Is African information ethics unique?1

Dennis Ocholla2- docholla@pan.uzulu.ac.za
Department of Information Studies
University of Zululand

Abstract

This paper discusses the African experience of information ethics (IE) by interrogating African philosophical and ethical studies in order to identify factors that affect IE in Africa and viewing IE from the perspectives of some eminent scholars to establish the uniqueness of African information ethics.

Introduction

Information ethics (IE) is a field of applied ethics that "investigates the ethical issues arising from the development and application of information technologies. It provides a critical framework for considering moral issues concerning informational 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, digital divide). Information Ethics is therefore strictly related to the fields of computer ethics and the philosophy of information" (Information Ethics, nd:np).

Information ethics (IE) as a field kicked off on its trajectory in the 1990s in the works of scholars such as Rafael Capurro, Luciano Floridi and Robert Hauptman (see Froehlich, 2005) and the development of IE education by the University of Pittsburg through the initiative of Toni Carbo and others. The three dominant ethical theories that define IE are consequence-based theories or consequentialism, with an emphasis on outcomes; duty-based theories or deontology, with an emphasis on rules; and virtue-based theories, which also include rights-based theories, with an emphasis on the character of people/ moral agents. These theories demonstrate the difficulties and contradictions that arise in the conceptualization and contextualization of ethics (see Fallis, 2007; Froehlich, 2005; Ocholla, 2009; and Ocholla, Onyancha and Britz, 2010).

Fallis (2007), referring to duty-based theorists such as Immanuel Kant, explains that, "There are ethical duties that human beings must obey [or abide by] regardless of the consequences." Thus, there could be a long list of duties that are to be obeyed or complied with without necessarily being aligned to either wrong or right, as WD Ross proposed in 1930. But are all rules, laws, policies, and/or regulations appropriate or acceptable holistically or contextually? Rights-based theories - categorized under duty theories - work according to the notion that "the

1 This paper was presented at the 6^{th} Biennial ProLISSA Conference, 9^{th} -11 th March Pretorial, 2011

2 Dennis Ocholla, PhD, is Professor and Head of the Department of Information Studies as well as Vice Dean Faculty of Arts, University of Zululand, South Africa.

right thing to do is determined by the rights that human beings have", such as the rights captured in the Universal Declaration of Human Rights in 19483. However marginalized communities (rural based or illiterate) the world over may not necessarily benefit from the human rights that others enjoy. To them in most instances, equality and human rights are utopian - what is naturally right to them is often decided not by themselves but by somebody else, some 'superior' being.

The third and oldest theory highlighted by Fallis (2007:32), referring to its originator Aristotle (and I would add Plato) in 350 BC, is the virtue-based theory He explains that virtue-based theorists believe that "the right thing to do is determined by virtues that human beings ought to have". The focus is on the character of the moral agent or person. Thus what a virtuous person would do under similar circumstances would be the right thing to do. This points us to the "golden Rule" or "ethic of reciprocity" normally expressed in the dictum, "Do unto others as you would have them do unto you". Mark Copeland (2009)5 in "The Sermon on the Mount" discusses how this permeates many traditions, religions and cultures globally in pointing to the righteous conduct towards others. There will always be many African versions of the ethic of reciprocity, both written and unwritten, but there should not be temptations to rid Africa of ethical learnings from other regions in order to create African information ethics as the infusion of new ideas, and this applies to all humanity, tends to benefit more than hurt over time.

The problem with all these theories is their application, particularly because of contradictions when attempting comparisons, both within and without. For example, an excellent consequence that brings happiness to an individual, community or an institution may not necessarily be either right or virtuous. Similarly, the way people understand duty varies, and the question therefore is, duty to whom - family, religion, employer, government or nation? Some of the most virile conflicts in family units, workplaces, governments and international relationships have largely arisen from conflicts in the interpretation of normative ethics. This also applies to the contradiction between mores, ethics and laws (see Froehlich, 1997:1-2), particularly if the three do not match or lack harmony. Thus, "Laws most often find their origin in the ethics and mores of a given nation or region" (Froehlich 1997:2). Froehlich (1997:3) notes that morals, ethics and laws contravene one another. For example, he views mores or morality to be "the implementation and social institutionalization of ethical values, generally acquired through socialization into a culture or society, through family, peers, education, etc". Ethics, according to his definition, is "concerned with the universal or commonly held values of persons, despite or because of moral or cultural variations, values such as a belief in justice, truth, competence in one's work and the like". He argues that, "There are cultural variations of ethical values which may provide for different implementations of an ethical value (i.e. mores)". Laws, according to him, are "formalized codes [of behavior] by governing bodies to provide mechanisms for enforcing appropriate behavior or deterring

