseminating, and using information.² What is crystal clear is that we cannot talk about any of the later parts of the life cycle without the "acquiring" step, and we focus here on that aspect, examining the potholes in the road of progress, the nefarious developments that could corrupt peaceful progress as the internet spreads across Africa, a continent of over a thousand languages that will be further transformed by an information revolution.

What is information integrity without first having access? The problem is neatly summarized in the story of a motion picture, the 2004 film *Moolaadé*, by the Senegalese director Ousmane Sembène. Its theme is female circumcision. In the film, the husbands confiscate their wives' radios, real radios still turned on and emitting songs and commentary, and burn them in front of the mosque. What the director says about his film is at the heart of information integrity issues in Africa:

"As far as I am concerned, politically speaking, cinema allows me to show my people their predicaments so they take responsibility," Sembène said. "They hold their destiny in their hands."

¹ Friedman, Thomas: Cellphones, Maxi-Pads and Other Life-Changing Tools. The New York Times. April 6, 2007 <http://select.nytimes.com/2007/04/06/opinion/06friedman.html?hp=&pagewanted=print>

² Mason, Richard, Mason, Florence, Culnan, Mary: The Ethics of Information Management. Sage Publications, 1995, 7

*Nobody other than ourselves can solve our problems. We are in 2004; out of 54 states of the African Union, more than 38 still practice female circumcision. Why? I don't know! Origins? I don't know! ... But Moolaadé is not just about female circumcision, it's about the liberation of our societies, the freedom of our people."*³

Moolaadé has made an impact outside of Africa and can be found in festivals such as Cannes and Los Angeles, winning the National Film Critics Award for Best Foreign Film, in university course syllabi, and in art theaters around the world. However, despite being directed and written by a prestigious African director and being filmed in Africa, the film's exposure to an African audience is miniscule, and will only penetrate the African continent with the help of free DVDs and public grants, such as the one from The Sigrid Rausing Trust to use the film as an advocacy tool.⁴ Change will come from public awareness, and perhaps the availability of films like *Moolaadé* in libraries and schools.

The artistic merit of the film is widely acknowledged, and the question is clear: Why is it so difficult to view *Moolaadé* in Africa? In the film, the director used the metaphor of burning radios, implying that the spread of information is not open but rather controlled by those who are threatened by it. Can the internet help spread uncomfortable artworks and information to areas where such an introduction surely will bring change? Will it help Africans to fulfill the minimum standard of information access for all members of society?⁵

³ Gadjigo Creates Film on Making of Moolaadé College Street Journal, Mount Holyoke College February 11, 2005. <http://www.mtholyoke.edu/offices/comm/cs/j/021105/moolaade.shtml>

⁴ New FORWARD Programme in Africa - Using Moolaadé to Advance the Rights of African Girls. 22 February 2006. <http://www.forwarduk.org.uk/news/news/121>

⁵ Mason, Richard, Mason, Florence, Culnan, Mary: The Ethics of Information Management. Sage Publications, 1995, 235.

Information Integrity

One of the oddities in Africa's history involved the Mountains of Kong in western Africa. This non-existent mountain range graced 19th century maps of Africa until geographers finally convinced map makers that the Mountains of Kong never were there at all.⁶ However, for nearly 100 years the well-documented myth lived, demonstrating the power of incorrect, unchallenged information issued on the culturally powerful medium of a map.

We all are affected by information integrity, whether it is the history of repairs on a plane we are about to board or the financial records of our government. Information integrity is a general term than one scholar summed up as "the dependability or trustworthiness of information. More specifically, it is the accuracy, consistency, and reliability of information content, processes, and systems."⁷

These values are embodied in the objectives of the Nigerian National Policy for Information Technology:

(iii) To guarantee the privacy, integrity, accuracy, confidentiality, security, availability and quality of personal information. 8

The availability of information is an essential part of the process. We cannot have any checks on the accuracy of information if we cannot access it. Suppression or loss of material can have enormous consequences, and a huge factor in the integrity of information is inspection, audit, review, and correction.

6 Bassett, Thomas Porter J. Philip, 'From the Best Authorities': The Mountains of Kong in the Cartography of West Africa, *The Journal of African History*, Vol. 32, No. 3. (1991), pp. 367-413.

7 Prabhaker, Paul: Information Pollution: A Disaster Waiting To Happen By , 2003, 5 <http://www.informationintegrity.org/download/index.php>

8 Nigerian National Policy For Information Technology (It) 'Use It' p. 3 <http://www.uneca.org/aisi/nici/Documents/IT%20policy%20for%20Nigeria.pdf>

Access to Public Information

In its Preamble to its Constitution, the Library and Information Association of South Africa wrote that they:

**affirm that equitable and unrestricted access to basic information, including government information, is a fundamental right in a democratic society;*

**recognize the power of information and information technology in establishing a society based on democratic values, social justice and fundamental human rights⁹*

A Google search for the words "information access" turns up thousands of references because this issue is so pivotal for insuring accountability, education, and oversight, to name only three benefits.

In South Africa during the apartheid era, people had difficulty in checking the validity of information that the government held about them. After apartheid ended, the Truth and Reconciliation Commission found that there was a systematic destruction of classified documents starting in the period 1990-1994, sanctioned by the Cabinet. South Africa has enacted a freedom of information act, but its use and effectiveness have been uneven.¹⁰ The key ingredient of ensuring the accuracy of information is the right to review documents and an ease in exercising that right.

As far as government records are concerned, the U.S. has attempted to have government officials preserve electronic information via the Freedom of Information Act, the 1978 Presidential Records Act, and the Electronic Freedom of Information Act. Yet as recently as April, 2007, perhaps thousands of government email messages have "disappeared."¹¹

9 Preamble to the Constitution of The Library and Information Association of South Africa (LIASA) http://www.liasa.org.za/about_us/liasaconstitution.php#Preamble

10 Banisar, David Text from the freedominfo.org Global Survey: Freedom of Information and Access to Government Records Around the World, by (updated July 2006) accessed April 20 http://www.freedominfo.org/countries/south_africa.htm

11 Hamburger, Tom: Officials' e-mails may be missing, White House says April 12, 2007. <http://www.latimes.com/news/nationworld/nation/>

Laws can only help a certain amount, and a basic common valuing of the integrity of information has to be actively pursued by people in power.

Accuracy of Translation

Africa is a continent of over 1000 languages. South Africa has eleven official languages and seven unofficial ones. Morocco uses Arabic officially, with people also speaking French and 8 other tongues, and Ethiopia has at least seven official languages.¹² Thus the issue of correct translation applies much more critically to the African countries than to countries with less endowed with lingual variety. In order to assure that a document has the same meaning across many translations is a huge task, with issues too vast to cover here. Suffice it to say that translation mechanics open up areas where the facts and sentiments of the original artifact can be vastly altered. Translating the Bible into many African languages demonstrates the inherent problems of translation " ¹³

In the last 20 years, the translation of HIV/AIDS materials has shown how difficult it can be to communicate accurately across the continent. Researchers know that the most appropriate language is a person's mother tongue for disbursing sensitive material about this virus, but the appropriate language may be taboo in many languages. To be effective, information has to be socially acceptable, yet it must be accurate and get the critical information across¹⁴ The Open Society Initiative for Southern Africa (OSISA) is tackling these translation issues and encouraging translation into the various indigenous languages so not only will people have

access to accurate information, they will be able to read and understand it in their own language.

As well, educational materials should be culturally relevant, taking into account the differences between Europe and the U.S. and Africa, where the Ubuntu spirit of community comes first.¹⁵ For example, in many parts of Africa polygamy is the norm, and urging people to be monogamous goes against the culture.¹⁶ Thus translation is not simply an issue of one language to another, but one culture to another. The social taboos that prevent the spread of helpful practices and medicines will lead to the deaths of many more thousands of people unless education can be done in a culturally practical way.

Preservation

We cannot adequately address the issues of the issues of permanency, accuracy, and integrity of stored traditional and digital knowledge resources here because the topic is simply too vast. The library associations, governments, and businesses of Africa are tackling these problems as information moves increasingly into digital form

One issue worth noting is that Africa's scholars are working to preserve its oral culture and traditional dances and other important parts of its heritage. Capturing the spirit of a living culture is more complicated than keeping written records. The integrity of these records is critical as issues abound, such as who is doing the recording, what media is being used, have people given their consent to be recorded, how will the archive be stored? Many issues arise in maintaining these records, and UNESCO has put forth The Convention on the Protection and Promotion of the Diversity of Cultural Expressions, adopted by the General Conference of the UN Educational, Scientific and Cultural Organization.¹⁷

la-na-emails12apr12,0,4800585.story?coll=la-home-headlines

12. Gordon, Raymond, Editor. *Ethnologue: Languages of the World*, Fifteenth Edition, <http://www.ethnologue.com/>,

13 Omanson, Roger *Can You Get There from Here? Problems in Bible Translation* as originally printed in the *Christian Century*, June 22-29, 1988. <http://www.religion-online.org/showarticle.asp?title=975>,

14, The Open Society Initiative for Southern Africa (OSISA), <http://www.osisa.org/programmes/language/mainstream>

15 Tim Allen, Suzette Heald HIV/AIDS policy in Africa: what has worked in Uganda and what has failed in Botswana? (1141-1154) *Journal of International Development* What is RSS? Volume 16, Issue 8 8 Nov 2004, DOI: 10.1002/jid.1168

16 Heald, Susan: It's Never as Easy as ABC: Understandings of AIDS in Botswana *African Journal of AIDS Research* 1(1): 1-11, 2002, 1608-5906

¹⁷ UNESCO Convention on the Protection and Promotion of the Diversity of Cultural Expressions

At this writing 52 nations have signed onto the convention, and African countries with their amazing diversity of language and culture should be at the forefront of this effort.

Corruption and Pollution of Information

The goal with information integrity is to assure that information is available and accurate, and therefore the opposite would be information that has been altered in some way during its journey. Of course, shoddy or deceitful record-keeping leads to information corruption. To give us an idea of the issue, take these three U.S. headlines on the internet and the chilling problems they reveal:

*Massive state contracts database riddled with errors, omissions Problem-plagued system grew out of effort at transparency in state spending.*¹⁸

*Census errors shortchange counties from federal grants York County could lose up to \$1M a year until 2010*¹⁹

*Schools budget full of errors In city document, funds for salaries don't match number of people being paid*²⁰

As we can see, excellence in bookkeeping and statistics would help in the above situations, but only when the records see the light of day and we can audit them. The internet offers the promise of oversight, but what can we do about the millions of websites containing all sorts of inaccurate and biased information?

http://portal.unesco.org/culture/en/ev.php-URL_ID=11281&URL_DO=DO_TOPIC&URL_SECTION=201.html

18 The Associated Press,
http://www.oeregister.com/oeregister/news/state/article_1651933.php

19 MacInnis, Adam: The Herald,
<http://www.heraldonline.com/109/story/15705.html>

20 Neufeld, Sara: The Baltimore Sun
http://www.baltimoresun.com/news/local/baltimore_city/baltimore.md.ci.budget09apr09,0,4394684.story?track=mostviewedlink

The analogy to drinking water best describes the problem. Of course first we need access to water. Once that is established, the entire community has to combine efforts to preserve the purity and healthiness of the water, because disease and filth so easily contaminate this precious resource. Although water composes most of our planet, only 3% of it is fit for humans to drink.²¹ We need controls to prevent the dumping of waste and impurities into our information stream.

The "impure" information can be an accidental error in copying or translating, or it could be intentional, the release of misleading or completely false artifacts.

The spreading of connectivity means that some people will suffer from misinformation and "information pollution". What we need are well-defined and acceptable standards for the accuracy, consistency and reliability of information.²² For example, people will see pictures that have been doctored, but they may not have the education to understand that pictures do lie. They may read that they can send their money to a remote person and reap vast rewards, but it will be a scam. Worse, leaders might base decisions on false premises, and the people will be starved of accurate information on which to base public opinion.

No policy on information corruption can treat it as something separate from the main society. Economics, law, culture, psychology, sociology, ethics, and philosophy are inter-related in these information integrity issues²³ For example, take this quote:

Nigerians have become notorious for their Internet scams, such as e-mails with a bogus request to move funds to an offshore bank, which ask for the recipient's account number in exchange for lucrative profit. The con, which

21 Lawson, Carol and Lazarus, Mary Ellen: Science Challenge Questions and Answers Open File Report Number: 98-507
http://www.usgs.gov/sci_challenge.html

22 Madhavan Nayar et. Al, U.S. Presidential Election: The Information Integrity Imperative,
http://www.informationintegrity.org/download/dfiles.php?f=pv_votingintegrity_whitepaper_0205.pdf

23 Madhavan Nayar et. Al, U.S. Presidential Election: The Information Integrity Imperative
http://www.informationintegrity.org/download/dfiles.php?f=pv_votingintegrity_whitepaper_0205.pdf

*originated in Lagos, represents the perversion of talent and initiative in a society where normal paths of opportunity are closed to all but the well connected. Corruption is intrinsic to getting anything done in Lagos.*²⁴

The promise of the internet could be challenged by the ingenuity that some people have poured into computer crime, information corruption, and mischief. Also, internet access and use are so unevenly distributed that some problems will emerge earlier in the more populated areas without having a significant impact in the more rural and remote areas.

Freedom of the Press and Information Integrity

A recent scandalous event in the USA underlines the need for a free press. The incident involved the death of a Corporal Pat Tillman, a former football player who was killed by an American soldier in a friendly-fire incident in Afghanistan. The U.S. military fabricated a tale in which Tillman was shot dead in battle by enemy fire. Only the determined efforts of Tillman's family and the probing of journalists revealed the falsehood to the nation. As a New York Times columnist wrote, a government that will lie about the tragic fate of an honorable young American like Pat Tillman will lie to the public about anything.²⁵

Lying is not unique to the U.S. In Africa it is also essential that the press keeps an eye on government, challenges false information, checks sources, and is the eyes and ears of the people. Even with examples of courageous reporting, the USA is ranked only 53rd on a list of countries and freedom of the press. On the African continent, the highest ranked countries are Benin (23rd), Namibia (26th) and Mauritius (32nd), while the lowest ranked is Eritrea (166) where a number of journalists have

been imprisoned in secret for more than five years.²⁶ One report summed it up like this:

"The year 2006 saw an increase in the number of assaults and attacks on journalists throughout the African sub-Saharan region. Many of these assaults were carried out by the authorities or their proxies, and the violence was often a precursor to arrests and detentions... The attitude of these governments displays a distinct dislike of criticism, and is also the sign of a lack of political maturity."²⁷ Another author wrote, "There can be no democratic progress without a free media, and repression of the media is a first sign of democracy going off the rails."²⁸

Counties like Senegal have state-owned media that can be used to advance the aims of government and not necessarily the people. In Zimbabwe, a journalist died as recently as April, 2007, after smuggling television pictures of the badly injured opposition leader Morgan Tsvangirai after he was beaten up by police on 11 March.²⁹ Four independent newspapers have been shut down, bombed, and suppressed, and reporters from other countries are routinely barred entry Zimbabwe.³⁰ Reporters Without Borders publishes updates on press freedom for many

²⁴ Packer, George The Megacity; Decoding the chaos of Lagos. A Reporter At Large; New Yorker Magazine, pg. 64 Vol. 82 No. 37, November 13, 2006

²⁵ Herbert, Bob: Working the Truth Beat April 30, 2007
[http://select.nytimes.com/search/restricted/article?res=F30A10FA385A0C738FDDAD0894DF404482:](http://select.nytimes.com/search/restricted/article?res=F30A10FA385A0C738FDDAD0894DF404482)

²⁶ Reporters without Borders, Press Freedom Index 2006
[http://www.rsf.org/rubrique.php3?id_rubrique=639,](http://www.rsf.org/rubrique.php3?id_rubrique=639)

²⁷ Dadg, David Africa Overview 2006 World Press Freedom Review, IPI International Press Institute
http://www.freemedia.at/cms/ipi/freedom_detail.html?ctxid=CH0056&docid=CMS1176887458165

²⁸ Crawford, Julia: Lessons in Democracy, Pressure, and the Press. Committee to Protect Journalists.
<http://www.cpj.org/attacks05/africa05/africa05.html>

²⁹ Howden, Daniel: Zimbabwe journalist murdered 'over leaked Tsvangirai pictures' The Independent 04 April 2007
<http://news.independent.co.uk/world/africa/article2418440.ece>

³⁰ Sapa-AP: Africa Independent Zim journalist murdered 07 April 2007.
http://www.mg.co.za/articlePage.aspx?area=/breaking_news/breaking_news__africa/&articleid=304111

African countries, and these documents are often depressing.³¹

The Future

The goal is to have information that is reliable, accurate, helpful, public, and correctable. As Africa had to erase the Mountains of Kong, it also has to correct errors in public health information, in court and government records, and to adapt its digital infrastructure to storing and maintaining records. At the same time, all countries should support their public libraries for the dissemination of uncensored information, art, and literature.

Newspapers, bloggers, and other media in African countries can contribute to information integrity through reporting government and public activities as accurately as possible. In the U.S. the media have long been called the "fourth branch of government". But as U.S. journalism slips down to 53rd in the world, the internet helps keep the journalists honest. When more people are connected in Africa, perhaps their voices, too, will counter state-owned and state-intimated media outlets.

We need to be proactive in providing access to and provision of public information to empower people to redress inequities. In other words, governments and businesses must provide accessible and understandable information, with formal processes of audit and accountability, made available free of charge.

Of course good recordkeeping and accounting is essential. People should have access to records about themselves, to correct and update personal information, and to ensure that this information is used only for the purposes that they authorized..

Conservation and maintaining integrity are the responsibility of those who store information. We urge stringent data protection laws and standards for information security.

All those who have power, including businesses and government, must be accountable for deliberately releasing incorrect information.

Maintaining a plurality of independent media is absolutely necessary in countering misinformation.

Thus, state ownership of media ought to be discouraged, and the independent media nurtured and encouraged.

By taking those steps, the metaphor for Africa will not be a pile of burning radios. Rather, communications will abound, and we will hear more voices and experience more art and literature through the myriad of digital media that will increasingly be at our fingertips. In that rosy future, the quality and integrity of the information we produce and receive will be vital to nurturing Africa's future.

31 Africa Reports, Reporters Without Borders.
http://www.rsf.org/rubrique.php?id_rubrique=36

Dennis Ocholla

Marginalized Knowledge: An Agenda for Indigenous Knowledge Development and Integration with Other Forms of Knowledge

Abstract:

The purpose of this paper is to re-examine Indigenous Knowledge (IK) in order to suggest an agenda for its development and integration with other forms of knowledge. The paper discusses what marginalization of IK mean, examines the challenges of integrating IK in the mainstream of other forms of knowledges and suggests agenda for IK development. The suggested agenda focuses on mapping and auditing IK capacity in Africa, legal and ethical issues, IK management, IK education and training, integration of IK and KM, IK brain drain. The paper recommends that information on IK be widely shared for evaluation, use and further development.

Agenda

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Introduction

Present day's literature proffers several definitions of Indigenous Knowledge. The broadest of these (e.g. NRF, n.d.), which we intend to use, defines IK as a "complex set of knowledge and technologies existing and developed around specific conditions of populations and communities indigenous to a particular geographic area" with an emphasis on how "these forms of knowledge have hitherto been suppressed... therefore, IKS should be brought into the mainstream of knowledge in order to establish its place within the larger body of knowledge". Essentially, Indigenous Knowledge (i.e., local/traditional/folk knowledge, ethno science) is a dynamic archive of the sum total of knowledge, skills and attitudes belonging to and practiced by a community over generations, and is expressed in the form of action, objects and sign language for sharing. Numerous examples¹ (e.g. Kaniki and Mphahlele 2002:4-6)) exist as to how IK thrives in beliefs, medicine (traditional African medicine using herbs), community development (e.g. communality or the ubuntu support system), art and craft(e.g. pottery) , sealing, energy production through charcoal burning), education (knowledge transfer through generations), communication and entertainment (festivals, drama, songs, dances, story telling/" what we could call today as "reading clubs", farming practices (soil conservation, intercropping, farm rotation), food technology (fermentation techniques, preservation), and arts and crafts (e.g. painting, curving, weaving, decoration). These skills, knowledge and attitudes, when shared, adapted and refined, sustain communities, and bring development in areas such as healing (e.g. alternative/traditional/herbal medicine, physical and mental fitness - acupuncture, yoga, tai-chi; Maasai's treatment of foot and mouth disease or Fulani treatment of cattle ticks with euphorbia plants), nutrition (e.g. vegetarian cuisine, hoodia stem/cactus used by San people/clan to stave off hunger and control thirst/ "slimming drug" on hunting trips), wealth/income/business (e.g. intellectual property, tourism, informal sector or SMEs), education (e.g. customs, traditions, culture, language), entertainment (e.g. traditional music and dance), politics (conflict resolution through indaba, baraza, imbizo, kgotla etc.), architecture and design (housing - some wonderful African architecture exists in

Egypt and South Africa; clothes/attire), industry (the informal sector) and countless more.

One of the focus area in Knowledge Management (KM) is the conversion of intangible knowledge (i.e. Indigenous Knowledge – IK) to tangible knowledge. Nonaka and Takeuchi (1995:62) define intangible knowledge as personal knowledge that is created through individual experiences. This knowledge is largely embedded within the culture and traditions of individuals or communities. Tangible knowledge, on the other hand, is recorded, documented or codified knowledge, widely conveyed through formal language, i.e. textual, electronic or digital. The manner in which this kind of knowledge is presented has made its storage, conveyance and sharing extremely easy and its popularization overwhelming. However, Nonaka and Takeuchi (1998:8) caution that tangible and intangible knowledge are not entirely two separate entities - they supplement each other. This is an area in which the integration of IK in mainstream knowledge, and more particularly in Knowledge Management, is inadequate. Knowledge, according to the two authors, is created and extended through the social interaction between tangible and intangible knowledge, and may follow four basic patterns:

- Intangible to intangible (socializing) – where individuals share intangible knowledge through personal contact.
- Intangible to tangible (externalization) – where the knowledge base is extended by the codification of experience, insight and judgment so that it may be utilized by others.
- Tangible to tangible (combination) – where individuals combine the tangible knowledge of others to create a new whole.
- Tangible to intangible (internalization) – where individuals use the codified knowledge of others to broaden their own intangible knowledge.

The purpose of this paper is to re-examine Indigenous Knowledge (IK) in order to suggest an agenda for its development and integration with other forms of knowledge.

What does the marginalization of IK mean?

Marginalization refers to exclusion - a state of being left out or insufficient attention to something for

¹ <http://www.worldbank.org/afr/ik/basic.htm>

example IK. Although Indigenous Knowledge (which is still largely tacit or intangible) is inseparable from any realistic knowledge and Knowledge Management or classification paradigm, marginalization of IK has occurred over the years, and has retarded its development and integration. While IK has existed within our communities since time immemorial - indeed, there is no community that does not have elements of IK - the degree of such possession varies, and seemingly the more a community possesses or practices it, the more the individual or community is marginalized or stigmatized. There are many speculative causes or reasons as to why this occurs. Of these, one stems from the characteristics of IK, i.e.: tacit knowledge is not codified or systematically recorded and therefore difficult to transfer or share; it lives solely in the memory of the beholder and is mostly oral, meaning that unless transferred, it dies with the beholder; it is embedded in the culture/ traditions/ideology/language and religion of a particular community and is therefore not universal and difficult to globalize; and it is mostly rural, commonly practiced among poor communities and is therefore not suitable in multicultural, urban and economically provided communities. The marginalization of IK can also be seen in light of how some global organizations, such as the World Bank and NUFFIC, associate IK with the poor. For example, in the World Bank website, *"Indigenous knowledge is also the social capital of the poor, their main asset to invest in the struggle for survival, to produce food, to provide for shelter or to achieve control of their own lives"*².

Marginalization has also occurred because families and communities are becoming increasingly disintegrated and globalised, a trend that may have stemmed from the push and pull of technologies, and the over-extensive supply of mass products, services and mass media gadgets and content to private spaces where IK once thrived.

During periods of domination, which have been variously described with terms such as forced occupation, invasion, colonialism, servitude, apartheid, ethnic cleansing and imperialism; IK was subject to yet another level of marginalization. It was often referred to in a negative or derivative manner, with phrases such as primitive, backward, archaic, outdated, pagan and barbaric. This demeaning reference did not create space for IK's integration with other forms of knowledge, commonly referred to as scientific, western or modern knowledge (largely

products of explicit knowledge). Thus, if a community or a person recognized and utilized IK more, then that community or person was supposedly inferior to those that practiced the opposite. Put simply, a person or community practicing or using IK was stigmatized.

Therefore in order for an individual/community to be admitted into 'civilized' or modern society, that individual/community had to abandon practicing and using IK. IK was vindicated, illegitimated, illegalized, suppressed and abandoned by some communities, and the countries and peoples practicing it were condemned and associated with out datedness, a characteristic most people find demeaning. This form of marginalization produced a generation that for the most, does not understand, recognize, appreciate, value or use IK. Arguably, this situation has produced an intellectually "colonized" mindset. These are communities that the celebrated world novelist, Ngugi wa Thiongo, in his essay "Decolonizing the Mind: The Politics of Language in African Literature" consider to be intellectually colonized. The question is how much have they gained through losing? Or put another way, how much have they lost through gaining?

Marginalization has also been fuelled by stereotypes. There has been a tendency to associate IK with traditional communities. Studies on IK tend to focus on the poor, the developing countries, on the Aborigines of Australia, the Maoris of New Zealand, the Saskatchewan of Canada, the Red Indians of the United States, the Maasai of Kenya etc. The nature of these studies raises problematic questions, i.e.: Are the studies done to improve the welfare of the communities? Or are they done to demean such communities? Would such studies be done in order to gain and share knowledge on how well the communities solve problems using Indigenous Knowledge systems and methods? Are they done to unravel or demystify the stereotype paradigm? Alternatively, are such studies merely adventurous outlets justifying where research money has been spent? Would it not perhaps also be interesting to study the Indigenous Knowledge of western or industrialized communities? Whereas much can be gained from IK studies conducted on any community in the world (since each community contains elements of IK), the demeaning tendency to focus IK studies on traditional and poor communities has been an added cause to marginalization.

Ultimately, has marginalization occurred in the way we define IK in relation to broader knowledge or in the context of knowledge management? A worth

² <http://www.worldbank.org/afr/ik/basic.htm>

challenging definition of knowledge in this context is that of Bells where, "*knowledge is that which is objectively known, an intellectual property, attached to a name or a group of names and certified by copyright or some other form of social recognition [e.g publication]*"(Bell, 1973:176). Bells definition of knowledge is a good example of modern or Euro-centric definitions of knowledge that can easily be used to marginalize/exclude Indigenous Knowledge, particularly if knowledge must be "*attached to a name or a group of names and certified by copyright or some form of social recognition*". This could be a biased approach that favors modern knowledge, recognizes explicit knowledge at the expense of tacit knowledge, and emphasizes codification and the ownership of knowledge that IK does not necessarily comply with

PLICIT knowledge thrives because of its visibility, access and use. The fourth step consists of the storage of IK for retrieval. This requires the creation and development of IK repositories requiring taxonomies, databases, recording, indexing, and preservation for easy access and use. The IK database developed by the World Bank⁵ and those listed by Le Roux (2003) are essential examples. However, although IK databases are a brilliant idea, reliable content within the databases would be of greater value. For example, the World Bank database reflects only three records on South Africa, as indicated in Table 1, and 17 on Kenya (see Table 3).

Challenges of integrating IK with other forms of knowledge

Fundamentally, integrating IK with other forms of knowledge first begins with knowledge creation and development processes that can be viewed in six steps, all of which are recognized by the World Bank (See Indigenous Knowledge for Development; a Framework for Action (1998³). The first step or process include recognition and identification, in that IK has to be recognized, identified and selected from a multitude of other knowledges. Step two involves IK's validation/affirmation by identifying its significance, relevance, reliability, functionality, effectiveness and transferability. This signifies an ability to support problem solving. For example, the HIV/Aids scourge, particularly in Africa, has invited a number of IK experimentations, most of which have not been validated (i.e. tested over time and used for problem solving) culminating in disasters in many cases. There are also interesting IK developments and practical achievements⁴ that are worth considering. Step three involves codification/recording / documentation. Explicit knowledge thrives because of its tangibility, sharability, transferability and storability etc., all of which originate from knowledge recordal system. Although there are some contestations to the recording of IK - the argument being that IK owners easily loose moral and material ownership of their intellectual property or capital, which is renegade to third parties - ex-

³ <http://www.worldbank.org/afr/ik/ikrept.pdf>

⁴ <http://www.worldbank.org/afr/ik/iknotes.htm>

⁵ <http://www.worldbannk.org/afrik/databases.htm>

IK Database Search Results

To view details click on practice title.

Table 9 Indigenous Knowledge records search results in the World Bank database on South Africa (Source¹)

Your search returned 17 record(s).

No.	Country	Domain	Technology	Title
10	Kenya	Agriculture	Agriculture	Botanical knowledge of the Maasai
41	Kenya	Health Nutrition & Population	Traditional Medicine	Medicinal use of plants to alleviate health problems of both human and livestock.
42	Kenya	Environment	Biodiversity, Conservation	Taboos restrict felling of trees in the Maasai steppe.
43	Kenya	Agriculture, Environment	Agricultural Meteorology	Weather forecasting on the basis of astronomy and ecology.
44	Kenya	Agriculture, Environment	Biodiversity, Taxonomy	Use of plants and animals determines their taxonomy.
46	Kenya	Agriculture	Taxonomy	Classification of livestock disease names assists the Maasai in sharing knowledge, diagnosing diseases and preventing their impact.
47	Kenya	Health Nutrition & Population	Knowledge Management	Sharing of medicinal knowledge among the Maasai.
51	Eastern Africa Region, Kenya	Agriculture, Health Nutrition & Population	Biodiversity	Traditional societies in East Africa use wild plants for different purposes and means to survive.
58	Eastern Africa Region, Kenya, Tanzania	Education	Informal Education	Storytelling is the traditional means to bridge past and present and to transfer ethical values through the generations.
63	Kenya	Health Nutrition & Population	Traditional Medicine	Use of plants for their antibiotic effects.

Item 445 has been a highly contested/controversial issue in South Africa's debate regarding IK intellectual property rights (see table 2 for illustration).

IK Practice Detail



¹ : http://www4.worldbank.org/afri/ikdb/ik_results.cfm

Practice title: A Landmark Agreement Recognizing the San's Intellectual Property Rights regarding their traditional knowledge of the Hoodia plant

Country: South Africa

Domain: Health Nutrition & Population

Technology: Intellectual Property Rights

Bearers of Knowledge: The San peoples living in Angola, Botswana, Namibia, and South Africa

Summary: On March 24, 2003, after years of negotiations and uncertainty, representatives of the San peoples of southern Africa and representatives from South Africa's Council for Scientific and Industrial Research (CSIR) signed a benefit-sharing agreement for a drug being developed from a traditional mainstay of the San diet – the Hoodia plant. The Hoodia has been traditionally used by the San to treat stomach pain and eye infections, among other applications. On long hunting trips through the desert, San chewed on the stem of the Hoodia to suppress their hunger and thirst and boost their energy. In 1995, CSIR researchers discovered its qualities as an appetite suppressant, isolated the compound, called P57, in the plant that curbs hunger, and obtained a patent for it in 1996. The San pointed out that the Hoodia's distinctive properties were the exclusive traditional – and communal – knowledge of the San, passed down for centuries. Seeking acknowledgement of this fact, and of the collective ownership of this knowledge by the broader San community, they sued in 2000, which began a long process of negotiation with CSIR that only recently succeeded. The San stand to receive six percent of all royalties when the drug reaches the market. They plan to invest the money, and only tap into the interest generated to fund community projects. This benefit-sharing agreement between a local research council and the San people represents enormous potential for future collaboration, not only for the San but also for other holders of traditional knowledge.

Lesson:

Source: Cultural Survival Quarterly Issue 26.1, The Kalahari San: Self-Determination in the Desert, 2002.

Email:

URL: [Cultural Survival](#)

Table 10 Example of IK Intellectual Property Rights Agreement in South Africa. Source²: Cultural Survival Quarterly Issue 26.1, The Kalahari San: Self-Determination in the Desert, 2002.

Examples from Kenya also draw significant interest largely because of the Maasais indigenous knowledge that has received minimal recognition.

IK Database Search Results

To view details click on practice title.

Your search returned 17 record(s).

² <http://www4.worldbank.org/afr/ikdb/detail.cfm?id=445>

No.	Country	Domain	Technology	Title
10	Kenya	Agriculture	Agriculture	Botanical knowledge of the Maasai
41	Kenya	Health Nutrition & Population	Traditional Medicine	Medicinal use of plants to alleviate health problems of both human and livestock.
42	Kenya	Environment	Biodiversity, Conservation	Taboos restrict felling of trees in the Maasai steppe.
43	Kenya	Agriculture, Environment	Agricultural Meteorology	Weather forecasting on the basis of astronomy and ecology.
44	Kenya	Agriculture, Environment	Biodiversity, Taxonomy	Use of plants and animals determines their taxonomy.
46	Kenya	Agriculture	Taxonomy	Classification of livestock disease names assists the Maasai in sharing knowledge, diagnosing diseases and preventing their impact.
47	Kenya	Health Nutrition & Population	Knowledge Management	Sharing of medicinal knowledge among the Maasai.
51	Eastern Africa Region, Kenya	Agriculture, Health Nutrition & Population	Biodiversity	Traditional societies in East Africa use wild plants for different purposes and means to survive.
58	Eastern Africa Region, Kenya, Tanzania	Education	Informal Education	Storytelling is the traditional means to bridge past and present and to transfer ethical values through the generations.
63	Kenya	Health Nutrition & Population	Traditional Medicine	Use of plants for their antibiotic effects.

Table 11 Indigenous Knowledge records search results in the World Bank database on Kenya (See³)

³ http://www4.worldbank.org/afr/ikdb/ik_results.cfm

Evidently, creating meta-data capturing capabilities and multiple storage approaches is becoming increasingly essential. Step five borders on IK transfer. Such transfers go beyond focusing on human recipients. Following this, step 6, would be the dissemination and use of IK. Use of knowledge put it to testing, acceptance and further validation for development. Therefore in essence, the six steps or processes are essential if the gap between IK and other forms of knowledge is to be closed.

The second consideration for integration borders on pragmatism. Thus, what can we reap from IK. Other forms of knowledge have thrived because of their functions or importance or benefits. The recognition and development of IK is picking up momentum, largely due to the benefits being derived from it. For example, as already been mentioned, IK is increasingly being used for health services, particularly herbal/ traditional/alternative medicine and in agriculture, among others. Reported activities and practices of IK by the World Bank in "*IK notes on Indigenous Knowledge*"(2006¹), which covers 93 documents from 1998 -largely focusing on Africa and Eastern and Southern Asia (e.g India and Sri Lanka) - shows ongoing activities and practices of tremendous achievement in the field of traditional medicine and health practices, agriculture, biodiversity, education, natural resource management, conflict management, energy generation and preservation etc; that are of great benefit to the communities in question. Additionally, business and trade through tourism has created significant interest in indigenous food, arts and craft (weaving, painting, sculpture and pottery). Significant growth has also been driven by pharmaceuticals. Unfortunately, most IK practices are currently being held in the informal sector/unregulated economy, and are therefore subject to abuse. It is acknowledged² that IK provides skills, experiences and insights into individuals and communities which may, in turn, be used to improve the livelihoods of those mostly situated in the informal sector of the economy. Furthermore:

- IK provides local communities - especially the poor - with problem solving strategies
- IK is an important contribution to global development knowledge
- IK systems risk extinction

- IK is relevant for the development process
- IK is an under-utilized resource in the development process

Thus, learning from IK by investigating first what local communities know and have, can assist with understanding local conditions and provide a productive context for activities designed to help the communities³

However, this document strongly views IK to be a survivalist instrument of development, meaning that its use is likely to occur less in areas where the lives of communities are better, or beyond the norm of survival. Will this be the case with pharmaceuticals or IK practitioners or even IK users, some of whom are not poor, and do not belong to the rural community? Put another way, how many people are employed in the IK industry who are not poor or come from the poor communities? Despite the rather sad denigration of IK, the World Bank recognizes that IK could be relevant in at least three levels of development, the first being that it is important in the local community in which the IK knowledge owners live and practice. Secondly, development agents such as NGOs, civil society, and governments, need to recognize, value, and appreciate it whilst integrating with local communities. Essentially, before incorporating IK into their approaches, they need to understand and critically validate it against the usefulness of their intended objectives. There are unique examples, such as South Africa's recent policy document on "Indigenous Knowledge Systems"⁴ produced by the Department of Science and Technology, where government has integrated IK health workers, such as traditional healers, into mainstream national health care services by legislating a "*Traditional Health Practitioners Legislation*". This mandates the establishment of a "*Traditional Health Practitioners Council to preside over the activities of approximately 200 000 South African Traditional Healers*". According to the refereed to document above, the "Traditional Medicine Strategy of World Health has noted that the use of traditional medicine is widely growing within Africa alone, as up to 80% of its population uses traditional medicine for their health needs,

¹ <http://www.worldbank.org/afr/ik/iknotes.htm>

² <http://www.worldbank.org/afr/ik/basic.htm>)

³ <http://www.worldbank.org/afr/ik/why.htm>

⁴

http://www.dst.gov.za/publications/reports/IKS_Policy%20PDF.pdf

largely due to accessibility and affordability". Thirdly, Indigenous Knowledge forms part of the Global Knowledge System. In this context, it has a value and relevance in and of itself. Thus, IK can be preserved, transferred, or adopted and adapted anywhere in the world. Some of the World Bank achievements as at 2005, in areas such as integrating IK in Bank projects [18 cases], mainstreaming IK in development [14 cases], building capacity to facilitate IK exchanges [22 cases], collection and dissemination of IK [12 cases] and building partnerships [10 cases]⁵ are of great significance.

The third consideration is epistemological. The nature, origin, foundation, limitations and validity of IK requires further exploration and interrogation. For example Agrawal (2004), among others, identifies the key issues in a manner that poses the following questions: How does IK differ from scientific/modern/western knowledge? How do the two differ in dealing with immediate /concrete necessities as opposed to distant and abstract issues? What are the methodological and epistemological differences? And what are the contextual differences? It is therefore necessary to provide more epistemological content, concept and context to IK in order to broaden its understanding and application to research and education in Africa and wherever else there's such a need.

Agenda for IK development

- Mapping and auditing IK capacity in Africa (e.g. health, agriculture and food, trade and tourism). This may involve creating: an awareness of IK policies, legislations and strategies; management structures, programmes and activities; research output and recordable activities; centers and systems; support and funding; and knowledge holders and practitioners. This agenda appears to have been echoed also by Kaniki and Mphahlele (2002:14) as well as being given attention by the Department of Science and Technology ⁶ of South Africa but not necessarily in other countries of Africa.
- Legal and ethical issues (e.g. policy, legislation, intellectual property rights). The issue

of the San people alluded to earlier is an example of why legal issues are important.

- IK management issues that borders on management structures within a country or institution, research, visibility-publication [see Ocholla and Onyancha 2006]), IK databases, creation of an IK website for its publicity and promotion [see Le Roux 2003⁷] are equally valid issues.
- Education and training (e.g. workshops, seminars, conferences, short courses, IK knowledge fair, sharing of Best Practices, IK market place, popularization of IK, for instance in schools and in the curriculum of education institutions), which extends to the teaching of African history and literature (see African Writers Series- works written by Ngugi wa Thiongo, Chinua Achebe, Wole Soyinka, etc.) to students, thus bringing them closer to indigenous context.
- Integration of IK with KM. This should feature in KM research and teaching, curriculum development, publications, funding etc.
- IK brain drain. This first occurs in instances when an IK holder dies with knowledge that has not been widely shared through knowledge codification. Thus, when an IK holder dies, a whole community library disappears without trace. This type of brain drain is frequently ignored, yet quite important. Similarly, brain drain occurs in the form of migrated archives, where the IK of a community is displaced or transferred from its original location to a foreign location, thereby rendering access and use difficult or impossible. The third instance occurs when a community's IK disappears due to the displacement or re-location of community members as a result of natural or artificial courses/disasters such as war, flooding, or urbanization.

Conclusions

The achievements made so far in the revival of Indigenous Knowledge, such as in South Africa and by the World Bank and other organizations, should be encouraged, supported and interrogated for further development within the country [SA] and in other parts of the world.

⁵ <http://www.worldbank.org/afr/ik/achieve.htm>

⁶

http://www.dst.gov.za/publications/reports/IKS_Policy%20PDF.pdf

⁷ <http://www.worldbannk.org/afrik/databases.htm>

Notes:

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References

- Agrawal, A. (2004) *Indigenous and Scientific Knowledge: some critical comment*. *Indigenous Knowledge Monitor* (3). [Online] : <http://www.nuffic.nl/ciran/ikdm/3-3/articles/agrawal/html>. Accessed 15 May 2007 from IK notes.
- Bell, D. (1974) *the coming of Post-Industrial Society: A venture in Social Forecasting*, Basic Books, and New York
- Indigenous Knowledge for Development. A Framework for Action* (1998). [Online] <http://www.worldbank.org/afr/ik/ikrept.pdf>. Accessed 20 May 2007
- Ngugi wa Thiongo (1986), *Decolonizing the Mind: The Politics of Language in African Literature*. Nairobi: Heinemann Kenya.
- National Research Foundation (NRF). 2003. *Indigenous knowledge systems*. [Online]. Available WWW: <http://www.nrf.ac.za/focusareas/iks/> Accessed 10 November 2005
- Nonaka, I. & Takeuchi, H. 1995. *The knowledge-creating company: how Japanese companies create the dynamics of innovation*. New York: Oxford University Press.
- Kaniki, Andrew M. and Mphahlele, Kutu M.E. (2002) *Indigenous knowledge for the benefit of all: can knowledge management principles be used effectively?* *South African Journal of Libraries and Information Science*, 68(1), 1-14
- Ocholla, D.N and Onyanha O. Bosire (2006) *The marginalized knowledge. An informetric analysis of indigenous knowledge publications 1990-2004*. *South African Journal of Libraries and Information Science*. Vol.71.No.3, 247-248
- Le Roux, C.J.B. (2003), *tapping indigenous knowledge on the world-wide web* *Indilinga African Journal of Indigenous Knowledge Systems*, Vol 2, Issue 1, 107-113

T V Gopal

Ethics in Deploying Data to make Wise Decisions

Abstract:

Way back in the 1980s corporations began collecting, combining, and crunching data from sources throughout the enterprise. This approach was widely accepted as a methodology that provides objectivity and transparency in decision-making. Good processing of the garnered data paved way for improved analysis of trends and patterns leading to better business and increased profit margins. Corporations began investing in collecting, storing, processing and maintaining enterprise wide data. The focus was always on the quality of data and the process of converting it into knowledge that enables right decisions.

It was soon realized that a wide range of personal biases has an impact on the way decisions are made. The entire process is replete with ethical dilemmas. This paper provides a framework to understand the interplay of data, information, personal biases, ethics and decision-making. This approach is suitable for every individual, team, organization or a nation. Several years of turmoil in South Africa make it imminent for it to take a fresh look at the way data is transformed into knowledge. The leadership within South Africa has to arrive at wise decisions that can withstand the scrutiny of generations to come.