3 See http://www.un.org/overview/rights.html

^{4 &}lt;u>http://en.wikipedia.org/wiki/The_Golden_Rule</u>)

⁵ http://www.ccel.org/contrib/exec_outlines/mt/mt_19.htm

inappropriate or unacceptable behavior". Thus, "Laws most often find their origin in the ethics and mores of a given nation or region" (Froehlich 1997:2). Frohman (2007:134) explains that, "Ethics questions the philosophical foundations of the good and of morality, whereas morality questions what is right and wrong according to specific moral codes."

Ethical theories and the relationship between ethics, mores and laws can be contradictory and require rational judgment by information professionals, but even these professionals may sometimes encounter highly 'sticky' dilemmas (Fallis, 2007:23). From the myriad of definitions available, ethics seem to focus on the norms and standards of behavior of individuals or groups within a society based on normative conduct and moral judgment, principles of wrong and right (Roland and Heilyer, 1996), "moral consequences of human action" (Wojtzak, 2000), and responsibility and accountability (Sembok, 2004). Bernd Frohmann's (2007:134) argues that the meaning of ethical work is to question "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"

Gleaning from these definitions, the role or purpose of ethics in society is to promote what is good in people, avert chaos, and provide norms and standards of behavior based on human morals and values that are inclusive as opposed to exclusive by creating better moral agents.

A recent email exchange between me and Professor Rafael Capurro (2010, March 3) on multiculturalism also gives another dimension into ethics and information ethics. In his response to my question on whether globalization can also mean multiculturalism, he wrote:

Yes, I think so. We can make a difference between:- multicultural analysis which means 'just' describing cultures without relating them to each other - intercultural analysis which means comparing and 'translating' cultures -- transcultural analysis which means looking for what is common 'beyond' the singularities of each culture. If you connect this with ethics (and IE) then you get a better overview of the different dimensions. The key question is, of course, whether cultural differences are important or not when dealing with morality as well as with ethics as theory/ies of morality/ies

While recommending that I read the contribution by Philip Brey6 at the European IE Conference in Strasbourg, he agrees with Brey:

Cultural differences have a deep influence on moral values and theoretical views on them. I [Capurro] also think that the richness of human cultures is expressed in human moralities. This does not necessarily mean a moral relativism but I think that a transcultural morality for humanity is something Kant would call a "regulative idea". Kant, as you know, never proposed a dialog of do/ do not but gave 'just' a basic criterion for any moral maxim which is its universalization. This Kantian formalism in ethics (ethical theory) might allow us to better handle an intercultural and transcultural dialogue even if such presupposition (I mean Kantian

6 http://portal.unesco.org/ci/en/ev.php-

formalism) is itself product of a specific culture, a specific European epoch and also a specific understanding of ethics.

2. What is unique or uniqueness?

African in this context refers to a native of Africa, normally an indigenous person or a person of African nationality or origin, while Africa refers to the geographical and physical space occupied by the continent of Africa. Africa's uniqueness depends on how it is perceived: in isolation or with others, as a single identity or multiple identities, or as a multicultural, intercultural or transcultural society. There is a lot that Africa shares with other continents and that Africans share with other cultures when Africa is not viewed through the lenses of colonial history and the socio-political and economic challenges it faces in modern times. How can this be explained within the context of political, economic, social and technological(PEST) environments in which the people and the continent exist and thrive?