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Introduction

Quantitative approach to corporate decision-making is the process by which one takes the *numbers* and transforms them into *knowledge*, using instincts and experience to fill in when we one doesn't have all the answers [6,7,12,13,17,24,24,27].

The following 10 basic principles provide the framework for using this methodology^[26].

1. If you're not using data to make decisions, you're flying blind.
2. This is all about a process, not a specific technology.
3. Get ready to feel threatened due to improved accountability and transparency.
4. You will be spending more money, not less. Information Systems is the additional investment.
5. Data-driven decision-making does not save time. It refocuses the way business spends time in arriving at a decision.
6. Your data's cleanliness is next to Godliness. It is unfortunate but true that fudging figures is a serious concern.
7. Don't shoot first and ask questions later. In other words do not draw the graph first and plot the points later.
8. A good solution is one you can afford to change.
9. Garnering Data is just the beginning of a long journey in building reliable and robust Information Systems.
10. This approach is highly addictive and often creates **a false impression** that the **"process works like magic"**.

"Our networks are awash in data. A little of it is information. A smidgen of this shows up as knowledge. Combined with ideas, some of that is actually useful. Mix in experience, context, compassion, discipline, humor, tolerance, and humility, and perhaps knowledge becomes wisdom".

Clifford Stoll, astronomer, computer systems administrator, and author.

Data is of two types –Quantitative and Qualitative. 'Quantitative data' is in numerical form and 'qualitative data' is not. Qualitative data could be much more than just words or text. Photographs, videos,

sound recordings and so on, can be considered qualitative data. It is a fact that the qualitative and quantitative data are intimately related to each other. All quantitative data is based upon qualitative judgments; and all qualitative data can be described and manipulated numerically.

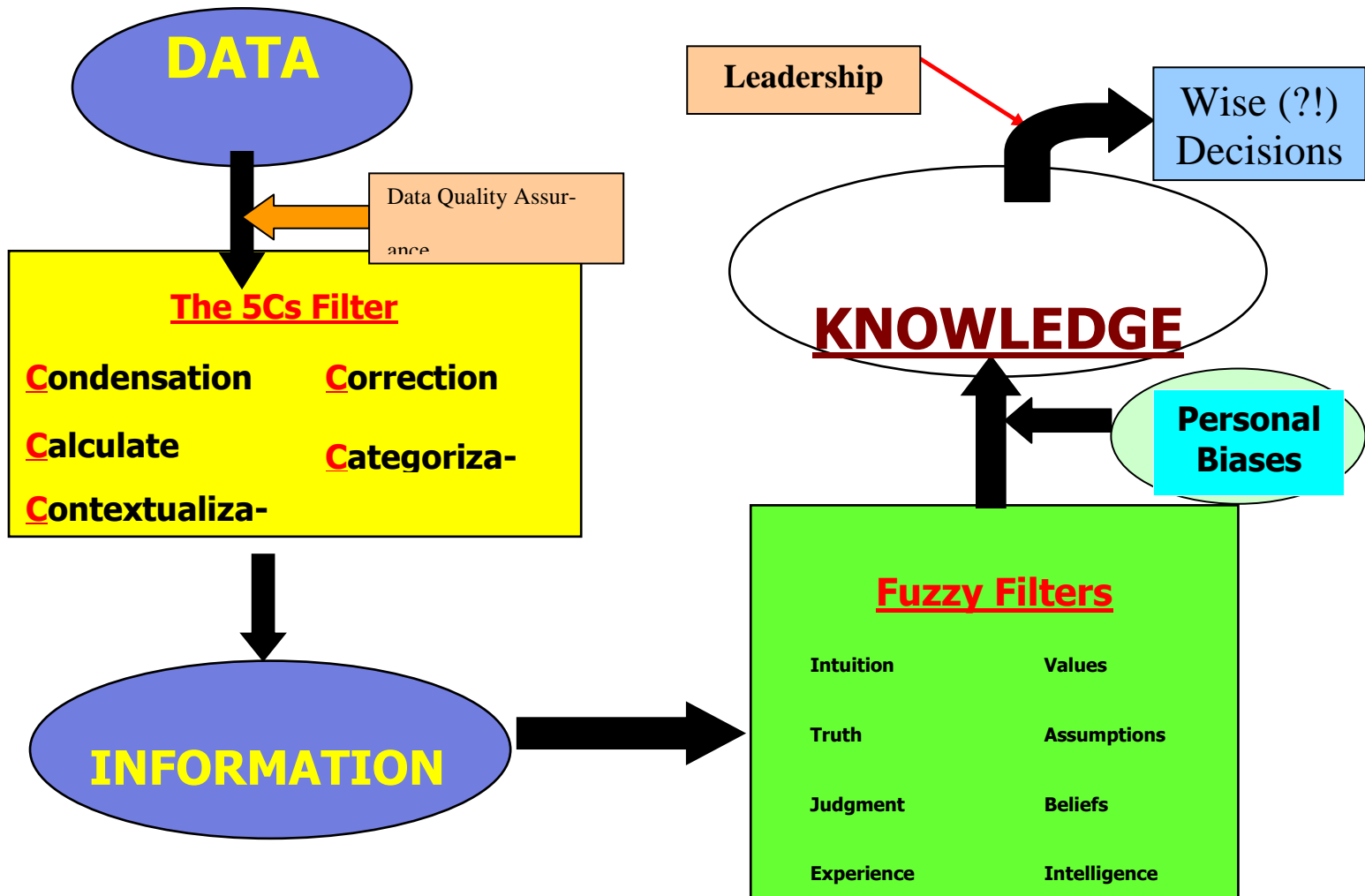
Information and Communication technologies have provides devices and tools to store and transmit both quantitative and qualitative data. The problem is reading meaning from the data and using it to make right business decisions.

Theory states that people are rational and they make complete calculations to reach optimum decisions. In practice, people make decisions based on "limited resources" and "good enough" outcomes. People often make decisions based on the notions of "acceptable risk" and their perception of weaknesses and threats. As a consequence, the following personal biases find a place in the process of decision-making.

- Selective search for evidencePremature termination of search for evidence
- Conservatism and inertia
- Experiential limitations
- Selective perception (Prejudice)
- Wishful thinking or optimism
- Choice-supportive biasRecency - more attention on more recent information
- Repetition bias – Oft repeated choice is the best
- Anchoring and adjustment – Hinging on Initial Information
- Group Think
- Peer Pressure
- Source credibility bias
- Incremental decision making and escalating commitment
- Inconsistency
- Attribution asymmetry : Failure is sheer bad luck and success is due to our abilities
- Role fulfillment
- Underestimating uncertainty and the illusion of control
- Faulty generalizations
- Ascription of causality – Cause: Effect Chains

Figure 1 and Table 1 present a framework for the data-centered approach to making Wise decisions.

Figure 1 Block Schematic depicting the transformation of Data into Wise decisions



The 5Cs Filter	
C ondensation	Summarizing Data ; Eliminating Unnecessary Data
C alculated	Analyzed Data
C ontextualization	Knowing Why the Data was Collected
C orrected	"Data Holes" have been accounted for
C ategorized	Basic Units are Identified

Table 12 The 5Cs Filter indicated in Figure 1

Role of Technology

When you can't effectively integrate information, valuable opportunities are lost — and fraud, regulatory or security threats go unrecognized. The right information in the right hands at the right time can lead to the right action by the right people at the right moment [25,26].

Unfortunately, current techniques limit the breadth and depth of integration. Valuable data and content lie buried in technology silos that are difficult to bridge.

Over the past 15 years, we've seen several integration technologies and methodologies. Extract, Transform and Load (ETL) methodology delivered data integration and paved way for data warehouses. Then Enterprise Application Integration (EAI), along with middleware enabled business-to-business e-commerce. Now there is a surge of interest in enterprise information integration (EII). XML, JSR 170 and other standards figure prominently. "Metadata" — the data about the data that provides schema, table, index and other definitions and context is becoming a valuable tool in implementing information integration.

Integration at a higher level holds great promise, especially as "Semantic Web" standards evolve. Semantic integration is a key strategic direction for both structured data and unstructured content integration because it focuses on meaning: that is, how pieces of information relate to each other.

The primary objectives of semantic integration are:

- Providing metadata that enriches the meaning
- Describing the relationships between things, not just their definitions and attributes
- Providing more abstraction from lower levels of data
- Enabling machines draw inferences directly from semantics.

Information Integration across the enterprise minimizes the scope for subjectivity in decision-making.

"You can use all the quantitative data you can get, but you still have to distrust it and use your own intelligence and judgment"

- Alvin Toffler **Role of Ethics** [12,14,15]

"Information and freedom are indivisible: the information revolution is unthinkable without democracy and true democracy is unimaginable without freedom of information"

- Mr. Kofi Annan, Secretary-General, United Nations

The author takes the liberty of interpreting the usage of the word 'Freedom' in the above quotable quote as 'Freedom' in Free Software and 'Freedom' as in 'Open Access' in addition to the Freedom of a Nation as a whole.

"Spread of information is making transparency and accountability a fact of life for all free governments. The challenge now is to make information available to all. Access is crucial"

- Mr. Kofi Annan, Secretary-General, United Nations

People decide essentially for two reasons

1. To solve the problem
2. To feel good

The first reason [Founded on Mind] leads to exploration of alternative solutions. The second reason [Founded on Emotions] is all about human behavior and its manipulation.

Decision-making is still pervaded by intuition, tacit knowledge, and gut reaction. People decide with their hearts no matter how much their brain tells otherwise. A large percentage of decisions are based on unconscious needs and wants, such as

prestige, habit or perceived values. Typical emotional foundations for deciding are given below.

- **Desire for gain** : usually financial, but also to gain in love, power, respect from other people.
- **Fear of loss** : usually financial, but also emotional.
- **Comfort and Convenience** : making life easier, simpler, more productive, more worthwhile [Individual Perception]
- **Security** : reduce fear of loss [Individual Perception]
- **Prestige and Pride**
- **Satisfaction of Emotion** : 'Feel Good' factor(s)

Attitudes and Ethics usually provide the props in decision-making. Attitudes that aid business are [1,2,3,4,5,8,11,15,16,17,18]:

- Trust
- Self-Control
- Empathy
- Fairness
- Truthfulness
- Learning
- Gratitude
- Civility
- Moral Autonomy

These factors are indicated a 'Fuzzy Filters' in the framework proposed in Figure 1. The 'Fuzzy Filters' also impact the Information Security policies of the organization.

Information Security^[16]

'Information Security' usually entails a policy framework and technology support. Information Security measures usually prevent:

- Unauthorized access to personal and / or critical data
- Unauthorized intrusion into the network or computer system
- Unauthorized usage of copyrighted or patented products, both hardware and software
- Unauthorized usage of computer timeData

Security refers to corporate measures taken to safeguard important data. The popular approaches

are Physical Security [Access restrictions; Organizations tend to become a archipelago], Personal Security [Authentication] and Personnel Security [Stringent Selection Procedures for picking people to sensitive posts].

Network Security is an area that has provided a framework comprising several tools and pieces of software. Virus, Worm, DoS, DDoS, Spam and Spyware are proving to be tough nuts to crack.

Plagiarism and Software Piracy are the major concerns in the IPR arena^[21]. While Grid Computing aims at utilizing the idle time of other machines, unaccounted and unauthorized usage of the idle time is a menace.

A short list of Cyber Crimes is given below:

- Unauthorised access by insiders
- Theft of proprietary information
- Computer fraudSystem penetration by outsiders
- Sabotage of data or networks
- Disruption of network traffic
- Computer viruses
- Identity theft
- Personal attack

The People, Process and Technology determine "Accountability" in Information Systems. Accountability is central to making right decisions.

Conclusions

"The information superhighway is a dirt road that won't be paved over until 2025."

-- Sumner Redstone, CEO of Viacom/Blockbuster.

In a sincere attempt to cleanse the information superhighway, information science specialists all over the globe are actively addressing this multi-dimensional problem. Some good solutions are already on the anvil. However, language and cultural divides in addition to the other problems such literacy levels of the population across the globe are proving to be the major hurdles for the solutions to take immediate effect. **The author is sure that the Information technology specialists in South Africa are tailoring the solutions to fulfill the felt needs of their citizens residing all over the globe.**

This paper presents an integrated framework to making wise decisions. Starting with collecting quality data, the framework factors quantitative and fuzzy filters leading to the knowledge necessary for making decisions. A quick review of technology to help in this process is provided.

The fuzzy filters are founded on right attitudes, ethics and more importantly accountability.

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References

1. Ashwin Mahesh and Subramaniam Vincent, "The Infrastructure of Trust", Editorial for *India Together*, 01 February 2007
2. Center for Education and Research in Information Assurance and Security [CERIAS], "Trust, Privacy, And Security", CERIAS Tech Report 2003-34, Purdue University, USA, 2003
3. Communicaid, "The South African Culture Overview", 2006
4. Charles B. Haley et al, "Picking Battles: the Impact of Trust Assumptions on the Elaboration of Security Requirements", Open University, UK
5. David Zussman, President, Public Policy Forum, *Confidence in Public Institutions: Restoring Pride to Politics*, An address at Parliament House, Canberra, Australia, February 9, 2001
6. e-Conference on, "Internet in Higher Education, Research, Science, and Technology Development in Subsaharan Africa", 21 August – 10 September 2006 [Three Weeks], Notes and Summary of the e-Conference
7. Economic Intelligence Unit [<http://www.eiu.com>], "e-Readiness Rankings", 2005
8. Eric M Uslaner, "The Moral Foundations of Trust", Chapter 8 [Draft Version] [www.bsos.umd.edu/gvpt/uslaner/Trustch8.pdf]
9. European Group Ethics in Science and New Technologies to the European Commission, "Ethical Aspects of ICT Implants in the Human Body", March 2005.
10. Gerardo A. Guerra et al, "Economics of Trust in the Information Economy: Issues of Identity, Privacy and Security", Oxford Internet Institute, Research Report No. 1, April 2003
11. Gopal T V, "Making Information Speak – The IT Way", PPT Presentation, 2004
12. Gopal T V, "IT and Communications in India - Past Successes and Future Challenges", Technology Day Lecture for M/s Tata Consultancy Services, May 2004
13. Gopal T V, "Information Society Indicators" based on Report by Economic And Social Commission For Western Asia, United Nations, May 2005
14. Gopal T V, "Professional Ethics", Materials prepared for the Faculty Development Programmes at Anna University and Executive Development Programmes for M/s Ashok Leyland Ltd., Chennai
15. Gopal T V, "Attitudes, Ethics and Decisions", Lecture Materials Prepared for the Tata Group Northern Region Ethics Counselors Meet, January 2006. Gopal T V, "Information – Security, Risks, Rights and Ethics", Lecture Materials Prepared for the Tata Group Northern Region Ethics Counselors Meet, January 2006. GlobeScan Incorporated, "Global Poll: Iran Seen Playing Negative Role", A major BBC World Service Poll exploring how people in 33 countries view various countries.
18. Huang H et al, "Trust, The Internet and the Digital Divide", IBM Systems Journal, Vol. 42, No.3, 2003
19. Human Sciences Research Council [<http://www.hsrc.ac.za>], "Public Attitudes in Contemporary South Africa", comPress, 2002
20. International Federation For Information Processing [IFIP], "Ethics and the Gover-

- nance of the Internet”, IFIP SIG 9, Discussion Report, September 1999*
21. Joel Slemrod and Peter Katuscak, "Do Trust and Trustworthiness Pay Off?", Department of Economics, University of Michigan, December 2002
 22. Josephson Institute of Ethics [<http://www.josephsoninstitute.org/>], "What Is a Person of Character?", USA, 2007
 23. Lisa Cameron et al, "Propensities to Engage in and Punish Corrupt Behavior: Experimental Evidence from Australia, India, Indonesia and Singapore", Research Paper Number 943, University of Melbourne, Australia, October 2006.
 24. Luciano Floridi, "From the Philosophy of AI to the Philosophy of Information", [Draft Version], The Philosopher's Magazine, UK
 25. Luciano Floridi, "Open Problems in the Philosophy of Information", *Metaphilosophy*, Vol. 35, No.4, July 2004
 26. Pamela Wheaton Shorr, "10 Things You Always Wanted To Know About Data-Driven Decision Making", <http://content.scholastic.com>.
 27. Rajesh Shukla et al, "India Science Report" National Council of Applied Economic Research, 2005
 28. Stefano Battiston, "Impact of Trust on the Performance of a Recommendation System in a Social Network", European Conference on Complex Systems - ECCS 2006, 25 - 29 September 2006, Oxford University, UK
 29. Stephen Downes, "Learning Trends and The Learning Imperative", <http://www.downes.ca/>, September 14, 2005
 30. Stephen Downes, "Paradigms in e-Learning", <http://www.downes.ca/>, June 14, 2005

Sandra Braman

The Ourobours of Intellectual Property: Ethics, Law, and Policy in Africa

Abstract:

Because law, policy, and ethics are multiply intertwined, developments in any one of these areas can affect what happens in each of the others. Thus those interested in African information ethics will find it valuable to examine trends in law and policy – and those concerned about legal trends should acknowledge effective leadership when it comes from the direction of ethical practices. Though African societies are almost always pictured as receivers of social, informational, and technological innovations that come from other sources, today many Africans are providing global leadership by developing innovative techniques for approaching the problem of information access. This article describes the context within which this is taking place, including a brief introduction to innovations in a number of areas, before looking in particular at innovations involving intellectual property rights that blend law, policy, and ethics.

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Introduction

From the perspective of the formal law-making and implementation practices of governments, ethics, law, and policy are inter-related in a manner best described by the ouroboros, the ancient Greek symbol for the snake that eats its own tail. If by "policy" we mean the fundamental principles and values underlying laws and regulations, then policy is the means by which ethics is translated into law. It is a goal of the law, of course, to set up social conditions that encourage and support ethical practice. And ethics should drive policy. Thus ethics -> policy -> law -> ethics, and so on.

Today, however, ethics can play additional, even more direct, roles in the development of law and policy because relations between law and society, law and government, and the very nature of governance itself are all undergoing change. This is particularly so in areas of the law in which the subject matter itself is undergoing continuous and rapid change, and the issues themselves are therefore often emergent – as is the case with law and policy for information technology.

As a consequence, we must look beyond formal laws, institutions, and practices of governments in order to understand policy for information technology and the processes by which it is made. Recent theoretical developments support such an effort. Structural and post-structural theories of society lead rather naturally to conceptions of a broad policy field. And complex adaptive systems theory provides a way of understanding the transformations of specific policies and policy-making processes within any given policy field. Together, these theories identify three types of policy-making processes. Those of government involve the formal laws, institutions, and practices of geopolitically recognized entities such as states, regional groups such as the European Union that are beyond states, and provinces and municipalities that are within states. Those of governance involve the formal and informal decisions with structural effect of both public sector entities (governments) and private sector entities (whether corporations, communities, or civil society as a whole). And governmentality involves the cultural norms, habits, and social practices that sustain and enable governance and government.¹

The ouroboros of ethics, law, and policy remains important for all three of these, but the rise in relative importance of governance and governmentality means that ethics activities have multiple additional paths through which they can influence the law. Indeed, one of the most interesting features of the contemporary policy environment, at both the national and international levels, is that many key battles now take place not at the level of solutions for specific policy problems but, rather, conflicts among policy-making processes themselves.

The African role in policy-making for intellectual property rights provides numerous vivid examples of this development. This article examines African participation in international intellectual property rights policy-making, with an emphasis on ways in which African ethical leadership is affecting the nature of resulting laws and regulations. Because almost all national governments around the world are signatories to international intellectual property rights treaties, this international ethical leadership in turn influences developments within other nation-states on continents outside of Africa as well. Intellectual property rights law is, of course, key to the development, diffusion, and use of IT – and in turn, innovations in IT have stimulated a great deal of revision to and extension of intellectual property rights laws as well as changes in practice. Thus developments in this area are also central to the nature of the information society and the information economy themselves.

Following a brief review of just why intellectual property rights are so important for information access and the ethics of information in Africa and the range of ways in which Africans are innovating in order to increase information access, African innovations in the area of intellectual property rights will be addressed.

The Issues

While there are those who argue that Africa is not yet fully part of the information society,² it can alternatively be claimed that every culture is today a part of the information society in the sense that everyone everywhere is at minimum *affected* by the

¹Braman, Sandra: Change of State. 9-38.

²Britz, Johannes, et al.: Africa as a Knowledge Society. 25-40.

decisions of those who are most influential in the information society.³

Many of the problems that Africans face also confront those in the most deeply informatized societies – such as the cost of network breakdowns (“down time”)⁴ -- but it is incontrovertible that Africa lags in many indicators of “informatization.” Because knowledge transfer rarely accompanies technology transfer, digital inequalities remain not only between Africa and the rest of the world but also within Africa.⁵ There are barriers to information access in Africa not only when information available on the internet is sought, but with every channel.⁶ Many of the challenges facing those concerned about information rights in Africa today are the same as those identified a decade ago.⁷ While many of the same types of problems are faced in every African society, it is still necessary to be very specific about local conditions when country-specific policies are designed and implemented.⁸ Opportunities for e-government, for example, can differ significantly from country to country.⁹

Perhaps ironically, however, while many of the factors affecting information rights are the same as factors impeding the achievement of other development goals,¹⁰ some fear that G8 attention to using information technology to address the digital divide in Africa may draw attention away from problems such as debt and poverty by implicitly or explicitly suggesting that there are digital solutions to every

concern.¹¹ Critics argue that developments that accompany access to information, such as “techno-dependency,”¹² are not desirable because they can bring unwelcome cultural changes, an emphasis on consumption,¹³ and the possibility that use of ICTs will only enhance the power of existing elites to the detriment of others in the population.¹⁴ Some effects of use of the internet, such as the extent to which it has increased the effectiveness of environmental activists working on African problems, may be viewed either positively or negatively depending on the stakeholders’ interests!¹⁵

There is a need to develop capacity in regulatory skills in order to achieve information technology and telecommunications goals.¹⁶ In addition to training indigenous telecommunications policy analysts – a process Nelson Mandela wisely launched for South Africa immediately upon his election in 1994 – developing such capacity requires research and conceptualization regarding the gap between regulatory ideals and actualities of what is achieved once policies are implemented.¹⁷

To achieve information access goals, regulatory change regarding competition is insufficient, for a wide range of policies are necessary to ensure affordability and access along all of the pertinent dimensions.¹⁸ Since language is so important, for

³Braman, Sandra: *The Information Society, the Information Economy, and South Africa.* 74-75.

⁴Kennedy, C., et al.: *Audit of Web-Based Telemedicine in Ophthalmology.* 88-89.

⁵Oyelaran-Oyeyinka, Banji & Lal, Kaushalesh: *Internet Diffusion in Sub-Saharan Africa.* 507.

⁶Wresch, William: *Information Access in Africa.* 295-300.

⁷Thapisa, Amos P. N. & Birabwa, Elizabeth: *Mapping Africa’s Initiative at Building an Information and Communication Infrastructure.* 49-58.

⁸Adomi, E. E.: *Internet Development and Connectivity in Nigeria.* 257.

⁹Netchaeva, Irinia: *E-Government and E-Democracy.* 467-477.

¹⁰Coeur De Roy, Olivier: *The African Challenge.* 883-898.

¹¹Alden, Chris: *Let Them Eat Cyberspace.* 457-476.

¹²Donaike, S. Adefemi: *The Internet and the Dilemma of Africa’s Development.* 41.

¹³Robins, Melinda B.: *Are African Women Online Just ICT Consumers?* 235-249; Ngwainmbi, Emmanuel K.: *Africa in the Global Infosupermarket.* 534-552.

¹⁴Hall, Martin: *How Digital Communications Might Impact the Development of Democracy and the Identification of Elite Classes in Africa;* Ott, Dana: *Power to the People.*

¹⁵Zelwietro, Joseph: *The Politicization of Environmental Organizations through the Internet.* 45.

¹⁶Mahkaya, Gertrude & Roberts, Simon: *Telecommunications in Developing Countries.* 41-42.

¹⁷Smith, Ronel: *Overcoming Regulatory and Technological Challenges to Bring Internet Access to a Sparsely Populated Rural Area;* Mercer, Claire: *Telecentres and Transformations.* 262-264.

¹⁸Mureithi, Muriuki: *Self-Destructive Competition in Cellular.* 11.

example, cultural policy is relevant.¹⁹ There must be a comprehensive e-commerce framework that aligns with other telecommunications policies and practices.²⁰ In many places governments must also address issues affecting the printing and publishing industries, both because print materials are often a gateway to effective information access via the internet and because print still remains an important source of information in itself.²¹ Even the regulation of electricity rates can affect access to the internet.²²

Geography is a key variable for regulators concerned about African information rights. Even with the newest technologies it is necessary to ensure that there are policies in place specifically tailored to the needs of rural environments.²³ Collaboration at the regional level can make a big difference to the ability to achieve success within a country, whether a region is defined geographically²⁴ or linguistically.²⁵ The establishment of the free trade zone in Southern Africa affects information access, for example, by reducing the cost of moving both goods and services among countries in that region. Climate is another key geographic factor affecting the extent to which technologies developed for other environments can be maintained in the African context.²⁶

Innovation as a Strategy

Leapfrogging and/or reversing the sequence of technological development, organizational innovations, manipulations of the diffusion process, and

experimentation with the technologies themselves are all ways in which African societies are innovating in order to address information access issues.

Leapfrogging

The notion that developing countries can “leapfrog” in their use of information and communication technologies, skipping steps in what has appeared to be a necessary linear progression of movement from one technological system to another in the developed world, has long been familiar.²⁷ Indeed, irrespective of such beliefs among those in deeply informatized societies, leapfrogging has also been key at times even to those countries – radio received a tremendous burst of developmental attention in the World War I period as a means of working around British control over the global telegraph system.²⁸

This is still a powerful technique in today’s environment, filled as it is with numerous complementary communication systems, many or all of which are simultaneously in use. Thus while in Europe and North America experience showed that wireless developed after wired communication and complemented its functions, in Africa wireless often comes first, paving the way for the later development of wired networks.²⁹ Though factors other than the nature of the technological infrastructure affect e-readiness and the ability to effectively and meaningful use information once acquired, the level of development of the infrastructure itself is still the primary variable determining extent of use of the internet.³⁰

Organizational Innovations

Organizational as well as environmental factors are critical in determining e-readiness for African societies.³¹ Collaborations with academic institutions³²

¹⁹Roycroft, Trevor R. & Anantho, Siriwan: Internet Subscription in Africa. 61-74.

²⁰Rhodes, Jo: The Development of an Integrated E-Commerce Marketing Framework to Enhance Trading Activities for Rural African Communities. 269-293.

²¹Lor, Peter J. & van As, Adri: Work in Progress. 101-110.

²²Zachary, G. Pascal: Black Star.

²³Chetty, M., et al.: VoIP Deregulation in South Africa. 332-333.

²⁴McCormick, P. K.: Telecommunications Reform in Southern Africa. 95.

²⁵Eko, Lyombe: Steps toward Pan-African Exchange. 365-379.

²⁶Boulahya, M., et al.: Climate, Communications, and Innovative Technologies. 299-310.

²⁷See, *e.g.*, Jussawalla, Meheroo: Singapore: An Intelligent City-state, 31-54.

²⁸Headrick, Daniel: The Invisible Weapon.

²⁹Hamilton, Jacqueline: Are Main Lines and Mobile Phones Substitutes or Complements? 109-133.

³⁰Oyelaran-Oyeyinka, B. & Lal, K.: Internet Diffusion in Sub-Saharan Africa, 525-527.

³¹Molla, A. & Licker, P. S.: Perceived E-Readiness Factors in E-Commerce Adoption. 83.

and institutions in the private sector³³ are one means of achieving this, both through development of new organizational forms and as a means of diffusion of experience, knowledge, and capability. Certainly collaborations involving ICTs have enhanced governmental capacity re information access, and both sides are critical to this for however wealthy private sector parties cannot be effective on their own or without sufficient public infrastructure.³⁴

The creation of new organizations has also facilitated better access to information, African Journals OnLine, for example, launched in 1998, has significantly expanded access to scholarly information published in Africa, and published about Africa elsewhere in the world.³⁵ This again is a story about collaboration, for African Journals OnLine was launched in the UK and only moved its headquarters to the African continent in 2005.³⁶ The Alliance for Progressive Communication (APC) ICT Policy Monitor (see www.apc.org), that provides a means of sharing experience with and approaches to information rights policies, is another such organizational innovation.

Some African approaches to policy-making for the information infrastructure can themselves be considered innovations of this type. In the South African example, appreciation of the need to approach access to the internet using diverse policy tools simultaneously and development of a "converged" regulatory agency to deal with both broadcasting and telecommunications are ways in which it

might be said that that government has "reinvented policy technologies."³⁷

Experimentation with the Diffusion Process

It should not be surprising that it was those who combined high education levels with a very strong "need to know" motivation for working with the internet who were the first in Africa to make extensive use of information resources once made available. Thus physicians took enormous advantage of scholarly resources made available to them.³⁸ The Rockefeller Foundation's (www.rockfound.org) trajectory here is instructive – in the early 1980s this foundation supported distribution of indices to medical journals throughout the developing world along with delivery of the full text of any items then requested by physicians, even before the internet made such access so much easier.

The several decades of research into the nature of the diffusion process³⁹ has stimulated experimentation with that process itself as a means of improving access to information. Efforts to increase the internet training of librarians as a means of accelerating diffusion of knowledge about the internet⁴⁰ can be understood as a deliberate engagement with early innovators and maximizing opportunities for the trialability that is a characteristic of technologies and technological systems that diffuse quickly. Trialability and the support and encouragement to experiment with the use of new technologies that come from visibility in the community and awareness that others are using a technology are significantly enhanced through use of community-based telecentres rather than a focus on penetration at the individual household level.⁴¹

Support for the education process is of course a primary motivation behind the desire to increase

³²Keats, Derek W., et al.: Using the Internet to Enable Developing Country Universities to Meet the Challenges of Globalization through Collaborative Virtual Programmes.

³³Walker, Kenneth: Bandwidth and Copyright. 12-21.

³⁴Killen, Heather: Lessons from the Internet Revolution. 141-148.

³⁵Smart, P.: African Journals OnLine. 261-265.

³⁶It is worth noting that at the time the literature review for this article was conducted, the single best peer reviewed scholarly journal source for research on ICTs in Africa – as measured by number of publications, diversity of research questions and approaches, and richness of material -- is First Monday, itself one of the earliest and most successful of freely available electronic journals.

³⁷Braman, Sandra: Reinventing Policy Technologies. 2-10.

³⁸Burton, K. R., Howard, A., & Beveridge, M.: Relevance of Electronic Health Information to Doctors in the Developing World.

³⁹Rogers, Everett M.: Diffusion of Innovations.

⁴⁰Muswazi, Paiki: Continuing education, libraries and the Internet (CELI) Project.

⁴¹Falch, Morten & Anyimadu, Amos: Tele-Centres as a Way of Achieving Universal Access, 21.

access to information in Africa,⁴² but in this area there is a chicken and egg problem: while access to information increases the quality of education, it is necessary to have at least some education in order to be e-ready.⁴³ Another type of innovation in efforts to diffuse access to the internet, therefore, has been to incorporate information literacy training in higher education.⁴⁴

Technological Innovations

Though Africa is most often portrayed as a receiver of technologies developed elsewhere, with growing theoretical and practice-based appreciation of the role of users in the innovation process it has become clear that there are many ways in which those in African societies are also developing quite useful technological innovations of their own.

Those with few resources have always, of course, been adept at using materials and objects in ways that may not have been intended by the designers and vendors of such things, whether that is use of paper advertising to adorn a home or reworking cans into tools. In highly informatized societies such as those of Europe and North America, what is now being referred to as the "make" movement, after a magazine by that name, has quite popularly now extended hacking practices from the world of software into the material world, but in Africa such efforts have long been the practice. An example of a contemporary innovation in support of information access that can be accomplished at the individual level now in use in Uganda involves soldering together two in cans and a receiver to make an expensive internet antenna.⁴⁵

The particularities of climate and other geographic conditions are themselves stimuli to technological

innovation. African companies have lead the way in such matters as developing solar powered telecommunications installations and infrastructural elements that can withstand intense heat and blowing sand.⁴⁶

Innovation and Intellectual Property Rights

There are many senses in which information can be said to be "owned," not all of which are economic. Developing *Wikipedia* content in African languages,⁴⁷ for example, is an important move towards ensuring that Africans have ownership in this community-built open-source encyclopedia of global interest.

There are four types of intellectual property rights – copyright, patents, trademarks, and trade secrets.

Copyright

Copyright has been important to African development because software piracy, in particular, is so rampant that it is discouraging companies from trying to bring their own tools to African society legitimately. Indeed, in some countries it is essentially impossible to find legitimate copies of widely used very basic software. This not only has economic ramifications (including loss of tax revenue for governments), but can also contribute to a continuance of the digital divide as stolen software does not receive support and may not include features widely used by others. A second copyright issue involves efforts by many African governments are still playing catch-up in terms of adhering to international law and adapting domestic law and practice in order to conform with international standards. A third set of issues arises from African participation in efforts to develop forms of copyright appropriate for indigenous and traditional forms of knowledge, and for ownership of property held by communities rather than individual entities.

Patents

While most discussion about patents in Africa has focused on efforts to ensure that these countries

⁴²Ahmed, Allam & Nwagwu, Williams E.: Challenges and Opportunities of E-Learning Networks in Africa, 86; Darkwa, Osei & Mazibuko, Fikile: Creating Virtual Learning Communities in Africa.

⁴³Mutula, S. m. & van Brakel, P.: An Evaluation of E-Readiness Assessment Tools with Respect to Information Access, 212.

⁴⁴Jager, Karin & Nassimbeni, Mary: Institutionalizing Information Literacy in Tertiary Education, 167-185.

⁴⁵McConnell, Tristan: Internet Connections for the Price of Two Old Tin Cans. *African Business*, 42-43.

⁴⁶Braman, Sandra: The Information Society, the Information Economy, and South Africa.

⁴⁷Cohen, Noam: Building Wikipedia in African languages.

participate in the Trade Related Intellectual Property Rights (TRIPS) agreements administered by the World Trade Organization (WTO), there are at least two types of patent issues in which African involvement has affected international policy-making.

African governments have been very active in efforts to ensure that patented and otherwise quite expensive pharmaceuticals are affordably available to those who need them.⁴⁸ A variety of techniques is being used for this purpose, including adaptations to,⁴⁹ new interpretations of,⁵⁰ or new practices involving⁵¹ patent law as well as the development of specific contractual arrangements with producers of pharmaceuticals.⁵² When those pharmaceuticals have been developed using genetic information from Africa, the ethical issues are particularly noticeable.⁵³ Central American countries have modelled the successful use of contracts that require payment to societies from whom materials are taken by pharmaceutical companies.

A wrinkle on efforts in this area developed, however, when the Togo government announced it was banning media advertising for traditional medicines and healers.⁵⁴ Because the media in Togo were previously so highly dependent on advertising from these sources, this ban makes it likely that the amount of advertising from companies selling patented – and expensive – pharmaceuticals will grow.

It is also important for African governments to develop a culture in which adaptations of technologies for the specific climactic, social, and geographic

circumstances in which they will be used are patented to maximize resources garnered for African societies.

Trademarks

Trademarks are a form of intellectual property that is based in competition, or antitrust, law. Here, too, many African governments have lagged in conforming with international law and practice in ways that are economically and socially detrimental because it discourages corporations based elsewhere from trying to operate in Africa. Still, there has been ethical innovation in this realm of particular creativity. In one example, a South African tourism entity – the Fair Trade in Tourism South Africa (<http://www.fairtourismsa.org.za/>) – has trademarked its name as a way of encouraging tour operators to conform with a set of ethical principles in order to be allowed to use the trademark for particular tour packages. This was the first time the concept of fair trade has been applied to the tourism industry and is likely to be widely imitated around the world.

In a second example, the South African government pursued an entity that staked out ownership in a key South African internet domain name (southafrica.com) in hopes of selling it for millions to the government in a US court. This, too, is a practice that is now being widely imitated by other governments around the world that have been abused by such cybersquatters.

Trade Secrets

Trade secrets protect intellectual property by not staking out any other form of officially-recognized property right but, rather, by defining certain practices, knowledge, or technologies as trade secrets not to be shared with anyone at all. This is a particularly difficult area in which to do research (for obvious reasons), but a secondary analysis of the literature on corporate activities and trends in Africa could yield useful insights.

Conclusions

Though African countries are often portrayed as recipients of innovations developed elsewhere, there are many ways in which African innovations that promote access to information and other information rights are worthy of diffusion to the rest of the world. In the area of IT-related intellectual property

⁴⁸Consumer Project on Technology: Comment on the Attaran/Gillespie-White and PhRMA Surveys of Patents on Antiretroviral Drugs in Africa.

⁴⁹Capczynski, Amy: Strict International Patent Laws Hurt Developing Countries; Wheeldon, Ron & Burt, Helen: Changes in the patent and trademark landscape.

⁵⁰See, e.g., *Syntheta v Janssen Pharmaceutical* (1998).

⁵¹Pouris, Anastasios: Technological Performance Judged by American Patents Awarded to South African Inventors. 221-226; Rimmer, Matthew: The Jean Chretien Pledge to Africa Act.

⁵²The Economist: Me too.

⁵³World Health Organization: Protecting Traditional Knowledge. 345.

⁵⁴Godwin, Ebo: Anger at Togo's Herbal Advert gan.

rights, however, Africa offers two faces. In a number of areas ethically-driven activities are providing international leadership for the making of law and the practices used in its implementation. In other areas, insufficient or inappropriate activity results in an ethical deficit on the part of governments vis a vis their own societies.

References

- Adomi, E.: *Internet Development and Connectivity in Nigeria*. *Electronic Library and Information Systems*, 39(3), 2005, 257-268.
- Ahmed, Allam & Nwagwu, Williams E.: *Challenges and Opportunities of E-Learning in Africa*. *Development*, 49(2), 2006, 86-92.
- Alden, Chris: *Let Them Eat Cyberspace: Africa, the G8 and the Digital Divide*. *Millennium: Journal of International Studies*, 32(3), 2003, 457-476.
- Boulahya, M., Cerda, M. S., Pratt, M. & Sponberg, K.: *Climate, Communications, and Innovative Technologies: Potential Impacts and Sustainability of New Radio and Internet Linkages in Rural African Communities*. *Climatic Change*, 70(1-2), 2005, 299-310.
- Braman, Sandra: *Change of State: Information, Policy, and Power*. Cambridge, MA, MIT Press, 2006.
- Braman, Sandra: *The Information Society, the Information Economy, and South Africa*. *Communicatio*, 24(1), 1998, 67-75.
- Braman, Sandra: *Reinventing Policy Technologies: South African Decision-Making for the Information Infrastructure*. In Christine Stilwell, Athol Leach, & Simon Burton (Eds.), *Knowledge, Information and Development: An African Perspective*, pp. 2-10. Pietermaritzburg, South Africa, University of Natal-Pietermaritzburg School of Human and Social Studies, 2001.
- Britz, Johannes J., Lor, P. J., Coetzee I. E. M., & Bester, B. C.: *Africa as a Knowledge Society: A Reality Check*. *International Information & Library Review*, 38(1), 2006, 25-40.
- Burton, K. R., Howard, A., & Beveridge, M.: *Relevance of Electronic Health Information to Doctors in the Developing World: Results of the Ptolemy Project's Internet-Based Health Information Study (IBHIS)*. *World Journal of Surgery*, 29(9), 2005, 1194-1198.
- Chetty, M., Blake, E., & McPhie, E.: *VoIP Deregulation in South Africa: Implications for Underserved Areas*. *Telecommunications Policy*, 30(5-6), 2006, 332-344.
- Cohen, Noam: *Building Wikipedia in African Languages*. *International Herald Tribune*, online, Aug. 26, 2006.
- Coeur De Roy, Olivier: *The African Challenge: Internet, Networking and Connectivity Activities in a Developing Environment*. *Third World Quarterly*, 18, 1997, 883-898.

- Consumer Project on Technology: Comment on the Attaran/Gillespie-White and PhRMA Surveys of Patents on Antiretroviral Drugs in Africa.* Washington, DC, Consumer Project on Technology, 2001.
- Darkwa, Osei & Mazibuko, Fikile: *Creating Virtual Learning Communities in Africa: Challenges and Prospects.* First Monday, 5(5), 2000, www.firstmonday.org/issues/issue5_5/darkwa/index.html.
- The Economist: *Me too: South African Pharmaceuticals Welcome New Investment in the Generic Drug Industry.* The Economist, 370(8368), 2004.
- Eko, Lyombe: *Steps toward Pan-African exchange: Translation and Distribution of Television Programs across Africa's Linguistic Regions.* Journal of Black Studies, 31(3), 2001, 365-379.
- Falch, Morten & Anyimadu, Amos: *Tele-Centres as a Way of Achieving Universal Access: The Case of Ghana.* Telecommunications Policy, 27(1-2), 2003, 21-39.
- Godwin, Ebow: *Anger at Togo's Herbal Advert Ban.* BBC News online. Nov. 27, 2006.
- Hall, Martin: *How Digital Communications Might Impact the Development of Democracy and the Identification of Elite Classes in Africa.* First Monday, 3(11), 1998, www.firstmonday.dk/issues/issue3_11/hal/index.html.
- Hamilton, Jacqueline: *Are Main Lines and Mobile Phones Substitutes or Complements? Evidence from Africa.* Telecommunications Policy, 27(1-2), 2003, 109-133.
- Headrick, Daniel R.: *The Invisible Weapon: Telecommunications and International Relations.* New York/London, Oxford University Press, 1990.
- Jager, Karin & Nassimbeni, Mary: *Institutionalizing Information Literacy in Tertiary Education: Lessons Learned from South African Programs.* Library Trends, 51(2), 2002, 167-185.
- Keats, Derek W., et al.: *Using the Internet to Enable Developing Country Universities to Meet the Challenges of Globalization through Collaborative Virtual Programmes.* First Monday, 8(10), 2003, www.firstmonday.org/issues/issue8_10/keats/index.html.
- Kennedy, C., Bowman, R., Fariz, N., Ackuaku, E., Ntim-Amponsah, C., & Murdoch, I.: *Audit of Web-Based Telemedicine in Ophthalmology.* Journal of Telemedicine and Telecare, 12(2), 2006, 88-91.
- Jussawalla, Meheroo, Heng, Toh Mun, & Low, Linda: *Singapore: An Intelligent City-state.* Asian Journal of Communication, 2(3), 1991, 31-54.
- Kapczynski, Amy: *Strict International Patent Laws Hurt Developing Countries.* YaleGlobalOnline, Dec. 16, 2002.
- Killen, Heather: *Lessons from the Internet Revolution: Where Internet Markets Go from Here.* Fletcher Forum of World Affairs, 26(1), 2002, 141-148.
- Lor, Peter J. & van As, Adri: *Work in Progress: Developing Policies for Access to Government Information in the New South Africa.* Government Information Quarterly, 19, 2002, 101-121.
- Makhaya, Gertrude & Roberts, Simon: *Telecommunications in Developing Countries: Reflections from the South African Experience.* Telecommunications Policy, 27(1-2), 2003, 41-59.
- McCormick, P. K.: *Telecommunications Reform in Southern Africa: The Role of the Southern African Development Community.* Telecommunications Policy, 27(1-2), 2003, 95-108.
- Mercer, Claire: *Telecentres and Transformations: Modernizing Tanzania through the Internet.* African Affairs, 104(419), 2005, 243-264.
- McConnell, Tristan: *Internet Connections for the Price of Two Old Tin Cans.* African Business, 314, 2005, 42-43.
- Molla, A. & Licker, P. S.: *Perceived E-Readiness Factors in E-Commerce Adoption: An Empirical Investigation in a Developing Country.* International Journal of Electronic Commerce, 10(1), 2005, 83-110.
- Mureithi, Muriuki: *Self-Destructive Competition in Cellular: Regulatory Options to Harness the Benefits of Liberalisation.* Telecommunications Policy, 27(1-2), 2003, 11-19.
- Muslazi, Paiki: *Continuing Education, Libraries and the Internet (CELI) Project: Narrowing the Skills Gap in Southern African University Libraries.* D-Lib Magazine, 10(4), 2004, www.dlib.org/dlib/april04/muswazi/04muswazi.html.
- Mutula, S. M. & van Brakel, P.: *An Evaluation of E-Readiness Evaluation Tools with Respect to Information Access: Towards an Integrated Information Rich Tool.* International Journal of Information Management, 26(3), 2006, 212-223.
- Ngwainmbi, Emmanuel K.: *Africa in the Global Infosupermarket: Perspectives and Prospects.* Journal of Black Studies, 30(4), 2000, 534-552.