2.1. Political factors

Africa consists of 53 countries with diverse geo -political, economic, social and technological backgrounds and dispensations. Politics through democracy plays a major role in the development of a country's information institutions and systems. However, democracy is a dilemma in Africa where its interpretation and understanding in not always "of the people, by the people and for the people" as Franklin D. Roosevelt, then Governor of Newyork in 1930 wanted us to undestand; quite often, it is designed and applied only in limited circumstances where it suits the interest of politicians and their local and international allies. We have a few countries that have fully embraced democracy as a system of political governance and are struggling admirably to keep it that way, e.g. most SADC7 (Southern African Development Community) countries. Such countries have a popular constitution, respect and adhere to the rule of law for all its citizens, are open and tolerant to competitive multiparty and parliamentary democracy, and ensure that popular elections are held regularly and elected political leaders leave office when their terms in office ends. This is not a situation where one person 'rules forever' as has occurred or is occurring in Algeria, the Ivory Coast, Libya, Swaziland and Zimbabwe, or is removed from office forcefully (recently Tunisia and Egypt). On the extreme end of the scale, are dictatorial regimes that do not follow democratic principles of political governance or even worse, lead to a state of political anarchy as has been the case for a long time now in Somalia.

Africa frequently blames its past for its present ethical predicament, sometimes justifiably so. The colonialists left socio-economic and political poke marks on the face of Africa that included painful periods of invasion, war, servitude, divestment, racial segregation and the denigration of indigenous communities. African political structures, cultures and traditions have been significantly influenced

http://en.wikipedia.org/wiki/Southern_African_Development_Community#Member_s tates)

⁷ Angola ,Botswana, Democratic Republic of the Congo, Lesotho, Malawi, Mauritius, Mozambique,Namibia,Swaziland,Tanzania,Zambia,Zimbabwe,South Africa,Seychelles – (see

by foreign occupation and colonialism, whose approach, as Senghor puts it, was **cogitative**. The relationship to Africans was that of assimilation. Leopold Senghor (1964:72-73) explains this relationship in sad and derogatory tones that in some ways also define our information ethics:

In contrast to the classic European, the Negro-African does not draw a line between himself and the object, he does not hold it at a distance, nor does he merely look at it and analyze it. After holding it at a distance, after scanning it without analyzing it, he takes it vibrant in his hands, careful not to kill or fix it. He touches it, feels it. Thus the Negro-African sympathizes, abandons his personality to become identified with the other, and dies to be reborn in the other. He does not assimilate; he is assimilated. He lives a common life with the other; he lives in a symbiosis.

It is generally agreed that most of the continent's problems were initiated by slavery and occupation. Slaverys, which unfortunately still continues in different forms today (slavery statistics count 13 -27 million slaves in the world today), is an abhorrent, dehumanizing and agonizing practice that displaced people and destroyed the culture, traditions and leadership structures of Africans. The latter were further destroyed by wars and occupation culminating in further displacement, the relocation of communities and families, division, and assimilation through religion and education. Religion and education became mass weapons of enlightenment, assimilation, and intellectual and spiritual invasion into the souls and minds of the African people, leading to the gradual erosion of cultures and traditions and what we now call the 'mass society'9. The outcome of this mental and physical occupation of African space has led to intellectual transformation through Western education, the marginalization of indigenous knowledge, mass conversion to Christian and Islamic religions, and the transformation of governance structures to Western democratic systems, all of which have contributed to African information ethics in different ways. Religion 10 is supposed to be an ethical tool for supporting normative behavior and healing the mind and soul. But it has also acted as a weapon for destruction and alienation.

Although **globalization**11, meaning integration in all spheres, is considered to be a social, economic, political and technological concept, it is, in my view, more of a political construct that influences African information ethics whether it is approached from a positive, neutral, negative or constructive paradigm. With respect to information services, globalization means connectivity, accessibility, visibility, assimilation and inclusivity in the access and use of information worldwide. We do not forget its negative consequences such – culture, language loss, etc.- though. I would think that globalization is defined by the level of networks (inflows and outflows) or connectivity within Africa and between Africa and the rest of the world. At government levels, such linkages occur largely at PEST levels (e.g. within the African Union, United Nations, SADC, EAC, Common Wealth, ECOWAS, etc.),

⁸ http://en.wikipedia.org/wiki/Slavery

^{9 &}lt;a href="http://en.wikipedia.org/wiki/Mass_society">http://en.wikipedia.org/wiki/Mass_society

¹⁰ http://en.wikipedia.org/wiki/Religion

¹¹ http://en.wikipedia.org/wiki/Globalization

while at private level, mass media dominates; access to and the use of non-African mass media, particularly television, the internet and the film industry, is quite common. Socially, globalization brings Africa closer to the world and the world closer to Africa by creating useful social, private, business and government networks for information and knowledge sharing. However, globalization is enabled through ICTs, and access to and the use of these technologies is minimal in Africa (see 2.4).