- Ott, Dana: *Power to the People: The Role of Electronic Media in Promoting Democracy in Africa*. *First Monday*, 3(4), 1998, www.firstmonday.dk/issues/issue3_4/ott/index.html.
- Oyelaran-Oyeyinka, Banji & Lal, Kaushalesh: *Internet Diffusion in Sub-Saharan Africa: A Cross-Country Analysis*. *Telecommunications Policy*, 29(7), 2005, 507-527.
- Pouris, Anastassios: *Technological Performance Judged by American Patents Awarded to South African Inventors*. *South African Journal of Science*, 101, 2006, 221-226.
- Robins, Melinda B.: *Are African Women Online Just ICT Consumers?* *Gazette*, 64(3), 2002, 235-249.
- Rogers, Everett M.: *Diffusion of Innovations*, 4th ed. New York, Free Press, 1995.
- Rhodes, Jo: *The Development of an Integrated E-Commerce Marketing Framework to Enhance Trading Activities for Rural African Communities*. *Perspectives on Global Development and Technology*, 1(3-4), 2002, 269-293.
- Rimmer, Matthew: *The Jean Chretien Pledge to Africa Act: Patent Law and Humanitarian Aid*. *Expert Opinion on Therapeutic Patents*, 15(7), 2005, 889-909.
- Roycroft, Trevor R. & Anantho, Siriwan: *Internet Subscription in Africa: Policy for a Dual Digital Divide*. *Telecommunications Policy*, 27(1-2), 2003, 61-74.
- Smart, P.: *African Journals OnLine (AJOL)*. *Serials Review*, 31(4), 2005, 261-265.
- Smith, Ronel: *Overcoming Regulatory and Technological Challenges to Bring Internet Access to a Sparsely Populated, Remote Area: A Case Study*. *First Monday*, 5(10), 2000, www.firstmonday.org/issues/issue5_10/smith/index.html.
- Sonaïke, S. Adefemi: *The Internet and the Dilemma of Africa's Development*. *Gazette*, 66(1), 2004, 41-61.
- Syntheta v. Janssen Pharmaceutical*, 1998, Supreme Court of Appeals, South Africa, September 11, 21, Case No. 449/96/
- Thapisa, Amos P. N. & Birabwa, Elizabeth: *Mapping Africa's Initiative at Building an Information and Communication Infrastructure*. *Internet Research*, 8(1), 1998, 49-58.
- Walker, Kenneth: *Bandwidth and Copyright: Barriers to Knowledge in Africa?* *Carnegie Reporter*, 3(2), 2005, 12-21.
- Wheeldon, Ron & Burt, Helen: *Changes in the Patent and Trademark Landscape*. Johannesburg, South Africa, Webber Wentzel Bowens,
- Wilson, Ernest J., III & Wong, Kelvin: *African Information Revolution: A Balance Sheet*. *Telecommunications Policy*, 27(1-2), 2003, 155-177.
- World Health Organization: *Protecting Traditional Knowledge: The San and Hoodia*. *Bulletin of the World Health Organization*, 84(5), 2006, 345.
- Wresch, William: *Information Access in Africa: Problems with Every Channel*. *The Information Society*, 14, 1998, 295-300.
- Zachary, G. Pascal: *Black Star: Ghana, Information Technology, and Development in Africa*. *First Monday*, 9(3), 2004, www.firstmonday.org/issues/issue9_3/zachary/index.html.
- Zelwietro, Joseph: *The Politicization of Environmental Organizations through the Internet*. *The Information Society*, 14, 1998, 45-56.

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The Discourse of Identity in the Maghreb between Difference and Universality

Abstract:

The discourse of identity in the Arab context in general and in the Maghrebi context in particular is a modern phenomenon and is of central importance. In the Maghreb this discourse is related to modernization efforts, with the de-colonization struggle and its ideology, and with the nation-state-building genesis, process, and legitimisation after independence. A fundamental part in the developmental process of this discourse, therefore, is the difference from, as well as the non-negotiable and hegemonic presence of, the "Other". The evolution of a Maghrebi discourse of identity in this instance is a peculiar formation of consciousness or awareness with regard to a self-evident constancy, namely, the own identity, which had not been in doubt up to that point. From the challenging encounter with the western European hegemonic "Other" comes the necessity to bring forth such a discourse. The Difference is thus a fundamental aspect in the beginnings of the Maghrebi discourse of identity.

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 - Ibn Ruschds Philosophie interkulturell gelesen. Reihe Interkulturelle Bibliothek Band 4. Nördlingen; Traugott Bautz. Verlag 2005. 135 p.
 - Ways of the Intellect: Forms of Discourse and Rationalization Processes in the Arabic-Islamic Context; in: Worldviews and Cultures. Philosophical reflections on fundamental intricate issues, from an intercultural perspective, edited by Nicole Note, Raúl Fornet-Betancourt, Josef Estermann, and Diederik Aerts. Springer Verlag 2007.

The discourse of identity in the Arab context in general and in the Maghrebi context¹ in particular is a modern phenomenon and is of central importance. In the Maghreb this discourse is related to modernization efforts, with the de-colonization struggle and its ideology, and with the nation-state-building genesis, process, and legitimisation after independence. A fundamental part in the developmental process of this discourse, therefore, is the difference from, as well as the non-negotiable and hegemonic presence of, the "Other". The evolution of a Maghrebi discourse of identity in this instance is a peculiar formation of consciousness or awareness with regard to a self-evident constancy, namely, the own identity, which had not been in doubt up to that point. From the challenging encounter with the western European hegemonic "Other" comes the necessity to bring forth such a discourse. The Difference is thus a fundamental aspect in the beginnings of the Maghrebi discourse of identity. This Difference relates to the various levels and realms of the construed identity, to language, culture, and politics².

A further explanation is necessary with regard to language, which manifests a triadic situation: mother language, classical Arabic, and French. Here, language is a constant of identity, with which the various groups surround themselves according to their linguistic identities. Language is a central reference for the cultural and political identities that derive themselves from it. The statement that language has not only a communicative function but also that it renders existence, as it were, finds ample use and legitimacy in our context. The mother languages or the spoken languages in the Maghreb are the various local Arabic dialects and/or the Berber languages, which also vary locally and manifest a strongly oral character. In all cases, this language is oral, everyday, and practically oriented language. It must be noted, however, that the reluctance to fixate the dialect in writing was relatively weaker before colonialization than during or after decolonization. Thus, classical Arabic and French remained the only languages of writing, and consequently also the languages of education and officialdom.

¹ With 'Maghreb' I am referring to Tunisia, Algeria and Morocco, in contrast to the Union Maghreb Arabe as regional political constellation which also includes Mauretania and Libya.

² By 'politics', I understand the official and ideological discourse.

As oral languages, the dialects – both Arabic and Berber – remained characteristic of an uncultivated state of nature, whereby a direct connotation was made with the Bedouin tribal tradition, which manifests originality, but also vulgarity. The socio-cultural level of these languages is the small, regional or tribal community.³

Classical Arabic is really a language of education and officialdom but also the language of the media and of a certain class of intellectuals. The status of classical Arabic gains importance particularly after independence. It is brought into a strong relationship with the written Arabic tradition in general, and with the Qur'an in particular, which renders the language of revelation a sacral character. The cultural and linguistic elimination and marginalisation wrought by French colonial policy, however, also makes classical Arabic a vehicle of resistance as a symbolism of the threatened identity, since French occupied the official public space, both during colonial times and afterwards. The Arabising process in the various Maghrebi countries began in the 1960s and '70s and is still underway. The dominant practice in these countries is still bilingual, French and Arabic. The relationship with the French language here is essentially ambivalent. French is sometimes labelled a foreign language, which can mean a kind of discredit, and sometimes a language of progress. The Maghrebi Francophone intellectuals and the Francophile class do not hide their arrogance or dislike of classical Arabic. The Arabophone intellectuals also show their mistrust of the Francophone and often emphasise the structural status of the Arabic language and its culture for their own identity. The concept, "*al-umma al-arabiya*", the Arab community, is not only a political statement with an ideological, pan-Arab background, but also a carrier of definitions and an indispensable reference of collective identity. Here, the French language, as a carrier of symbols of western culture and modernity, plays a contradictory role, on the one hand a certain attraction for modernisation efforts, on the other, it provokes a dislike and fear of western hegemonic political, economic, and cultural expansion efforts.

The Difference as a strategy of definitions inevitably leads to discomfort, namely, over the fact that the Difference emphasises one's own cultural "specificity", and thus the universal ambition of certain

³ Grandguillaume, Gilbert: *Langue, identité et culture nationale au Maghreb*. Pg. 3-28.

humanistic cultural and ethical values are rejected, among them human rights and democratic values.

In practice, some structures have been presented and some developments ascertained that would speak in favour of a certain modernisation in the Maghreb countries, and which could be helpful to bridge and overcome this chasm between Difference and Universality. This also means a possible conception of Maghrebi identity as a differential process, which cannot be allowed fixation in a culturalistic or ideological way. It also, however, enables a differentiated self-perception, which may legitimise universal humanist values in one's own culture. An integration of humanistic values and world-views in one's own culture becomes a possibility with this approach, without the necessity of an allergic phobia over keeping one's own integrity intact.

An additional aspect of a differentiating view of Maghrebi identity is the religious factor. The Maghrebi societies are overwhelmingly, homogeneously Malikite Sunni Muslim. The religious homogeneity served an additional role for the emergence of a collective national identity. The contradictory exclusivist juxtaposition of national Muslim identity on the one hand, and French colonial identity on the other is manifested most dramatically in the French colonial policy in Algeria. Here the concept of 'Muslims' was synonymous with those who were not assimilated, or better, for those who refused to assimilate and succumb to the colonial hegemony of power. The establishment of the "Association of Muslim Scholars" (*jam'iyat al-ulama al-muslimin*) in May 1931 under the leadership of Abdelhamid ibn Badis had the strategic purpose of safe-guarding the Islamic and Algerian identity in the face of the threat of assimilation as a result of colonial French cultural and educational policies. On May 8, 1945, 45,000 civilians were killed by the French colonial forces in Sétif, Melgoua and Kherrata in eastern Algeria because they had demonstrated for their equality as "Algerian" citizens and for freedom. The massacre of Sétif remained a deeply influential symbol of Algerian history and of collective Algerian identity and it is still conspicuously present in the political discourse. Less dramatic than the genocide of Sétif but all the clearer are the events surrounding the French naturalisation of Muslim Tunisians during the 1930s. To the discourse of resistance the Muslim and national identity was endangered by the French colonial power and its citizenship policy. Although the Tunisians naturalised by France have remained Muslim in faith, they were disowned and

rejected by their Muslim environment and they were not allowed burial in Muslim cemeteries.⁴ The demonstrators killed on April 9, 1934, remained martyrs in the national consciousness, and this day is celebrated annually as the national holiday in Tunisia. These are examples of historical events in which the fusion of the religious and the national elements is concretely obvious. In this context, it must be added that the religious or Islamic factor in the formation of identity in the Maghreb is often equivalent with the Arab cultural identity. Islamic identity and Arab identity constituted the national consciousness and not least due to the confessional homogeneity synonyms. The formation of a national identity in the Maghreb countries represented as a process closely linked on the one hand to the struggle for decolonisation and for the liberation from French colonial power, and on the other to strategies and programmes for the creation of an independent, sovereign nation-state. The concept of a nation-state is characterised by an ambiguity and an uneasiness; because the relationship to the concept of nation in the modern sense is an ambivalent relationship. The concept of nation remained alien, novel and insufficiently rooted in the Arab political tradition. Nation sometimes means 'home' or 'fatherland' (*Watan*) and sometimes the Arab nation, *al-umma al-arabiya*. The nation in the first sense (*Watan*) has politically become the failed result of a western Balkanisation policy to the disadvantage of the unity of the Arab nation, *Umma*.⁵

In this context, the Arabic language serves, particularly in the Maghreb, as reference for the pan-Arab ideological discourse. The French language served especially in the early phase of the Maghrebi nation-states as reference for the political discourse. This reflects the ambiguity and the uneasiness of this situation, at least in its initial phase, because in all constitutions of the Maghreb countries Islam was unmistakably and even in the first paragraphs announced as state religion and Arabic as the national language. The arabisation process in the realms of education, administration, and public official discourse mirrors this constitutional role. As a programmatic task, and simultaneously goal, of the new state after independence, the construction of

⁴ Al-Ghurab, Saad: Der religiöse Faktor und die tunesische Identität. Pg.21-23, and Djait, Hichem: La personnalité et le devenir arabo-islamique. Pg. 42.

⁵ Djait, Hichem: La personnalité et le devenir arabo-islamique. chapters I–II

an authentic national identity on the one hand took place in contradistinction to the uprooting experience and the extinguished collective identity during the colonial era. On the other hand, the development of the country and the socio-economic modernisation were a central purpose, rendering legitimacy to the new state on the international stage. In practice, the attempted modernisation is often understood as a synonym to the west-oriented strategy, since none of the Maghrebi states was able to develop an authentic original model of development which differs from the western model. The newly acquired national Arab identity thus becomes a Trojan agent of the western model.⁶ This becomes apparent in the application of sometimes socialist, sometimes liberal economic policy during the 1960s and '70s in Algeria and Tunisia. These policies, which were perceived as westernisation and alienation by the political opposition, were easily argued with the aid of analogous experiences and associations with French colonialism. The emergence of the phenomena of religious fundamentalism and political Islamism during the 1970s can be brought back to these contexts by means of socio-cultural argumentation.

The reference to the paradox between arabisation policy and modernisation and development policy in the Maghreb countries is justified, but limited. The arabisation policy served in the discourse of power against the mounting accusations by the political opposition as an alibi of diversion from the crisis of development policy. The constructed paradox between arabisation and modernisation, however, often has a background in an attitude which sees this representation as a juxtaposition of incompatible opposites. Thus the Arabic language, as a perceived constant of the identity, is an obstacle to modernisation efforts. This argument is based on two mistaken ideas, the first of which is that the Arabic language is understood as something static and almost meta-historical. Here, the various social and intercultural processes that the Maghrebi societies have experienced, and which possessed their own dynamics, are rejected and ignored. This culturalist perception leads to the confirmation of the prejudiced constructions that refer to rival hegemonies and power relationships. The second mistake is the premise that modernity is something meta-historical and that it is exclusively and can only be European/western per se. This leads to a latent and automatic identification of Occident and modernity.

It cannot be denied that modernity emerged as a process in the European context. An essentialist perception suggests that this European context in its cultural historical features is ultimately a substantially homogeneous unit and consciously suppresses the various intercultural processes of exchange, especially with the Arab-Islamic culture which particularly often took place with an impetus from the Mediterranean and the Maghreb. This culture-centric paradigm, which raises a monopolistic claim to modernity, as well as a universal patent, really manifests crisis on the flip side of modernity, with its colonialist and fascist aspects, aspects that suffered annihilating criticism through postmodernism. In this context a differentiated view and intercultural analysis of modernity is helpful for a better understanding and for overcoming the problems to which I have referred. On this level and with this method of approach, a legitimisation and foundation of modern values with their universal claim beyond culturalist hegemonies could be made. In the argumentation for and conception of human rights and basic liberties as achievement and important aspect of modernity no culture should be excluded. Culture as defining space for identity must be understood as a process and in no way as statically transcendental. Identity can also be seen and constructed as an open, dynamic process and in a relational rather than an essential manner.

In conclusion, this intercultural approach offers, firstly, a wider perspective for a conception of the Maghrebi discourse of identity, which may be useful for an escape from the eternal, nihilistic clash of the dogmatic identity trap. Secondly it might offer an opportunity for the establishment or adaption of modernity in the Arab-Islamic context in general, and in the Maghrebi context in particular.

References:

- Hichem Djait: La personnalité et le devenir arabo-islamique; traduit en arabe par Monji Sayyadi. Beirut 1990. (in the Arabic Original: ashakhsiyah al-arabiya al-islamiya wa-l-masir al-arabi)*
- Saad Al-Ghurab: Der religiöse Faktor und die tunesische Identität: Maison Tunisienne d'Édition 1990. (in the Arabic Original: al-'amel addini wal-hawiyah at-tunisiyah)*
- Gilbert Grandguillaume: Langue, identité et culture nationale au Maghreb; article published in Magazine „Peuples Méditerranéens”. N°9, Oct.-Dec. 1979. Pg. 3-28.*

⁶ Grandguillaume, Gilbert: Langue, identité et culture nationale au Maghreb. Pg. 3-28.

Netiva Caftori

African Women and the Internet

Abstract:

As the future of the Internet in Africa seems promising from an infrastructure point of view, the issue of the women of Africa should not be forgotten, in particular women who are already in academia who continue to struggle for equality despite their relative achievements.

Women all over the world face similar hurdles and conflicts related to their gender, such as tenure vs. biological clock and shrinking pipeline. However the glass ceiling in the West is made of iron in Africa. One cannot yet aspire to reach the top.

Luckily thanks to the Internet, women communicate with each other and African women as well are being heard. The Internet is serving them as a sound board and support in their struggles.

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 - "Women in Computing", Oct 2004, University of Central Florida (UCF), Women Research Center
 - « L'ethique en informatique », June 16, 2004, Cotonou, Benin
 - "Ethical Reflections", paper delivered at EEI21, Oct. 2001, published by McFarland Press.
 - "Computers and Major Ethical Problems of Society", presented with Alfred Bork at the University of Memphis at the EEI21 Conference (Ethics in Electronic Information in the 21st Century), 1998, published in Simulation journal, 1999.
 - "Ethical Implications of Technology on Education", Pugwash conference, UCSD, 1999

The Internet in Africa:

The situation now:

As the Internet continues to gain momentum throughout Africa, people in many countries are becoming more knowledgeable about connectivity, content development, training, and public policy issues.

Yet the numbers of users are still relatively small: 425,000 Internet users in Benin as of Sept. 2006, which is 5.7% of the population, and less than a million in all of Africa, which represents 3.6% of the total population according to International Telecommunications Union (ITU.) More world statistics can be seen at: <http://www.internetworldstats.com/stats.htm>.

The Internet Society (ISOC) continues its longstanding effort to promote the development of the Internet in Africa through its INET Africa Conference 4 May 2007 in Abuja, Nigeria. INET Africa is held in conjunction with the AfriNIC 6 and AfNOG 8 meetings.

The near future:

Efforts spent on the connectivity level are aimed at getting 50 African countries online with various speeds ranging from 64k or lower up to hundreds of Mb/sec in some cases. The next phase includes the local training and human resource development of support staff in many communities in Africa. This represents much progress achieved in the direction of access.

Africa is now facing new challenges such as a shift from development of the infrastructure only to development of info-structure as well. Several hot issues are being explored, such as local languages, content update, intellectual property, and security. Regarding Internet governance and policy issues, Africa is shaping its efforts as well. The establishment of an African Network Information Center for the management of the IP addresses is under development.

Two other major topics of concern to Africa addressed in the 2007 ISOC conference are: Internet security, and detecting and deterring unwanted Internet traffic. Much work is to be done in this domain just as it is all over the world. Security may just be an elusive goal.

The women of Africa:

As the future seems promising from an infrastructure point of view, we should not forget the issue of the women of Africa, and in particular women who are already in academia who continue to struggle for equality despite their achievements.

Women all over the world face similar hurdles and conflicts related to their gender, such as tenure vs. biological clock. The glass ceiling in the West however is made of iron in Africa. One cannot even aspire to reach the top.

The number of women in computing, and in academia in general, is higher in the West than in Africa although it is steadily declining. In the West the problem is recognized and efforts are made to remedy. In Africa however the issue is not yet dealt with openly. The culture is so that a woman's place is with her family and her work should be within the family. In the West many women have broken this stereotype some time ago and are working outside the house to develop themselves and not just their families.

Luckily thanks to the internet, many women communicate with each other and African women as well are being heard. The internet is serving them as a sound board and support in their struggles.

This social tool may prove to be more revolutionary in Africa than in the West. It serves as a highway straight from someone's home even if there is only a dirt road outside of the physical house. An African woman may have to take a leap to use this highway, a more difficult task than for her sister in the west, but by doing so she can reach much farther than her neighbors who don't try.

From my own experience living a year in Benin, West Africa, in 2003-04, I know women there are proud and self confident. They have achieved relative equality when it comes to economical and financial independence. In many rural areas of the South they are partners with the men. They still have a long way to go from a social stand point. In academia also their numbers are few and need to increase so they can serve as role models for future generations.

Poverty in many African countries bound with old beliefs keep women at home and at work, far from school benches and lacking books and other educational resources.

Let me expand further down on the current situation of university women in particular and how informatics can help stabilize their role in the African society.

The joy of sharing knowledge:

The title:

The title of the conference reminds me of a recurring theme between my husband and I, which I may argue, could be generalized to a theme between men and women. Women, who value socialization more readily than men, generally like to share information more willingly as well. Men, whose motive in life is most likely to climb up the ladder of success, is to retain information so that their rivals will not use it to advance themselves. Sounds familiar? This of course may be a Western way of life. However gender inequality in Africa should be one of our issues of concern too.

The Western world instead of sharing of its knowledge, which it does to some degree, inadvertently steals brain power from Africa. The rich and powerful in Africa send their children to study abroad. The talented get stipends and leave their native countries sometimes to never return. Of course many do return and bring a wealth of knowledge to help their countries out of poverty but many do not.

Therefore it is a comforting idea to participate in a conference that has as its title the sharing of knowledge to advance the good of all.

Sharing of knowledge implies trust; trust that the receiving party will acknowledge and appreciate the source and will in turn reciprocate so all parties involved will benefit in the long run; hence comes the joy. Many of us believe that this is the only way to advance science and culture throughout the world.

A rich country confident in its resources can begin by sharing and giving to the less fortunate.

When Africa recognizes its full potential, its brain resource, among others, it can start by keeping it there and using it with proper compensation to benefit all involved.

Industries can be developed producing chips and the like (using their hard working potential) and data centers including programming and system developing centers.

India, for example, has achieved such a status. Why not Africa with its French-speaking potential for example?

Global community and the case of women and girls:

We live in a global community. Neglecting one part of the community hurts us all in the long run.

In Africa universities remain male-dominated and male-structured. That can be particularly true in sub-Saharan Africa where 20 million girls are denied any education due to discrimination, poverty and conflict according to a 2005 Save the Children report.

In Benin, West Africa I witnessed gender discrimination. In the graduate institute where I taught (IMSP) there were very few women (less than 10%) who came usually from rich families or foreign countries. They themselves were not aware of direct discrimination except sometimes from their own families who wanted them to marry instead of study. However I realized later on by teaching a Women-in-Computing course in the US (where women in computer science represent 20-30% of the general student population) that no one was aware of discrimination until eyes were opened to it. In a survey I conducted just this past semester in my class none of my students felt there was any such discrimination in our department or anywhere. It's only in mid term or at the end of the semester after much reading and discussions into the topic did the students start seeing the truth.

It seems similarly will happen in Africa. Right now many women deny there is discrimination. Their eyes are just not open to see it yet. It will not take long I believe as the proliferation of the Internet and western influence will bring with them greater awareness and a desire for more.

South Africa, in particular:

Post-apartheid South Africa is widely agreed to be a Mecca. But even there, senior women-faculty are scarce. At Johannesburg's University of the Witwatersrand, for instance, women account for only 19 percent of associate professors and 17 percent of full professors in recent years, according to Dr. Hilary Geber, a professor there. In South Africa, female faculty of color are particularly rare. At the University of Cape Town, women account for 35 percent of the school's overall academic staff of 779.

But only 59--or 8 percent--are women of color, according to Nazeema Mohammed, who oversees the school's transformation from the apartheid system. Representation at universities is just part of the problem. "The insufficient support for the production, dissemination and use of African feminist knowledge and theory, in all fields, is surprising." Groups such as AGI (the African Gender Institute) are using technology as a major tool to overcome those hurdles.

Online connections to other female thinkers and advocates help make up for the camaraderie that's often lacking for women at African universities; it's a loneliness that may lead many to leave the continent to pursue graduate-level studies. "The Internet and technology play a big role in breaking the isolation," says Dr. Elaine Salo, a senior lecturer at the African Gender Institute. "We are doing work here that will result in a generation of scholars who will say: 'we can do work here that is relevant to our society.'

The institute was founded in 1996, two years after South Africa's transition from apartheid to democracy, to expose African researchers and intellectuals to the importance of gender equity and to support those engaged in that process.

Housed in offices at the University of Cape Town, AGI offers undergraduate and graduate academic programs in gender and women's studies. Three core teaching faculty also raise up to \$1 million a year from international foundations to offer programs for African scholars committed to gender equity.

Female academics in Africa also exchange ideas and information through a number of other Web sites such as:

FEMNET in Kenya,

Zimbabwe's Women's Resource Center and Network,

Uganda's African Women's Economic Policy Network and

Cameroon's Association for Support to Women entrepreneurs.

To ensure as many readers as possible, Feminist Africa <http://www.feministafrica.org/> is published both as a traditional 150-page academic journal, as well as on a free Web site.

<http://www.gwsafrica.org/>

GWS Africa is a project of the AGI, sponsored by the Ford Foundation

Tamale has become the first female dean of Makerere University's Faculty of Law in 2004 and, earlier this year; she launched a research project on Gender, Law and Sexuality, which she hopes will someday become a fully fledged research center.

The origin of the newly established Institute for Women's and Gender Studies of Pretoria University (the fourth of its kind in South Africa), is not dissimilar to the origin of women's and gender studies elsewhere in Africa. Whereas the women's movement had played a fundamental role in the establishment of women's and gender studies in the West, women's movements in Africa have not played a similar role in the institutionalizing of women's and gender studies in Africa. On the contrary, the main forces behind the institutionalizing of women's and gender studies in Africa have been Western financial support, conceptual apparatuses and theoretical models. (From the preface by the director of WGS of Pretoria U)

Even Oprah Winfrey has opened a school for girls in the small town of Henley-on-Klip, south of Johannesburg, S. Africa. This is another example of a Western concept which may impact the local culture.

Ethical overview:

We need to realize that cyber ethics are different than the ethics we had to deal with since biblical times.

What makes ethics online a unique moral issue according to Deborah Johnson can be summarized in the following three points:

- The **scope** of the Internet is **global** and **interactive**.
- The Internet enables users to interact with **anonymity**.
- Internet technology makes the **reproducibility** of information possible in ways not possible before.

The above features make behavior on-line morally different than off-line. In a country where not too many people use the Internet or one gender uses it substantially more, these differences create a wider digital gap that one should avoid.

In conclusion:

In the industrialized world computers are changing everything: from education to health, from voting to making friends or making war.

Many countries fully participate in cyberspace and make use of opportunities offered by global networks.

We are living a technological and informational revolution.

It is important for policy makers, leaders, teachers, computer professionals and all social thinkers to get involved in the social and ethical impacts of this communication technology. Women in particular can be invaluable as they are more naturally communicative.

Not involving women in this new technological world is immoral¹. A society that doesn't use its entire citizenry is losing on attaining its full potential. It's only through diversity that a society can reach the full rainbow of its colors.

Appendices:

Telecenters:

There has been a proliferation of telecenters providing access to information and communication technologies (ICTs), initiated by governments, the private sector, international donors, and community organizations. Telecenters address the lack of ICTs throughout Africa and assist in providing universal access, to both telephony and other forms of communication.

Senegal is the African country with the largest number of telecenters: more than 9,000.

Other major centers were established in Mali, Uganda, Mozambique, and South Africa by foreign organizations but had a hard time once on their own.

Nakaseke Multipurpose Community Telecenter (MCT) in Uganda is a more realistic and successful center.

Purely market-driven initiatives are likely to increase the digital divide within Africa. There doesn't exist yet a model for sustaining community access centers that can provide access for the majority.

Rarely should foreign funding be 100 percent (all the economic lessons of entrepreneurship should be used)

The greatest potential to bring access to ICTs throughout Africa is to support smaller businesses and community organizations that develop new services themselves. Through telephony, they can offer fax, or secretarial, or computer, or even Internet services.

"The individual who sublets his or her phone line or sets up a phone shop or telecenter does more to close the development gap than the great corporations and businesses of the world."
By ITU secretary-general Pekka Tarjanne.

Second appendix at the end.

References:

- Irene Albert: *Des femmes; une terre. Une nouvelle dynamique sociale du Benin; L'Harmattan, 1993.*
- Peter Benjamin: *African Experience with Telecenters;*
<http://www.isoc.org/oti/articles/1100/benjamin.html>
- Laurie Garrett: *The betrayal of trust: The Collapse of Global Public Health*
- Marita Golden: *Don't play in the sun: One Woman's Journey Through the Color Complex*
- Tarek Kamel and Terry Weigler: *African Chapters and Their Role in Internet Development in African Countries;*
<http://www.isoc.org/oti/articles/0401/kamel.html>
- Gretchen L. Wilson, WeNews correspondent: *African Female Scholars Share Virtual Lifeline;*
<http://www.isoc.org/isoc/conferences/inet/06/mauritus.shtml>
<http://www.internetworldstats.com/stats1.htm>
- <http://www.brad.ac.uk/research/ijas/links.htm>
http://www.africa.upenn.edu/Home_Page/mcgee.html, 2004

¹ Deborah Johnson and Keith Miller: is diversity in computing a moral matter?

<http://www.afrinic.net/>

<http://www.computers4africa.org/>

Computers to Africa scheme criticized:

<http://news.bbc.co.uk/2/hi/africa/2989567.stm>

Internet Society (ISOC) annual report, 2005:

<http://www.isoc.org/isoc/reports/ar2005/>

Internet Society Programs Helping Africans Develop
Internet in Africa:

<http://www.isoc.org/isoc/media/releases/070503pr.shtml>

Appendix b:

Population (2006 Est.)	Pop. in World	% Internet Users, Latest Data	Penetration (% Population)	% Users in World	Use Growth (2000- 2006)	
Total for Africa	915,210,928	14.1 %	32,765,700	3.6 %	3.0 %	625.8 %
Rest of World	5,584,486,132	85.9 %	1,053,485,203	18.9 %	97.0 %	195.5 %
WORLD TOTAL	6,499,697,060	100.0 %	1,086,250,903	16.7 %	100.0 %	200.9 %

Kendra S. Albright

AIDS and Culture: The Case for an African Information Identity

Abstract:

The library and information profession in Africa is not well recognized. It does not carry an identifiable set of core activities that share a common understanding across societies in Africa. The number of libraries in Africa is limited for a variety of reasons including lack of resources, populations that are not based in print literacy, and having its roots in the British model of librarianship.

HIV/AIDS continues to pose severe problems for Sub-Saharan Africa. Some countries in the region have successfully reduced the number of HIV/AIDS cases, citing information as the main source of prevention, presenting library and information professionals a unique opportunity to collectively organize and establish their role in the fight against the disease. This paper will discuss the opportunity for how LIS professionals engaged in HIV/AIDS information activities can develop and strengthen a positive status for the library and information discipline in Sub-Saharan Africa.

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- Relevant publications:
 - Albright, Kendra S. Information Vaccine: HIV/AIDS and Libraries in Sub-Saharan Africa. In Seidelin, S. and T.S. Jensen (Eds.), *Libraries and the Fight Against HIV/AIDS, Poverty, and Corruption*. World Report Series Vol. VI. The Hague, Netherlands: International Federation of Library Associations, 29-42, 2006.
 - Albright Kendra S. and Kigongo-Bukenya, Isaac. Libraries and AIDS in Sub-Saharan Africa: Realities of Culture and Curriculum, Proceedings of the 69th Annual Meeting of the American Society for Information Science & Technology, November 3-8, 2006, Austin, Texas. Silver Spring, MD: ASIS&T, Vol, 43, 2006.

Introduction

Libraries in most industrialized countries provide services that are recognized by the public as contributing to the overall good of society. Public monies are made available to fund, either in whole or in part, the development and maintenance of public libraries. Librarianship is a well-established, recognized profession that carries a common perception of its related services. More recently, librarianship, when joined with information and communication technologies, is transformed into information work and those who participate in this profession are often referred to as information professionals or a related title. Together, library and information science (LIS) professionals constitute a profession and conduct activities that are widely recognized.

LIS professionals also have an important role to play in Sub-Saharan Africa. They provide access to valuable information and knowledge that can contribute to the solution of social problems. They help to "advance knowledge sharing, preservation of local knowledge and content, indigenous languages, content management and development, access to the Internet, and many other information concerns which are indispensable to ensuring the acquisition of knowledge by Africans" (United Nations Economic Commission for Africa, 2006). Libraries also provide information to people through the "collection, acquisition and dissemination of books, journals and other materials" (Rosenberg, 2002).

The LIS profession in Africa, however, faces challenges to the provision of effective services that are specific to their own Sub-Saharan cultures. Barriers from external sources (e.g., a legacy of LIS education that is rooted in the British tradition) and internal limitations (e.g., limited resources, weak management) have restricted the growth and recognized value of the LIS profession in Sub-Saharan Africa.

There are many fewer libraries per capita in Sub-Saharan Africa compared with those in the industrialized nations. Because societies in SSA are steeped in oral culture, libraries are not perceived as necessary. Librarianship is perceived as a low status profession with a poor image (Tsigemelak, 2006; Batambuze, 2005), and remains loosely defined and not clearly recognized (Mchombu, 1991). Tsigemelak (2006) adds that because of the apathetic perspective towards libraries in Africa, "African governments have lost enthusiasm for library service" (3). Librarianship evolved from its colonial roots which became the basis for LIS training and practice in

Africa. With additional influence from the U.S., these Western roots have yielded a profession trained for an elitist print (and now digital/electronic) culture but operating in one that is predominantly based in oral tradition. Amadi (1981) asserts that while American libraries exist to meet the needs of Americans, and British libraries exist for the British, African libraries do not offer services that meet the needs of Africans.

Despite these problems, the demand for LIS graduates is increasing (Mambo, 2000). LIS education programs have proliferated, including those in Namibia, Ethiopia, Uganda, Zambia, Tanzania, Kenya, Ghana, Botswana, Nigeria, Sierra Leone, and South Africa since the initial establishment of the East Africa School of Librarianship in Uganda in the early 1960s. Raseroka (1994) reported that LIS training in Sub-Saharan Africa doubled with the addition of South Africa. The demand appears to be greatest for graduates with Bachelor's degrees, although postgraduate studies are increasingly common (Albright, 2005). For example, Makerere University started a doctoral program with four students in its initial cohort in 2005 (Kigongo-Bukenya 2005).

There remains, however, no official reporting mechanism for tracking the graduates of these programs (Ocholla and Bothma, 2006). Anecdotal evidence suggests that many of these graduates are working in HIV/AIDS information activities across a variety of settings including community centres, documentation and tele-centres, and non-governmental organizations involved in AIDS information, education and communication (IEC) activities (Albright, 2005). Because information is critical to the fight against HIV/AIDS and is necessary for preventing its spread, LIS professionals are uniquely positioned to meet this need. These professionals who are engaged in HIV/AIDS information activities have the opportunity to develop and strengthen a positive perception of the LIS discipline in Sub-Saharan Africa.

Status of HIV/AIDS in Sub-Saharan Africa

Sub-Saharan Africa accounts for only 10% of the world's population, but has over 63% of people living with HIV/AIDS (PLWHA) in the world (Figure 1). Seventy-two percent of the estimated 2.1 million AIDS-related deaths worldwide in 2006 were in Sub-Saharan Africa (UNAIDS/WHO, 2006).

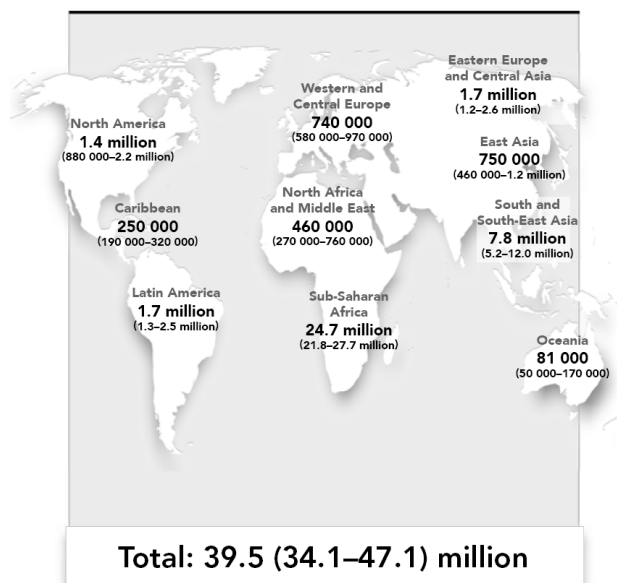


Fig. 1 Adults and Children Estimated to be Living with HIV/AIDS (Source: UNAIDS/WHO, 2006)

Eighty-seven percent (330,000) of the 380,000 children who died of AIDS-related causes in 2006 were in Sub-Saharan Africa. Despite intervention efforts, the numbers of new HIV infections are roughly equivalent to the number deaths from AIDS each year. However, several countries in Africa have successfully reversed the prevalence of the disease, with information, education, and communication (IEC) cited as the primary means of prevention (Green, 2003). Uganda has been credited with the greatest success in curbing the spread of the disease, and praised for its multi-sectoral, IEC strategy implemented by President Museveni in the early years of the disease (Albright and Kawooya, 2004; Albright and Kawooya, 2005).

There is no vaccine or cure for HIV or AIDS. Information is all that we have and is therefore, critical in efforts targeted at preventing the spread of the virus. Through widespread information about HIV/AIDS, the people of Sub-Saharan Africa can gain the knowledge needed to change their behavioural response to the AIDS epidemic. LIS professionals are trained in the collection, organization, management, storage, retrieval, and dissemination of information and have the tools to be particularly instrumental in HIV/AIDS prevention efforts. However, the LIS profession faces barriers to this service that must first be addressed.

Barriers to the LIS Profession in Sub-Saharan Africa

The problems facing the LIS profession in Africa are many. Problems stem from a combination of social characteristics including oral tradition, varying rates of print literacy, a limited understanding of the specific information needs of people of Sub-Saharan Africa societies, and limited resources. At times, the need for libraries seems questionable, at best.

Mchombu (1991) identified the primary problems facing librarianship in Africa, grouping them into two categories; those that are external challenges for libraries in Africa and those that are internally-focused. External challenges are those that are "derived from the hostile social environment within which libraries exist in Africa" (Mchombu, 1991, 186). These are the problems that professionals themselves identified as the barriers to African librarianship.

Internally-focused challenges address those issues that are caused by the "structural decoupling of libraries in Africa from their key user target groups, and the development of an inward-looking mentality which tends to glorify internal processes at the expense of maximizing use of library resources" (Mchombu, 1991, 188).

The combined framework will be used to analyze ways in which LIS professionals engaged in HIV/AIDS information activities can develop and strengthen a positive status for the LIS discipline in Sub-Saharan Africa. Each of the issues will be examined in light of opportunities for the LIS profession to respond within the context of HIV/AIDS information.

External Challenges

A list of external challenges identified by Mchombu (1991) is presented in Table 1. Each of these challenges is addressed below from the perspective of LIS professionals engaged in HIV/AIDS activities.

African readers have not yet developed a reading habit.

Many people in Sub-Saharan Africa cannot read. It does not, however, mean that they are incompetent

External Issues
1. African readers have not yet developed a reading habit.
2. Africa's oral culture and authoritarian transmission of knowledge does not favour the development of libraries.
3. Governments and decision makers do not fully support libraries, in particular they have failed to institute and legislate national information policies.
4. African governments lack the notion of information as an important factor and strategy in the process of national development.
5. Over-sensitivity of governments in Africa to critical information, hence frequent attempts to block access to certain categories of information.
6. A low level of informatization of the African society, and overall low competence and propensity in incorporating large amounts of innovative information into the goods and services being produced.
7. Illiteracy rates are too high to enable people, particularly in rural areas and urban shanty-townships, to appreciate use of libraries.
8. Students read only to pass examinations after which they stop reading.
9. The book industry has failed to supply sufficient materials in indigenous languages.
10. The economic recession in African countries has made it very difficult for libraries to obtain adequate funding and often there has been a complete freeze on foreign exchange allocations

Table 13 External Challenges for Librarianship in Africa (based on Mchombu, 1991)

or lacking in the ability to understand. Literacy takes many forms; oral tradition is a form of literacy that allows for the rapid transmission of information throughout local communities. LIS professionals in Sub-Saharan Africa involved in HIV/AIDS information activities are well-positioned to tap into the local community oral network, utilizing the existing form of communication to quickly spread accurate, relevant, useful information. LIS professionals can interact and engage with local communities, building trust while furthering the spread of critical information. Concurrently, these professionals can establish reading programs that are specifically targeted to the needs of the communities they serve using culturally-appropriate techniques to foster reading skills (e.g., reading tents, mobile libraries).

Africa's oral culture and authoritarian transmission of knowledge does not favour the development of libraries.

Several approaches can be used to address the problem of library development. Instead of assuming a print-based approach to librarianship, the incorporation of oral culture into the practice of LIS work can expand and transform the notion of librarianship into something that is decidedly African. Partnerships with other institutions can be

made to facilitate this transformation. For example, radio and drama are two primary means by which AIDS information is transmitted (Albright, Kawooya,

and Hoff, 2006). LIS professionals can partner with media (e.g., radio) to develop effective AIDS information campaigns for the local community. LIS professionals can also team with educational institutions to develop targeted educational programs for AIDS information. These partnerships can build and expand the professional identity for LIS professionals.

Governments and decision makers do not fully support libraries, in particular they have failed to institute and legislate national information policies.

The LIS profession has a tremendous challenge to establish their professional identity in such a way as to garner support from the government and other societal institutions. Partnerships like those listed above will help to increase the visibility of the profession. In addition, as the role of LIS professionals in the prevention of HIV/AIDS is more highly recognized, these professionals will have increasing opportunities to participate in decisions regarding information policies.

African governments lack the notion of information as an important factor and strategy in the process of national development.

The reduction of HIV/AIDS in several of the Sub-Saharan countries (e.g., Uganda, Botswana, Senegal) has demonstrated the importance of information

in creating social change. Similar changes may be possible through the targeted design of information campaigns for issues of national development. LIS professionals have an opportunity to collectively organize their engagement in AIDS information activities and create more visibility for the profession. Concurrently, the rise of the profession will also increase awareness of the importance of information in national development.

Over-sensitivity of governments in Africa to critical information, hence frequent attempts to block access to certain categories of information.

LIS professionals are in a unique position to address freedom of information issues. HIV/AIDS information activities are only one area where the LIS profession can promote the free flow of information, thus lowering the barriers to information access. This is another area where partnerships between LIS professionals and media (e.g., print and broadcast journalists) can facilitate access to vital information, particularly in the case of HIV/AIDS.

A low level of informatization of the African society, and overall low competence and propensity in incorporating large amounts of innovative information into the goods and services being produced.

With the record number of graduates from LIS programmes throughout Sub-Saharan Africa, there is an increasing number of people trained in the use of new technologies, including those that are well-deployed within the region. The idea of informatization need not be limited to computers; rather, it should be viewed broadly and can include mobile telephony and radio, two very widely adopted technologies in Sub-Saharan Africa. For example, information can be easily transmitted to those with mobile telephones through text messages. LIS professionals can utilize these technologies in the provision of all types of information, including HIV/AIDS. Further, LIS professionals can be deployed as community resources to integrate computers and other technologies into local communities. It must be cautioned, however, that maintenance of new technologies must be supported in order to be effective over time.

Illiteracy rates are too high to enable people, particularly in rural areas and urban shantytownships, to appreciate use of libraries.

The notion of libraries is often applied to Africa from a limited perspective represented by an outdated definition proposed by UNESCO in 1970 as "any organized collection of printed books and periodicals or of any other graphic or audio-visual materials, and the services of a staff to provide and facilitate the use of such materials as are required to meet the informational, research, educational or recreational needs of its users." The emphasis is on a print and audio-visual collection and does not represent the incorporation of newer digital technologies that are widely incorporated into western LIS practice. Can Africa not create its own variation of librarianship by incorporating more appropriate technologies for its own cultures? Again, the inclusion of oral communications (e.g., radio, drama) within the context of African information practice could lead to a greater appreciation for and use of libraries. HIV/AIDS information programmes would be a useful starting point for developing an African concept of library.

Students read only to pass examinations after which they stop reading.

HIV/AIDS information programmes that incorporate oral communications could possibly facilitate increased interest and use of LIS activities. Through increased involvement of the public, LIS professionals can expand programmes to include reading activities. In partnership with educational institutions, reading programmes can be designed to support school-related activities, including examinations. They can also be designed to facilitate the enjoyment of reading. Partnerships can also provide access to additional reading materials through inter-lending agreements and expanded access to other collections.

The book industry has failed to supply sufficient materials in indigenous languages.

Western publishers are cautious about publishing African materials and those in indigenous languages because of the limited market for these materials. Further, African authors and organizations often make materials available for local distribution only (Sturges and Neill 1997). There are also concerns that giving away their indigenous knowledge to publishing companies in the industrialized countries will not result in economic rewards or incentives for

African authors (Kawooya 2005). There is a substantial amount of HIV/AIDS research in the grey literature of Sub-Saharan Africa. LIS professionals are trained in the management of grey literature, and should assume some leadership in negotiating the terms and conditions for making this information more widely available.

The economic recession in African countries has made it very difficult for libraries to obtain adequate funding and often there has been a complete freeze on foreign exchange allocations.

The economic recession in Sub-Saharan Africa has been compounded by the devastation caused by HIV/AIDS. More than ever, it is necessary for LIS professionals to utilize their skills in targeting information to prevent the spread of the disease. LIS professionals must pursue positions of leadership in HIV/AIDS information activities in order to raise the awareness of their professional value and increase their visibility.

Internal Challenges

A list of the internally-focused challenges identified by Mchombu (1991) is presented in Table 2. These challenges are addressed below from the perspective of LIS professionals engaged in HIV/AIDS activities.

The historical legacy of colonialism and its impact on librarianship

There are a number of issues involved in the impact of colonialism on African librarianship. Reviewing the British model of library training in Sub-Saharan Africa, Batambuze (2005) suggests that it was geared towards creating a market for British publications in Africa. The outcome since then has been that African academics in LIS science "have failed to come up with an African LIS Hybrid. Therefore, the library profession is not perceived as particularly useful except by those who are already fairly educated."

Currently, library responses to this are slowly building towards an identity of an African LIS profession. In particular, the same creative and innovative approach to sources and services is found in HIV/AIDS information activities offered by libraries.

Internal Issues
1. The historical legacy of colonialism and its impact on librarianship.
2. The belief that information seeking behaviour of Africans was identical to those of library users in Europe and North America.
3. The emphasis on tending to documents rather than users.
4. The ability of librarians to incorporate the integration of optimum information to its parent organization.
5. The need to create African materials (i.e., to facilitate an African publishing industry) rather than relying on book donations from the U.S. and Western Europe.
6. Matching the information needs of Africans with African materials.
7. Weak library management and leadership based, in part, on the poor quality of training in LIS programs abroad and at home.

Table 14 Internally-Focused Challenges for Librarianship in Africa (based on Mchombu, 1991)

The belief that information seeking behaviour of Africans was identical to those of library users in Europe and North America.

There has been a fair amount of research on the information seeking behaviour of Africans. In many cases, it has been realized that there are clear differences in information seeking between the way that African seek information and those in European and North American libraries. For example, Mchom-

bu (1996) conducted a study of information needs in rural Tanzania, Botswana, and Malawi in which 50% of the participants did not perceive that they had any information needs. He found that this perception depends upon the way in which they are asked about their information needs. They were more likely to articulate their information needs if they were explicitly linked to their reality, to "what was going on around them" (78). Merely asking them what information they needed was not useful in

drawing out their information needs. The concept of information needs is more explicit to library users in North America and Europe. LIS professionals in Sub-Saharan Africa who work with HIV/AIDS information often encounter users whose information needs can be more easily articulated. Therefore, this is an excellent area for examining the information seeking behaviour specific to Africans in particular communities.

The emphasis on tending to documents rather than users.

African LIS professionals, being trained primarily in the British tradition, have learned to focus on managing the collection rather than placing their emphasis on the users. Libraries, therefore, have a very limited ability to serve the African population. LIS professionals engaged in HIV/AIDS information activities are often in direct contact with individuals who have a specific need for critical information. Professionals are sometimes required to go into the field to serve the information needs of these users and find that they must develop creative approaches to meet these needs.

The ability of librarians to incorporate the integration of optimum information to its parent organization.

LIS professionals in Sub-Saharan Africa, as elsewhere, reflect the mission of their parent organization. They are responsible for ensuring the acquisition and distribution of relevant materials to the parent body. Those professionals engaged in HIV/AIDS information activities in Sub-Saharan Africa are uniquely positioned to assume a strong leadership role by identifying and selecting the most relevant materials for their parent organization.

The need to create African materials (i.e., to facilitate an African publishing industry) rather than relying on book donations from the U.S. and Western Europe.

African materials are needed to represent the specific realities for life in Africa. The political, economic, social, and cultural differences need to be reflected in materials developed specifically for Africa and its independent nations and communities. Materials published elsewhere, whether acquired through purchase or donation, cannot substantially address the particular needs of African societies. Because the number of people living with HIV/AIDS in Sub-Saharan Africa is so much greater than anywhere

else, there is a large body of indigenous materials that are produced on this topic. LIS professionals can facilitate the publication of these

materials by prioritizing and requesting these materials for their collections.

Matching the information needs of Africans with African materials.

The evidence is clear that there is a need for HIV/AIDS information in Sub-Saharan Africa. These materials should reflect research and cultural practices within the local communities that will be most likely to prevent the spread of the disease. By examining the specific HIV/AIDS information needs of Africans with materials that are responsive to the specific needs of Africans, there is a greater likelihood of successful prevention than by relying on outside sources.

Weak library management and leadership based, in part, on the poor quality of training in LIS programs abroad and at home.

Problems with LIS management and leadership in Sub-Saharan Africa are linked to problems that stem from the British model of librarianship (Benge, 1996). African LIS professionals trained under the British model learn to address the information needs of westerners and how to serve those cultures. What works in Northern Europe, for example, may not work in East Africa. More emphasis should be placed on training African LIS professionals within an African context of LIS practice. The role of information in the prevention of HIV/AIDS is an area that can promote the development of African LIS practice by incorporating the information needs of Africans into the African model of LIS education. An example is the creation of an AIDS information course module for postgraduate students at the East African School of LIS Science at Makerere University in Uganda. This course seeks to incorporate identifiable information needs of the local communities with reference to culturally appropriate sources and services.

Considerations for Sub-Saharan Africa

Several considerations emerge from the activities of LIS professionals involved in HIV/AIDS information dissemination in Sub-Saharan Africa. These considerations can assist LIS professionals in overcoming

the challenges identified above and utilizing the characteristics of indigenous culture to facilitate the provision of information through formats that are better suited to African societies (e.g., radio, drama, audiobooks). These include:

1. The scope of what is included in LIS practice in Africa should be broadened to include information sources outside the role of traditional libraries (e.g., community centres, mobile libraries), including those information activities related to HIV/AIDS. For example, information is commonly shared in community centres, youth centres, documentation centres, multipurpose telecentres, and centres. These centres serve as a community centre where local forums and meetings can be conducted, both formal and informal.
2. LIS practitioners must develop flexible HIV/AIDS programs designed to meet the specific needs of the African people. This includes encouraging the development and production of information products and services appropriate to the local community, addressing issues of language, delivery, and publishing. Materials should be designed specifically for a target audience. Because of the oral tradition, non-print materials should be widely used in conjunction with reading programmes.
3. The establishment of partnerships between libraries and other sources of HIV/AIDS information activities (e.g., educational institutions, the media). The value of HIV/AIDS information in prevention efforts is well recognized, and is increasingly at the core of policy and funding practices. LIS professionals should be involved in decision-making and policy setting regarding information practices related to HIV/AIDS. By partnering with other institutions, LIS professionals raise their visibility and potential role for affecting policy.
4. Review the LIS education curriculum in Sub-Saharan Africa. The incorporation of HIV/AIDS information activities would be useful to raise public awareness and increase the visibility of the profession. Coursework should include the characteristics of local culture, particularly oral tradition, and the information needs of local communities. Training should also address how to work in partnership with other organizations. Additionally, specialized train-

ing, possibly certification, in the unique HIV/AIDS information could be offered.

5. LIS educational programs should track the professional activities of their graduates, including where they find work, types of organizations that employ their graduates, etc. This will provide the necessary metrics to present an organized picture of the LIS profession throughout the region.
6. Library associations in Sub-Saharan Africa should develop a position statement regarding the profession's role in the fight against HIV/AIDS. Related projects should be developed and evaluated and the results should be widely publicized.

The combination of these activities will help to build the professional identity of the African LIS profession. LIS professionals working in HIV/AIDS information activities have an opportunity to lead the development of this identity.

References

- Albright, Kendra S. The Role of Libraries in HIV/AIDS Information Dissemination in Sub-Saharan Africa. Report prepared for the U.S. National Commission on Libraries and Information Science, 2005.*
- Albright, Kendra S. and Dick Kawooya. The role of information in Uganda's reduction of HIV/AIDS prevalence: The Rakai Project and World Vision Cases. Proceedings of the 67th Annual Meeting of the American Society for Information Science & Technology, November 12-17, 2004, Providence, Rhode Island, Silver Spring, MD: ASIS&T, 2004.*
- Albright, Kendra S. and Dick Kawooya. The role of information in Uganda's reduction of HIV/AIDS prevalence: Individual perceptions of HIV/AIDS information." Information Development, Vol. 21(2), June 2005.*
- Albright, Kendra S., Dick Kawooya, and Judy Hoff. Information vaccine: Information and Uganda's reduction of HIV/AIDS. In A. Mcharazo and S. Koopman (Eds.), Librarianship as a Bridge to an Information and Knowledge Society in Africa. Munich: K.G. Saur, 2007.*
- Amadi, Adolphe O. African Libraries: Western Tradition and Colonial Brain-Washing. Metuchen, NJ: Scarecrow Press, 1981.*
- Batambuze, Charles. Private e-mail message to Kendra Albright, July 18, 2005.*

- Benge, Ronald. *Library provision in Africa 20 years on: A review article*. *Journal of Librarianship and Information Science*, 28 (3): 171-175, September 1996.
- Green, Edward C. *Rethinking AIDS Prevention: Learning from Success in Developing Countries*. Westport, CT: Praeger Publishers, 2003.
- Kawooya, Dick. *Personal conversation*. May 18, 2005.
- Kigongo-Bukenya, Issac. *Meeting minutes*. Kampala: Makerere University, March 2005.
- Mambo, Henry L. *Africa: Focus on current and future library and information training needs and future patterns*. *Library Trends*, 49(8): 387-391, 2000.
- Mchombu, Kingo. *Which way African librarianship?* *International Library Review*, 23: 183-200, 1991.
- Mchombu, Kingo. *A survey of information needs for rural development*. *Resource Sharing and Information Networks*, 12 (1): 75-81, 1996.
- Ocholla, Dennis and Bothma, Theo. *Trends, challenges and opportunities for LIS education and training in Eastern and Southern Africa*. ALA Conference, Forum on International Library Education, Sponsored by ALA President Michael Gorman Friday, June 23, 2006, New Orleans, USA.
- Raseroka, H. Kay. *Changes in public libraries during the last twenty ears: An African perspective*. *Libri*, Vol. 44(2): 153-163, 1994.
- Rosenberg, Diana. *Current issues in library and information services in Africa*, in Stringer, Roger (Ed.), *The Book Chain in Anglophone Africa*. Oxford: International Network for the Availability of Scientific Publications (INASP), 2002.
- Sturges, Paul and Neill, Richard. *The Quiet Struggle: Information and Libraries for the People of Africa*, 2nd Edition. London: Mansell, 1997.
- Tsigemelak, Dessimew. *Libraries and librarianship in Ethiopia: Status, prospects and challenges*. 97th Annual Conference of the Special Libraries Association entitled: *Where Transition and Transformation converge*, Baltimore, Maryland, USA, June 11-14, 2006, 1-10, 2006.
- UNAIDS/WHO. *AIDS Epidemic Update*. Geneva: United Nations Programme on HIV/AIDS (UNAIDS) and World Health Organization (WHO), 2006.
http://www.unaids.org/en/HIV_data/epi2006/default.asp. [Accessed 6 May 2007].
- United Nations Economic Commission for Africa (ECA). *World Summit on the Information Society (WSIS)*. Addis Ababa, Ethiopia: Economic Commission for Africa, 2006.
- United Nations Educational, Scientific, and Cultural Organization (UNESCO). *Recommendation concerning the International Standardization of Library Statistics*. The General Conference of the United Nations Educational, Scientific and Cultural Organization, 16th Session, Paris, France, October 12-14, 1970. Geneva: UNESCO, November 13, 1970.
http://portal.unesco.org/en/ev.php-URL_ID=13086&URL_DO=DO_PRINTPAGE&URL_SECTION=201.html[Accessed April 13, 2005].

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Are ICTs Prerequisites for the Eradication of Poverty?

Abstract:

I provide a philosophical analysis of the claim that ICTs are necessary preconditions for the eradication of poverty. What are the links between information and communication technologies (ICTs) and poverty? I first define technology and then give a brief depiction of ICTs. Thereafter I define poverty and give a brief explanation of its context and causes. Next I discuss the relationship between poverty and ICTs in three paradigm cases: [i] the role of ICTs in poor societies, [ii] the effect of poor ICT knowledge and skill of individuals in highly developed technological societies, and [iii] the impact of impoverished ICT knowledge and skills on the rich, powerful, and intelligent ones in society. I propose a procedure for decision making about the appropriation of ICTs by individuals and societies. I assess the claim that both access to ICTs and effective use of them are preconditions for the eradication of poverty.

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Introduction

Everyone familiar with the development of information and communication technologies (ICTs) over the past few decades is amazed at the spectacular progress made in designing new, more powerful technologies with an ever wider range of useful applications. For example, to observe the ICT automated production of motor vehicles or to draw cash in different countries from one's own bank account through ICT enabled automatic teller machines leaves almost anyone astonished at the precision, speed, and effectiveness of these powerful technologies.

As with most new pioneering technological innovations in the past two centuries, like telephones, automobiles, radio, and television, the availability of ICTs, access to and effective use of them are unevenly distributed both within countries and between them.¹ The expression 'the digital divide' describes uneven access to, and use of, ICTs throughout the world, both within and between countries.² Many people regard the digital divide as a matter of serious moral concern, as they judge that people without proper access to ICTs in today's interconnected global village lose out on important economic and social opportunities to secure their survival and improve their quality of life.³

Is this judgement correct? Has proper access to ICTs become a precondition for survival and flourishing in our world today?⁴ If this judgement is

correct, it would imply an empirical claim that every poor person in whichever part of the world needs one or more of the following, i.e. a computer, television, radio, and mobile phone, as prerequisite for the eradication of their specific cases of poverty. Somehow such a claim seems to fly in the face of our common sense judgements about the eradication of poverty in many areas of the world.⁵ Informed people everywhere judge that poor people need proper jobs with adequate income to escape poverty. If such income is sustained over time, basic necessities such as decent housing, enough food, proper shelter, and appropriate clothing can be acquired. This solution was good enough to eradicate poverty throughout most of our known history as a species. Thus, are ICTs really prerequisite for the eradication of all cases of poverty?

One could approach this topic from another angle. Sometimes poor people need fitting skills and the right kind of training to be able to get a job. At other times their country's economy must grow and diversify to offer opportunities they qualify for. But do poor people need ICTs as prerequisites to eradicate their poverty, i.e. to get rid of their poverty at its roots? Does their society have to employ ICTs to make a success of their income-generating activities to be able to offer employment to all citizens?⁶ Is our contemporary world so different from all previous human worlds that we now require ICTs for our mere survival?⁷

networked system. Development without the Internet would be the equivalent of industrialization without electricity in the industrial era." Castells, Manuel: *The Internet Galaxy*. 269.

¹ Compaine, Benjamin E: *The Digital Divide*. 102.

² See Tavani & Bolt, David B. and Crawford, A.K.: *Digital Divide*. 20, 98.

³ Some warn that the Internet could amplify the social differences rooted in class, education, gender, and ethnicity, Castells, Manuel: *The Internet Galaxy*. 260. Current evidence suggests that the in the first decade of its existence, the Internet has therefore reinforced existing economic inequalities. See Norris, Pippa: *Digital Divide*. 66. See also Moss, Jeremy: *Power and the digital divide*. 162. Note the deep concern of the G8 heads of state who set up the Digital Opportunity Task Force to identify ways in which the digital revolution can benefit all the world's people, *Digital Opportunities for All*.

⁴ Castells think not to be connected to the Internet is "tantamount to marginalization in the global,

⁵ In 1973 E. F. Schumacher could still suggest that "there is nothing in the experience of the last twenty-five years to suggest that modern technology, as we know it, can really help us to alleviate world poverty..." Schumacher, E. F.: *Small is Beautiful*. 123. See also the relative absence of ICTs amongst the solutions to the ten most urgent global challenges as identified by the Copenhagen Consensus in 2004. See www.copenhagenconsensus.com.

⁶ These questions about the role of technology in development have often been asked in the past, as technology has always held promise as an engine of economic growth for transforming developing nations. Norris, Pippa: *Digital Divide*. 6.

⁷ Note how the change in the work situation is described, "the large-scale introduction of com-

In this essay I want to provide a philosophical analysis of the claim that ICTs are necessary preconditions for the eradication of poverty from our world today. I will ask questions like the following. What are the links between information and communication technologies (ICTs) and poverty? Can poor people appropriate ICTs and thereby hasten the eradication of their poverty? Can a lack of knowledge about, and skill in the use of, ICTs cause people to become or remain poor?

To answer these broad questions, I will first define technology and then give a brief depiction of ICTs. Thereafter I will define poverty and give a brief explanation of its context and possible causes. Next I will discuss the relationship between poverty and ICTs in three paradigm cases: [i] the role of ICTs in poor societies, [ii] the effect of poor ICT knowledge and skill of individuals in highly developed technological societies, and [iii] the impact of impoverished ICT knowledge and skills on the rich, powerful, and intelligent ones in society. In a final section I will propose a procedure for decision making about the usefulness of the appropriation of ICTs by individuals and societies. I conclude by assessing the claim that both access to ICTs and effective use of them are preconditions for the eradication of poverty.

What is technology? And ICTs?

What is technology? Technology is the art and craft, i.e. the smart use of human rationality and the intelligent development of specialised bodily functions, to design and develop skills and techniques and fabricate artefacts. We use these skills, techniques, and artefacts for making and doing things necessary for our survival or useful for our flourishing. This means we develop and use technology to ensure the material necessities for us to survive and to acquire the comforts of life for us to thrive. Technology provides us with means, tools, and instruments to realise the fundamental goals we as humans set for ourselves.⁸

puters into the workplace has changed the very nature of many jobs from hands on to computer-aided or controlled processes requiring an entirely different skill set." Bolt, David B. and Crawford, A.K.: Digital Divide. 53.

⁸ See Kaplan's remarks on the difficulties of defining technology. Kaplan, David M.: Introduction. xiii – xiv.

Through technology we optimise our human potential in a diversity of daily activities. We apply our technological skills to improve our efforts to produce food, make clothing, construct buildings, transport ourselves and our belongings, communicate with others, provide medical care and defend ourselves and our society.⁹ The kind of technology available in a society is affected by the materials and instruments readily accessible, the amount of financial means available for investment, the number and quality of skilled and knowledgeable people, and the kind of ideas in circulation that might stimulate or suppress innovation and receptivity to new ideas.¹⁰ We typically evaluate our technological products by [i] their effectiveness, i.e. whether they serve the purpose we had in mind or produce the desired or intended results and [ii] their efficiency, i.e. whether they work productively with a minimum wasted effort or expense.¹¹

How do ICTs fit into this definition of the nature and role of technology? What we currently refer to as information and communication technologies [ICTs] are based on a variety of analog and digital technologies that give us telephones, radios, television, and computers. My focus is on digital technologies, as these computer-based technologies are either [i] the cause of world-wide concern about their effects that reinforce existing inequalities or [ii] the reason for excitement about the promise that they might yield important solutions to get rid of crushing poverty.¹²

⁹ Jonas, Hans: *Toward a Philosophy of Technology*. 24

¹⁰ See Kaplan, David M.: Introduction. xiv.

¹¹ Note how McNamara states this point, "the measure of any tool or process is whether it answers a need in the most efficient fashion, relative to other options, given existing constraints." See McNamara, Kerry S.: *Information and Communication Technologies, Poverty and Development*.

¹² McNamara articulates both the promise and threat of ICTs. He says that "the hopes engendered by the new technologies and networks had as their mirror image a fear that differential access to these tools and innovations would increase inequality, further handicap the poor and disadvantaged, and deepen (perhaps irreversibly) the economic decline, social instability, and environmental degradation of poor communities and countries. Concerns about a digital divide and about its eco-

One possible definition of a computer, the symbol of digital technology, is provided by the Concise Oxford English Dictionary: "an electronic device capable of receiving data and performing a sequence of logical operations in accordance with a predetermined but variable set of procedural instructions (a program) to produce a result in the form of information or signals" (COED). This definition points us in several directions that make deeper understanding of this technology possible. An 'electronic device' points to the fact that computers are designed, need maintenance, and require a constant flow of electricity. 'Capable of receiving data' means that this technology can only deal with particular kinds of problems through receiving certain kind of 'stuff' or 'material,' i.e. so-called 'input.' Input here are matters that can be presented to a computer in the form of data, i.e. information offered in specified formats to be processed. Data input is processed by 'performing a sequence of logical operations in accordance with a predetermined but variable set of procedural instructions (a program).' To do something useful with data requires people capable of designing programmes that convert the input according to the requirements of the people in need of the computer's functions. The conversion of input leads to output 'in the form of information or signals.' The output must be a result useful to some detailed aspect of one or more of our fundamental human goals related to survival or flourishing. Again, output can only be meaningful if there are people to understand and interpret it, or people who can connect and convert such output to other technological processes reliant on information or signals for their effective functioning.

Two issues follow from this discussion of a possible definition of a computer. The first issue is the kinds of problems that ICTs can address and the other issue is the prerequisites for sustainable, productive

economic and social implications first appeared primarily in the United States, an expression of the growing awareness that access to the Internet and the broader economic and social opportunities it represented mirrored — and threatened to exacerbate — existing economic, social, and ethnic divides within American society. Yet quickly the concept — and the concern — took on a broader global dimension, as analysts and policy-makers focused increasingly in the late '90s on how the spread of a global Internet-enabled economy held the risk of leaving the poor behind." McNamara, Kerry S.: Information and Communication Technologies, Poverty and Development.

use of ICTs. The definition of ICTs implies that ICTs embody very specific kinds of advanced technologies applicable and useful for particular problems only. What are the kinds of problems that are amenable to ICT solutions? The spectacularly fast development of this technology in less than a century has enabled us to use its wide range of applications for a variety of functions. As technology ICTs function as instruments, means, and tools to accomplish some of our fundamental goals related to our survival and flourishing.¹³ So what are the kinds of things that these technologies empower us to do better, faster, more productively, and perhaps more economically?

ICTs have overlapping functions that can be dissected and classified as follows: (1) a *calculative-financial* function in which ICTs calculate complex mathematical formulae, do sophisticated statistical computations, and perform intricate financial transactions; (2) an *administrative* function in which ICTs enable us to keep track of how we organise aspects of our dealings with the world and one another, such as business transactions, academic records, the lending and returning of books in libraries, the recording of climate patterns, or the management of livestock on farms; (3) an *information* function that enables us to store and retrieve all kinds of information in large quantities, such as encyclopaedias and expert databases; (4) an *automation* function by which manufacturing, operational, design, and administrative processes are taken over from human labour and done automatically by the superior programmed functioning of ICTs, like the manufacturing of automobiles; (5) a *communication* function through which human communicative abilities are extended, such as electronic mail and text messages, websites, and cellular telephone technology, and [6] an *entertainment* function through which ICTs provide us with almost endless possibilities to play games, watch movies, listen to our favourite music, and take and manipulate as many photographs as we wish. These functions can be combined in various ways, for example, to facilitate education in schools and universities and enable more efficient management in corporate and public enterprises.

¹³ McNamara says that "to the extent that ICTs can help achieve those other goals, they are a worthwhile tool of development efforts, but they remain tools, not goals." See McNamara, Kerry S.: Information and Communication Technologies, Poverty and Development.

ICTs also require that certain preconditions are fulfilled for them to be usable. To be able to access and utilise the functions of ICTs require several other technologies and skills as prerequisites. For example, the definition above refers to a computer as an electronic device, which means that a constant supply of electricity is needed to operate a stand-alone personal computer. A telecommunication infrastructure is necessary for the full use of the Internet, mobile phones, and digital television. Similarly, basic literacy and adequate acquaintance with the mindset of software functioning are needed for minimally competent use of these technologies. For more advanced uses of ICTs more sophisticated skills are needed.

There is no one, standard way in which to utilise ICTs. Almost all ICTs can be used at a wide variety of different levels. They constitute a set of multi-functional technologies that can be used at many levels for a variety of purposes by users with a varying range of skills. For example, some people with basic literacy skills use a personal computer as an electronic typewriter for their personal communication. Others, like some highly trained physicists, also use their computers for complex mathematical modelling of stellar phenomena. In whatever depth or functionality a person uses ICTs, the crucial question for any technological innovation remains: does this innovation help us do some things more productively or more efficiently and thus add more value to our lives?

The use of ICTs in a specific society exposes its level of technological modernization. To judge the level of technological modernization one must note the following. The quality of the electrical and digital infrastructure and the competence of people trained in the use of ICTs show the possibilities for effective utilisation of ICTs in that particular society. The range of ICT functions applicable to and useful for societal functioning expose the extent to which a society depends on state of the art technology. The depth of penetration and scope of the diffusion of ICTs in that society point to the various functions of ICTs employed, the depth and quality of their use, and the range of their penetration into the personal and working lives of individuals. This penetration and diffusion show the extent to which sophisticated technologies have been embraced and integrated as useful means to ensure the survival and enhance the flourishing of people's lives. In some technologically highly developed societies where ICTs have penetrated deeply into the lives of citizens and been widely diffused in many industries and sectors of society, access to and competence in the use of

ICTs have become requirements for most employment opportunities available. The intriguing question that as yet remains unanswered is whether these technologies have altered the conditions for high performance economic functioning to such an extent that integrated use of ICTs have become a *sine qua non* for economic success in today's global village.

What is poverty?

What is poverty and what could ICTs do to change the lives of poor people and poor societies? In this section I want to establish possible links between poverty and technology. Through a brief definition and explanation of poverty I want to show which problems of poverty can be solved by means of technology and which aspects of poverty call for different kinds of solutions.¹⁴

Poverty is a concept uniquely applied to humans to indicate when a specific person has fallen below the standard of life thought appropriate for someone in that culture. My general definition of poverty is as follows. Poverty can be seen as a lack of adequate economic capacities to maintain physical health and engage in social activities distinctive of human beings in a particular society. 'Economic capacities' refer both to available resources as well as human abilities and capacities to utilize resources effectively.

This general definition of poverty can be split into two parts. One part refers to absolute poverty which means that persons do not have adequate economic capacities to provide enough food, clothing, shelter, security, and medical care to maintain their physical health. It stands to reason that people living in absolute poverty will find the cost of access to ICTs, and training in their use, prohibitive.

Another part of the general definition of poverty refers to relative poverty which means that although people have adequate economic capacities to provide enough food, clothing, shelter, security, and medical care to maintain their physical health, they cannot participate in any other activities regarded as indicative of being human in that society. People who are relatively poor will also be hard pressed to

¹⁴ The section on poverty contain ideas worked out in two conference papers written by the author called, "Defining poverty as distinctively human" and "Why poverty is such a complex affair."

find the resources to enable them to make productive use of ICTs.

Poverty must be understood against the following background. A basic challenge for our species is the need to identify, locate, extract, convert, and consume resources for survival first and flourishing lives thereafter. These resources can be (i) edible products found or cultivated by means of natural resources like soil, water, or organic material; (ii) materials for designing, manufacturing, and constructing new composite materials, tools, buildings, and infrastructure, (iii) living beings to provide or produce things we need as food, clothes, or tools, (iv) ideas and innovations that improve or enhance any aspect of our lives, and (v) skills, talents, knowledge, or insight that can provide services to others. The role of technology with respect to these resource identifying, extracting, converting, and consuming processes is obvious. Good technology in its various guises enables us to do all these things better, faster, and more economically.

Humans have the intellectual and bodily characteristics that allow them to locate and convert resources in ways almost infinitely more complex than animals. We use resources in different ways that require variable degrees of human intervention. Words that refer to the location and conversion of food resources, like collect, harvest, produce, slaughter, and prepare reflect these degrees. We consume or use some resources directly, like fruits and flowers. Others need simple preparation, like meat and seeds that we process and cook or bake. In some cases we use complex processes to produce food, for example, followed by even more detailed processes of design and manufacture to deliver highly intricate products like beverages or fancy sweets. In all these cases of resource dealing processes humans manifest a particular level of technological prowess. The plans, procedures, or mechanisms we devise to do these things illustrate our knowledge of the issues involved and demonstrate the level of applicable technological and other skills we have acquired, developed, and mastered.

Once a particular community successfully locates and converts resources to ensure survival and builds a flourishing social life, several new demands arise. New needs and wants for more sophisticated products and services develop, which in turn put increased pressure on the community's abilities to locate new kinds of resources and find novel ways of converting them to suit and fulfil new demands. In this context new and improved technologies play a crucial role to satisfy ever growing demands.

Human resource dealing processes, i.e., the complex series of human activities consisting of the location, conversion, exchange, and distribution of resources, can be short-circuited and thwarted in a diversity of ways, some of natural and others of human origin. Humans can directly or indirectly influence these activities as follows. A particular community might be without sufficient resources or run out of resources and fail to find replaceable ones. These cases point to the possibility of a failure of scientific knowledge or technological skill. Population growth might outstrip available resources and conversion skills. Societies might neglect the transfer of scientific knowledge and development of technological skills for the location and conversion of resources. Fewer recruits, or recruits with lesser knowledge and skill might fail their particular community in locating, converting, or exchanging resources in the quest for survival and flourishing. It might be that the importance of the acquisition and application of technology was not adequately stressed in such societies.

Reasons other than neglecting scientific research or a lack of technological innovation are more often the causes responsible for making people poor. Political and economic factors are some of the important causes of poverty. A skewed or restricted allocation of opportunities to members of society for participation in location and conversion of resources might diminish the society's capacity to ensure survival. A disproportionate distribution of rewards to some participants at the expense of others on grounds such as the supposed extraordinary value of their work, or their group membership, can create poverty as well as resentment and conflict. Similarly, powerful political groups can employ political processes and mechanisms to determine and enforce distributions of resources that deliberately enhance some citizens and exclude or neglect others. They deny citizens voice and vote to struggle for their fair share in resource dealing processes.

If some groups dominate their particular communities through accumulation of excessive rewards for their role in resource dealing processes, other groups may be significantly disadvantaged through their meagre share of resources so that it weakens the central social project of location, conversion, exchange, and distribution of resources in a particular community. In this way poverty disables the capacities of segments of society to contribute their share to the joint societal project of ensuring survival and enhancing flourishing. Eventually the existence of such disabled segments harms society as a whole.

Many forces independent of human influence also cause poverty, i.e. they thwart, distort, or short-circuit the complex human activities of the location, conversion, exchange, and distribution of resources, i.e., resource dealing processes. Natural disasters like hurricanes, volcanic eruptions, floods, droughts, and tsunamis can devastate resource dealing processes. Climates can enhance or destroy the cultivation and production of food and clothing. Geology can determine which mineral resources are available. Epidemics can devastate the economies of continents or exacerbate existing poverty by dealing fatal blows to key actors in resource dealing processes.

Poverty can affect individuals only or a society as a whole. Whole human societies become poor when the highly complex processes of location, conversion, exchange, and distribution of resources are short-circuited or foiled on such a large scale that significant parts of the population are classified as poor. Individuals are, or become, poor when they do not have, or cannot, find any rewarded role within resource dealing processes, or are excluded from them, for whatever reason. Their poverty is due to the fact they do not have roles or functions rewarded in their society's quest for the location, conversion, exchange, or distribution of resources, nor are they compensated for this lack.

In summary, poverty is the result of any of thousands of possible kinds of failure or obstruction somewhere in the highly complex series of processes involved in the location, conversion, exchange, and distribution of resources. Lack of appropriate technology to realise fundamental human goals can be an important one amongst the many causes of poverty.

If the lack of appropriate technology is one of the important causes of poverty, what role can ICTs play in the eradication of poverty? This question must be answered in two parts. One part of the answer is that ICTs must be introduced and applied in a society within the broader context of the general guidelines for the eradication of poverty. The following truism undergirds my view on the eradication of poverty. Individuals and society are deeply intertwined, in the sense that their fates are linked and have a reciprocal influence on one another. This means that individuals and society have a complex complementarity, i.e. strong individuals with properly focussed outputs can, though not necessarily will, benefit their society, and weak societies often, though not always, fail to equip their members for successful survival. If this truism is accepted, then

interventions to eradicate poverty must never focus on either individuals or society alone.

The guideline implies that any interventions to eradicate poverty must ensure a multitude factors are in place in society that will enhance the ability of poor individuals to acquire capacities and learn responsibilities that will enable their escape from poverty. Not only individual transformation to equip people for survival and flourishing, but especially social transformation is necessary to create and establish conditions favourable for the effective eradication of poverty. Social issues, such as governmental budget priorities, a state's macro-economic policies, and entrepreneur-encouraging practices that indicate the need to transform a society, require as much attention as individual requirements for education and training, or feeding and housing schemes.

The ideas about the societal infrastructure and policy framework needed for the empowerment of individuals and the developed capacities of individuals required to strengthen the intellectual skills and capacities available to society apply similarly to the challenges of providing a society with comprehensive ICT connectivity that reaches the majority of the population. National policies and subsidies to create enabling environments for investment in and deployment of ICTs must go hand in hand with individual training, capacity-building and empowerment to deliver the human labour power needed to optimally exploit the usefulness of ICTs.¹⁵

These general guidelines for the eradication of poverty aside, what specific role can ICTs play to eradicate poverty? The second part of the answer to the question about the role of ICTs in the eradication of poverty now comes into play. In terms of what I have done thus far ICTs can only play a role in the eradication of poverty if certain preconditions are fulfilled. These preconditions are: [1] Enough resources and infrastructure must be available to

¹⁵ Accascina set as prerequisite for the use of ICTs the following, "Appropriate and forward-looking IT and telecommunication public policies, legislation and an understanding of their overall impact on a country's welfare." See Accascina, Gabriel: Information technology and poverty alleviation. See also the report by Peters, Teresa: E-Ready for What? the report commissioned by the G8 called Digital Opportunities for All and the article by Arunachalam, Subbiah: How the Internet is failing the developing world.

provide a constant flow of electricity and effectively functioning telecommunications connectivity, as well as resources to afford appropriate ICT equipment, software, and their maintenance; [2] sufficient numbers of people must have adequate literacy skills and appropriate training to master ICT programmes relevant to poor people's needs and to properly maintain ICT equipment; and [3] the challenges requiring detailed attention in order to enable the eradication of the poverty of specific persons must be amenable to the particular functions that ICTs can fulfil, i.e. advanced and improved administration, automation, calculation, information storage and retrieval, communication, and entertainment.

What are the possible links between poverty and ICTs?

Within the context of the human nature of poverty and its multiplicity of causes as sketched above, what difference can ICTs make to the lives of poor people? I want to examine the possible impact of ICTs in three cases I judge to be typical of situations where ICTs can be relevant to the lives of poor people.

Case 1: ICTs, individuals, and poor societies

Imagine a very poor society where the vast majority citizens make livelihoods from agriculture. The citizens are illiterate and have barely enough means to buy seeds, agricultural tools, or fertilizer. ICTs for use by themselves make no sense, as they have more urgent priorities for simpler technologies to enable them to secure the necessities for survival. One can imagine that government or civil society relief organizations might use ICTs to improve the productivity and effectiveness of the services they provide such rural poor people. One could also think that the children of the rural poor might be empowered by being taught basic uses of ICTs, provided ICT competent teachers, electricity, and telecommunication infrastructure are available.¹⁶

Desperately poor people might have other needs for ICTs not related to the means they require directly

¹⁶ Note how important it is to have teachers properly trained in the use of ICTs and that have the ability to integrate ICTs into the curriculum. See Bolt, David B. and Crawford, A.K.: *Digital Divide*. 26, 40, 55 – 56.

for survival.¹⁷ For example, they could want improved communication with their children, parents, and friends. They might benefit a lot from knowing in advance about inclement weather approaching, or from receiving accurate information about governmental services available to them. Poor people might want to become involved in protest action to strengthen their voice to express demands for better governmental services.¹⁸ Through the use of ICTs that empower their communication and improve their information they can participate more readily in activities such as the ones listed above. One should also not underestimate the value of the entertainment ICTs can provide poor people. Lack of suitable, affordable entertainment is a fairly common complaint by poor people.

Now let us imagine a slightly better off society with huge urban populations and semi-literate to literate citizens. Suppose such a society has an upwardly mobile economy where at least some opportunities become available for decently trained individuals by way of permanent employment in civil service departments or administrative, managerial, or specialist positions within smaller or larger companies. Skill and knowledge in ICTs might just provide the edge for many talented people to grasp the opportunities for employment to escape their poverty. Similarly, in such a society some kinds of entrepreneurs can set up small businesses that might easily outperform others through the advantages that good accounting software [the calculative-financial function], excellent information retrieval software [the information function], or stock taking software [the administrative function] can provide.

The two examples above refer to the value of ICTs for individuals in poor societies. But what about the role of ICTs to improve the situation of a poor society within the global context of interdependent

¹⁷ See Compaine, Benjamin M. and Weinraub, Mitchell J.: *Universal Access to Online Services*. 154.

¹⁸ Some authors refer to the 'democratic potential' of ICTs. See Norris, Pippa: *Digital Divide*. 6. She further states that "the networking potential of the Internet and its ability to link transnational advocacy networks, grassroots political organizations, and the independent media around the world has aroused hopes that civic society can be nurtured and mobilized through digital technologies." Norris, Pippa: *Digital Divide*. 171.

states that have strong trade, sport and cultural links that spur on even more development and growth?

Note the challenges to modernize technology that face developing countries within the context of our global economy. Can any developing country refuse to convert to the full-scale use of ICTs to make their production processes more efficient? Can they refuse technological modernization that will enable their businesses to become more competitive in local markets, that nowadays all form part of what has become one diffused, interconnected global market? As in all cases of decision making about appropriate technologies the main questions will be [1] whether a particular technology assists us to do things better, faster, and more efficiently, [2] whether the technology will deliver good returns on investment over the longer term, and [3] whether we can make the infrastructure and labour power available to effectively utilise a proposed new technology.

Case 2: ICTs and poor individuals in rich societies

Let us now imagine how the lack of ICTs in a person's employability profile can impoverish a person and impair that person's effective functioning in a rich, modernized society. In most well off, technologically advanced societies competencies in the efficient use of ICTs have almost become prerequisite for employment in a very large range of jobs. People who are ICT poor are almost disqualified from good employment. They are furthermore excluded from many opportunities to get the benefits offered by ICTs, like improved communication. Their interpersonal functioning is not as optimal as their society makes possible and their abilities allow. In a metaphoric sense their lives are thus also impoverished by their inability to utilise technological resources that can enhance the quality of their lives and help them accomplish some of their fundamental goals.

Case 3: Lack of ICTs as impoverishing factor for rich and intelligent people.

In wealthy, technologically advanced societies rich companies and intelligent individuals can be impoverished if they fail to adapt meaningfully to sweeping changes brought about by a technological shift such as the winds of change generated by the ICT revolution. Imagine a highly successful, large grocery store that refuses to computerise in any way.

Management cannot keep track through administrative software when they have to order goods to avert running out of stock nor can they order via the online websites of their suppliers or through their e-mail addresses. The company refuses to buy automated financial software and customers thus cannot pay by credit card nor can the salaries of its employees be administered through effective payroll software. The company cannot keep in touch with the drivers of their vehicles via mobile phones and cannot make use of the extra security satellite tracking systems offer. Such a store will soon be judged a dodo and be rejected by customers, suppliers, and employees for its ineffective service.

Even highly intelligent people like excellent academics can lose if they are incompetent with respect to ICTs. Although many academics might think the nature of their job does not require great ICT competencies, even the best minds in the world might suffer inconveniences, be deprived of valuable information and opportunities, or lose time if they fail to adapt to the ever increasing use of ICTs. An ICT-impoorished academic will become dependent on others for typing teaching materials and research reports. This might mean waiting unnecessarily to get things done. Similar losses will occur when such academics cannot use state of the art technology for communication with their peers or for retrieval of the best intellectual resources contained in the latest published research. Thus, even in a job based on reading books, writing research reports, and talking to students ICTs can enhance the productivity and creative output of academics.