2.2. Economical factors

The economies of African countries are not the same 12; of 52 African countries, the ten richest in terms of GDP per capita are (in descending order) Equatorial Guinea, Botswana, Gabon, Libya, Mauritius, South Africa, Angola, Tunisia, Algeria and Egypt, while the 10 poorest (from N.43) are the Central African Republic, Eritrea, Niger, Sierra Leone, Guinea Bissau, Somalia, Liberia, Burundi, Congo - Democratic Republic, and Zimbabwe. A sound economy and economic management supports resource and infrastructural development and sustainability. Unfortunately, not all the richest countries in Africa have good resources and infrastructure due to economic mismanagement. Some richer countries such as South Africa (rated number six in Africa and 24 in the world) have better access to resources and the infrastructure is far more developed, leading to better access to ICTs, libraries and information centers, mass media, telecommunications networks, and the human capacity to manage them. Such amenities come on board with unique IE issues that would normally not be significant in an impoverished environment. However, there is no link between wealth on the one hand and good governance and civil freedom/ liberty on the other as it occurs.

2.3. Social factors

The social aspects of African diversity are embedded in culture and traditions, language, literacy levels, education, ethnicity, religion and belief systems, and indigenous knowledge (IK). However it would be foolhardy, as Maurice Makumba (2007:18) puts it, to "talk of a pure indigenous Africa engaged in a completely detached reflection on reality. There was always the influence of the surrounding world, which involved a cultural in-flow and out-flows" that is represented by the way people from Africa live and function. For example, while there are many languages spoken in most countries, the dominant languages are still the languages of the colonialists, whose languages - 21 English speaking (Anglophone), 24 French speaking (Francophone), 5 Portuguese speaking (Lucophone), 7 Arabic speaking and 2 Spanish speaking - are widely spoken either as national or official languages alongside other local dialects such as Kiswahili in Eastern Africa. We also have cultures within countries developed, in most cases, along non-African religions such as Christianity, Islam and Judaism: "Africa of antiquity had contact with the Jewish, Greco-Roman and, to a certain extent, the Near Eastern worlds. Mediaeval Africa came face-to-face with mediaeval Christian Europe and Islamic influence from the Middle East. Modern Africa, or at least a part of it, had contact with modern Europe" (Makumba 2007:18). As Kwasi Wiredu (1998:15) notes "Through the twin historical facts of Western colonization and Christian evangelization, African cultures have been profoundly impregnated with ethical, metaphysical and epistemological ideas of Western provenance."

12

Traditional African information access, transfer and use systems are largely based on the oral tradition and indigenous knowledge (IK) where word of mouth (WoM) is predominant. Sources of IK thus include songs, folklore, proverbs, dances, myths, cultural rituals (e.g. during birth, transition to adulthood - circumcision, cultural weddings, deaths /funerals, etc.), beliefs/ religion, customary laws, local languages, indigenous people, the natural environment, community intermediaries/ gatekeepers/ community sages, traditional healers, community courts, and more recently, African churches. With the exception of the latter, many of these information access and transfer systems are fast approaching extinction. Perhaps Munyaradzi Murove(2009) is right when writing on 'Preserving our collective memory: An ethical inquiry into the future or archival tradition in Africa' by questioning whether what is in the[African] archives is a collection of African memory and African people have access to their archival memory. He argues that African morality is a morality of momoria where IK plays a significant role. There are concerted efforts being made in Africa to resurrect and reconstruct a number of lost information access and transfer traditions, albeit mostly through cultural activities during national or cultural festivals and events in order to preserve and disseminate knowledge, and also to attract tourists and for entertainment purposes.