Decision-Making on the Role of ICTs in Poverty Eradication

Can ICTs play a meaningful role in the eradication of poverty? Not necessarily, as their role depends on various factors. I want to propose the following ideas for possible guidance in decision making on the possible value of ICTs in every specific case of poverty.

(1) Introducing new technologies into the lives of poor people must add value to their existing livelihoods or create new livelihoods better than existing ones.¹⁹ This means that ICTs must enable poor

¹⁹ See McNamara's point regarding this issue, "The challenge, then, is both to improve the current livelihoods of the poor and provide them with new

people to acquire basic necessities more easily without adding too much extra cost, or assist them to know about and access governmental services without wasting their time. Access to, and use of, ICTs must make poor people more employable or aid them to improve the management and administration of their economic activities. Also, ICTs must improve their communication with family, friends, relatives, business associates, colleagues, and important service delivery institutions without too much hassle. ICTs must open up new vistas of better quality live for poor people that are within their grasp, suitably developed and trained.²⁰

(2) New technologies must fit into existing lifestyles, sets of values, and patterns of activity or create new ones which can meaningfully convert older ones.²¹ Meaningful conversion means new technologies will modify lifestyles, generate values, and produce patterns of activity that can be maintained by already existing or easily acquired educational levels, sustained by available resources, and are acceptable to the people involved and affected.²² ICTs must thus be adapted to the people they are meant to serve. What does this mean? Once people have basic literary skills, they must be made familiar with and be trained in appropriate ICT skills to suit their needs. The chosen ICTs must also be affordable and

their use must be sustainable over the longer term. Poor people must be assisted to adapt to the changes ICTs bring about in their lives and be guided to utilise new opportunities at their command. Software and even the Internet itself must be developed and adapted to suit the specific needs of the people concerned. The Internet should be shaped by its users according to their needs and values so as to have value in their lives.²³

(3) The decision to implement new technologies must be made judiciously. This implies that the new technology must be appropriate in the circumstances. Thus, the technology must be tailored to the society's most urgent needs,²⁴ must be for purposes that will benefit the society most, and must fit the developmental level of the people and the economy they are intended for. Most possibly poor societies will find it difficult to afford a comprehensive introduction of state of the art ICTs in all sectors of society. Cool heads and wise judgement will be required to determine the areas of intervention where the introduction of ICTs will be in the best interest of the further growth and development of ICT knowledge and skills that will enhance the productivity and competitiveness of the society in question.²⁵

opportunities appropriate to their circumstances while building their capacities and reducing their vulnerabilities so that, over time, they can broaden their economic opportunities as the economy itself grow and diversifies." McNamara, Kerry S.: Information and Communication Technologies, Poverty and Development.

²⁰ McNamara puts it as follows, "ICTs, properly adapted to specific circumstances, have enormous potential. The key to realizing that potential is to begin the analysis not with the presence or absence of ICTs, but with the specific, interdependent causes (both local and global) and components of persistent poverty in a given country, the most effective measures for addressing those causes, and then and only then the tools (not just ICTs, but other resources, policies, 5 partnerships, etc.) necessary to proceed." McNamara, Kerry S.: Information and Communication Technologies, Poverty and Development.

²¹ Pacey, Arnold: The Culture of Technology. 96.

²² See McNamara, Kerry S.: Information and Communication Technologies, Poverty and Development and Schumacher, E.F.: Small is beautiful. 141.

²³ See Couldry, Nick: Digital Divide or Discursive Design? p. 90.

²⁴ For McNamara the case is clear: we must select the most urgent needs to focus on. He says that any "development strategy requires difficult choices, and priorities need to be chosen on the basis of an understanding of what are the most urgent needs of a given country and the actions most likely to have a positive impact on those needs." McNamara, Kerry S.: Information and Communication Technologies, Poverty and Development.

²⁵ Note how McNamara suggests we make decisions on these matters: "one begins not with the question of what ICTs a given country lacks and what we can do about it (the implicit question underlying much digital divide analysis) but what specific types of change are required to make this country more sustainably prosperous, in ways that include even the poorest. ICTs are then brought into the analysis as possible instruments (among others, including both resources and policies) of these desired changes, not as a thing to be desired in themselves." McNamara, Kerry S.: Information and Communication Technologies, Poverty and Development.

Conclusion

In this essay I have argued for ideas that can assist us to rely on our considered judgement to determine the appropriate role of ICTs in the eradication of specific cases of poverty. If these ideas are taken seriously, limited funds for aid to poor people can be optimally employed to make the biggest difference to their lives. Note, however, that new technologies must always be used conjointly with other measures to eradicate poverty, as the idea of quick technological fixes for serious problems of poverty flies in the face of state of the art expertise on the complexities of eradicating poverty.²⁶

I plead the case for a nuanced use of ICTs based on our considered judgement of the most urgent needs that must be addressed to eradicate specific people's poverty. We can already clearly see the tremendous range of application of ICTs and their pervasive influence throughout the world. Some or other form of ICTs – appropriately adapted to people's needs and competencies – is practically already a prerequisite as an important tool to complement other strategies needed to eradicate poverty.

Considered judgement about the introduction of ICTs is necessary, as any technology can be judged obsolete in a specific context, regardless how old or new it is. Even the latest and most sophisticated technology can fall into disuse, can become something no longer used, or not used at all, if it does not appropriately address the needs and does not fit the capacities of the people concerned.

References

- Accascina, Gabriel: Information technology and poverty alleviation*
- Anon: "Behind the digital divide." The Economist. London: Vol.374, Iss. 8417; Mar 12, 2005. pg.21.*
- Bolt, David B. & Ray A.K. Crawford: Digital Divide: Computers and Our Children's Future. New York: TV Books LLC.*
- Castells, Manuel: The Internet Galaxy: Reflections on the Internet, Business, and Society. Oxford, Oxford University Press 2001.*
- Compaine Benjamin E. [ed.]: The Digital Divide: Facing a Crisis or Creating a Myth? Cambridge, Massachusetts, The MIT Press 2001.*
- Copenhagen Consensus 2004: The Results. Copenhagen Consensus Center Copenhagen Business School, Solbjerg Plads 3, 2000 Frederiksberg, Denmark, www.copenhagenconsensus.com*
- Couldry, Nick: "Digital divide or discursive design? On the emerging ethics of information space," Ethics and Information Technology, 5: 89 – 97, 2003.*
- Digital Opportunities for All: Meeting the Challenge: Report of the Digital Opportunity Task Force (DOT Force). Created for the G8 Heads of State 2001.*
- Helmore, Edward and Robin McKie: "Gates Loses Faith in Computers," The Observer of London, Sunday, November 5, 2000.*
- Jonas, Hans: "Toward a philosophy of technology," in David M. Kaplan (ed.): Readings in the Philosophy of Technology. Lanham, Rowman & Littlefield Publishers 2004, 17 - 33.*
- Kaplan, David M. (ed.): Readings in the Philosophy of Technology. Lanham, Rowman & Littlefield Publishers 2004.*
- Kaplan, David M: "Introduction," in David M. Kaplan (ed.): Readings in the Philosophy of Technology. Lanham, Rowman & Littlefield Publishers 2004, xiii - xvi.*
- McNamara, Kerry S.: Information and Communication Technologies, Poverty and Development: Learning from Experience. A Background Paper for the infoDev Annual Symposium December 9-10, 2003 Geneva, Switzerland, The World Bank. <http://www.infodev.org/en/Publication.17.html>*
- Moss, Jeremy: "Power and the digital divide," Ethics and Information Technology, 4: 159 – 165, 2002.*
- Munyua, Hilda: Information and Communication Technologies for rural development and food security: Lessons from field experiences in developing countries*
- Norris, Pippa: Digital Divide: Civic Engagement, Information Poverty, and the Internet Worldwide. Cambridge: Cambridge University Press 2001.*
- Pacey, Arnold: "The culture of technology," in David M. Kaplan (ed.): Readings in the Philosophy of Technology. Lanham, Rowman & Littlefield Publishers 2004, 95 - 102.*
- Peters, Teresa: E-Ready for What? E-Readiness in Developing Countries: Current Status and Prospects toward the Millennium Development*

²⁶ See Pacey, Arnold: The culture of technology. 100

Goals. Prepared for infoDev by bridges.org, The World Bank, 2005.

Schumacher, E.F.: Small is beautiful: A study of economics as if people mattered. London Abacus 1973.

Soanes, Catherine and Angus Stevenson: Concise Oxford English Dictionary (COED) (Eleventh Edition) CD-ROM. Oxford, Oxford University Press 2004.

Tavani, Herman. T.: Ethics and Technology: Ethical Issues in an Age of Information and Communication Technology. Hoboken NJ, John Wiley and Sons, Inc. 2004.

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Towards Professionalism and Commitment in Africa: the case for theory and practice of Information Ethics in Uganda

Abstract:

Though one could not exhaustively and conclusively define all the attributes of an information/knowledge society, it seems Uganda has made commendable strides to such society. One of the prerequisites of such society is a corps of well-educated, trained and experienced information professionals to manage information and knowledge effectively in that society. Furthermore, the corps must perform professionally and ethically at all times. To fulfill this, an Information Code of Ethics (ICE) is required. However, Uganda has as yet to establish an ICE because of some reasons. These reasons are outlined in the paper. The ICE has two aspects: theory and practice. These concepts are explained and related. The LA (USA) and the Chartered Institute of Library and Information Professions (CILIP) formerly the LA (UK) are studied as living examples. The provisions of these ICEs are briefly explained. In view of the past experience a process of establishing an IME for Uganda is considered. The paper concludes with an outline of the content of an IME for Uganda.

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The era of the information society has tightened its grips on Uganda. The Uganda Parliament has enacted several laws related to library and information services, a reflection of commitment to information, the key to the development of its citizens. Ugandans crave for information either as business venture or raw resource for development. Many information professionals are employed by organisations and institutions throughout Uganda thereby through taxation contributing to Uganda GDP. The above are indicators of an information society (IS)/knowledge society (KS).

One of the engines of an IS/KS, are a corps of well educated and trained information professionals to execute information related responsibility according to moral set standards. This is the concern of theory and practice of ethics enshrined in an information code of ethics.

THEORY OF ETHICS

Theory in this paper refers to the documented literature on the concept, philosophy, mechanisms, principles, regulations and evaluation of Information Code of Ethics (ICE). Such literature is consumed to guide and inform the managers and practitioners as well as students, researchers, library and information clients on issues of the information code of ethics. Some of this informing literature is reviewed in the following paragraphs.

Code of Ethics

Ethics comes from a Greek word Ethos (custom) and "has to do with conduct, theory of what is ultimately good or worthwhile, of good conduct and character, or moral rights obligations" (Boaz 1972)¹. Ethics are the customs or standards which a particular group or community acts on (Donalson 1990)². Information professionals should have basic understanding of ethical behaviour by its members, such as conducting oneself in the highest moral standards, ensuring organizational compliance with the spirit as well as letter of pertinent laws and regulations, and reporting to appropriate internal or exter-

nal authority any illegal or fraudulent act by the organisation. The ICE or Code of Conduct(CC) gives guidelines to professional conduct and provide guidelines in the ethical decision making process. (Jefferson and Contreras, 2005)³. An ICE also establishes high standards against which individuals can measure their own performance and communicate to those outside the organisation the value system from which the organisation members must not be asked to deviate (Vanasco 1994)⁴. Iacovino (2002)⁵ rightly concludes that ethical principles enable us to reach normative judgments, guide our thinking by providing us with the basis for determining how we should act when ethical issues arise. They do not provide definite answers; only answers that can be justified by way of argument depending on the ethical view points adopted, and the decision making models and process employed.

The Basis of Information Code of Ethics (ICEs)

Kigongo-Bukenya has outlined the basis for ICEs as follows:

- **Golden Rule**, which must either, be stated or implied: loyalty, honesty, generosity, courtesy, frankness, goodwill, cooperation, friendliness, charity and sincerity – which are general standards or ideals of conduct.
- **Voluntary Spirit**: Most codes are voluntary because they are products of professionals' volition and therefore the extent of its efficiency depends upon mutual understanding and common interest.
- **Machinery**: each code should establish controlling machinery; and an arm in the form of disciplinary committee to correct deviations.

¹ Boaz, Martha (1972): "Code of Ethics, Professional". In: Encyclopedia of Library and Information Science. Pg 245-252.

² Donalson, J. (1990): Key Issues in Business Ethics, London: The Academy Press

³ Jefferson, Rene'e N.; Contreras, Sylvia 2005. Ethical perspectives of library and information science graduate students in the United States. *New Library World* 106 (1208/1209): 58-66.

⁴ Vanasco, Rocco R. (1994): The IIA Code of Ethics: An International Perspective. *Managerial Auditing Journal*. 9(1): 12-22.

⁵ Iacovino, L. (2002): "Ethical principles and information professionals: Theory, practice and education" *Australian Academic and Research Libraries*, Vol. 33 No. 2, pp. 57-74.

Characteristics of Information Code of Ethics (ICEs)

Any ICE should incorporate the following (Kigongo-Bukenya, 1995)⁶:

1. **Duty to Client and Employer:** This refers to the guiding principle that priority should be paid to the interests of the clients within prescribed or legitimate requirements. The professional must be loyal and obedient to the employers within legitimate requirements.
2. **Updating Professional Expertise:** Members must be competent in their activities including the requirement to keep abreast of development and those branches of professional practice in which qualifications and experience entitle them to engage.
3. **Supervision of Staff and Trainees:** Experienced professionals must provide supervision and training to the juniors to ensure steady professional development leading to independent responsibility.
4. **Non discrimination on race, colour, creed, gender and sexual orientation:** Professionals should not exercise discrimination based on race, colour, gender or sexual orientation in the execution of their services to clients except as limited by legal practice.
5. **Confidentiality:** Professionals should not divulge information gathered during the course of execution of duties to their clients. Clients are entitled to secrecy of what transpires between them and the professionals. However, professionals are absolved from the "confidentiality-tenet" in so far as required by law or in answering questions under the disciplinary committee.
6. **Personal Financial Interest:** Members' actions and decisions should be determined solely by their professional judgment and they should not profit from their positions other than by normal remuneration or fee for professionals services. Under no circumstances should a query remain unanswered.

7. **Criminal Offence:** Members must report the facts to the secretary of the Professional Association if convicted of any offence involving disciplinary or one, which brings the profession in disrepute.
8. **Cooperation in Disciplinary Proceedings:**
 - Professionals must respond to any requirements from the disciplinary committee for comments or information on a complaint;
 - Attend the committee proceedings when required to do so;
 - Attend upon a nominated person for the purposes of receiving guidance as to future conduct if required to do so.

The Professional Register (PR)

A (PR) is a list of eligible professionals accepted by authority to practice in the profession. An independent body set up by law administers the PR. Such authority performs the following functions:

1. Exercises general supervision and control over professional education
2. Advises and makes recommendations to government on the matters of the profession
3. Exercises through the Disciplinary Committee control over professional matters

The Concept of PR

Professionals provide very important services which would mean life or death to the clients. Consequently stringent measures must be taken to ensure that enrolment is only done after proper education and training, subscribing to the code of ethics, constant inspection, and in case of malpractices facing disciplinary measures. This is a safety measure against impostors who if were allowed to practice would misinform the clients and tarnish the good name of the profession.

Criteria for Inclusion on the PR

The procedure for enrolment a practicing professional might differ from profession to profession. However the following requirements are similar.

1. Having successfully completed a professional programme of study

⁶ Kigongo-Bukenya, I M N.(1995): The Case for a Register and a Code of Ethics for Information Professionals in Uganda. The Chairman's Professional Address on the Occasion of Uganda Library Association Dinner, Uganda Libraries, Vol. 2 No. 2, p. 3-7.

2. Having been supervised by a qualified senior professional in the field to get experience (Internship)
3. Being a citizen of the country (Non-citizens may have other conditions to meet before registration)
4. Fulfilling specialisation
5. Legal and Medical professions demand inspection of facilities and equipment of the chambers, clinics or hospitals to ensure minimum standards and security to clients.

THE PRACTICE/APPLICATION OF THE INFORMATION CODE OF ETHICS

Practice concerns the management of the process of applying the policies, mechanisms, regulations relating to the ICE. The theory, part of which has been reviewed above, is the knowledge base that drives the implementation. The role of partners in the processes is briefly discussed below.

The Government

The government sets pace in the development of the LIS in any country. It enacts legislation to provide the basis of authority, sets up the organisational structure, provides funding, specifies staff required and provides inbuilt evaluative machinery. Examples of fast growing library and information services in Africa show the impact of personal commitment of respective heads of government in countries like Ghana, and Tanzania, thanks to Nkrumah and Nyerere. Related to the specifics of the implementation of ICE, the government should pass a law to control the profession through creating a PR and controlling authority through adhering to the ICE.

The Professional Library and Information Association (PLIA)

The PLIA is the heart and brain of the profession. It should unite all the information science professions through a common forum to resolve issues concerning the profession. It must play the role of positive agitation to create awareness and support among the citizens and government. One of the key responsibilities of the PLIA is to ensure accreditation of education and training institutions to produce quality professionals. Furthermore, the PLIA must create active and supportive member institutions

and individuals and should conceive and implement the PR and ICE to ensure that only registered people participate in its professional activities and that such professionals perform ethically.

The Information Professionals (IPs)

These are the individual IPs who shoulder the responsibility of planning, implementation and evaluation of plans in the field. Their education, training, experience, commitment and entrepreneurship will ensure the development of the profession and institutions in the field. It is from them the leaders of the profession emerge.

International Bodies – IFLA, etc

National professional associations must work hand in hand with international associations in their field particularly IFLA. This is a World Professional body which is the umbrella of information professionals and institutions. IFLA organises annual forum to discuss and resolve issues related to the information fields. IFLA co-operates with institutions such as ISO, FID, ICA, etc, unique to the information professions with which mutual issues are decided and implemented.

ICE in UK and USA

The Chartered Institute of Library and Information professionals (CILIP) founded in 2003, formerly the Library Association (UK), and the American Library Association (USA) are cases of references in establishing ICE. It should be noted that despite that the LA and ALA were established in 1876 and 1877 respectively, operationalising ICEs never got approved by LA Council till 1983 (subsequently revised in 2005) and by the Council of the ALA in 1995. The reasons for this delay (107 and 118 years) surely indicate the toughness of concluding an ICE. What is striking are the similar provisions of these codes. The ALA ICE for instance affirms its contract with the American people to ensure:

1. Providing the highest level of service to all library users through appropriate and usefully organized resources; equitable service policies; equitable access; and accurate, unbiased, and courteous responses to all requests.
2. Upholding the principles of intellectual freedom and resisting all efforts to censor library resources.

3. Protecting each library user right to privacy and confidentiality with respect to information sought or received and resources consulted, borrowed, acquired or transmitted.
4. Recognize and respect intellectual property rights.
5. Treating co-workers and other colleagues with respect, fairness and good faith, and advocate conditions of employment that safeguard the rights and welfare of all employees of institutions.
6. Not advancing private interests at the expense of library users, colleagues, or our employing institutions.
7. Distinguishing between personal convictions and professional duties.
8. Striving for excellence in the professional by maintaining and enhancing our own knowledge and skills, by encouraging the professional development of co-workers, and by fostering the aspirations of potential members of the profession.

Koehler and Pemberton (2000) state that the information codes of ethics in USA are prescriptive and aspirational in nature.

Koehler (2001) further clarifies: "the prescriptive, aspiration nature of codes of ethics is in part a function of the society in which these associations are found and in part a function of the role of the professional organisations have been ascribed and ascribe to in the society."

The UK ICE makes similar provision below:

1. Avoiding misconduct in providing information services
2. Members compliance with the Charter and Bye-Laws of the Association
3. Catering for the interest of the clients at all times.
4. Protecting the users right to information
5. Fulfillment of contractual obligations owed to the employer
6. Avoiding any type of discrimination
7. Observe privacy and confidentiality of users
8. Professional judgment
9. Members response to any requirements of the Disciplinary Committee

As Hill (1997) emphatically states, the practical use of the code is: an occasional reminder to members

especially the new ones that being a member of a profession does entail an obligation to conform to standards of behaviour normal among other members"

CHALLENGES OF DEVELOPING ICE FOR UGANDA

Thirty four years down the road since the Uganda Library Association was formed after the dissolution of the East African Library Association, no law to control the affairs of ULA, professional register or ICE, have been adopted in Uganda. The reasons are not clear but it is believed that some of the causes are

- Selfishness among the professionals, organisations and institutions. They seem not to like interference in their affairs.
- The government has taken its time to enact enabling legislation partly because of little pressure or negligible political gain that would accrue. For any ICE, there is need for a PR of practicing professionals. Such a register is administered by the designated authority, which should be set up by law. In Uganda, the authority is the Uganda Library Association which is yet to be established by law and see itself establishing a PR. It would be very difficult to even develop and enforce the ICE.
- There are also many people disguising as information professionals. Different disciplines have sprung up and all these are posing as information professionals. Examples include journalists, computer scientists, etc. There is need for a clear identity of who the information professional is and such a person should register with the Association.
- There appear to be lack of seriousness on the part of ULIA leadership and membership to exert due pressure to put their house in order.
- These efforts are further affected by the nature of the employment sector, which is now becoming more and more privatized. Many organizations employ libraries or information professions without consulting the association.
- Given the socio-economic, political and cultural conditions of Uganda as a developing country, there is a likely need to censure certain information, like concerning different

political ideologies, pornography, etc. However, this may conflict with the need to provide for freedom of access to information as may be required under the Code of Ethics.

- But the writing is on the wall. A code of information ethics is long overdue. The Uganda Library and Information Association should wake up and normalize this situation if Uganda were to be counted among the information/knowledge based society, managed by professionals who are controlled by legal authority to ensure quality and professionalism in the field.

Proposed elements of a Uganda Code of Information Ethics

⁷**Unethical behaviours** should be avoided. The professional Code of Ethics for Uganda should define unethical behaviour to include all actions that results into unfairness to others, whether those behaviours are legal or not. Examples may include:

- Bribery, which is considered to be the most frequently occurring ethical problem internationally (Venasco, Rocco R, 1994);
- Accepting personal gifts, because the professionals' ability to maintain professional objectivity might reasonably be questioned.

Information professionals should keep themselves up-to-date and continuously develop and grow professionally. When professionals are unaware of current developments standards, they are likely to conduct themselves in an unethical manner.

The Professional Body must render final decisions on disciplinary matters. By taking either of the following actions:

- Censure, involving a written reprimand which outlines the consequences of repeated actions;
- Suspension imposed when the misconduct warrants more serious disciplinary action than a censure; and
- Expulsion of a member or forfeiture of membership for the most serious misconduct cases.

More ethical work environment consists of several steps, which may include:

- The establishment of a code of conduct, an ethics committee, and a policy empowering the professional body to include checking for compliance with the code as part of its responsibility.
- Continuous training on how to deal with ethical dilemmas.
- Willingness to accept responsibility for one's behaviour.

SUMMARRISED PROPOSED CODE OF ETHICS FOR THE INFORMATION PROFESSION IN UGANDA

Introduction

A Code of Ethics for Information Professionals must basically address issues related to the standard of conduct, competence, honesty, social implications, professional development and protection of the profession. Therefore below is a proposed Code of Ethics for Uganda's Information Profession.

Information Professionals should act with professional responsibility and integrity in dealing with clients, employers, employees, students and the community generally. By this is meant:

1. **Priorities:** to serve the interests of clients and employers, employees and students, and the community generally, as matters of no less priority than the interests of my colleagues or than self.
2. **Competence:** IPs to work competently and diligently for the clients and employers.
3. **Honesty:** Strive to enhance the quality of life of those affected by IPs work.
4. **Social implications:** Strive to enhance the quality of life of those affected by IPs work.
5. **Professional development:** Enhancement IPs development, and that of their colleagues, employees and students.
6. **Information profession:** To enhance the integrity of the Information Profession and the respect of its members for each other.

⁷ Venasco, Rocco R. 1994. The IIA Code of Ethics: An International Perspective. *Managerial Auditing Journal*. 9(1): 12-22.

References

- American Library Association, 2004. "Code of Ethics". <http://www.ala.org/aif/ethics.html> (Accessed 21 Apr, 2005)
- American Library Association 2004, "Libraries: An American Value." <http://www.ala.org> (Accessed 21 Apr, 2005).
- American Library Association, 2004. "Library Bill of Rights." <http://ala.org/work/freedom/idr.html> (Accessed 21st April, 2005).
- Boaz, Martha, 1972. "Code of Ethics, Professional". In: *Encyclopedia of Library and Information Science*. Pg 245-252.
- Donalson, J. 1990. *Key Issues in Business Ethics*, London: The Academy Press.
- Freeman, Mike, 1996. *Living by the code: Some issues surrounding a code of conduct for the LIS Profession*. *New Library World* 97(1129):17-21.
- Gotterbarn, D. 1992. "The use and abuse of computer ethics", in Bynum, T.W., Maner, W. and Fodor, J.L. (Eds), *Teaching Computer Ethics, Research Center on Computing and Society, Southern Connecticut State University*, pp. 73-83.
- Hill, Michael; (1997). *Facing up the Dile: conflicting ethics and the modern information professional*. *FID NewsBulletin* 47 (April 1997):107-117.
- Koehler, Wallace and Pemberton, Michael. *A search for Core Values. Towards a Model Code of Ethics for Information Professionals*. *Journal of Information Ethics* 9 (200): 26-54
- Lacovino, L. (2002). "Ethical principles and information professionals: Theory, practice and education" *Australian Academic and Research Libraries*, Vol. 33 No. 2, pp. 57-74.
- Jefferson, Rene'e N.; Contreras, Sylvia 2005. *Ethical perspectives of library and information science graduate students in the United States*. *New Library World* 106 (1208/1209): 58-66.
- Kigongo-Bukenya, I M N. *The Case for a Register and a Code of Ethics for Information Professionals in Uganda*. *The Chairman's Professional Address on the Occasion of Uganda Library Association Dinner, Uganda Libraries, Vol. 2 No. 2, 1995 p. 3-7*.
- Maddocks, P M (1992) in Vanasco, Rocco R. 1994.
- Schweikart, J.A. (1992) in Vanasco, Rocco R. 1994.
- Sturges, Paul, 2003. *Doing the right thing: Professional ethics for information workers in Britain*. *New Library World*. 104 (1186): 94-102).
- The Library Association (UK): *Code of Professional Conduct*.
- <http://www.ifla.org/faife/ethics/lacode.htm> (Accessed on 21 April, 2005).
- Vanasco, Rocco R. 1994. *The IIA Code of Ethics: An International Perspective*. *Managerial Auditing Journal*. 9(1): 12-22.
- Wells, Barron and Spinks, Nelda. 1996. *Ethics must be communicated from the top down! Career development international* 1(7): 28-30.

Omwoyo Bosire Onyancha

E-governance in Eastern and Southern Africa: a Webometric study of the Governments' websites

Abstract:

This paper explores the adoption of one of the Information and Communication Technology (ICT) tools, i.e. the Internet and more particularly, the World Wide Web, by Eastern and Southern African governments as a means of facilitating interactions between the state and its citizens. It was observed that most governments in the region have constructed their own Web sites, some of which are up to date. English is the most commonly used language to prepare the web sites. Other findings include: foreign missions recorded the highest number of web pages followed by political parties; the **.com** or **.co** Top Level Domain (TLD) generated most web pages followed by **.ac** or **.edu** in each country; most governments provide contact information as opposed to sitemaps and feedback forms which recorded relatively few postings; governments with few web-pages and large quantities of in-links (including self-links) recorded high Web Impact Factors (WIFs); and only the South African government provided links to other Eastern and Southern African governments. Ethical issues regarding the analyzed variables as well as conclusions and recommendations are provided.

Agenda

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Introduction

Information and Communication Technologies (ICTs) are increasingly becoming important tools by which individuals, corporate institutions/ organizations and even countries not only create, store, disseminate and use information but also market their services and products. The Internet, being one of the modern ICT tools, offers several opportunities and services such as electronic commerce, web-based education, electronic mail, and Electronic governance, among others. E-governance is defined as the "use of ICTs to promote efficient and effective government, facilitate more accessible government services, allowing greater public access to information, and making government more accountable to citizens" (Jensen, 2002: Introduction, para 1). It involves the delivery of government services and information to the public using electronic means. The United Nations Educational, Scientific and Cultural Organization [UNESCO] (2005: what is e-governance?), provides an elaborate definition of E-governance thus: "the public sector's use of information and communication technologies with the aim of improving information and service delivery, encouraging citizen participation in the decision-making process and making government more accountable, transparent and effective". Backus (2001:n.d.) gives E-governance a commercial impetus. The author argues that E-governance is a form of e-business in governance and defines it as the application of *electronic means* in: (1) the *interaction* between *government* and *citizens* and *government* and *businesses*, as well as in (2) *internal government operations* to simplify and improve democratic, government and business aspects of Governance".

According to Chisenga (2004), e-governance is meant to fulfill the following goals:

- Improve the internal organizational processes of governments
- Provide better information and service delivery
- Increase government transparency in order to reduce corruption
- Reinforce political credibility and accountability
- Promote democratic practices through public participation and consultation

An audit of the technological developments in Africa indicates that most governments in the continent

are vigorously promoting the use of ICTs in the provision of their services to the respective citizens. A study conducted by Chisenga (2004) noted that majority of the African governments are finding their way into cyberspace through the construction of their own websites. It has been observed, however, that the mere ownership of a web site does not mean effective e-governance (Waiswa, 2006). Quoting Dr. Subhajit Basu, a lecturer at Queen's University Belfast, Waiswa (2006) agrees that ICTs only support and stimulate good governance. Websites, nevertheless, are essential tools (and sometimes pre-requisites) for governments to realize or attain any effective e-governance. According to Sangonet in Chisenga (2004), the following benefits can be realized if governments can distribute their information through the ICT tools such as the Internet and the Web:

1. Lower cost than print distribution
2. Broad distribution at relatively little cost
3. Speedy distribution at low cost
4. More information can be made accessible at lower costs
5. Government is therefore able to provide more information to the public than would have before
6. Different but important type of information can be distributed, e.g. staff members of departments, contact details, etc.
7. Access can be provided to information in remote/rural areas
8. People can respond and/or put their views across
9. Putting into effect commitment to transparency, accountability, and democratization

Commenting on the benefits of e-governance in China, Kluver (2005:76) argues that

"e-government initiatives in China have had as their purpose not the empowerment of citizens, nor even to attract external investment, but rather to add stability and order to a chaotic governing process and social change, and to re-establish the control of the governing authorities, including improving the quality of surveillance and data gathering, and hence policy-making, the elimination of corruption, and ultimately, the re-legitimation of the Communist Party of China".

Bar-Ilan (2005:975) defines the Web as an "enormous set of documents connected through hyper-

text links created by authors of Web pages". In addition, links, according to Bar-Ilan (2005) are used to improve the performance of information retrieval systems on the Internet and more so the Web. Therefore, for one to successfully access government information, he/she would require to follow particular links as provided by Web page authors, commonly known as webmasters. Links that are not well constructed or active (dead links) would make information access, on the one hand, and government-citizen or government-business interactions impossible thereby rendering the whole system of e-governance null and void for it is through the web links that citizens or the business community can reach and be reached by the government.

In view of the above, an evaluation of the websites in terms of web content and links (to and from other websites) would help to measure the performance of the various governments on the Web thereby providing valuable information which can be used in formulating relevant policies towards the improvement of the situation, specifically as regards service delivery through the Internet and the Web.

Purpose of study

This study sought to broadly examine the web performance and impact of the Eastern and Southern African governments on the Web with a view of determining their visibility and impact. The following research questions were used to inform the study.

- How many countries in eastern and southern Africa have constructed government websites?
- Which is the most commonly language used to prepare the websites?
- How up-to-date are the government website?
- How many government and government-related institutions own websites in each country?
- Does each government website provide the most essential features (e.g. feedback forms, search engines, contact details, site maps)?
- How much has each government's site contributed in terms of web pages in each country?
- What is each government's web influence/impact?

- Are there any inter-linkages between eastern and southern African governments' websites? If so, what is the nature/type of these linkages?

Methods and Procedures

The study employed two approaches, namely, link and content analyses, to study the web presence and impact of Eastern and Southern African governments on the Web. A total of twenty (20) countries were targeted for study. These are: Angola, Botswana, Djibouti, Eritrea, Ethiopia, Kenya, Lesotho, Madagascar, Malawi, Mozambique, Namibia, Seychelles, Somalia, South Africa, Sudan, Swaziland, Tanzania, Uganda, Zambia, and Zimbabwe. The Internet was heavily relied upon to obtain website addresses for each country. Three Internet-based online sources provided links to African countries on the Web. They include:

1. African Governments on the WWW (<http://www.gksoft.com/govt/en/africa.html>)
2. African Governments on the Internet
3. (<http://www.uneca.org/aisi/NICI/africagovintern.et.htm>)
4. Foreign governments – Africa (<http://www.lib.umich.edu/govdocs/forafr.html>)

These three sources provide links to a variety of websites of a given country which in turn provide various access points to African governments' home pages. Government ministries or departments, state house or presidents, national assemblies or parliaments, prime ministers, etc are some of the national institutions whose home pages are provided by the aforementioned sites. Others include representations in foreign countries (otherwise known as foreign missions or high embassies), and political parties. At this stage, only a government's official URL address was used to conduct a content and link analysis of Eastern and Southern African governments. The portal, notes Chisenga (2004), usually provide an "entry point or access point to all or some web sites of executive and legislative organs of the government, and government agencies".

A total of 13 government portals were identified as shown in Table 1. However, when the time came to access each of these websites, Djibouti's, Uganda's and Namibia's websites could not be accessible; with the most commonly known website access error – 'the page cannot be displayed' – popping up. Nevertheless, the websites were used to measure the

respective government’s impact using link analysis, therefore leaving out a content analysis of the country’s website.

In order to perform a link analysis of Eastern and Southern African governments, two online indexing services (i.e. google.com and altavista.com) were used to extract relevant data using a combination of unique search queries, respectively, as follows:

1. Number of links from one government site to another (e.g. from South Africa to Kenya)
 Google: site:gov.za (space) "www.kenya.go.ke"
 AltaVista: domain:gov.za (space) "www.kenya.go.ke"

This first search strategy is a bit limited in that hypelinks are sometimes in the name of a person or institution. For example, the Kenya government’s website can be linked to using either a URL or a name hyperlink (i.e. [Government of Kenya](http://www.kenya.go.ke), or <http://www.kenya.go.ke>). This study used the aforementioned query in the believe that if when the hyprlink is in the name a particular government, the linking page will still provide a URL alongside the name.

2. The total number of pages linking to the website
 Example (Google): *link:www.gov.za/*
 Example (AltaVista): *linkdomain:gov.za/* OR *linkdomain:www.gov.za/*
3. The total number of pages at the website
 Example (AltaVista): *domain:gov.za/* OR *domain:www.gov.za/*
 Example (Google): *site:gov.za/* OR *site:www.gov.za/*

The Web Impact Factor was calculated in order to measure each government’s web influence (impact) as follows.

$$WIF = \frac{\text{The total number of pages linking to the web site}}{\text{The number of pages at the web site}}$$

Social networks were constructed using the Pajek computer-aided software. Tables were largely used to present the findings.

No.	Country	Government website address
1	Botswana	http://www.gov.bw/
2	Djibouti	http://www.republique-djibouti.com/
3	Kenya	http://www.kenya.go.ke
4	Lesotho	http://www.lesotho.gov.ls/home/
5	Madagascar	http://www.madagascar.gov.mg/
6	Malawi	http://www.malawi.gov.mw/
7	Mozambique	http://www.mozambique.mz/
8	Namibia	http://www.grnnet.gov.na/
9	South Africa	http://www.gov.za/
10	Swaziland	http://www.gov.sz/
11	Tanzania	http://www.tanzania.go.tz/
12	Uganda	http://www.government.go.ug/
13	Zimbabwe	http://www.gta.gov.zw/

Table 15 Eastern and Southern African governments’ websites used to conduct the study

Results

Results cover the following sub-themes which were derived from the purpose of the study and the research questions: language of web construction, availability and number of government and government-related institutions that own websites, up-to-datedness of websites, essential Web

features, total Top Level Domains, number of in-links and number of pages, web impact factor, and governments’ inter-linkages.

Language in which the websites are prepared

Out of the total 13 government websites, all apart from Madagascar’s and Mozambique’s websites were in English language. Mozambique’s website was largely in Portuguese. The English version of the website is still under construction. In the case of Madagascar, the government’s website is constructed using the French language. Unlike Mozam-

bique, there is no English version of Madagascar's website.

Up-to-datedness of government websites

There were two dates that were considered in this analysis, namely, the copyright date and the date of page or site update. There were several occasions in which there were as many different dates as there were web directories or domains or pages in a given government website(s). Sometimes each department's website contained different dates of update from the portal's date(s).

Every effort was made to obtain the dates from the government's portal. Wherever the main government portal did not display any date, the page "about us" or "about the government" on the governmental portal was used to extract the two dates

where possible (e.g. South Africa). In some cases, the date of update was in the form of the "date today" (e.g. Kenya). The latter was excluded from the data analysis and only the *year* of update was considered.

Only countries with government portals were analyzed in this section. Table 2 shows that all the websites whose dates were given (i.e. 4) are up-to-date. Their copyright dates are current (i.e. beyond 2004). Majority of the sites did not provide the dates of copyright or update. South Africa provided both the copyright and update dates as shown in Table 2. It should be noted that the government websites that provided the dates of update showed that the websites are up-to-date, both having been updated in 2006, the year in which this study was conducted.

No.	Country	Government website address	Copyright date	Date of update
1	Botswana	http://www.gov.bw/	2006	-
2	Djibouti*	http://www.republique-djibouti.com/	-	-
3	Kenya	http://www.kenya.go.ke	2005	2006
4	Lesotho	http://www.lesotho.gov.ls/home/	-	-
5	Madagascar	http://www.madagascar.gov.mg/	-	-
6	Malawi	http://www.malawi.gov.mw/	-	-
7	Mozambique	http://www.mozambique.mz/	-	-
8	Namibia*	http://www.grnnet.gov.na/	-	-
9	South Africa	http://www.gov.za/	2004	2006
10	Swaziland	http://www.gov.sz/	-	-
11	Tanzania	http://www.tanzania.go.tz/	2001-2007	-
12	Uganda*	http://www.government.go.ug/	-	-
13	Zimbabwe	http://www.gta.gov.zw/	-	-

Table 16 Government portals' copyright and update dates

Note: *Websites belonging to the three countries were not accessible.

Government and government-related institutions with own websites

This section presents data extracted from all the eastern and southern African countries irrespective of whether the countries had government official websites or not. Table 3 provides the number of government and government-related institutions in each country that had own websites at the time of the study. The Table reveals that a total of 13 countries have constructed government portals from which most departments and other government-related institutions can also be accessed apart from directly accessing their own websites by keying in their respective URLs in the address bar of an Internet browser. The countries include South Africa,

Uganda, Kenya, Mozambique, Namibia, Madagascar, Tanzania, Zimbabwe, Malawi, Lesotho, Swaziland, Botswana, and Djibouti. South Africa leads in the number of government and government-related institutions that have websites, which total 92 followed by Uganda (29), Kenya (25), Ethiopia (23), while Angola, Mozambique, and Namibia recorded 19 institutions each. It should however be noted that South Africa's total number of institutions do not include the provincial/ regional governments and departments.

A comparison of different institutions indicates that foreign missions belonging to a country were the majority (104) followed by government ministries (77), political parties (37), government portals (13),

national assemblies/parliaments (8), and presidents/prime ministers (5).

The government ministry portals provide access to government institutions that fall under respective ministries. The 'Others' comprise electoral commissions, constitutional commissions, national police, national banks, national television stations, national

radio stations, office of the government spokesperson, national bureau of standards, etc. It should be borne in mind that South Africa's system of government comprises national and provincial/regional governments which in turn consist of several regional institutions.

No.	Country	Govt. Portal	Ministries	National Assembly	President /Prime Minister	Political Parties	Foreign Missions	Others	Total
1	South Africa*	1	23	1	-	11	35	21	92
2	Uganda	1	10	1	1	1	5	10	29
3	Kenya	1	7	1	1	3	7	5	25
4	Ethiopia	-	-	1	-	6	9	7	23
5	Angola	-	5	1	-	3	7	5	19
6	Mozambique	1	6	-	-	1	2	9	19
7	Namibia	1	7	-	2	2	4	3	19
8	Sudan	-	2	-	-	2	13	1	18
9	Madagascar	1	7	1	-	-	4	5	17
10	Tanzania	1	2	1	-	2	7	3	16
11	Zimbabwe	1	-	1	-	4	2	4	12
12	Malawi	1	2	-	-	-	1	5	9
13	Zambia	-	-	-	-	-	-	9	9
14	Lesotho	1	-	-	-	-	2	5	8
15	Swaziland	1	2	-	1	-	2	2	8
16	Seychelles	-	1	-	-	1	1	4	7
17	Botswana	1	3	-	-	-	1	1	6
18	Djibouti	1	2	-	-	1	-	2	5
19	Somalia	-	-	-	-	-	1	1	2
20	Eritrea	-	-	-	-	-	1	-	1
	TOTAL	13	77	8	5	37	104	102	344

Table 17 Government and government-related institutions that have own websites in each country

*Only the national government and government-related institutions were counted. Regional/Provincial institutions were not included in the national tally.

Distribution of the web pages according to the most commonly used generic TLDs (gTLDs)

Five generic Top Level Domains (gTLDs) [i.e. **.ac/.edu**, **.com/.co**, **.org/.or**, **.gov/.go/.gv**, and **.net**] that are commonly used to register domain names were selected and used to examine, among other aspects, each government's gTLD's (i.e. **.gov**, **.go**, or **.gv**) share of a country's total gTLDs tally. Table 3 provides the distribution of web pages according to the gTLDs in each country as well as country's total web pages (i.e. web pages that contained a country's Code TLD, i.e. ccTLD). Table 4 reveals that the leading country in the number of web pages bearing only a country's cTLD was South Africa which yielded 9368818 and 21194026 web pages in Google and AltaVista, respectively. Others that performed relatively well (in the order of Google, AltaVista) were Uganda (252949, 239740), Tanzania (145400, 221101), Zimbabwe (165850, 193040), Kenya (204700, 157900), Namibia

(391340, 128973), etc. Generally, it can be also observed that the **.co** or **.com** (commercial organizations) gTLDs recorded the highest number of web pages in most countries followed by **.org** or **.or** (non-profit making organizations) gTLDs in both indexing services. This pattern emerges when the total number of pages (third column from the bottom of Table 4) is considered. There were a total of 9597755 and 18921281 **.com** or **.co** web pages in Google and AltaVista, respectively while **.edu** or **.ac** gTLDs produced a total of 743312 and 1832534 web pages in the two indexing services. The governmental (i.e. **gov** or **go**) institutions web pages totaled 706212 and 551698 pages while the network infrastructures (i.e. **.net**) produced a total of 22619 and 34542 web pages in Google and AltaVista search engines, respectively.

No.	Country	.co + .com		.edu + .ac		.gov + .go + .gv + .government		.net		.org + .or		Total*	
		Google	AltaVista	Google	AltaVista	Google	AltaVista	Google	AltaVista	Google	AltaVista	Google	AltaVista
1	South Africa (.za)	8160000	18000000	655760	1760000	147000	414000	58	26	406000	1020000	9368818	21194026
3	Uganda (.ug)	165000	200000	15900	8540	39400	16200	0	0	32649	15000	252949	239740
8	Tanzania (.tz)	46800	168000	26800	23200	52300	17600	0	1	19500	12300	145400	221101
5	Zimbabwe (.zw)	135000	166000	7950	10300	2400	1640	0	0	20500	15100	165850	193040
7	Kenya (.ke)	157000	123000	10700	12300	21800	10100	0	0	15200	12500	204700	157900
6	Namibia (.na)	154000	99200	1440	2550	210000	22000	0	3	25900	5220	391340	128973
12	Mozambique (.mz)	85000	94900	919	626	63200	10400	1	0	12500	7050	161620	112976
15	Swaziland (.sz)	0	7160	357	318	3550	2520	0	0	11800	102000	15707	111998
10	Ethiopia (.et)	111000	2500	15100	7660	11600	12600	15700	32900	2510	1570	155910	57230
9	Zambia (.zm)	197887	34300	1218	857	7640	4490	310	135	11800	9730	218855	49512
4	Botswana (.bw)	168000	7560	228	98	26200	23300	0	0	2370	1880	196798	32838
16	Lesotho (.ls)	210000	14900	37	12	20800	3620	0	1	2580	2930	233417	21463
17	Malawi (.mw)	1524	494	607	2070	1620	1900	0	0	2480	4980	6231	9444
18	Sudan (.sd)	23	19	4160	217	28100	4420	5020	714	431	111	37734	5481
11	Madagascar (.mg)	49	34	0	0	56800	4420	0	0	327	216	57176	4670
14	Seychelles (.sc)	562	1380	171	146	893	737	1530	761	20	26	3176	3050
13	Djibouti (.dj)	0	2	25	1990	626	528	0	1	49	35	700	2556
19	Eritrea (.er)	2640	302	1940	1650	483	405	0	0	33	63	5096	2420
2	Angola (.ao)	3270	1530	0	0	11800	818	0	0	0	1	15070	2349
20	Somalia (.so)	0	35*	0	0	0	1*	0	2*	0	4*	0	229*
	TOTAL	9597755	18921281	743312	1832534	706212	551698	22619	34542	566649	1210712	11636547	22550996
	% of Total	82.5	83.9	6.4	8.1	6.1	2.4	0.2	0.2	4.9	5.4	100.0	100.0
	Average pages per country	479888	946064	37166	91627	35311	27585	1131	1727	28332	60536	581827	1127550

Table 18 Number of web pages distributed by the most common generic TLDs (gTLDs)

* Somalia's gTLD pages could not be accessed in order to verify their authenticity although the domain names ended with a **.so** ccTLD

Provision of important features on the government websites

An examination of the governments' websites for purposes of finding out the provision of information-related tools or services yielded the results presented in Table 5. Four aspects that are pertinent to citizen-government relationship in e-governance, namely, feedback forms, contact information, sitemap, search engines/options were considered.

Table 5 reveals that apart from Lesotho, South Africa and Swaziland which provided all the four features, the rest of the countries' websites offered fewer than 4. Websites of four countries, namely Djibouti, Namibia, Uganda and Zimbabwe, were not accessible at the time of comparing the countries in regard to the provision of the services. Notably, the contact information (i.e. persons to be contacted, telephone numbers, fax numbers, cell-phone numbers, email addresses, etc) was provided by 9 out of the 13 countries followed by search engines (6), sitemaps (5), and feedback forms (4).

No.	Country	Feedback forms	Search Engine	Contact Info	Sitemap
1	Botswana	x	√	√	x
2	Djibouti	-	-	-	-
3	Kenya	x	x	√	x
4	Lesotho	√	√	√	√
5	Madagascar	x	√	√	√
6	Malawi	x	x	√	x
7	Mozambique	√	x	√	x
8	Namibia	-	-	-	-
9	South Africa	√	√	√	√
10	Swaziland	√	√	√	√
11	Tanzania	x	√	√	√*
12	Uganda	-	-	-	-
13	Zimbabwe	-	-	-	-
Total occurrences		√=4, x=5	√=6, x=4	√=9, x=0	√=5, x=4

Table 19 Government's provision of feedback forms, search engines, contact information and sitemaps

√* The site did not have a "sitemap" option but "about this site"

Web pages in and links to the government portals

Government domain pages were evaluated in order to generally compare the visibility and influence – on the web using both the Google and AltaVista search indexing services – of Eastern and Southern African countries' government portals, on the one hand, and the entire or cumulative *.go/.gov/.gv* government websites, on the other hand. It was found, as expected, that there were more web pages at and links to the *.go/.gov/.gv* government web pages than there were web pages at and links to the government portals. For instance, Botswana yielded 22900 (AltaVista) and 1620 (Google) government portal web pages and a total of 23300 (AltaVista) and 26200 (Google) government web pages.

As the links, the country received a total of 69500 (AltaVista) and 1 (Google) government portal web pages and 73700 (AltaVista) and zero (Google) links to the cumulative government web pages. The same pattern was witnessed in all the other countries. The last row in Table 6 indicates that there were a total of 461767 governmental portal web pages in AltaVista while Google yielded a total of 204667 web pages in the same category. The cumulative government web pages (i.e. all pages that contained *.go/.gov/.gv* gTLDs) were 528228 and 672696 in AltaVista and Google, respectively. Links to the government portal web pages totaled 536510 (AltaVista) and 2 (Google) while all government web pages received a total of 631871 and zero links in AltaVista and Google, respectively.

Government Web Impact Factors

Table 6 provides the WIF for each government in both AltaVista and Google. The WIF was calculated as the ratio of the total in-links to the total web pages at the web site(s). The highest WIF was recorded by Djibouti’s government portal (i.e. 701.0 in AltaVista) followed by Uganda’s (288.0), Zimbabwe’s (235.3), Kenya’s (136.0), and Mozambique’s (47.2), all as reflected in AltaVista. In the case of Google, it was noted that all government portals recorded zero (0) WIF when rounded up to the nearest whole number.

When the total number of government web pages was considered, it was found that Zimbabwe had the highest WIF (i.e. 22.7) followed by Kenya (3.3), Botswana (3.2), Lesotho (2.1), Swaziland (1.8), Uganda (1.7), Tanzania (1.7), Malawi (1.5), Namibia (1.5), Djibouti (1.3), and Madagascar (1.1). Again, all government websites produced zero (0) WIF in Google. Cumulatively and as shown in the last row in Table 6, the government portals produced a WIF of 1.16 while all the government websites produced a WIF of 1.20 as measured using AltaVista data. The WIF, in both cases, was nil in both AltaVista and Google.

No.	Country Name	Govt. Portal only		Govt. sites (Collectively)	
		AltaVista	Google	AltaVista	Google
1	Botswana	3.0349	0.0006	3.1631	0.0000
2	Djibouti	701.0000	0.0000	1.3277	0.0000
3	Kenya	136.0000	0.0000	3.2673	0.0000
4	Lesotho	1.2359	0.0000	2.1188	0.0000
5	Madagascar	6.2867	0.0000	1.1403	0.0000
6	Malawi	1.7643	0.0000	1.5158	0.0000
7	Mozambique	47.2222	0.0000	0.8173	0.0000
8	Namibia	1.7714	0.0000	1.4500	0.0000
9	South Africa	0.8750	0.0000	0.8913	0.0000
10	Swaziland	1.7393	0.0000	1.8175	0.0000
11	Tanzania	5.2857	0.0002	1.6989	0.0000
12	Uganda	288.0000	0.0000	1.7160	0.0000
13	Zimbabwe	235.3383	0.0000	22.6829	0.0000
	TOTAL	1.1619	0.0000	1.1962	0.0000

Table 20 Web Impact Factors

Government inter-linkages

The social networks shown in Figs 1 and 2 provide inter-site linkages among the government web sites. The illustrations show that it was only the South African government that provided links to other governments' websites while it received none from any of the governments investigated.

In AltaVista, South Africa provided 2 links to Botswana and 1 link to Kenya. In the case of Google, 7 countries received links from South Africa. These are: Botswana (5), Kenya (4), Tanzania (2), and Lesotho (2) while Malawi, Namibia, and Swaziland received one link each.

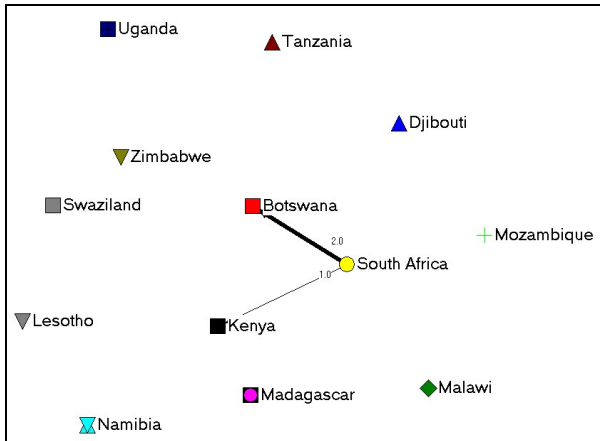


Fig 1 Government inter-linkages: AltaVista

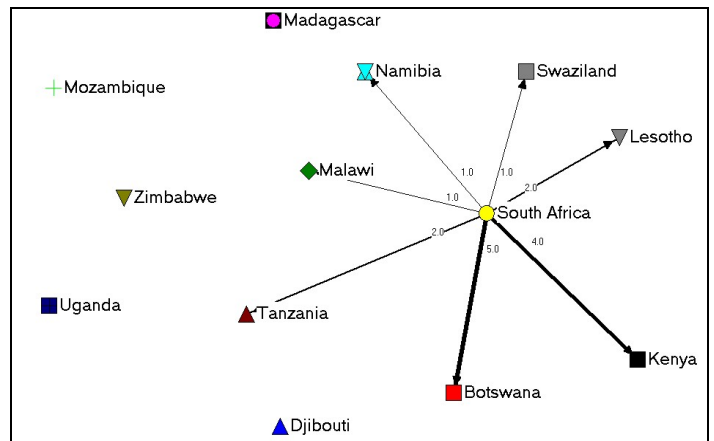


Fig 2 Government inter-linkages: Google

Discussion and conclusions

It was observed that several governments in the region have constructed websites. Out of the total 20 countries in eastern and southern Africa, 13 (65%) provide government portals. This falls far below the expectations of many especially in this era of technology. One may ask the question, why are the other governments in the region (totaling 7) reluctant to construct their websites? Are they reluctant or is it because they have not been enlightened about the Web's benefits? Chisenga (2004) is of the opinion that African governments lack active involvement in web development. It would be interesting to conduct a study to identify reasons as to why governments in Africa are not actively participating in web development and engineering. Chisenga's study reported a total of 24 African governments with own websites, 12 of which were from eastern and southern Africa. Kenya and Swaziland were excluded from Chiseng'a study because their websites were not accessible. The

same problem resurfaced during the current study where three government websites, namely, Djibouti, Namibia, and Uganda, could not be accessed. Whether they were "dead links" or the servers that host the websites were not functional could not be ascertained at the time of conducting this study. Nevertheless, it is worth mentioning that this scenario impacts negatively on a country's e-governance activities. Just like librarians often say, a 'book which is mis-shelved is as good as a lost book', any website that cannot be accessed is as good as it never existed at all. Citizens cannot keep abreast of the goings-on in the government nor can they be able to download important documents from the government website, which service e-governance is meant to provide. Another danger of

not owning a website which needs mention is related to the 'new forms of piracy' on the Web (Ndioo, 2007). According to Ndioo, individuals or companies are making huge sums of money by intentionally depriving real companies their right to own domain names. These individuals are busy registering domain names using renowned companies' names only for them to demand that company X buys the rights from them if the latter wants to use the domain name with which the former had registered 'their' company. Although this has not happened with government domain names, it is a possibility and that calls for governments to register their domain names with appropriate registration bodies not only because of the fear that their domain names may be used by others, but also for purposes of enhancing e-governance.

Previous studies (e.g. Chisenga, 2004) have shown that government Websites are used for several reasons some of which include informing the public of new developments in the government through the government such websites as the official gov-

ernment spokesperson's website; full text government documents; the country's constitution; government forms, e.g. application forms for birth certificates, and visa, etc; online application facilities; government contact details; feedback facilities; frequently asked questions; and statements of responsibility. This study considered four of such features, namely feedback forms, search engines, contact details, and sitemaps. Each of these is important in its own right and contributes to effective and successful e-governance. For instance, Chisenga (2004) and Markus (2001) observe that the interaction between government and the public is stimulated with various applications. For example, people can ask questions via e-mail, use search engines, and download forms and documents while feedback facilities act as discussion tools which the public can use to comment on various government policies and decisions. It was encouraging to note that most of the aforementioned four features were provided by all of the accessible government websites. The most noticeable was the availability of contact details (telephones, emails, and person to be contacted) in all accessible government websites.

It is well acknowledged that language, among other factors, affects usability or citedness of a document (see Garfield, 1993). It is equally therefore important to state that one of the factors that may determine the usability of a web site/page is the language¹ in which that site/page is constructed, thereby affecting the site's/page's sitedness/linkage. Consequently, international recognition is limited if the website is in a language that is not international. It was observed that English was the most dominant language in which websites were prepared probably because of its international usage. The other languages which are used to prepare the websites include Portuguese, French and Arabic. The use of these languages in preparing the government websites and as official languages of communication in respective countries can be attributed to the countries that were colonial masters in those countries. One would argue that local national languages, e.g. Swahili, Zulu, Afrikaans, etc. should be used to prepare alternative websites to the ones prepared using international language(s). This may improve e-governance but whether it is necessary or not – given that majority of the citizens who use the Web are well versed with the official language of com-

munication/instruction in their countries – is debatable.

Concerning the gTLDs, it was observed that there was consistency in the use of the several variations of the gTLDs in a given country. For instance in Kenya the use of **.co**, **.or**, and **.ac** for company, organization and academic institutions was observed while South Africa uses **.co**, **.org** or **.ac**, respectively. While some countries used **.gov** (e.g. South Africa, Zimbabwe, etc), others (e.g. Angola) used several variations for one type of institution (i.e. **.gov** and **.gv** for governmental institutions). Southern African countries largely used **.org** and **.gov** as opposed to Eastern African countries (except Uganda which used both variations of non-profit making organizations, i.e. **.or** and **.org**) which largely employed the use of **.or** for non-governmental organizations' domain names. Worth noting too was the dominance of **.co** or **.com** (commercial organizations domain names) TLDs in each country. The commercial organizations' web pages totaled 9597755 (Google) and 18921281 (AltaVista), accounting for 82.5% and 83.9% of the total web pages for the five gTLDs, respectively. The government Web pages were favorably represented in each country, with Google yielding a total of 706212 (6.1%) and 551698 (2.4%) pages in Google and AltaVista, respectively. This, in our view, is reflective of the real situation in each country where commercial companies are more than government institutions or any other type of institutions such as non-governmental organizations and academic/educational institutions and has nothing or very little to do with the preference of **.com** or **.co** TLD.

Another aspect that was considered when studying the government websites was the date of copyright or update. This analysis did not yield comprehensive results because most government websites did not provide either of the dates. However, results from those that provided the dates show that all the websites are up-to-date. It is recommended that all websites should provide the dates of copyright and/or update since these dates not only reflect how current the website is but also, in scholarly publishing, the date of publication is crucial especially when it comes to citation. It will also show professionalism in Web site/page construction on the part of web page authors.

Table 3 provides the number of web pages at the government and government-related institutions' websites. As aforementioned, all but seven (7) countries in eastern and southern Africa, own gov-

¹ Language, in this case, does not refer to the computer language (i.e. the system of commands used to develop software for computers – e.g. DOS) but the natural language (e.g. English, French, Arabic, Afrikaans, Swahili, etc.)

ernment portals. The most productive of the institutions were foreign missions, followed by government ministries, political parties, and national assembly. This pattern of distribution is typical of any country where foreign missions and political parties are several while such institutions as presidents'/prime minister's, national assembly's and even ministries' offices in a country would be one each. In fact, one would not find, for instance, two offices of the 'presidency', 'prime minister', 'government spokesperson', etc. There is normally one office for each of these institutions. Even wherever there are two deputies in any particular office, they will always be classified under the name of the respective office. In addition, it is most probable that the foreign missions, especially those based in developed countries, would find it convenient and compelling to prepare their own websites because of the environment in which they are operating. Developed countries provide enabling or conducive conditions, facilities and expertise for the construction of websites. For instance, one does not need to labor so much to convince the administration of foreign missions about the need to have a Web site for the mission. Other factors that may be contributing to construction of more web sites for foreign missions that any other government and/or government-related institutions could be advanced technology and expertise which are readily available in developed countries.

Results from an analysis of the number of web pages in and links to the government portals show, as expected, that government portals yielded fewer web pages and in-links than the government websites put together. Again, AltaVista search engine produced more Web pages and in-links for each government than Google. In fact, Google produced zero in-links for most of the governments in the region. Commenting on this type of pattern, Thelwall (n.d.) says that Google only reports a fraction of links that Google is aware of (approx. 10%) which may explain why Google produced less links to eastern and southern African governments. South Africa was the most prolific as well as most linked to (sited) government. Others that yielded a large number of Web pages and in-links include Namibia, Tanzania, Lesotho, Botswana, and Swaziland.

Impact-wise and as shown in Table 7, it was almost the opposite of the above. Countries that had fewer Web pages and a large number of in-links produced higher WIFs than their counterparts. This analysis saw Djibouti leading with a WIF of 701 (from only one web page and 701 in-links) in AltaVista followed Uganda (288) and Zimbabwe (235). It is worth

noting that, in this case, we analyzed all in-links (including self-links). Collectively, all government Web sites (including those belonging to government-related institutions as long as they contained *.gov* or *.go* TLDs) yielded the highest WIF for Zimbabwe (22.7) in AltaVista followed by Kenya (3.3) and Botswana (3.2). Again, Google yielded a zero WIF for most governments. This perhaps illustrates why IFs should be used with care when assessing the quality of Web sites or pages or documents because a country like Djibouti which yielded only one (1) web page produced the higher WIF than South Africa which had 416000 web pages.

With regard to the government inter-linkages, it was observed that only the South African government provided links to other governments that were investigated. All the links to the other eastern and southern African governments originated from the Association of Law Reform Agencies of Eastern and Southern Africa, Department of Justice in South Africa. The website (URL: <http://www.doj.gov.za/alraesa/contacts/>) provides contact information of the member countries. There were no government to government linkages, i.e. links from one government portal to another. These links need to be created especially now that countries in Africa have come together to form the African Union and other regional organizations such as Southern African Development Community (SADC), East African Community (EAC) and Common Market for Eastern and Southern Africa (COMESA) and the Pan-African Parliament (PAP) which brings together parliamentarians from all over Africa.

Interestingly, while we encourage the African countries to make use of ICTs in the administration of e-governance, it is worth noting that the major impediment to the use of these tools lies with the public who could be incompetent in ICT usage. This is not only a hindrance in developing countries but also in developed countries. The UK Financial Times of May 22nd 2006 wrote, "*The UK is still struggling to get the public to use online and other electronic forms of government in spite of multi-billion pound investments in them*". A larger population of African countries does not have access to ICTs and even when the citizens have these tools, they are incapable of fully utilizing them due to their low level literacy, in general and more particularly computer literacy. E-governance will be successful if the African governments move fast to solve the myriad problems that may hinder the effective use of the ICTs in the region, e.g. poor telecommunications

infrastructure, illiteracy level, poverty, and computer or ICT phobia.

Finally, we focus our attention to ethical issues in relation to the variables outlined and discussed in sections 4 and 5 above. Firstly, while commending various governments for the construction of websites and the provision of various documents on the Web, it is advisable that the documents be published in several languages to cater for the majority needs just as the 'real space' provides. Unlike in the cyberspace where individuals access and interpret Web documents by themselves, in 'real space' they are assisted by designated government officers, i.e. especially when it comes to the completion of forms. This is the more reason why Web documents should be prepared in simple formats as well as in a language that is easily understood by most citizens. Secondly, in information ethics, two inter-related factors affect access to information, i.e. the right of access and free access (Ackerman & Britz, 2006). In this regard, governments should formulate policies governing the two issues. The big question, though, is which and how much information should the government allow free access to without compromising the security of data and the nation/country at large? It should be remembered that good governance or democracy is defined in terms of transparency and accountability. This study did not delve in detail into the content of government websites, but in regard to the four features analyzed, it was noted that most government websites offer feedback forms, contact details, sitemaps, and search engines. These are fundamental basic features that should be provided by all government websites. Another factor that affects free access, as mentioned above, is the provision of active links. Web page authors should ensure that all links to and from the government websites are working. Thirdly, as MacDonald (1995) notes, one of the Web-based features with ethical importance is what he terms as 'clarity of administrative responsibility'. He argues that websites should clearly state the owner(s), i.e. the persons responsible for the websites' administration. The same applies to government websites. It was encouraging to note that all government websites investigated in this study indicated ownership and/or administrative responsibility. Related to this feature is the date of copyright or update, which should be considered and published in each government webpage. Lastly, we borrow Rose's (2005:2-3) argument regarding situations where several government institutions have independent websites as was witnessed in this study:

"At its worst, each agency of a government may have its own processes controlling interaction with those it serves and distinctive information technology that is not readily compatible with other public agencies. While a single agency may be able to introduce e-governance services, citizens will be frustrated if they must sign on and off a number of different web sites when their requests involve a multiplicity of national and local offices of government".

References

- Ackerman, M. & Britz, H. (2006). *Information, ethics and the law: a guide for information practitioners, students and the corporate environment*. Hatfield, Pretoria: Van Schaik.
- Backus, M. (2001). *E-governance in developing countries*. [Online]. IICD Research Brief, (1). Retrieved November 20, 2006, from http://www.ftpicd.org/files/research/briefs/brief_1.pdf
- Bar-Ilan, J. (2005). *What do we know about links and linking? A framework for studying links in academic environments*. *Information Processing and Management*, 41:973-986
- Chisenga, J. (2004). *Africa Governments in Cyberspace: are they bridging the Content Divide?* In: P. Birungi and M.G. Musoke. 2004. *SCECSAL XVI. Towards a Knowledge Society for African*. Retrieved October 10, 2006, from www.dissanet.com
- Garfield, E. 1993. *New Scientist examines AIDS research with ISI 's citation data*. *Current Contents*, 27:3-12
- Jensen, M. (2002). *Information and communication technologies (ICTs) as tools for improving local governance in Africa: A UNESCO project mission report and assessment of the current situation and outlook in selected African municipalities (Zanzibar, Lusaka, and Maputo) to identify needs for training on e-governance*. Retrieved November 15, 2006, from <http://portal.unesco.org/ci/en/>
- Kluser, R. (2005). *The architecture of control: a Chinese strategy for e-governance*. *Journal of Public Policy*, 25(1): 75-97
- MacDonald, C. (1995). *The ethics of Web site engineering*. *CMC Magazine*, July 1 1995. Retrieved May 11, 2005, from <http://www.ibiblio.org/cmc/mag/1995/jul/macdonald.html>
- Ndoo, C. (2007). *In domain names, a new form of piracy*. *Daily Nation*, January 5, 2007.

- Rose, R. (2005). *Introduction: the Internet and governance in a global context*. *Journal of Public Policy*, 25(1):1-3
- Thelwall, M. n.d. *Using Commercial Search Engines and the Internet Archive*. Retrieved April 10, 2006, from, <http://linkanalysis.wlv.ac.uk/17.htm>
- UNESCO. (2005). *E-governance capacity building*. Retrieved November 21, 2006, from, <http://portal.unesco.org/ci/en/>
- Waswa, V. (2006). *Africa's e-government dilemma*. Retrieved November 21, 2006, from *A Programme of Collaboration on International ICT Policy for East and Southern Africa [CIPESA] website*: <http://www.cipesa.org>

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Towards a creativity research agenda in information ethics

Abstract:

The value for human wellbeing and social development of information and its associated tools and technologies is no longer controversial. While still less well-endowed than other regions, Africa has growing numbers of print and electronic journals, funding programmes, and researcher and practitioner networks concerned with the generation and use of information in multiple domains. Most of this activity focuses on information as a knowledge resource, providing the factual basis for policy and intervention. By contrast more creative applications of information – as the basis for new ideas whether or not they turn out to be factual – has been almost entirely ignored. Being able to generate and develop new ideas is, however, an equally important and arguably a prior capability, but until recently one that has been little understood. Recent advances in cognitive science and creativity research are changing this, however, and it is now possible to see how a rich research agenda can be developed concerned with the role of information and information and communication technology (ICT) as creative resources.

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The value of information and its associated tools and technologies for human wellbeing and social development are no longer controversial. While still less well-endowed than other regions, Africa has growing numbers of print and electronic journals, funding programmes, and researcher and practitioner networks concerned with the generation and use of information in multiple domains. And it now has its own learned society dedicated to studying and promoting the welfare of the African infosphere. This is an exciting time for all those concerned with information and with Africa, and a good moment to consider future research agendas. One area which has so far received almost no attention from either the information or the development community but which is centrally related to human and social wellbeing and which depends fundamentally on information resources is that of creativity. This short paper outlines some directions for a research agenda that it is hoped will become part of the AIES community's work in the future.

Creativity

The generation of new and valuable ideas is a core component in the ability of individuals and groups both to respond adaptively to change and to envision and bring about change (Runco 2004). As such, creativity is clearly of central importance to human, social and economic development – and yet the concept has received little direct attention in development research, and almost none in informatics and the ICT for development field. The reasons for this are obscure but one might speculate that they could derive in part from the common association of creativity with world-leading achievement in the arts and sciences, and thus apparently a lack of connection with the lives and problems of the poor. In fact this view, while true of some creativity research, represents a small and somewhat outdated conception of the subject, which increasingly focuses on creativity as a universal human capacity and an everyday activity that can be either nurtured or damaged by a wide range of social and environmental factors including information resources and technologies. There is therefore a strong case to be made for a research agenda looking in detail at the linkages between information and creativity in the context of African development.

Creativity as a developmental capability

Despite the almost total lack of overt reference to creativity in development writing, there are many

points of contact at a conceptual level. Creativity research, for example, focuses on a diverse range of phenomena familiar to anyone working in development – for example problem-definition and problem-solving (Mumford et al. 1991), divergent thinking (the ability to come up with multiple possible solutions rather than striving after a single 'right' answer), tolerance of ambiguity, the cognitive flexibility to deal with a changing environment (Flach 1990) and advances in the arts, sciences and technology (Dudek 2003). Creativity has also been studied as an economic driver, through its role in innovation and entrepreneurship (Runco 2004, Stehr 1994) and in the development of the cultural and creative industries.

Similarly concern with aspects of creativity – or its lack – can be found in multiple guises in development literature, including 'cultural dependency' (Seers 1981), project problem-solving (Hirschmann 1967), explanations for changes in models of development (Sikkink 1997), alternative and liberatory ways of thinking (Escobar 1995 ; Shrestha 1995), envisioning a better future as the basis for resistance (Scott 1985) or policy development (Blackmore 1998), innovation and new ideas in participatory practice (Chambers 2005), and the fostering of local research capacity (Kim 1995, Adair 1995).

Development applications of creativity concepts can be roughly categorised as either instrumental or constitutive. In the former case, creativity is valued because of its potential to deliver some other development objective. Hirschmann (1967) for example commented on the role of creative problem solving in development projects and the way in which long-term commitment and irreversibility tended to unleash more creative responses albeit at some cost (Chambers 2005). Similarly, creative arts such as drama and painting can be used to develop awareness and engagement with issues such as gender, HIV or children's rights, or as therapy.¹ Perhaps the dominant instrumental perspective, however, is an economic one, where creativity is viewed as 'human capital' – a resource with economic value. The creative industries as well as technical and scientific innovation can provide employment, generate revenue, attract investment and broaden the economic base. Even from a purely instrumental point of view then, the importance of fostering creative

¹ It is arguable that therapeutic use of creative expression may be better seen as a constitutive perspective since therapy and self-development are closely allied.

capabilities is not in question as a development strategy.

A more profound perspective on creativity can, however, be found underlying liberatory and 'people-centred' approaches to development where the ability to free oneself from conceptual constraints, to think differently, to imagine new forms of society and envision a range of alternatives is seen to be not a vehicle for arriving at development but part of the very meaning of development. Such views can be found within, for example, the Marxian concept of 'false consciousness'; Gramsci's notion of ideological control; Freire's 'pedagogy of the oppressed'; liberation theology; dependency theory; the ideational resistance proposed Fanon, Said and Escobar; and also capability theory (e.g. Sen 1999, 1997, 1993, 1992; Nussbaum 2000, 1995; Alkire, 2002).

As well as in the work and meaning of development itself, important but often implicit connections to creativity related concepts can be found in various forms in several policy domains. At an international level, the Universal Declaration of Human Rights asserts rights to freedom of thought, expression, belief – and importantly of the right to change beliefs – and participation in cultural life and the arts and sciences. National policies typically include a central focus on the development of 'human capital' through for example health and education – both of which have deep and complex linkages with aspects of creativity. Cultural and economic policies that aim to promote artistic, technical and scientific development, or industries such as media and tourism, or that focus on innovation and entrepreneurship, also frequently make implicit or explicit reference to the fostering of creativity. Many developing countries, for example, have adopted local content strategies aimed at promoting indigenous media production.

Policy is, however, not just instrumentally related to creativity, but can also be seen as the outcome of creative process, based on a vision of what could be and of how it might be achieved. A number of developing countries have shown high creativity in the development of new policy frameworks and approaches to difficult social problems. For example, South Africa's Truth and Reconciliation Commission shows how a local innovation can come to be globally recognised and influential. The conception of an 'African Renaissance' has similar aspirations and African philosophical concepts such as ubuntu have been creatively used in framing policy and practice in many areas. As recognition grows of the limitations of Western 'domination and exploitation' views of the environment, conceptions of nature drawn

from African and other traditions of thought can be expected to enter creatively into policy discussions at a global level.

Creativity research

Studies of creativity are standardly classified into four main focal categories (Rhodes 1961/1987):

- Person – the traits, abilities, motivational and affective states, and behaviours that appear to be correlated with creativity such as the work of Barron and Harrington (1981) and Amabile (2003).
- Process – the cognitive and social dynamics governing the generation, expression and acceptance or adaptation of new ideas (e.g. Martindale & Hasenfus 1978, Runco 1991, Csikszentmihalyi 2003).
- Press – pressures in the social and material environment that enhance or inhibit creativity (Murray 1938), such as access to resources, family or organisational structure, support for and valuing of originality, or the need to find solutions to urgent problems (e.g. Amabile & Gryskiewicz 1989, Will & Beorkrem 1989, Sulloway 1996, Albert & Runco 1989, Amabile 2003).
- Product – studies of creative outputs such as publications, patents or art works (Simonton 1984, Gardner 1993).

Runco (2004) further identifies a significant amount of creativity research with a disciplinary focus, some of which cuts across the focal categories or fails to fit the classification scheme. Those of particular relevance to development domains include:

- Connections between physical and mental health and creativity (Maslow 1971, Rogers 1970, Runco & Charles 1997).
- Cognitive research on memory, attention, knowledge, intuition, imagination, problem-finding and conceptualisation, as well as specific thinking techniques and skills (e.g. Pollert et al. 1969, Martindale & Greenough 1973, Mumford et al. 1991, Runco 1999).
- Research on family structure (Sulloway 1996) and gender roles and differences (Harrington et al. 1983, Reis 1999) in creativity.
- Economic theories relating creativity to socioeconomic status (Dudek et al. 1993) or to

conceptions of 'human capital' (Walberg & Stariha 1992).

- Studies of educational practices such as testing techniques (Reiter-Pelmon et al. 1997), classroom environment (Wallach & Kogan 1965) and teacher attributes and expectations (Graham et al. 1989, Runco 1992, 1989, 1984).
- Research on creativity in organisations and groups (Amabile 2003, Witt & Beorkrem 1989, Runco 1995, Rubenson & Runco 1992) and on innovation (reviewed by Service 2003 and Rickards & deCock 2003).
- Connections between social processes and creativity (Amabile 2003, Paulus & Nijstad 2003) and the effectiveness of social techniques such as brainstorming (Rickards & deCock 2003).
- Studies of creativity domains (Gardner 1983); the addition of new domains such as morality (Stein 1993, Gruber 1993) and nature (Solomon et al. 1999), and the increasing recognition given to 'everyday' creativity as part of normal problem-solving (Cohen & Ambrose 1999, Runco & Richards 1997).
- Cultural differences in creativity such as levels of social control (Aviram & Milgram 1977), attitudes and values (Johnson et al. 2003), expectations (Dudek et al. 1993), domain differences (Runco 2004) and also similarities for example in childhood developmental research (Raina 1984).

Other authors have suggested other classificatory schemes – Hemlin, Allwood and Martin (2004), for example, argue that environmental influences on creativity need to be studied at the micro, meso and macro level. There is thus no simple way of characterising the field but rather – and perhaps appropriately – a broad and divergent body of work cutting across multiple disciplines all with useful if very different contributions to make. As a result an African creativity agenda has the potential to open up an extremely rich and interesting field of investigation.

Information as a creative resource

Information is the raw material of human thought. Without access to information and the ability to process it effectively we cannot meet our basic survival needs, relate to others, do our jobs or find our way around the world. Whether acquired as

sensory input, through social learning or, as nativists believe, partially encoded by evolution, information is the medium in which our minds operate, and the transformation of information – in visual, verbal, spatial, symbolic or another form – *is* thinking. Some of this thinking is about factual knowledge – working out how clean a water source is or how many children go to school or where there are no jobs – but a great deal is about how things could, should or might be, or could, should or might have been. These 'counterfactual' or imaginative thought processes depend on information just as much and are just as important as those involved in knowledge acquisition² but have received barely a fraction of the attention from academic, practitioner and policy communities.

One reason for the lack of attention to creative processes in information disciplines is that until quite recently we have had few tools for describing and analysing imaginative phenomena. Recently, however, new approaches have emerged in cognitive science and which seem to offer promising ways of thinking about the creative functions of information and even, perhaps, about the creative foundations of ethical thought itself.

The theory of conceptual blending

Until recently even in cognitive science it tended to be assumed that the imagination was beyond the scope of empirical investigation and that while it might be possible to correlate creativity with a range of personal, social and environmental factors, the actual mechanisms of new idea production themselves were somehow permanently inaccessible to scientific investigation (Evans et al. 2006). Since the 1990s, however, a powerful and flexible theory known as conceptual blending or conceptual integration has been developed within the field of cognitive linguistics, showing imaginative processes to be systematically involved in human thought and identifiable in language through the use of mapping tools and techniques.

Conceptual blending (CB) is a general theory of idea generation as a process in which elements of two or more 'mental spaces'³ are 'mapped' onto one an-

² They are in fact heavily involved in the generation of knowledge particularly of a theoretical or probabilistic nature.

³ Dynamically produced conceptual clusters generated 'on-line' during the process of cognition.

other and merged to form a third space with emergent properties of its own not found in the two contributing spaces (Fauconnier 1997, Fauconnier and Turner 1998). Conceptual blending, it is argued, is a systematic but complex form of processing that, contrary to traditional views of imaginative thinking, exhibits many standard features and that obeys a number of optimality constraints (Fauconnier and Turner 1998, Turner 2001). Much of the time it operates as 'background' cognition at a level below that of conscious thought but it can also be intentionally engaged in during deliberately imaginative cognition.

This theory of dismantling and recombination of elements of symbolic structures has some powerful applications. For Turner, it is the basis of language, and even the distinguishing feature of human intelligence including in particular the processes of metaphor, analogy and counterfactual reasoning that lie at the heart of creativity. Counterfactual reasoning, is also a primary tool of human and social science research (Turner 2001). Historical reasoning for example frequently takes the form of retrospective counter-to-reality speculation, such as 'If the Treaty of Versailles after World War I had not been so punitive, the Nazis would never have gained power in Germany'. Policy disciplines by contrast operate in *prospective* mode, focusing on the potential results of actions as yet unperformed 'Increasing income tax to fund better health care will be acceptable to the electorate only if they see results quickly'.

According to CB theory what is going on in cases of this sort is in fact a type of thought experiment or mental simulation in which elements of a set of ideas about public services, taxation and health care provision are combined with elements from a set of ideas about public attitudes about tax and services. The policy being proposed is the result of this simulation. In this case it is a conditional result, with the element of speedy results being seen as critical in the formation of public attitudes. The success of the policy, it is being suggested, will depend on whether health care reform can be accomplished in a time-scale that integrates with that of public attitude formation. In this way CB theory shows how meanings are creatively manipulated in essentially the same ways in a vast range of everyday and expert thinking.

They draw on more stable conceptual structures such as scripts and schemata.

Creative problem-solving blends

One interesting area of application for blending theory particularly in the context of African development is in local problem-framing and problem-solving. A large amount of research and many failed programmes across the development agenda testify to the need for problems and solutions to be locally framed and locally owned. Research by the author, for example, found AIDS organisations operating in KwaZulu-Natal identifying needs for 'alternative conceptions' and appropriate 'models', 'strategies', 'approaches', 'programmes' and 'how to' understanding in multiple domains. At the same time, it is clear that new models and local innovations *are* emerging as communities struggle to come to terms with critical problems for which ready-made solutions do not exist.

While local innovations themselves have to some extent been studied, very little is known about the creative processes through which problems are framed and solutions developed locally. Blending theory offers a promising suggestion as to how we might start to undertake such investigations. Consider for example this comment by an NGO worker in a rural area, criticising the way in which social science professionals were advising the closure of orphanages in favour of community care – as she saw it without full understanding of local realities:

The people who work down there in the community are saying, 'our people are so poor, nobody is prepared to take somebody else's child'. One woman keeps about 54 AIDS orphans in her home. She is not rich but she says, 'What can I do, they don't have any other place to go?' She is always open and anyone who wants to come and take those children can come. But nobody comes forward. Most people are so poor. They say, 'Everyone wants to feed those kids but I can't even feed myself. How can I look after somebody else's child?'

In this example we can identify two contributing mental spaces, one associated with the problem situation and one with the proposed solution. The blend – a mental simulation in which the advocated solution is imaginatively implemented in the problem situation – is implied rather than made explicit:

Contributing Space 1 (Problem space – perceived real-life situation): There are many orphans in our community but families do not take them in.

Contributing Space 2 (Solution space – proposed desired outcome and associated intervention): Children do better in families than in orphanages. Orphanages in this community should close.

Blend (Simulation space – projects intervention into real-life situation generating counterfactual scenario): Local families take in children. Families cannot feed themselves. Implied (unspoken) result is that families cannot feed the orphans either, with disastrous results.

The blend does not cohere but terminates in the asking of a rhetorical question ('How can I look after somebody else's child?') with the implied answer 'You can't'. There is no way to integrate the two contributing spaces and the blend disintegrates. The 'solution' offered by outside experts turns out not to be a solution at all, and the thinker is returned to contemplating the problem space. This example might seem somewhat negative, ending as it does in the rejection rather than the generation of a solution. Failed blends, like *reductio ad absurdum* arguments, do however do some useful cognitive work. The thinker is not in the same position after running the simulation that she was before. While the solution put forward by the experts has been rejected, the problem ends up being the focus of renewed thought, refocused from a question about the best type of care for orphans to a more fundamental question about poverty and survival.

It is not difficult to see how ethical thinking itself could be conceived in similar terms, for example in considering choices between different courses of action we typically simulate various scenarios in our minds – often socially assisted through dialogue with others – in order to see what their effects might be and how we feel about them. It may even be possible to give quite precise definitions of moral emotions based on this theory. Empathy, for example, could perhaps be seen as a complex blend of an already blended space (a hypothetical 'me in someone else's shoes' space composed of elements of my own subjectivity combined with elements of another person's identity) with an action or event space, giving a composite 'what it would be like for someone else if I did this/if this happened' blend. Simulations of this sort would then feed back in to my conceptualisation of the action or event space, leading me perhaps to adjust my views or intentions in the light of my simulated experience of being someone else.

The role of ICT

Another direction for research in this field is in investigating the linkages between creativity and ICT. To date research on these topics has been conducted almost exclusively in Western contexts where there is, for example, a significant research agenda examining the effects of electronic environments on various forms of creative activity such as idea generation, problem solving, expressive writing and artistic production (e.g. Wertheimer, 1985; Christensen 1988; Christensen and Tennyson 1989; Moore-Hart 1995; Klein et al. 2003; Klein and Dologite 2000; Yang 2003; DeRosa in press; Delfino in press). In addition, software and hardware development have been seen as creative undertakings; digital media are increasingly being integrated into artistic production and performance, leading to new genres; while on a more macro level whole new creative and content industries are emerging at least some of which may have genuine claims to influencing the economic dynamics of creativity.⁴

In trying to establish some order in this field it may be useful to categorise approaches to ICT and creativity according to the nature of the engagement with technology – for example, whether it is concerned with development, implementation, use or automation (Mateos-Garcia 2006). Development here refers to the process of constructing new and useful technologies, applications and products; implementation to finding new ways of applying existing technologies; use to the instrumental application of ICT as a tool or medium for supporting or enhancing creative activity; and automation to attempts in artificial intelligence to replicate creative activity in machines. In addition, research will vary according to level (individual, social, industry sector etc) and according to object of study or disciplinary orientation – for example, whether it is focused on an individual behaviour, social process or creative outcome of a particular sort. Almost no research in any of these fields has been focused on developing regions of the world – cause for concern given the intimate connection that exists between develop-

⁴ The use of the word 'creative' in 'creative industries' does not of course imply any necessary connection with ideas that are either new or valuable. In the UK, for example, the Department of Trade and Industry defines creative industries as those which make money from content or from intellectual property, thus including mobile phone ring tones and satellite navigation systems.

ment and capabilities such as problem-solving and innovation.

Conclusion

A considerable amount has already been written on the general topic of information and ICT as contributors to development, and particularly on their importance as resources for development knowledge, communication and interaction. There has not so far been any equivalent focus on information as a resource for more creative development functions such as idea generation and problem-definition. A creativity perspective, it is proposed, may well provide useful insights that complement and enrich existing perspectives on the developmental role of information in the African context. Investigating the mechanics of mental blending and simulation, for example, may show how local perspectives can lead to new and more constructive ways of framing problems, and how expert understandings can be more coherently integrated with local realities. Considering ICT as a creative resource may lead to new ways of lead to new ways of conceiving and evaluating the role of Internet projects such as Development Gateway and Eldis, and suggest new forms of technological intervention and engagement.

It is perhaps not obvious that this is an *ethics* research agenda, However, as hinted above, creativity research holds out the prospect of new ways of understanding ethical thinking. In addition, a focus on information as a creative resource necessarily incorporates a value dimension, since creativity is explicitly about the production of *valuable* new ideas. Considerations of who creates new ideas, who they are valued by and for what purposes, how they are propagated and to whom, and how they interact or conflict with other values and interests, are thus necessarily central to a creativity analysis. Ideas are born into political and contested space and how they succeed or fail to achieve recognition and influence can depend on a multitude of social, political and economic factors entirely independent of any intrinsic or technical worth. Thus in considering the role of information, access, participation and influence will be key issues to address. ICT has the technical potential to provide tools for both idea generation and also idea propagation and recognition. However, ICT resources are not equally available to all and even when they are mere access to resources does not enable equal use to be made of them and equal benefits derived. In examining the creative dimension of information and ICT, then, it

is essential to consider not only the technical aspects but also the full range of factors affecting the ability of individuals and groups to derive creativity benefits from them. A central part of a creativity agenda in information ethics will thus be the analysis and critique of existing systems and regimes as they impact differentially on the creative capabilities of individuals and groups. If blending theorists such as Turner and Fauconnier are right and creativity in the distinctive mark of our humanity then there can be no more important issue in information ethics.