The reasons behind why oral traditions have been marginalized are closely tied to the marginalization of IK. Maurice Makumba (2007:37-45) argues that early European thought on African philosophy, as represented by Emmanuel Kant, Georg Hegel ("Philosophy of History: Myth and Reality") and Lucien Levy-Bruhl - all German philosophers - did not seem to recognize African philosophy because Africans were considered to be primitive or uncivilized, and primitive people had "no sense of thought" or were unable to think/ reason logically. With this type of thinking, which still permeates through some Western circles, it may be that African ethics or African information ethics would be branded the same. Despite this, Oruka (1991) – among others such as Hountondji (1996), - work on "Sage Philosophy. Indigenous Thinkers and Modern Debate on African Philosophy distinguishes the 'folk sage' (conformist inclination - stands/ goes by what culture and tradition say without questioning) from the 'philosophic sage' (critical inclination - open to discourse on cultural issues),") and question or disapprove of the three European philosophers' paradigms. My recent (2011) encounter with a philosophic sage (87 year old Senior Chief in Kenya) who was open to discussions on any traditional matter including information ethics, confirms Oruka's point on the two philosophic categories.

I (Ocholla, 2007) have referred to marginalization to mean exclusion - a state of being left out or insufficient attention being given to something - and argue that the marginalization of IK is a legitimate information access issue and challenge that also defines the uniqueness of African information ethics. The marginalization of IK has occurred over many years and has retarded its development and integration. While IK has existed within our communities since time immemorial – no community 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 community is marginalized or stigmatized. There are many speculative reasons behind why this occurs (Ocholla, 2007). Of these, some stem from the characteristics of IK, namely:

• Tacit knowledge is not codified or systematically recorded and is 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 beliefs of a particular community and is therefore not universal and difficult to globalize.
- It is mostly rural, commonly practiced among poor communities, and is therefore not suitable in multicultural, urban and economically sated communities.

The marginalization of IK can also be seen in light of how some global organizations, such as the World Bank and the Netherlands Organization for International Cooperation in Higher Education (NUFFIC), associate IK with the poor. For example, the World Bank Group (n.d.) states: "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."

Marginalization has also occurred because families and communities are becoming increasingly disintegrated and globalized, a trend that may have stemmed from the increased supply of mass products, services, media gadgets and content to private spaces where IK once thrived. During periods of domination, which have been varyingly 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 derisive 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 or exogenous knowledge' (largely products of explicit knowledge). Thus, if a community or a person recognized and utilized IK, that community or person was supposedly inferior to those that did not. Quite simply, a person or community practicing or using IK was stigmatized. Therefore, in order for an individual or community to be admitted into 'civilized' or modern society, that individual or 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 associated with out-datedness, a characteristic most people find demeaning. This form of marginalization produced a generation which, for the most part, 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 (1986), in his essay "Decolonizing the mind: The politics of language in African literature", considers intellectually colonized. The question is how much have they gained through losing? Or 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 (Ocholla and Onyancha 2006). Studies on IK tend to focus on the poor, the developing countries, and 'endangered' peoples: the Aborigines of Australia, the Maoris of New Zealand, the Saskatchewan of Canada, the American Indians of the US, the Maasai of Kenya, and so on. The nature of these studies raises problematic questions, such as: 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 can solve their problems by using IK systems and methods? Are these studies 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 IK of Western or industrialized communities? (see Ocholla 2007)

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 of marginalization.

Ultimately, has marginalization occurred in the way we define IK in relation to broader knowledge or in the context of knowledge management? A definition of knowledge worth referring to in this context is Bell's (1973:176): "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's definition of knowledge is a good example of modern/exogenous knowledge or Eurocentric definitions of knowledge that can easily be used to marginalize or 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 is 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.

2.4. Technological factors

I would like to start this section with a quote from the editorial of International Review of Information Ethics (Editorial, IRIE Vol.13, 2010)

It is well known that information and communication technologies have permeated all corners of the world.... Moreover, the Internet has continued to penetrate deeper and deeper into the everyday world of ordinary people, so much so that it is fast becoming an ubiquitous medium present in different cultural contexts.....An inevitable result of the global penetration of the Internet and the mobile phone (in fact the two technologies are fast merging into one device only) is that presuppositions of the world's cultures could clash with those accompanying these technologies. This has given rise to an emerging field called "intercultural information ethics," where the cultural presuppositions of the world's cultures are seen as an important factor in consideration of ethical theorization and the search for ethical guidelines....In terms of theory, many questions still remain: How are we to come to terms with the age-old philosophical problem of universalism and particularism? In other words, are values embedded in the use of information and communication technologies culture specific or are they universal? Or are there some values that are specific to time, place and culture, and are there some others that are more universal? Does the term 'universal' admit of degree, so that one can be more 'universal' than another?"