References

- Adair, J. G. (1995) *'The research environment in developing countries: contributions to the national development of the discipline.'* *International Journal of Psychology* 30.
- Albert, R. S. and Runco, M. A. (1989) *'Independence and cognitive ability in gifted and exceptionally gifted boys.'* *Journal of Youth and Adolescence* 18.
- Alkire, S. (2002) *Valuing Freedoms: Sen's Capability Approach and Poverty Reduction.* Oxford: Oxford University Press.
- Amabile, T. M. (2003) *Within you, without you: towards a social psychology of creativity and beyond.*
- Amabile, T. M. and Gryskiewicz, N. D. (1989) *'The Creative Environment Work Scales.'* *Creativity Research Journal* 2.
- Aviram, A. and Milgram, R. M. (1977) *'Dogmatism, locus of control, and creativity in children educated in the Soviet Union, the United States and Israel.'* *Psychological Reports* 40.
- Barron, F. and Harrington, D. (1981) *'Creativity, Intelligence and Personality.'* *Annual Review of Psychology* 32.
- Blackmore, C. and Ison, R. (1998) *'Boundaries for thinking and action.'* Thomas, A., Chataway, J. and Wuyts, M. Eds.) *Finding Out Fast: investigative skills for policy and development.* London, Thousand Oaks, New Delhi: Sage Publications in association with The Open University.
- Chambers, R. (2005) *Ideas for Development.* London and Sterling, VA: Earthscan.
- Christensen, D. L. (1989) *'Educational technology: Integration?'* *Computers in Human Behavior* 5(2): 137-141.
- Christensen, D. L. and Tennyson, R. D. (1988) *'The relationship of learning to technology-based enhancements.'* *Computers in Human Behavior* 4(1): 3-11.

- Cohen, L. M. and Ambrose, D. (1999) 'Adaptation and Creativity.' Runco, M. A. and Pritzker, S. R. Eds.) *Encyclopedia of Creativity*. San Diego CA: Academic.
- Csikszentmihalyi, M. (2003) 'The domain of creativity.' Runco, M. A. and Albert, R. S. Eds.) *Creativity Research Handbook Vol 3*. Cresskill NJ: Hampton Press.
- Delfino, M. and Manca, S. 'The expression of social presence through the use of figurative language in a web-based learning environment.' *Computers in Human Behavior In Press, Corrected Proof*.
- DeRosa, D. M., Smith, C. L. and Hantula, D. A. 'The medium matters: Mining the long-promised merit of group interaction in creative idea generation tasks in a meta-analysis of the electronic group brainstorming literature.' *Computers in Human Behavior In Press, Corrected Proof*.
- Dudek, S. Z. (2003) 'Art and Aesthetics.' Runco, M. A. (Ed. *Creativity Research Handbook*. Cresskill NJ: Hampton Press.
- Dudek, S. Z., Strobel, M. G. and Runco, M. A. (1993) 'Cumulative and proximal influences of the social environment on creative potential.' *Journal of Genetic Psychology* 154.
- Escobar, A. (1995) *Encountering development : the making and unmaking of the Third World*. Princeton, NJ: Princeton University Press.
- Evans, V., Bergen, B. K. and Zinken, J. (2006) 'The cognitive linguistics enterprise: an overview.' *The Cognitive Linguistics Reader* Edinburgh: Equinox Publishing Company.
- Fauconnier, G. (1997) *Mappings in Thought and Language* Cambridge: Cambridge University Press.
- Fauconnier, G. and Turner, M. (1998) 'Conceptual Integration Networks' *Cognitive Science* 22(2); 133-187.
- Flach, F. (1990) 'Disorders of the pathways involved in creative process.' *Creativity Research Journal* 3.
- Gardner, H. (1983) *Frames of Mind*. New York: Basic Books.
- Gardner, H. (1993) *Creative Minds*. New York: Basic Books.
- Graham, B. C., Sawyers, J. K. and DeBord, K. B. (1989) 'Teachers, creativity, playfulness and the style of interaction with children.' *Creativity Research Journal* 2.
- Gruber, H. E. (1993) 'Creativity in the moral domain: ought implies can implies create.' *Creativity Research Journal* 6.
- Harrington, D., Block, J. and Block, J. H. (1983) 'Predicting creativity in preadolescence from divergent thinking in early childhood.' *Journal of Personality and Social Behaviour* 45.
- Hemlin, S., Allwood, C. M. and Martin, B. (2004) *Creative Knowledge Environments*. Cheltenham and Northampton MA: Edward Elgar.
- Hirschman, A. O. (1967) *Development Projects Observed*. Washington, D.C.: The Brookings Institution.
- IBRD/World Bank. (2005) *Global Monitoring Report 2005 Millennium Development Goals: From consensus to momentum*. IBRD/World Bank, Washington.
- Johnson, D., Runco, M. A. and Raina, M. K. (2003) 'Parents' and teachers' implicit theories of children's creativity: a cross-cultural perspective.' *Creativity Research Journal* 14.
- Kim, U. (1995) 'Psychology, science, and culture: cross-cultural analysis of national psychologies.' *International Journal of Psychology* 30.
- Klein, E. E., Clark, C. C. and Herskovitz, P. J. (2003) 'Philosophical dimensions of anonymity in group support systems: Ethical implications of social psychological consequences.' *Computers in Human Behavior* 19(3): 355-382.
- Klein, E. E. and Dologite, D. G. (2000) 'The role of computer support tools and gender composition in innovative information system idea generation by small groups.' *Computers in Human Behavior* 16(2): 111-139.
- Martindale, C. and Greenough, J. (1973) 'The differential effect of increased arousal on creative and intellectual performance.' *Journal of Genetic Psychology* 123.
- Martindale, C. and Hasenpus, N. (1978) 'EEG differences as a function of creativity, stage of the creative process, and effort to be original.' *Biological Psychology* 6.
- Maslow, A. H. (1971) *The Farther Reaches of Human Nature*. New York: Viking Press.
- Mateos-Garcia, J. (2006) Private communication.
- Moore-Hart, M. A. (1995) 'The effects of multicultural links on reading and writing performance and cultural awareness of fourth and fifth graders.' *Computers in Human Behavior* 11(3-4)
- Mumford, M. D., Mobley, M. I., Uhlman, C. E., Reiter-Palmon, R. and Doares, L. M. (1991)

- 'Process analytic models of creative capacities.'* *Creativity Research Journal* 4.
- Murray, H. A. (1938) *Explorations in Personality*. Oxford: Oxford University Press.
- Nussbaum, M. C. (1992) 'Human Functioning and Social Justice: In Defense of Aristotelian Essentialism.' *Political Theory* 20(2): 202-246.
- Nussbaum, M. C. (1995) 'Human Capabilities, Female Human Being.' Nussbaum, M. C. and Glover, J. Eds.) *Women, Culture and Development: A Study of Human Capabilities*. Oxford: Clarendon Press.
- Nussbaum, M. C. (2000) *Women and Human Development: The Capabilities Approach*. Cambridge: Cambridge University Press.
- Paulus, P. P. and Nijstad, B. A. (2003) *Group Creativity*. Oxford: Oxford University Press.
- Pollert, L. H., Feldhusen, J. F., Van Mondfrans, A. P. and Treffinger, D. J. (1969) 'Role of memory in divergent thinking.' *Psychological Reports* 25.
- Raina, M. K. (1984) *Social and Cultural Change and Changes in Creative Functioning in Children*. New Delhi: National Council for Education and Research Training.
- Reis, S. M. (1999) 'Women and Creativity.' Runco, M. A. and Pritzker, S. R. Eds.) *Encyclopedia of Creativity*. San Diego CA: Academic.
- Reiter-Palmon, R., Mumford, M. D., Boes, J. O. and Runco, M. A. (1997) 'Problem construction and creativity: the role of ability, cue consistency, and active processing.' *Creativity Research Journal* 9.
- Rickards, T. and deCock, C. (2003) 'Understanding organizational creativity.' Runco, M. A. (Ed. *Creativity Research Handbook vol 2*. Cresskill NJ: Hampton Press.
- Rogers, C. (1970) 'Toward a theory of creativity.' Vernon, P. E. (Ed. *Creativity*. New York: Penguin.
- Rubenson, D. L. and Runco, M. A. (1992) 'The psychoeconomic approach to creativity.' *New Ideas in Psychology* 10.
- Runco, M. A. (1984) 'Teachers' judgements of creativity and social validation of divergent thinking skills.' *Perceptual and Motor Skills* 59.
- Runco, M. A. (1989) 'Parents' and teachers' ratings of the creativity of children.' *Journal of Personality and Social Behaviour* 4.
- Runco, M. A. (1991) *Divergent Thinking*. Norwood NJ: Ablex.
- Runco, M. A. (1992) *Creativity as an educational advantage for disadvantaged students*.
- Runco, M. A. (1995) 'The creativity and job satisfaction of artists in organizations.' *Empirical Studies in the Arts* 13.
- Runco, M. A. (1999) 'Time for creativity.' Runco, M. A. and Pritzker, S. R. Eds.) *Encyclopedia of Creativity*. San Diego CA: Academic.
- Runco, M. A. (2004) 'Creativity.' *Annual Review of Psychology* 55(-1): 657-687.
- Runco, M. A. and Charles, R. (1997) 'Developmental trends in creativity.' Runco, M. A. (Ed. *Creativity Research Handbook*. Cresskill NJ: Hampton Press.
- Runco, M. A. and Richards, R. Eds.) (1997) *Eminent Creativity, Everyday Creativity, and Health*. Norwood NJ: Ablex.
- Scott, J. C. (1985) *Weapons of the Weak: everyday forms of peasant resistance*. New Haven and London: Yale University Press.
- Seers, D. (1981) 'Development Options.' Seers, D. (Ed. *Dependency Theory: a critical reassessment*. Pinter.
- Sen, A. (1992) *Inequality Reexamined*. Oxford: Oxford University Press.
- Sen, A. (1993) 'Capability and Well-Being.' Nussbaum, M. C. and Sen, A. Eds.) *The Quality of Life*. Oxford: Clarendon Press.
- Sen, A. (1997) *On Economic Inequality*. Oxford: Clarendon Press.
- Sen, A. (1999) *Development as Freedom*. Oxford: Oxford University Press.
- Service, R. (2003) 'Organizational innovativeness: a comprehensive review and models.' Runco, M. A. (Ed. *Creativity Research Handbook vol 2*. Cresskill NJ: Hampton Press.
- Shrestha, N. (1995) 'Becoming a Development Category.' Crush, J. (Ed. *Power of Development*. London: Routledge.
- Sikkink, K. (1997) 'Development Ideas in Latin America.' Cooper, F. and Packhard, R. M. Eds.) *International development and the social sciences : essays on the history and politics of knowledge*. London, Berkeley CA: University of California Press.
- Simonton, D. K. (1984) *Genius, Creativity, and Leadership*. Cambridge MA: Harvard University Press.
- Solomon, B., Powell, K. and Gardner, H. (1999) 'Multiple Intelligences.' Runco, M. A. and Pritzker, S. R. Eds.) *Encyclopedia of Creativity*. San Diego CA: Academic.

- Stein, M. (1993) 'Moral issues facing intermediaries between creators and the public.' *Creativity Research Journal* 6.
- Sulloway, F. (1996) *Born to Rebel*. New York: Pantheon.
- Turner, M. (2001) *Cognitive Dimensions of Social Science: the way we think about politics, economics, law, and society*. Oxford: Oxford University Press.
- Walberg, H. J. and Stariha, W. E. (1992) 'Productive human capital: learning, creativity, and eminence.' *Creativity Research Journal* 5.
- Wallach, M. A. and Kogan, N. (1965) *Modes of Thinking in Young Children*. New York: Holt, Rinehart & Winston.
- Wertheimer, M. (1985) 'A Gestalt perspective on computer simulations of cognitive processes.' *Computers in Human Behavior* 1(1): 19-33.
- Witt, L. A. and Beorkrem, M. (1989) 'Climate for creative productivity as a predictor of research usefulness and organizational effectiveness in an R&D organization.' *Creativity Research Journal* 2.
- Yang, S. C. (2003) 'Computer-mediated history learning: spanning three centuries project.' *Computers in Human Behavior* 19(3): 299-318.

Sarah B. Kaddu

Information Ethics: a student's perspective

Abstract:

Based on personal experience, and content analysis, this paper examines Information Ethics (IE) from a student's perspective. Within this framework the paper defines IE, outlines the history of IE and highlights incidences of IE violations in Uganda. The paper concludes with proposals towards better adherence to IE in Uganda. The paper presents personal experience, observation and a content analysis methodology.

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Introduction

Information Ethics (IE) is an important aspect of the Information Science (IS) discipline. Being able to determine what is right or wrong, good or bad is very important in any discipline. IE directs a vision in life. It is a commitment to do right and uphold the good in the execution of responsibilities in the profession. Not doing so would be violation of IE. Nevertheless, some players in IS violate IE. Based on a student's perspective, this paper highlights incidences of the violation of IE. It also makes proposals towards better adherence to IE in Uganda.

Ethics defined

According to Capurro¹; Kostrewski and Oppenheim², Ethics are derived from the Greek word "ethos", which means "way of living". Ethics is a branch of philosophy that is concerned with human conduct, more specifically the behaviour of individuals in society. Ethics examines the rational justification for our moral judgments; it studies what is morally right or wrong, just or unjust. Ethics leads to a set of rules of conduct for specific situations; basic ethical principles guide the development of standards for specific professions and groups.

There are two aspects in the definition of ethics: being able to determine what is right or wrong, good or bad and a commitment to doing what is right and good. Ethics are a subset of values: a value applies to things that are desired as well as what one ought to do, and can include such concepts as wealth, happiness, success, and fulfillment. Ethics define how a moral person should behave; values include other beliefs and attitudes that guide behavior (Froehlich, 1992)³.

¹ Capurro, Rafeal: Information ethos and information ethics. Ideas to take responsible action in the field of information, 2

² Kostrewski and Oppenheim: "Ethics in information science", *Journal of information science*, pp 277-278

³ Froehlich, Thomas J: Ethical considerations of information professionals", *Annual review of information science and technology*

Brief history of Information Ethics (IE)

According to Adam (2005)⁴, Information ethics is the field that investigates the ethical issues arising from the development and application of information technologies. It provides a critical framework for considering moral issues concerning information privacy, moral agency (e.g. whether artificial agents may be moral), new environmental issues (especially how agents should behave in the infosphere), problems arising from the life-cycle (creation, collection, recording, distribution, processing, etc.) of information, especially ownership and copyright in the environment of a digital divide).

Information ethics has grown over the years as a field in Information Science (IS). It has evolved and been embraced by many other disciplines (Hauptman, 1988)⁵. In the United States information ethics has had a 20-year evolving history, pulling together strands from information science and computer science.

Addressing issues of information ethics, one source lists problem areas within librarianship, viz. censorship, privacy, access to information, balance in collection development, copyright, fair use, codes of ethics, and problem patrons.

In fact, even at its beginning the domain of concern in information ethics spilled over to other areas: computer ethics, information systems ethics, ethical issues in Management Information Systems, and Information Policy (Hauptman, 1988).

Besides Hauptman, there are other people who first used the phrase, *information ethics*. Capurro (1988) wrote an article in Information Ethos and Information Ethics, but did not raise some of the issues in information ethics. This prompted (Kostrewski and Oppenheim, 1980: 277-283) to write an article, raising such issues as confidentiality of information, bias in information provided to clients or consumers, the quality of data supplied by online vendors and the use of work facilities.

⁴ Adam, D Moore ed. (2005). "Information ethics: Privacy, property and power"

⁵ Hauptman, Robert (1988). *Ethical challenges in librarianship*

Key players in Information Ethics violation in Uganda

The experience as a student reveals that the key players in Information Ethics are: lecturers, students, information workers, and employers. They play both positive and negative roles.

Lecturers at university level

The first moral obligation of lecturers is to prepare, teach and evaluate students effectively. This would include preparing course outlines, schemes of work, and setting and marking course work and examinations. Miller⁶ enlists the good qualities of an ethically based lecturer: coming to work regularly and on time; being well informed about their student and subject matter; planning and conducting classes with care; regularly reviewing and updating instructional practices; cooperating with, or if necessary, meeting and discussing with parents of under-achieving students; cooperating with colleagues and observing school policies so the whole institution works effectively; tactfully, but firmly criticizing unsatisfactory school policies and proposing constructive improvement.

Whereas many lecturers fulfill the above, there are others who do not plan what is to be taught in advance, miss lectures, fail to report on duty daily, are drunk on duty; or demand money from students in exchange for marks, etc. Many times teachers have been accused of breaching the code of confidentiality by leaking examinations or colluding with those who do so.

LIS Students

The most obvious incident in which some LIS students violate LIS ethics is through plagiarism. LIS students borrow from many sources, words, sentences, paragraphs without acknowledgement. This is especially common with assignments or projects submitted by students.

Further, some students have a habit of buying other students' work from secretarial bureaus around universities and pretend that it is their own work. The rules in universities are clear that once caught cheating or copying, one could be expelled. This

does not deter students from copying. Copying could be associated with lack of confidence in producing an individual work or lack of skills to produce a good piece of work. And in some cases, there is this belief that 'everyone does it, why not me?' Another problem is photocopying that has become a plague in the academic setting. Too much photocopying is seen these days compared to years ago. This violates the ethical issues related to copyright.

For instance, at Makerere University, once students are given an assignment or a project, they take the assignment instructions to a nearby secretarial bureau and for a fee the bureau prepares the assignment. This is done at a fee payable to the person managing that particular bureau. Another incidence is that of photocopying almost the entire text book. Once the students are reminded about infringing on the copyright issues, they would photocopy the book chapter by chapter till the entire text is all done.

LIS Students and Computer Crimes

Though other key players in LIS have violated Computer Ethics, it appears like the major culprits are students. The problem is not so much about the physical security of the hardware (protecting it from theft, fire, flood, etc.), but rather "logical security". Spafford, et al, (1989)⁷ divide logical security into five aspects: privacy and confidentiality, integrity - assuring that data and programs are not modified without proper authority, unimpaired service and consistency ensuring that the data and behavior we see today will be the same tomorrow and controlling access to resources.

Information Professionals (IPs)

Other key players in IS ethics violations are librarians/ IPs. Some of the ways in which they have violated IS ethics include: concealment, influencing staff, acting in a non responsible manner- 'every information professional is doing it, why not me', censorship and intellectual freedom.

Concealment

Information Professionals have been observed to avoid giving frank (negative feedback) because they do not want to offend others. However, it should

⁶ Miller, A. R. (1971). The Assault on Privacy: Computers, Data Banks, and Dossiers

⁷ Spafford, Eugene (1992) "Are Computer Hacker Break-Ins Ethical? Pp 41-47

always be remembered that being dishonest is disrespectful. The key in this case would be to share negative information or disagree with others in ways that still communicate facts. Besides, it is unethical to use one's position to bully others. Publicly criticizing college staff, programs, and other trustees abrogates the responsibility to protect the assets of the college.

Influencing staff

Information professionals have tended to influence staff by asking for favors. One may excuse behavior that might not meet ethical standards because "no one will be hurt." However, using one's position to influence staff, asking for special favors or perks, tips or sharing confidential information may seem easy and harmless, but the ethic of trustworthiness is violated.

Acting in a non responsible manner- 'Everybody's doing it, why not me?'

In some cases, IPs have acted in non professional ways because others are also doing the same. Others acting in unethical ways is no excuse for unethical behavior. Some organizational and group practices or systems may be so deep-rooted that they seem acceptable even if they are ethically questionable. Ethical trustees will always evaluate behavior against the Information Code of Ethics (ICE).

Censorship and Intellectual Freedom

IPs have been guilty of excluding from the collection materials to which they personally object. Some successfully pressurize schools to restrain children under certain ages from using certain materials. Abbott⁸ concurs: "Censorship can occur when materials are restricted to particular audiences, based on their age or other characteristics." These groups of IPs do not want the materials sold in video stores or published; they do not want art galleries to display them.

According to Samek⁹, Intellectual Freedom is the right of every individual to both seek and receive information from all points of view without restriction. It provides for free access to all expressions of ideas through which any and all sides of a question, cause or movement may be explored. Many IPs have denied users freedom of access to information. There have been restrictions to some information from the collection under the excuse of: "trash" and "immoral" excuses. Restrictions do not only apply to printed information. It has extended to online information to the extent of buying special software to filter the so called information 'unfit for consumption'. Concerns have been raised about freedom of access to information. Samek (2003) states:

Our citizens must be informed; intellectual freedom is the basis for our democratic society. Our people are self governors and to do so responsibly, our citizenry must be able to access information to make well informed decisions. Libraries must be dedicated to providing the ideas and information, in a variety of formats, to allow people to inform themselves. Intellectual freedom is the freedom to hold, receive and disseminate ideas.

Conclusion

IPs, lecturers, students and information workers have been identified as key players in violation of IS ethics in Uganda in their diverse roles. As IPs continue to develop, they face new challenges in balancing the many roles demanded of them. We are called upon to develop and implement policies throughout the entire life-cycle of information. Among the greatest challenges facing IPs in Uganda is the need to earn "ethics trust" from those to whom information is provided, and to expect IE from the organizations for which we work, and from ourselves. Understanding our own sense of ethics and calling upon that sense throughout all aspects of our work is the greatest challenge we face.

⁸ Abbott, Randy: "A Critical Analysis of the Library-Related Literature Concerning Censorship in Public Libraries and Public School Libraries in the United States During the 1980s.

⁹ Samek, Toni: Intellectual Freedom within the Profession: A Look back at Freedom of Expression and the Alternative Library Press

Recommendations

Freedom of access to information

The issue of access to information as a welfare right requires IPs and information science institutions in Uganda to take positive steps to satisfy those rights. Access to information is a welfare right.

According to Rawlsian Theory¹⁰ people behind the veil of ignorance will need access to information. In order for a society to make informed decisions and understand the consequences of social policies, the people must have access to the information for a democratic society to function effectively. This is a basic right in order to facilitate the decision making process.

Information professionals in Uganda need to promote intellectual freedom for the welfare of our society. This includes government agencies and the libraries collaborating to make the information accessible to everyone. According to Miller (1971), people need access to information and diverse perspectives to understand a topic. The US Library Bill of Rights promotes free and equal access to everyone regardless of age, level of education, or legal emancipation, or race. To accomplish the dissemination of so much information the access to information would have to be a welfare right in order to work effectively.

The library collections in Uganda should include a wide variety of topics and it should provide materials on both sides of the issues. On the issue of labeling areas of the library collection, the librarians in Uganda need to be careful about censoring the materials by the content with biased labels. If a label will organize materials in a way that would allow patrons to quickly access a particular topic, it must be kept unbiased. Labeling could save the patron the time of sorting through thousands of pieces of irrelevant information.

Equal Access to Library Use

All IPs in Uganda should note that patrons should not be denied access to materials on whatever basis. Rawlsian theory would deny access only because of the disruptive behavior is breaking the contract of the social system. Fair equality is being denied to the people who are in the library and a

just society would not allow someone to harm others. Under the "veil of ignorance" a patron who is uncomfortable around the disruptive patron may decide not to ever come back to the library. Therefore, this disruptive patron has limited others from using the library due to his or her presence and Rawlsian theory would choose to ban the disruptive patron in order not to make the majority of the patrons comfortable.

Privacy Rights

The responsibility of all IPs in Uganda should be to ethically facilitate, not monitor, access to information. This is according to the American Library Association's interpretation of the Bill of Rights.

Books and other library resources should be provided for the interest, information, and enlightenment of all people of the community that the library serves. Materials should not be excluded because of the origin, background, or views of those contributing to their creation.

"this commitment is implemented locally through development, adoption, and adherence to privacy policies that are consistent with applicable federal, state, and local law. Everyone (paid or unpaid) who provides governance, administration, or service in libraries has a responsibility to maintain an environment respectful and protective of the privacy of all users. Users have the responsibility to respect each others' privacy. Anyone on the library staff who collects or accesses personally identifiable information in any format has a legal and ethical obligation to protect confidentiality".

Libraries in Uganda should provide materials and information presenting all points of view on current and historical issues. Materials should not be proscribed or removed because of partisan or doctrinal disapproval.

IPs should also challenge censorship in the fulfillment of their responsibility to provide information and enlightenment. Libraries should cooperate with all persons and groups concerned with resisting abridgment of free expression and free access to ideas. A person's right to use a library should not be denied or abridged because of origin, age, background, or views.

¹⁰ Rawls, John (1971): A theory of Justice.

References

- Abbott, Randy: "A Critical Analysis of the Library-Related Literature Concerning Censorship in Public Libraries and Public School Libraries in the United States During the 1980s." *Project for Degree of Education Specialist, University of South Florida*. [ED 308 864], 1987.
- Adam D. Moore ed (2005). "Information Ethics: Privacy, Property, and Power", University of Washington Press.
- Capurro, Rafael: *Information ethos and information ethics. Ideas to take responsible action in the field of information*", *Nachrichten für Dokumentation*, vol. 39, no. 1- 4, 1988.
- Capurro, Rafael: "Intercultural information ethics". In: *International ICIE Symposium 2004, Localizing the Internet: ethical issues in intercultural perspective*. Karlsruhe, Germany: Center for Art and Media, 2004.
- Froehlich, Thomas J: "Ethical considerations of information professionals", *Annual review of information science and technology*, vol. 27, 1992.
- Froehlich, Thomas J.: Survey and analysis of legal and ethical issues for library and information services, *UNESCO Report (Contract no. 401.723.4), for the International Federation of Library Associations. IFLA Professional Series*, 1997.
- Froehlich, Thomas J.: "Ethical considerations of information professionals", *Annual review of information science and technology*, vol. 27, 1992.
- Hauptman, Robert: *Ethical challenges in librarianship*. Phoenix, AZ: Oryx Press, 1988.
- Kostrewski, Barbara J. *Charles Oppenheim: "Ethics in information science"*, *Journal of information science*, vol. 1, no. 5; 1980, pp. 277-283.
- Miller, A. R: *The Assault on Privacy: Computers, Data Banks, and Dossiers*, University of Michigan Press, 1971.
- Rawls, John : *A theory of Justice*. Oxford UK: Oxford University Press, 1971.
- Severson, Richard J.: *The principles of information ethics*, Armonk, NY: M. E. Sharpe, 1997.
- Spafford, Eugene, et al.: *Computer Viruses: Dealing with Electronic Vandalism and Programmed Threats*, ADAPSO, 1989.
- Spafford, Eugene: "Are Computer Hacker Break-Ins Ethical?" *Journal of Systems and Software*, January 1992, Vol. 17, 41-47, 1992.
- Samek, Toni: "Intellectual Freedom within the Profession: A Look back at Freedom of Express-

tion and the Alternative Library Press"; *Counterpoise* 4(1/2), Spring 2003.

York W. Bradshaw, Johannes Britz, Theo Bothma and Coetzee Bester

Using Information Technology to Create Global Classrooms: Benefits and Ethical Dilemmas

Abstract:

The global digital divide represents one of the most significant examples of international inequality. In North America and Western Europe, nearly 70% of citizens use the Internet on a regular basis, whereas in Africa less than 4% do so. Such inequality impacts business and trade, online education and libraries, telemedicine and health resources, and political information and e-government. In response, a group of educators and community leaders in South Africa and the United States have used various information technologies to create a "global classroom" that connects people in the two countries. University students, high school students, and other citizens communicate via Internet exchanges, video conferencing, and digital photo essays. The project has produced a number of tangible benefits and it has developed a model for reducing inequality in global education, at least for those institutions with the technological resources to participate. We also present several recommendations for how to expand the initiative and thereby increase the number of people who can benefit from it.

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Introduction

Global inequality is an enduring reality, and no where is this more evident than when examining the global digital divide. Across Africa, for example, only 3.6 percent of the population uses the Internet, well below the world average of 16.9 percent. At the upper end of the world system, twenty-four countries (primarily in North America and Europe) have Internet usage rates that exceed 60 percent and five are higher than 70 percent (Internet World Stats, 2007). This global digital divide impacts business and trade, online education and libraries, telemedicine and health resources, and political information and e-government.

Inequalities in information technology clearly represent an ethical issue (see Britz, 2007). The "wired" world has distinct advantages over the "unwired" world in terms of access to resources and opportunities. These advantages perpetuate global inequality and make it more difficult for the developing world to catch up. As discussed below, solutions to the global digital divide are extremely difficult to implement for a variety of reasons.

This paper discusses an on-going project that uses information technology to facilitate greater equality in global education. More specifically, for more than five years, a group of university professors, secondary school teachers, government leaders, and NGO leaders in South Africa and the United States have formed a unique "global classroom" that facilitates international education and inter-cultural understanding. We discuss this project in substantial detail and then examine its implications for ethical issues related to development, equality, and social justice.

Theoretical Issues

There is no question that information technology has altered the world economy in many ways (see Sassen, 2006). International capital flows, global trade, and the exchange of electronic information have changed the way that companies and individuals conduct business. *Distance* and *place* are less and less important as information technologies facilitate connections between people and companies, regardless of their geographic location. The problem, of course, is that not everyone has access to these technology resources. Lack of access to computers, the Internet, and other forms of elec-

tronic information makes it virtually impossible for some countries – and their citizens – to participate fully in the global economy (Britz, Lor, and Bothma, 2006). Moreover, because information technology is associated with better health and overall quality of life, the many countries with low levels of information technology are at a distinct disadvantage relative to economically developed nations (Bradshaw, Fallon and Viterna, 2005).

A number of scholars argue that information poverty is an ethical issue – a moral issue – precisely because it is correlated with other types of poverty (Capurro, 2000; Britz, 2004; Britz and Blignaut, 2001). Remedying the global digital divide is, according to this perspective, a matter of social justice. Information technology is part of the "formula" for developing poor regions, a process that is hampered by the fact that rich and powerful countries control the global information system. Interestingly, this view is consistent with both the "cyber-optimist" and "cyber-pessimist" theories outlined by Pippa Norris in her book, *Digital divide: civic engagement, information poverty, and the internet worldwide* (2001). On the one hand, cyber-optimists assert that information technology is a positive force in the world today. It is associated with economic growth, health, democracy, and other features that typically characterize societal development. On the other hand, although cyber-pessimists do not disagree with these sentiments, they assert that rich countries maintain control over information technology and insure its unequal distribution globally. Thus, rich countries utilize information technology for their own benefit, at the expense of poor countries.

Below, we discuss an innovative project that has the capacity to create greater equality of access to educational resources through the use of information technology.

Background

In October of 2002, Johannes Britz attended an "Ethics of Electronic Information Conference" at the University of Memphis in the USA. At the time, Prof. Britz was a Professor in the Department of Information Science at the University of Pretoria. One of his major research and teaching interests focused on information poverty as an issue of social justice. During the conference, Prof. Britz met York Bradshaw, who was the Chair of the Department of Sociology at the University of Memphis. One of Prof. Bradshaw's research and teaching interests

examined the impact of information technology on development and quality of life in poor countries.

Over the next few months, Profs. Britz and Bradshaw continued a dialogue that ultimately expressed a desire to initiate the following:

- Connect classes at the University of Pretoria and the University of Memphis through the use of information technology.
- In the classes, examine the effects of information technology on various social, political, and cultural issues. One important question is whether inequalities in access to information technology are correlated with inequalities in development.
- Examine all of these inequalities within an ethical context. For example, "information poverty" represents an ethical challenge because it translates into a poorer quality of life in the developing world.

During January – March of 2003, Profs. Britz and Bradshaw began talking with their colleagues about these issues. Prof. Britz enlisted the collaboration of Prof. Theo Botma (Chair of Information Science at the University of Pretoria) and Mr. Coetzee Bester (Executive Director of the Africa Institute of Leadership, Research & Development – and a former Member of the South African Parliament). And Prof. Bradshaw enlisted the collaboration of Dr. Wanda Rushing, an Associate Professor of Sociology at the University of Memphis. The larger group began to work together to outline a curriculum for a course that would accomplish the objectives noted earlier.

The group decided to launch its first "global classroom" during September of 2003. During May – August, the following was accomplished:

- Two courses were identified as ideal for the new initiative. One course was "Information and Development" at the University of Pretoria (taught by Prof. Britz and Mr. Coetzee Bester) and the other was "Globalization, Culture, and Information Technology: Is 'Place' Still Relevant?" (taught by Profs. Bradshaw and Rushing).
- Profs. Bradshaw and Rushing traveled to Pretoria to work with their South African colleagues on the course content and objectives. The group decided that the two classes would share about 60% of the overall course content. In other words, both sides would collaborate on 60% of the "global classroom" course and keep 40% of

their courses separate. This was necessary because the academic calendars are different in Pretoria and Memphis. The Pretoria courses begin and end nearly a month before the Memphis courses.

- Pretoria students enrolled in the "Informational and Development" course and paid local fees to the University of Pretoria, and Memphis students enrolled in the "Globalization" course and paid local fees to the University of Memphis.
- The faculty members worked out common readings (for the 60% of the course that would be shared), course assignments, and assessment guides. The group also decided on a web design for the course, which was hosted at the University of Memphis. All students who were enrolled in the global classroom course (from both Pretoria and Memphis) were given full access to the course web site. Because WebCT was widely used on both campuses, it was selected as the course platform.

After ten months of dialogue and about six months of intensive planning and curriculum development, the Universities of Pretoria and Memphis were prepared to launch their first truly global classroom initiative.

Early Lessons Learned

Even before the course officially commenced, we had already learned several valuable lessons that have endured through the years. We consider these issues a "must" for a successful global classroom experience that relies heavily on information technology:

- **Both sides** should have at least one "champion" who will "sell" the course to colleagues and upper-level administrators, collaborate with others to work out details for the course (including all substantive, logistical, and technical issues), and trouble shoot when challenges occur (and they will occur!). Profs. Britz and Bradshaw served this role in the beginning.
- The "champions" must have the support of key administrators to accomplish course and program objectives. Administrators can provide crucial resources and support, and they can open doors (or close them!) when troubles emerge. Prof. Britz had the strong

support of his department chair (Prof. Bothma), who enlisted the support of his dean. Prof. Bradshaw was the chair of his department and he enlisted the support of his dean. Great ideas, strong “champions,” and excellent administrative support are “musts” when organizing global classroom experiences.

- Although champions are vital, a team effort is important especially as the project continues. Each side needs its own team and the respective teams need to work with each other to function as a “global team.” The teams need not be large, but they do need to have clear objectives and work well together. We have already discussed how the teams worked together to plan the course and develop the curriculum.
- Part of the team effort includes strong support from the Information Technology Departments at both institutions. Equipment between institutions must be compatible and the “academic” part of the course must be coordinated with relevant “technical” issues. For example, if part of the course is Internet-based, several questions must be answered. What platform will be used – WebCT, Blackboard, or something else? Which institution will host the site? Who will design the web site? Who will upload photographs and other materials that might be used? And, if part of the course utilizes video conferencing, several additional questions need to be addressed. Does each institution have an adequate video conferencing facility? What type of connection can the institutions make (e.g., ISDN, IP, etc.)? Can the institutions work around large time differences in the two locations? Who will pay for ISDN connections, which are expensive?

First Global Classroom: University of Pretoria and University of Memphis

The global classroom course occurred primarily in September and October of 2003. For two weeks, students focused on various theoretical issues related to the effects of information technology on development. For four weeks, students examined whether “place” (that is, local history and culture) still matters in an increasingly global society. And

for two weeks, students studied ways to increase information technology around the world, especially in countries that lack adequate resources.

A major part of the course not only studied information technology, but also used information technology to connect the students across nearly 8,500 miles. Throughout the course, two different asynchronous discussion rooms were available. One was an “open chat room,” where students could talk about virtually any topic. Most of the discussion revolved around non-course material, such as popular music in South Africa and the United States, sports, leisure activities, types of parties that the students attend, and so on. The other discussion room focused on the video conferences that were a vital part of the course (see below). Prior to the video conferences, one or more of the instructors posted a set of questions or a short lecture that outlined the main issues associated with the conference. And, following the video conference, the students continued their discussion on-line. These discussions frequently were more intense than the actual video conferences, and they lasted for several days – and sometimes longer!

An interesting example of inequality of access to information technology emerged early in the course. Specifically, the Memphis students sent frequent messages to their Pretoria colleagues, and it was often several days before they received a response from most of them. This frustrated the Memphis students, who initially interpreted this as a sign of apathy on behalf of the Pretoria students. But the interpretation was incorrect as they would learn. During one video conference, the instructors asked this question: “How many of you have a computer at home that is connected to the Internet?” More than 70% of Memphis students’ hands went up. Fewer than 20% of Pretoria students’ hands were raised. To communicate with their Memphis counterparts, Pretoria students had two options: go to an Internet Café and pay for a connection (not feasible for many students on a tight budget) or send messages from a campus computer lab during class time. Recognizing the challenge, Prof. Britz and Mr. Bester gave students an opportunity to respond during his regular class time. The computer labs were oversubscribed and therefore students were seldom able to use the labs outside of class time. (In 2007, the instructors conducted a similar poll, and nearly 80% of hands in **both classes** went up.)

Although students enjoyed communicating via the Internet, it paled in comparison to the popularity of the live interactive video conferences. Four times

during the course (spaced about every two weeks), the students would talk to each other for 75+ minutes on a wide range of topics associated with the course. (At that time, the connections were made via an ISDN connection that cost about \$500 per conference [the University of Pretoria and the University of Memphis split the costs]). The instructors would determine the primary topic well before the video conference, and they would post a question or two on the discussion board prior to its start. Each video conference also began with a short "lecture" (10 minutes) from one of the faculty members. The first video conference addressed the theoretical issue, "Are you a 'cyber-optimist' or a 'cyber-pessimist' (i.e., is information technology good for the world, or not?)? The second video conference examined the role of "place" in global perspective. The third looked at the effects of information technology on health, education, and overall quality of life. And the fourth focused on possible solutions to the global digital divide.

Prior to the video conference, it is very important for instructors on both sides to have their students thoroughly prepared for the day's theme. Students need an understanding of the content as well as the technology being utilized. For example, we talked about the different technologies that can connect video conference partners (e.g., ISDN, IP, etc.), along with the pros and cons of each approach. If students are not prepared for the technology, they may be frozen by the "Wow factor" that video conferencing usually brings to first-time users who are surprised with the "real time" reality of the experience.

Following the short lecture that started each conference, the faculty member normally would ask an initial question (or questions), to which each side would respond. The faculty member on the other side would then have the opportunity to respond and ask a question (or questions), to which each side would again respond. Once the discussions begin, it is essential to have good leaders on both sides. The leaders must work together to give both sides an equal opportunity to speak and they must take advantage of impromptu topics that enrich the discussion. They must also allow students to ask each other questions, which can lead to very interesting discussions.

A particularly valuable and moving segment occurred during the final 20-25 minutes of the last video conference. All of the students were given an opportunity to express their sentiments about what the video conferences meant to them. Students on

both sides said that the conferences had opened their eyes, reduced stereotypes (such as, "Americans are all rich and arrogant" and "South Africans are unsophisticated and live in the bush"), enhanced intercultural understanding, and made them much more interested in visiting the others' country. Moreover, and importantly, the course "forced" each side to look more intensively at its own challenges. For instance, upon learning more about apartheid and race relations in South Africa, the Memphis students observed (primarily during private class sessions) that Memphis still suffers from some of the same challenges. Racial tension is very real in Memphis, a reality associated with history, poverty, and violence. One Memphis student commented, "We still have our own apartheid right here." Other students disagreed with this perspective – the point being that the video conferences prompted an excellent discussion of race relations in the "other place."

In addition to video conferences and Internet discussions, the students used one other form of information technology to work together. Specifically, for their final assignment, they completed a photo essay that required good digital photographs. The classes were divided into five "global teams," each of which had students from the University of Pretoria and University of Memphis. Each team decided what topic it wanted to investigate (a task accomplished through intense email negotiations!) and then Pretoria students took relevant photographs in the Pretoria region and Memphis students took relevant photographs in Tennessee. The photographs were exchanged over the Internet and each individual student was required to write her/his own essay from the topics. Topics included "The fight against HIV/AIDS," "Providing healthcare to poor communities," "The role of religion in society," "International cuisine as an expression of culture," and "Popular culture and society."

In conclusion, students were assigned a grade (or mark) for each section of the global course (Internet discussions, video conference participation, and photo essay). The Memphis students were graded only by their instructor (Prof. Bradshaw or Prof. Rushing) and the Pretoria students were graded only by their instructor (Prof. Britz and Mr. Bester). Although instructors from both sides shared comments about the overall performance of students, there was never a desire for one side to grade the other's students.

Broadening the Scope: Subsequent Global Classrooms

Following the success of the initial global classroom, the project has been repeated and expanded in three ways.

First, the global classroom concept has continued at the University of Pretoria and the University of South Carolina Upstate (USC Upstate). Coetzee Bester assumed primary responsibility for the course at the University of Pretoria (after Prof. Britz moved to the University of Wisconsin Milwaukee) and Prof. Bradshaw assumed primary responsibility for the course at USC Upstate (when he moved there). The two universities had a global classroom in September – October 2005 and again in September – October 2006. Although the topics and themes have changed slightly since the initial course in 2003, the overall organization and format have remained the same. Moreover, the same information technologies (Internet discussions, video conferences, and digital photography) have been utilized in all three courses.

Interestingly, the global digital divide made the video conferences more challenging over time. As mentioned earlier, ISDN connections were used during the initial global classroom project in 2003. Both sides utilized this technology. In recent years, however, most U.S. universities (including USC Upstate) have moved away from ISDN technology because it usually is not needed – instead, IP connections are the norm and they are essentially free! Unfortunately, however, IP connections are problematic when, as in the case of the University of Pretoria, there is insufficient broadband capability to utilize this technology. Thus, the only way that the University of Pretoria and USC Upstate can interact in a reliable way is for the former to utilize an ISDN connection to a “bridge,” which can convert the transmission and make possible an IP connection with USC Upstate. The University of Pretoria normally used a bridge in the Netherlands, and the typical cost was about \$385 for a 90-minute video conference. In other words, lack of broadband capability was financially costly to the University of Pretoria.

Second, and very exciting, the global classroom has moved successfully to the high school level. During a several month period in 2006, USC Upstate worked closely with both the Pretoria High School for Girls and Spartanburg High School to initiate a very successful project that has run much of the 2006-2007 academic year. Since October 2006, the

two schools have engaged in three video conferences and exchanged more than a dozen photo-essays on a wide variety of topics. The three topics investigated thus far are: “Is information technology a positive force in the world?”; “Is popular culture uniting the world?”; and “War: when (if ever) is it justified?” The students have also exchanged 451 emails (as of May 10, 2007) over a dedicated discussion board on WebCT .

By all accounts, the global classroom for high school students has been enormously successful. The students have taken the project very seriously and participated at an impressive level. The successful interaction has also resulted in (1) an invitation to the headmistress of the Pretoria High School for Girls to participate in an international conference in Spartanburg, South Carolina (March, 2007), and (2) an invitation for two students and a teacher from the Pretoria High School for Girls to attend a Youth Leadership Institute on the USC Upstate campus (June, 2007). Moreover, an exchange program from USC Upstate will visit the Pretoria High School for Girls in June, 2007.

It is important to point out that global classrooms at the high school level face special challenges, most of which ultimately relate to issues of equality and ethics. We mention a few here:

- High schools normally do not have video conferencing facilities or software packages like WebCT. Thus, they must partner with institutions that do – or pay substantial rental fees. In the case of our high school global classroom, the Pretoria students used the video conferencing facilities at the University of Pretoria and the Spartanburg students used the facilities at USC Upstate. A grant awarded to USC Upstate from the U.S. Department of Housing and Urban Development covered the costs associated with the video conference (approximately \$385 for a 90-minute video conference). Moreover, USC Upstate hosted the WebCT site for the global classroom, and students at both high schools were given passwords to the site (no charge to anyone).
- High schools also need partners who bring expertise on technology and curriculum issues. In this case, the two high schools had extensive assistance from both USC Upstate and the University of Pretoria on such issues. Prof. Bradshaw coordinated the effort at USC Upstate and Prof. Theo Bothma provided crucial support at the University of

Pretoria. All of the lessons learned in the University-level global classrooms were applied to the high school classrooms.

- Although external support is important, nothing is more important than committed teachers and administrators within the high schools. Just as with global classrooms at the university level, **both sides** must have at least one "champion" who will advocate for the project at all times. They need to be outstanding teachers who have the support of their respective administrators and who can work well with people at different institutions. Ms. Janis Haynes (social studies teacher at Spartanburg High School) and Ms. Jeanne Cyrus (English teacher and debate coach at the Pretoria High School for Girls) were true champions for the global classroom – and kept it going at all times. And they had strong support from the principals at each institution.

In the end, global classrooms need human, capital, and technological resources to succeed. Poor schools will have difficulty achieving access to such resources.

Third, in addition to formal classrooms, the global classroom concept can be used for occasional conferences. For example, we used video conferencing during an October 2005 international conference on the USC Upstate campus titled, "Using Information Technology to Globalize the Curriculum." During one session at the conference, a panel of South African experts (led by Mr. Coetzee Bester) talked via interactive video with conference participants about a number of social, political, and economic factors influencing South Africa. The panel broadcast from the video conferencing facilities at the University of Pretoria. And during June 2007, 50 high school students at a Summer Youth Leadership Institute to be held on the USC Upstate campus will hold a video conference with youth leaders in South Africa. Again, the University of Pretoria and USC Upstate will provide their facilities for the conference.

Conclusion and Recommendations

This paper has discussed, based on case studies, the use of global classrooms at the university and high school levels. In our view, the success of these international initiatives is due to two common char-

acteristics: they (1) rely on committed and well-trained professionals who know how to create and sustain such projects, and (2) possess the financial and technological resources to make the projects possible. Unfortunately, there are relatively few institutions across Africa and the rest of the developing world that have the resource capacity to launch similar global classroom initiatives. The impediments to widespread use of these classrooms are related to issues of inequality. On the positive side, however, this also means that global classroom initiatives could be much more prevalent if several key issues are overcome. We recommend three here.

First, teachers in the developing world (and, for that matter, the economically developed world) need intensive training in how to incorporate information and communications technology into the classroom. Although the acquisition of new computers, new servers, and new satellite hook-ups would be a positive step, they are not particularly useful without trained teachers who can use them in an effective and creative manner. It is not just a matter of understanding the technical use of the equipment; instead, it is devising a curriculum that incorporates the new technology in a creative learning environment.

Training programs for teachers need to include several components:

- Teachers need intensive training (several weeks) at institutions that have innovative programs in the area of teaching with technology. It would be an invaluable opportunity for teachers to see the programs in action, receive instruction in relevant pedagogical and technical issues, talk to students and instructors, and build networks that will serve them well into the future. These training opportunities can take place anywhere in the world that has the requisite facilities and programs.
- "On-site" training is also important. Visits by teachers and technology experts to schools with new technology would also be valuable. It would enable teams of educators from the local school and outside the local school to work together on a variety of issues.
- On-line resources are also a crucial part of (continuous) training for educators throughout the world. Good on-line resources can be used for "basic" training in technology and curriculum issues, and they can be used

for a wide variety of "advanced" discussions on an on-going basis. Sophisticated discussion boards on "teaching with technology," "incorporating indigenous knowledge in a digital age," and a myriad of other topics would be an outstanding resource for teachers in all regions of the world.

Second, institutions in the developing world need access to computers, servers,

video conferencing equipment, and other electronic resources. And, if they acquire these resources, they need assistance maintaining them. The value of many equipment donations has eroded over time because there is no provision for maintaining and repairing equipment. Moreover, as already mentioned, lack of broadband access remains a difficult problem that slows connectivity and increases the cost of doing business. Greater resources, combined with well-trained "human capital," would go along way toward resolving some of Africa's most intractable IT challenges.

It would be enormously beneficial if international and regional actors would provide the human, financial, and technological resources to help local actors develop creative solutions to the digital divide. In Africa, for example, the New Partnership for African Development (NEPAD) has launched a very exciting "e-schools" initiative designed to connect 600,000 schools across the continent through information technology. NEPAD has already supplied many schools with computers, satellite hook-ups, television monitors, and video conferencing equipment. The challenge ahead is to (1) provide the necessary resources to maintain the equipment and train technicians to repair it, and (2) train teachers how to use the equipment and, perhaps most important, to integrate technology in the classroom in an effective manner.

Third, partnerships are essential in building global classrooms. Partnerships expand human, capital, and technological resources. In our case, the relationships among the universities and high schools (and the key players at each institution) made possible a unique global learning experience. It is also important to point out that some partnerships along the way did not work out! This project attempted to recruit several other institutions and, for various reasons, they opted not to be a part of the initiative. Several expressed great interest initially but then, when hard work and resources were required, they dropped out. This again underscores our primary argument: global classrooms are

extremely valuable and they require great commitment on the part of all partners.

Global inequality has maintained a serious digital divide that places developing countries at a distinct disadvantage. Addressing this inequality is a matter of ethics and social justice precisely because information poverty maintains other types of poverty. We hope that our initiatives will play a small role in reducing poverty.

Bibliography

- Bradshaw, York, Kathleen Fallon, and Jocelyn Viterna. 2005. "Wiring the World: Access to Information Technology and Development in Poor Countries." Research in Social Stratification and Mobility 23: 375-397*
- Britz, J. J. 2004. To know or not to know: a moral reflection on information poverty. Journal of Information Science, 30(1), 192-204.*
- Britz, J.J. 2007. A Critical Analysis of Information Poverty from a Social Justice Perspective. Ph.D. Thesis, Department of Information Science, University of Pretoria.*
- Britz, J. J. & Blignaut, J. N. 2001. Information poverty and social justice, South African Journal of Library and Information, 67(2): 63-9.*
- Britz J. J. & Lor, P. J. 2003. A moral reflection on the flow from south to north with specific reference to the African continent. Libri, 53(3): 160-173.*
- Britz, J.J., Lor, P.J. & Bothma, T.J.D. 2006. Global capitalism and the fair distribution of information in the marketplace – a moral reflection from the perspective of the developing world Journal of Information Ethics (In press).*
- Capurro, R. 2000. Ethical challenges of the information society in the 21st century. International Information and Library Review, 32(3&4): 257-276.*
- Castells, M. 1998. End of millennium. In: The information age: economy, society and culture, vol. III. Malden: Blackwell.*
- Internet World Stats. 2007. www.internetworldstate.com/stats/htm. Accessed May 10, 2007.*
- Norris, Pippa. 2001. Digital Divide: Civic Engagement, Information Poverty, and the Internet Worldwide. Cambridge: Harvard University Press.*
- Sassen, Saskia. 3^d ed. 2006. Cities in a World Economy. Boston and London: Pine Forge Press.*

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Co-Production on the Web: Social Software as a Means of Collaborative Value Creation in Web-based Infrastructures

Abstract:

The concept of co-production was originally introduced by political science to explain citizen participation in the provision of public goods. The concept was quickly adopted in business research targeting the question how users could be voluntarily integrated into industrial production settings to improve the development of goods and services on an honorary basis. With the emergence of the Social Software and web-based collaborative infrastructures the concept of co-production gains importance as a theoretical framework for the collaborative production of web content and services. This article argues that co-production is a powerful concept, which helps to explain the emergence of user generated content and the partial transformation of orthodox business models in the content industries. Applying the concept of co-production to developmental policies could help to theorize and derive new models of including underprivileged user groups and communities in collaborative value creation on the web for the mutual benefit of service providers and users.

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 - Networked Knowledge – Networked Media. Integrating Knowledge Management, New Media Technologies and Semantic Systems. Schaffert, Sebastian; Tochtermann, Klaus; Pellegrini, Tassilo (Eds.). New York: Springer Verlag 2008
 - Social Semantic Web. The Convergence of Web 2.0, Social Software and Semantic Web. Blumauer, Andreas; Pellegrini, Tassilo (Eds.). Heidelberg: Springer Verlag 2008

Introduction

While from its early days the internet has been a place of social interaction [Rheingold 1993] increasing spread of internet connections and improvements in the usability of (mobile) web applications have lowered the participatory barriers for users to actively engage in virtual communities and the production of web content. The tremendous success of Wikipedia as a communitarian project of high quality content provision, the increasing popularity of blogging as a low cost personalized editorial activity and the rising importance of tagging platforms as referential architecture for the approval of relevance and quality has raised attention of how user generated content (UGC) is affecting and altering orthodox business models in content industries.

Media companies - especially aggregators – but also public organizations have already begun to take advantage of the increasing availability of UGC on the internet for various reasons, either by establishing their own collaborative platforms or by taking over established service providers. With the growing amount of UGC available increasing attention is being paid to the question how collaborative action on the web can be used for value creation taking into account that service providers and users share production resources and facilities in a manner of enterprise collaboration for mutual benefit.

Web collaboration as a means of co-production

Theories of co-production originate from public policy research. According to Ostrom [1996: 1073], "co-production is a process through which inputs from individuals who are not in the same organization are transformed into goods and services [...] that transform citizens into safer, better educated or healthier persons." Co-production implies that users (i.e. citizens) can play an active role in producing (public) goods and services of consequence to them. According to Incera et al. [2005: 3] collaboration can be defined as a state of mutually beneficial relationships between two or more parties who work toward common goals by sharing responsibility, authority and accountability for achieving results. Hence collaboration can be seen as a specific mode of co-production to improve structural deficiencies in production settings and value chains.

Empirical investigation in the development of open source software revealed that co-production amounts for about Euro 1,2 billion for freely available software which leads to 36% in savings in corporate research and development per year compared to conventional ways of software development in Europe [Ghosh 2006].

Research in media economics has shown that co-production is used as an efficient means to shift the costs of content production from the service provider to the user [Hess 2004], i.e. the Japanese mobile mail magazine market is almost entirely built on the honorary engagement of users in the production and continuous provision of media content [Funk 2004].

Research in human computing has focussed on the improvement of collaborative infrastructures for value creation in service provision like the semantic enrichment of images through collaborative tagging [Golder 2006; Ahn 2004].

The trend toward open access repositories (i.e. Wikipedia) to collect, organize and make available highly dispersed amounts of data in special interest domains characterizes another field of application based on the principle of co-production [Winterbottom 2007].

Over the past few years microeconomic theory has paid increasing attention to the role of the user in value creation along the innovation life cycle by the application of cyberinfrastructures [Hsu 2006; Leadbeater 2006; Fichter 2005; Franke 2004]. Widespread cyberinfrastructures like the web are a necessary (but not sufficient) precondition to achieve economy of scale on co-production communities, where the users share production resources and facilities with the providers, in a manner of enterprise collaboration [Hsu 2006]. Co-production has to be conceptualized as a two level infrastructure consisting of (1) a (top down) service provider, who provides the stable running, toolkits and marketing of content services and (2) the (bottom up) content producer who adopts the infrastructure to provide creative work in exchange of improvements in services, reputation, visibility, self-esteem, fun etc. and trying to avoid underutilization of knowledge, skills and time [Ostrom 1996].

Service providers profit from the selective integration of users along the product life cycle which can significantly improve the overall production process [Fichter 2005] leading to lower transaction costs in information provision and search, and accumulating

a critical mass of data for service development, provision and the reduction of cycle times [Hsu 2006]. But to sufficiently enable and govern co-production, service providers have to establish adequate remuneration and incentive models to encourage participation, promote trust and secure quality standards.

Foundations of UGC

Wikipedia.org defines user generated content as "various kinds of media content that are produced or primarily influenced by end-users, as opposed to traditional media producers, licensed broadcasters and production companies" [Wikipedia 2007]. The UGC production embraces activities like publishing, commenting, referencing, reviewing, rating, syndicating, tagging and querying.

UGC emerges out of a micro-content-based, self-organizing infrastructure. It is being embedded within a "architecture of participation" based on the principles of bottom up networks, self-service, openness, self-regulation and decentralization [O'Reilly 2005]. In monetary terms, tools and services are cheaply available and cost-effective, being designed not just for the production of content but also for the management of relationships and shared resources.

UGC embraces 1st order editorial content and 2nd order meta-content which makes it applicable for reuse outside the context it has been created in. Tags and folksonomies are examples for meta-content which is being used to generate surplus statements, views and references within a domain. Semantic enrichment through 2nd order content therefore is a crucial, indispensable means in the improvement of content services.

According to media economics goods that are being traded on a market can be characterized by their excludability from use and their rivalry in consumption [Kiefer 2001]. By applying these two dimensions to UGC the following matrix can be drawn:

	Rivalry	
	Yes	No

Excludability	Yes	Private Goods (i.e. Universal Resource Identifiers)	Club Goods (i.e. Blogs, Tags, Mashups, Folksonomies)
	No	Common Pool Goods (i.e. water, air, space) – not relevant to UGC	Public Goods (Open Access Repositories like Wikipedia)

The matrix shows that although media content can have several good characteristics it is best described as a club good, characterized by non-rivalry in consumption but excludability in use. The latter aspect might be intriguing to those who think of web content as a public good because of its free availability in terms of monetary costs. But taking into account that the use of web content is bound to production resources like hardware, software, internet connections skills and time, and the usage of the content is highly often bound to conditions of use like access fees, referencing, revealing personal data, agreeing to user tracking and profiling, and/or the exposure to advertisements we find an exchange pattern between service provider and content producer that makes the club good paradigm applicable.

Examples: Collaborative Tagging in ESP, Peekaboom and Phetch

The following section introduces applications that have been developed by Carnegie Mellon University School of Computer Science. The examples illustrate some low level approaches incorporating the idea of co-production for the semantic enrichment of images on the web by collaborative tagging. The empirical set up pays account to the fact that certain improvements in quality of service are hard to achieve by machines, but easy to handle by humans. Hence the human is seen as an extension of the computing system.

According to Heymann [2006:pg] collaborative tagging systems are "a good way to leverage large numbers of users to help organize very large, rapidly changing corpora which would be difficult to organize automatically. Often, this works because users are working in their own self interest as they

mark an object with a particular tag, and when all of these tags are aggregated together, the system can make assumptions about objects based on the aggregate activities of hundreds of thousands or even millions of users.”

The basic idea behind the following applications was to let users do the semantic enrichment of images in their spare time by playing it as a game. According to Ahn [2004], 5,000 people continuously playing the game could assign a label to all images indexed by Google in 31 days. To achieve this two or more anonymous players gather in a team to contest against time and higher score-holders in labelling pictures, locating objects within them and phrasing their content.

ESP Game

ESP (<http://www.espgame.org>) is a Java application for the collaborative tagging of images. A team of two randomly chosen anonymous players come together for a limited amount of time to describe images by using tags. For each matching tag both players collect grants which are added to their individual score. The purpose of the game is to improve image search by collecting annotation data on a lexical level based on a quota-model. This means that just those tags are stored as legitimate annotations of an image that pass certain quota-criteria.

Peekaboom

Peekaboom (<http://www.peekaboom.org>) is a Java application used to identify the location of an object within an image. Peekaboom is an extension of the ESP Game as it deepens the semantic enrichment of images from a lexical level to a spatial description of objects located within the image.

Two randomly chosen anonymous players take turns either presenting an object within an image or guessing what the object could be. The first player gets an image along with a word related to the image (i.e. cow). By clicking on certain parts of the image the first player reveals little portions of the image to the second player. For the second player the game consists of a slowly revealing image, which has to be named. Once the second player has guessed the correct word the team moves on to the next image and switches roles.

Phetch

Phetch (<http://www.peekaboom.org/phetch/>) addresses accessibility problems of images by visually impaired people. It was designed to produce descriptive captions of an image so that screen readers - programs that convert the text of a webpage into synthesized speech - are capable to process the content of the image and visually impaired people can share a common experience of the web.

Phetch is a 3 - 5 person game which generates explanatory phrases for images from the Web. The players are randomly grouped with others. One player is chosen as a describer, and the others are the seekers. The describer gets an image and has to help seekers find it in a given corpus by typing search strings related to the captions. Given only text from the describer, the seekers must find the image using a search query which presents the seekers a collection of possibly matching images. The first seeker to find the correct picture wins and becomes the next describer. Each session of the game lasts 5 minutes, during which all players should go through as many images as possible.

Remuneration Models in Collaborative Environments

The examples described above illustrate how gaming can be applied to set up a remuneration model between service provider and content producer. Users experience fun in competing against time and higher score holders by contributing to the qualitative improvement of the service. To secure quality of service, knowledge about motivational aspects and anonymity are crucial as trust and positive feedback (i.e. satisfaction, pleasure) are indispensable factors in this specific co-production setting [Lieberman et al. 2007]. Nevertheless in the case of collaborative tagging to extend the level of productivity beyond entertainment requires more elaborate remuneration models.

Virtual Currencies

Elaborate remuneration models take into account the fact that increases in productivity can be achieved through coupling voluntary engagement with material rewards. In the case of Second Life (<http://www.secondlife.com/>), the co-production architecture is built in a way that rewards users with the possibility to capitalize their engagement by developing services on their own. The precondition

to this is the establishment of a market based on a virtual currency (the Linden Dollar) that enables surplus transactions between service providers and content producers. The coupling of the virtual currency to "real world" financial transactions by stable exchange rates further deepens the remuneration value users acquire by participating in the co-production setting and promotes productivity.

Second Life provides a hierarchical, multi-level remuneration model incorporating the infrastructure providers (Linden Labs) on top with various service providers down the taxonomic functionality of the game. In addition, Second Life theoretically enables its users to switch between various roles thereby taking full advantage of either being a service provider or a content producer.

Bonus Systems for Collaborative Content Production – A Scenario

Bonus systems – here defined as the deliberate rewarding of positive feedback – could be a powerful means to encourage UGC and the participation in co-production settings. In the case of collaborative tagging scores acquired through a game or any other form of mutually positive interaction could be assigned material value for exchange and trade outside the production setting. The score could be transformed into a virtual currency mutually accepted by service providers to grant access to surplus goods and services, i.e. premium services, personalization, discounts, downloads etc.

To enable market conditions the currency must be accepted among various service providers from a business web transcending the validity of the virtual currency into "real world settings" by offering material exchange. Rewarding models based on bonus systems could promote the spread of cyberinfrastructures by giving users the possibility to gain material rewards through collaborative engagement and simultaneously acquire literacy and skills in the use of advanced web technologies. Bonus systems could also be seen as a metric for productivity in co-production settings, which is a necessary precondition to allow the evaluation of user participation and centrality within a given domain or community.

Conclusion

Co-production is a powerful concept. Transformations will take place along various dimensions including the modes of production (i.e. from design to co-design), the relationship between producers and

consumers (i.e. from consumer to prosumer) and maybe even the socio-economic conditions in industrialized societies (i.e. from disintegrated to reintegrated value chains) [Weber 2006]. To benefit from co-production from a service provider's perspective means to incorporate it at the right level at the right scale and scope based on trust and mutual benefit. To benefit of co-production from a user's perspective means to ensure ones creative work doesn't get harvested without one's permission by at least claiming fair remuneration and privacy ideally based on a social contract. But in a co-production environment content producers have to take account of the fact that due to structural reasons corporate actors are in a more privileged position when it comes to exercise power and enforce legal rights. Hence the individual user is in a much weaker position under co-production circumstances than the corporate actor. This unequal distribution of power might be one of the hampering effects in the deployment of co-production concepts and should therefore be paid close attention to.

References

- [Ahn 2004] Von Ahn, Luis; Dabbish, Laura (2004). *Labeling Images with a Computer Game. Paper presented at CHI 2004, April 24–29, 2004, Austria.* See also: <http://www.cs.cmu.edu/~biglou/ESP.pdf>, viewed June 20, 2007
- [Fichter, 2005] Fichter, Klaus (2005). *Modelle der Nutzerintegration in den Innovationsprozess.* Berlin: IZT – Institut für Zukunftsstudien und Technologiebewertung
- [Franke 2004] Franke, Nikolaus; Piller, Frank (2004). *Value Creation by Toolkits for User Innovation and Design. The Case of the Watch Market.* In: *Journal of Product Innovation Management*, 21/6, 2004, pp. 401-415
- [Funk 2004] Funk, Jeffrey L. (2004). *Neue Technologie, neue Kunden und die disruptive Technologie des mobilen Internet. Erfahrungen aus dem japanischen Markt.* In: Zerdick, Axel; et al. (Eds.). *E-Merging Media. Kommunikation und Medienwirtschaft der Zukunft.* Berlin: Springer Verlag
- [Ghosh, 2006] Ghosh, Rishab Aiyer (2006). *Study on the: Economic impact of open source software on innovation and the competitiveness of the Information and Communication Technologies (ICT) sector in the EU.* European Commission: Contract ENTR/04/112.
- [Golder 2006] Golder, Scott; Huberman, Bernardo (2006). *Usage Patterns of Collaborative Tagging*

Systems. In: *Journal of Information Science*, 32(2). pp. 198-208.

[Heinrich, 1999] Heinrich, Jürgen (1999). *Medienökonomie. Band 2: Hörfunk und Fernsehen. Op-laden: Westdeutscher Verlag*

[Hess 2004] Hess, Thomas (2004). *Medienunternehmen im Spannungsfeld zwischen Mehrfachverwertung und Individualisierung. Eine Analyse für statische Inhalte. In: Zerdick, Axel; et al. (Eds.). E-Merging Media. Kommunikation und Medienwirtschaft der Zukunft. Berlin: Springer Verlag*

[Hsu, 2006] Hsu, Cheng (2006). *Models of Cyberinfrastructure-Based Enterprise and their Engineering. In: Hsu, Cheng (Eds.). Service Enterprise Integration. An Enterprise Engineering Perspective. Boston: Springer*

[Incera 2005] Incera, Jose; Mejia, Marcelo; Roberts, Keith (2005). *Online Collaboration as Emerging Technology. Final Project Paper on INFT 625. See also: http://collaborationwiki.pbwiki.com/f/Online_Collaboration_Paper.doc, viewed Mai 1, 2007*

[Kiefer 2001] Kiefer, Marie Luise (2001). *Medienökonomik. München: Oldenbourg Verlag*

[Leadbeater 2006] Leadbeater, Charles (2006). *The User Innovation Revolution. Report by the National Consumer Council, London, UK*

[Lieberman 2007] Lieberman, Henry; Smith, Dustin; Teeters, Alea (2007). *Common Consensus: a webbased game for collecting commonsense goals. Paper presented at IUI'07, January 28–31, 2007, Hawaii, USA.*

[O'Reilly 2005] O'Reilly, Tim (2005). *What is Web 2.0? Design Patterns and Business Models for the Next Generation of Software. See also: <http://www.oreillynet.com/pub/a/oreilly/tim/news/2005/09/30/what-is-web-20.html?page=1>, viewed April 30, 2007*

[Ostrom, 1996] Ostrom, Elinor (1996). *Crossing the Great Divide: Coproduction, Synergy and Development. In: World Development, 24/6, 1996, pp 1073 - 1087*

[Rheingold, 1993] Rheingold, Howard (1993). *Virtual Communities. New York: Addison Wesley*

[Weber, 2006] Weber, Michael; Fröschl, Karl (2006). *Semantic Web als Innovation in der ökonomischen Koordination. In: Pellegrini, Tassilo; Blumauer, Andreas (Hg.). Semantic Web. Wege zur vernetzten Wissensgesellschaft. Berlin: Springer Verlag*

[Wikipedia 2007] Wikipedia (2007). *User-generated content. In:*

http://en.wikipedia.org/wiki/User_generated_content, viewed April 30, 2007

[Winterbottom 2007] Winterbottom, Anna; North, James (2007) *Building an Open Access African Studies Repository Using Web 2.0 Principles. In: First Monday, 26.03.2007, http://www.firstmonday.org/issues/issue12_4/winterbottom/, viewed May 05. 2007*

Jangawe Msuya

Challenges and opportunities in the protection and preservation of Indigenous Knowledge in Africa

Abstract:

This paper presents challenges and opportunities in the protection and preservation of Indigenous Knowledge (IK) in Africa. Specific examples have been taken from the Maasai pastoralists and the Sambia and Zigua traditional medicine-men of North Eastern Tanzania. The paper argues that there is a threat of IK extinction due to lack of recording and problems associated with preservation and protection of the knowledge from pirates. Examples on efforts made by Tanzania in IK preservation, including efforts made by Economic and Social Research Foundation in developing IK database and training initiatives at University of Dar es Salaam are discussed. Ethical issues in IK Systems are also discussed with emphasis on returning IK benefits to the owners of the knowledge, and involvement of people in IK researches. Finally, the paper highlights challenges in IK prevention and suggests measures that can be taken to alleviate the challenges. These include among others, developing appropriate IK policies and practices, establishing IK resource centres, training, researching and developing South South IK networks.

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 - The information studies program of the University of Dar es Salaam: perceptions of the stakeholders. Information Development Vol. 21(3) September, 2005 pp. 209-217

- Sustainability of Library and Information Science Journals and Research in Africa: A case study of East Africa. Proceedings of the Stakeholders Conference on Improving the Quality of Library and Information Science Journals in West Africa, held at the University of Ibadan, Nigeria from 7th to 8th December 2005 pp 35-50.
- "Information Literacy in the Eastern, Central and Southern African region: an overview" In: User Information Literacy: case studies from university library programmes in the SCANUL- ECS region. Edited by E. Kiondo and J. Msuya. Oxford, INASP, 2005 pp.1-18.

Introduction

Indigenous Knowledge (IK) is defined as a systematic body of knowledge acquired by local people through the accumulation of experiences, informal experiments and intimate understanding of the environment in a given culture (Rajasakeran, 1992). Indigenous knowledge can be seen as local or traditional knowledge that is unique to every culture or society. The knowledge influences planning as well as decision-making in local areas.

IK is regarded as a problem solving mechanism to rural communities. It is recognized as having relevance to the daily life of most individuals, economic development, culture preservation and political transformation, which lead to poverty reduction. IK plays a substantive part in poverty eradication among communities in different parts of Africa. The knowledge is implicit and thus difficult to systemize. It is embedded in community practices, institutions, relationships and rituals.

IK is effective in helping to access the poor with information as in most cases it is the only information they control and certainly the one which they are familiar with. When they are empowered with IK, they can use it to solve critical problems using the information. IK is said to be as old as human race itself.

Johnson (1992) identifies the following characteristic features of IK:

- It is locally bound; that is, indigenous to a specific area;
- It is culture and context specific;
- It is non formal knowledge;
- It is orally transmitted, and generally not documented;
- It is dynamic and adaptive. It is not static. It changes as the society changes socially, economically, culturally etc.
- It is holistic in nature;
- It is closely related to survival and subsistence to many people worldwide;
- It belongs to the community. The knowledge is communally owned.

Based on the above, it can be concluded that Indigenous Knowledge is scientific in the sense that it is obtained through many years of practicing and practicing, and therefore provides scientific solution

to problems. It is used to solve problems that communities are facing. IK belongs to the community. It is there to solve peoples problems and communally shared. Those who possess the knowledge are so doing on behalf of the community. IK is meant to benefit all the people in the community.

IK Practices in Tanzania

The Maasai of Northern Tanzania

The Maasai people of Northern Tanzania are pastoralists. They interact directly with the environment right from childhood. In this way, they have acquired a lot of knowledge on their environment. They have ensured that the knowledge gained on physical resources is used sustainably.

The strategy of mobile grazing that they use allows their animals to utilize a wide variety of forage vegetation types that are widely dispersed. This increases seasonal grazing and the carrying capacity of the land. Through their intimate association with the natural grasslands Maasai pastoralists are familiar with every plant in their rangelands and pastures. They can even describe the palatability of each plant for the different animals they keep and they know each plants seasonality, nutrition value, toxicity, and medicinal properties.

The pastoralists have knowledge and experience of supplementing their animals diet with minerals, which not only provides resistance to illness, but also enhances their appetite, growth, fertility and milk production. The Maasai are fully aware of the migration pattern for effective land use and conservation. This is an example of true indigenous knowledge that belongs to the community for the community.

The traditional Medicine-men of North-Eastern Tanzania

In the North Eastern part of Tanzania lives the Sambia and Zigua people. These communities are well known for their famous traditional medicine. They cure people with health problems through use of herbs and other traditional means. The knowledge is said to be transmitted among family members from one generation to the next. The father in the family works very closely with the

eldest son who carries over the skills and do the same to his eldest son. They know the herbs that

can cure tropical diseases such as malaria, wounds, stomach pain etc.

The same is practiced by the mother who will do the same to her eldest daughter. This knowledge has all characteristics of IK outlined above. Some have even specialised in assisting women in labour. The knowledge is however, threatened as formal schooling takes over. As children go to school, the potential successors have a choice between abandoning western education and being a traditional medicine man or joining modern school and getting a formal career. This is the dilemma facing sons and daughters of the Sambia and Zigua medicine men and women.

Current issues in the Management of IK in Africa

There are pertinent issues with regard to the management of IK systems in Africa. One of them is the threat of IK to extinct. As it was revealed earlier, most of IK practices are not in written form. The knowledge is transmitted from one generation to the next orally. In this way it is easy to face extinction due to lack of records.

Among the leading factors that explain the possible extinction of IK is the fact that concentration has been to IK that has direct cash value, ignoring the non cash knowledge. In the area of research for example, attempts have been made to research and document medicinal plants since such initiative leads to discovery of medicine that can be used by huge pharmaceutical industries to develop medicines. On the other hand, not much has been done in areas such as traditional dances, rituals, languages as they do not contribute directly to productivity.

The main area of concern on IK in Africa therefore, is how to preserve it. What measures need to be taken to ensure preservation of the knowledge so that it is transmitted from generations to generations.

Lack of written memory on IK has also led to its marginalization. IK is not documented. It is orally transmitted as we have seen in the case of the Maasai pastoralists and the Sambia and Zigua medicine-men of Tanzania. The new generation that spend most of their time nowadays in formal education are exposed to western education systems and less to IK. As such, there is no appreciation on the existence of IK. Africa has not been able to docu-

ment IK so as to protect and prevent it from extinction and pirates.

It should be noted that there is less appreciation of IK today than it used to be in the past. The Western knowledge has taken over in the education system. Any one practicing IK as a means to solve problems such as local medical technology is looked down as outdated and considered primitive. The western medical technology has taken over. The issue therefore, is how to ensure that IK is integrated in the World Knowledge System for its survival.

There is also a concern on the needs to take stock of what is in Africa as far as IK is concerned. For example, the following needs to be addressed:

- What kind of IK exists in different parts of Africa?
- Where is it? If some one wants a certain knowledge, where can he/she get it from?
- Who owns or have to be consulted to access the knowledge?
- Under what conditions is the knowledge accessible? In other words, what Intellectual Property Rights (IPR) exist in getting access to the knowledge?

Protection and Preservation of IK in Africa

Protection Versus Promotion of IK

It is a common knowledge that Africa is very rich in Indigenous Knowledge. The issue of protection of the knowledge is currently a topical issue. There is however, a debate on promotion and development of the existing knowledge. Which one should be given priority? Should Africa put more emphasis on protection of what is currently there or promote it first for wider awareness?

During the conference on African Information Ethics held in Pretoria, South Africa in February 2007, IK Panel members deliberated on the issue of prevention versus protection of IK. The argument was on which one should be given priority?

The discussion was very stimulating, and at the end, it was agreed that Africa has to focus on Promoting IK particularly in areas of medicinal plants, game reserves, environment etc. and add values to the knowledge as a prerequisite to its protection. Whereas protection was acknowledged to be impor-

tant, the argument was that let it be known widely through promotion after which the next stage be protection. Protection before promotion was considered to be an inward looking approach. Other members in the debate however, were of the opinion that the two should be taken simultaneously.

Preservation and Protection of IK in Tanzania through ESRF database

There are several efforts that have so far been made in Tanzania with regard to the protection and preservation of IK. One of such efforts is the Tanzania Development Gateway database of the Economic and Social Research Foundation (ESRF).

The Economic and Social Research Foundation (ESRF) is a Non Governmental Organization in Tanzania whose main objective is to build and strengthen human and institutional capabilities in economic and social policy analysis and decision-making and to enhance the understanding of policy options within the government, donor community and in the growing non-governmental sector in Tanzania.

ESRF has developed a database on Indigenous Knowledge which is a product of the Tanzania Development Gateway, an initiative that uses information technology and the internet to promote social and economic development within Tanzania. The database was established by ESRF to enhance sharing and dissemination of IK information, experiences and practices in Tanzania, its objectives being to:

- provide a platform where IK is captured, stored and disseminated;
- provide a mechanism of sharing this knowledge and also integrate it with modern science and technology to enhance information dissemination;
- promote sharing and dissemination of IK information, experience and practices in Tanzania; and
- in realisation of IK and its contribution to socio-economic development, the database will promote development of IK systems to improve information provision to the local communities.

Training in IK Systems

Some IK training initiatives have been developed to train people in IK principles and practices. The

Faculty of Law of the University of Dar es Salaam in Tanzania for example, has a course on IK Systems. The course is however, taught from a legal point of view. At the moment, it is taught as a module in Intellectual Property Rights. This is an effort on the right direction.

Ethical issues in IK

As highlighted earlier, IK has been practiced in Africa since time in memorial. With globalization whereby the countries in the world are open and connected in all spheres of life, there are ethical issues that need to be considered when one is discussing IKS in Africa.

One of such issues is the ownership of research findings or discovery. For example, if a research on IK is conducted in a certain remote village in Africa, with information provided by the villagers themselves as respondents, then who owns the findings of that research or the innovation for that matter?

The tendency has been that researchers from the west conduct research and after data collection, they are not seen any more. The ownership remains to the researcher who patents the findings. The indigenous people are only used to generate data and have no knowledge of the outcome of the data they produced. If the innovation is say a resource with economic value, then it is patented by the researcher without involving the respondents. This is unethical.

Equally important is that research methods used in IK should be appropriate to the indigenous community. The kind of data collection methods, data analysis and presentation of the findings should be brought down to the level that the indigenous people understand. It should be considered unethical to use research method that may have negative impact whether physically or otherwise to the people. Research methods that may subject respondents to torture or harmful practices should be considered illegal.

Another ethical issue is that IKS should be inclusive. It has to include all groups in the community. No group should be marginalised in IKS. Age wise for example, all groups such as the youths, the elders should be included in research and enjoy the benefits accrued from IK.

In terms of gender, both men and women should be involved in IK research process. In many areas in

Africa, women have been marginalised and given low priority when it comes to information generation and use (Nkebukwa, 2007). IK researches should tap information from all social groups. More important, they have to be gender sensitive.

In terms of use of IK, the profit has to be returned to the people who are the owners of the knowledge. Any benefit accrued from IK, must also benefit the owners of the knowledge. Many incidents exist where Indigenous Knowledge discoveries have been made and patented elsewhere without the knowledge of the indigenous people. The ownership and utility of the knowledge ends up benefiting the researchers who claimed the owners of the innovations.

There has to be a promotion of positive identity and consciousness of IK. People have to appreciate the existence, relevance and use of IK available in their local places. IK is a knowledge just like any other knowledge that can help people in a local setting. It has to be valued and used appropriately. In this way, it can help liberate people in Africa from over dependence on Western knowledge.

Equally important, is that the negative side of IK has also to be identified. This implies that we have to present IK in critical manner and analyse it objectively to be able to see the negative side of it. In other words, there has to be a balanced view of IKs. We have to be able to present and discourage the negative side of IK. It has to be noted that not all IK is good. For example, there are people in Africa who practice witchcraft. This is an Indigenous form of knowledge but harmful as it affects others. Such type of IK should be revealed and completely discouraged.

Challenges in the Preservation of IK in Tanzania

As pointed out earlier, most of indigenous knowledge is not in written form. It is mainly in practice and transmitted from one generation to the next orally. This renders it difficult in preservation. Education in Africa has traditionally been transmitted orally from one generation to the next. Africa is basically an oral society. In this case, IK has followed the same pattern. Worse still, the transmission has mainly been family based or in small ethnic groups.

People on a certain community may have a certain knowledge on a certain aspect. The problem how-

ever, is that, in some cases they are not conversant on how that knowledge works, scientifically. For example, in the Usambara area of North Eastern Tanzania, and indeed in many other parts of Africa, there is sound knowledge of traditional medicine men who prevent thieves from stealing properties such as cattle or any other form of wealth. This is believed to be true and practicable. The issue here, is the science behind this knowledge. How does it operate scientifically? With electronic security system, one can tell exactly how it works. With this type of IK, it is difficult, though it really works.

Another challenge with regards to IK is that owing to its local or environmentally specific in nature, IK has traditionally not been viewed in the business sense as 'capital.' It has tended to be exclusive at times, susceptible to suspicion, and at times to abuse (Kaniki and Mphahlele, 2002). Thus, IK has not effectively been managed like scientific knowledge which is well managed because it is taken as knowledge that can be interpreted as capital valued or taken as profit.

Not many researches have been conducted in IK and the findings documented. It is therefore difficult to obtain that knowledge and incorporate it in the educational curriculum for the purpose of transmission from one generation to the next. In this way, even the development and subsequent improvement of the knowledge is apparently difficult.

It is understandable that knowledge generated from universities and research institutes is considered a resource just like any other resource that can be used for development. It is well organised, preserved in libraries and information units, and disseminated for wider access to user community. This is not the case with indigenous knowledge.

There is sufficient evidence (Covin and Stivers, 1997) that IK is drawn from a wide range of disciplines such as:

- Environmental conservation,
- Traditional education system
- Health practices and prevention
- Medical technology
- Sustainable agricultural practices,
- Local industry and technology and many other areas

The problem however, is on how these local knowledge practices, principles and methodologies appreciated and applied. Whereas as the modern scientific

knowledge generated through scientific research process are highly appreciated, IK is still questionable in many facets.

Recommendations on the Management, Promotion and Preservation of IK

The following recommendations are put forward with a view to improving the generation, collection, preservation and use of IK:

Appropriate Policies

Each country needs to have in place appropriate policies that encourage and provide guidelines on the innovation, conservation and preservation of IK. South Africa for example, adopted IK policy in 2004 (Saleti, 2007) which provides government stance on those areas.

The policies are expected to address among other things:

- Government appreciation of IK;
- Political commitment on IKS;
- Copyright and Patent issues;
- Use of IK;
- Trans-border IKS and how to share it;
- Statement on Protection of IK;
- Preservation of IK;
- Distribution of benefits accrued from IK.

Researching in IK Systems

There has to be deliberate efforts to conduct researches in the area of IK. This role can best be undertaken by universities and appropriate research institutes. Areas can include disclosing, recording, and preserving IK.

Issues such as:

- What specific IKS exist in Africa?
- How is the knowledge applied for productivity?
- What practices, traditions and norms surround the innovation, use and transmission of IK in Africa?
- How can specific community based measures be used to promote IKS?

Establishing IK Databases

Equally important, is the creation of databases on IK. Libraries and Information centres have this role to play. Other stakeholders such as private organizations, relevant ministries and government organizations, NGOs can all join hands in recording and preserving Indigenous Knowledge.

Establishment of IK Resource Centres

There are some countries that have IK resource centres in place. For example, Nigeria where the following activities are carried out:

- Conducting and coordination of research activities on IK;
- Dissemination of IK information;
- Networking IK initiatives;
- Exchange of information on IK with other centres;
- Quality assurance on IK practices;
- IK policy formulation.

Each country needs to have IK centres legally established and its operations guided by the law

Government and NGOs Involvement in IKS Development

African governments need to take a leading position to intervene and participate fully in the creation, development and protection of IK. The commitment is essential as it provides room for actors to invest in this initiative. In this way, there is a political commitment in this endeavour which is an important aspect of IK development. Individuals and NGOs will have the courage and strength to involve themselves in IK if they realise that the government puts value and emphasis in IKS.

Equally important is the involvement of NGOs in IK development initiatives. The government on its capacity needs only to set policies, rules and regulations governing aspects related to use and protection on IK. The core IK activities such as researching, use and dissemination of IK can be done by individuals and governmental and Non Governmental Organizations. In Tanga region Tanzania for example, there is an NGO known as Tanga Aids Working Group (TAWG) which is an HIV/AIDS organization. The organization uses IK local expertise and modern medical experts to fight against HIV/AIDS. Both the western and indigenous medi-

cal facilities provided plus counselling have proved to be very successful in helping people living with HIV/AIDS. Scheinman (2002) points out that this is low cost alternative to imported therapies.

[Http://www.tanzaniagateway.org/ik/ikabout.asp](http://www.tanzaniagateway.org/ik/ikabout.asp)
Accessed on 18th December, 2006.

Formation of collaborative teams with others Developing Countries

International Conventions on IK are world forums that many African countries are not conversant with. It is therefore important that in IK development at international level, African countries collaborate with developing countries in other continents which are interested in IKS, for example Brazil, India, China, for joint negotiations and collaborations. This is a struggle that developing countries can not be given free, but has to work on it to acquire collective strategies at regional and international levels.

References

- Covin T.J. and B. Stivers (1997) *Knowledge management focus in US and Canadian firms*, Creativity and Innovation Management, Vol. 63, pp. 140-150
- Kaniki, A. and Kutu Mplhahlele (2002) *Indigenous knowledge for the benefit of all: can knowledge management practices be used effectively?* SA Journal of Library and Information Science Vol. 68 No. 1 p.1
- Nkebukwa, A. (2007) "The generation and dissemination of information for HIV/ AIDS in rural Tanzania: an assessment through a Gendered Grassroots Aids Model" Ph. D thesis, Department of Sociology, University of Dar es Salaam.
- Rajasekan, B. and Martin Arren (1992) *A framework for incorporating IKSs into agricultural extension organization for sustainable agricultural development in India. Paper presented at 9th Annual Conference of the Association for International Agricultural and Extension Education, Arlington, Virginia USA.*
- Saleti (2007) *the protection of IKS in the era of knowledge economy: the South African experience. Unpublished paper.*
- Scheinman, David (2002) *Traditional medicine in Tanga today: the ancient and modern worlds meet.*
<http://siteresources.worldbank.org/EXTINDKNOWLEDGE/Resources/iknt51.pdf> Accessed 16/04/2007.
- Tanzania development gateway IK database: sharing and dissemination of information.