Technological development is closed linked to the three factors(see 2.1.-2.3]) that also differ from country to country, and from urban to rural areas in Africa. A democratic country with a good economy and developed social systems (e.g.

education and literacy) would do exceedingly better technologically than those with less or none of the above, which brings us to the **digital divide**¹³.

The digital divide is a popular concept or phrase used to explain the inequality of information access and use, largely with respect to ICTs within or between individuals, families, communities, nations and regions. It is another way of defining the knowledge 'haves' and 'have nots'. The digital divide statistics in Africa are alarming. For example, ITU World Telecommunication/ ICT Indicators database (2010) reports:

In the developing world, mobile cellular penetration rates will [was to] reach 68 % at the end of 2010 - mainly driven by the Asia and Pacific region. India and China alone are expected to add over 300 million mobile subscriptions in 2010... In the African region, penetration rates will reach an estimated 41 % at the end of 2010 (compared to 76 % globally) leaving a significant potential for growth... While 71 % of the population in developed countries is online, only 21 % of the population in developing countries is online. By the end of 2010, Internet user penetration in Africa will reach 9.6 %, far behind both the world average (30 %) and the developing country average (21 %)..... Africa still lags behind when it comes to fixed (wired) broadband. Although subscriptions are increasing, a penetration rate of less than 1 % illustrates the challenges that persist in increasing access to high-speed, high-capacity Internet access in the region.

These figures are a stone's throw from a similar report published in 2004 (Jansen 2004) (no new data from the source is available). World statistics show less access to ICT gadgets that enable effective globalization to take place. For example, Mike Jansen (2004)14, writing on ICT in Africa, painted this bleak picture: "Of the approximately 816 million people in Africa in 2001, it was estimated that only: one in four have a radio (200 million); one in 13 have a television (62 million); one in 35 have a mobile telephone (24 million); one in 39 have a fixed line (21 million); one in 130 have a personal computer (5.9 million); one in 160 use the Internet (5 million); one in 400 have pay-television (2 million)."

Recent (2007) estimates are presented in the table that follows.

Population Main telephone lines Mobile subscribers **Internet users** 000s000sp. 100 000sp. 100 000sp. 100 2'922.7 3'500.0 10.34 Algeria 33'860 8.63 21'446.0 63.34 75'500 11'228.8 30'047.0 8'620.0 11.42 Egypt 14.87 39.80 6'160 852.3 14.56 4'500.0 73.05 260.0 4.36 Libya 31'220 2'393.8 20'029.0 7'300.0 Morocco 7.67 64.15 23.38 1'722.2 Tunisia 10'330 1'273.3 12.33 7'842.0 75.94 16.68 North Africa 157'070 18'670.9 11.91 83'865.0 53.39 21'402.2 13.64

Africa, ICT Indicators, 2007

 $\frac{14}{https://members.weforum.org/pdf/Global_Competitiveness_Reports/Reports/GITR_2002_2003/ICT_A frica.pdf}$

¹³http://en.wikipedia.org/wiki/Digital divide

South Africa	48'580	4'642.0	9.56	42'300.0	87.08	5′100.0	10.75
South Africa	48'580	4'642.0	9.56	42'300.0	87.08	5'100.0	10.75
Angola	17'020	98.2	0.62	3'307.0	19.43	95.0	0.60
Benin	9'030	110.3	1.22	1'895.0	20.98	150.0	1.66
Botswana	1'880	136.9	7.78	1'427.0	75.84	80.0	4.55
Burkina Faso	14'780	94.8	0.70	1' 611.0	10.90	80.0	0.59
Burundi	8'510	35.0	0.45	250.0	2.94	60.0	0.77
Cameroon	18'550	130.7	0.79	4'536.0	24.45	370.0	2.23
Cape Verde	530	71.6	13.80	148.0	27.9	33.0	6.36
Central African Rep.	4'340	12.0	0.29	130.0	2.99	13.0	0.32
Chad	10'780	13.0	0.13	918.0	8.52	60.0	0.60
Comoros	840	19.1	2.33	40.0	4.77	21.0	2.56
Congo	3'770	15.9	0.40	1'334.0	35.40	70.0	1.70
Côte d'Ivoire	19'260	260.9	1.41	7'050.0	36.6	300.0	1.63
D.R. Congo	62'640	9.7	0.02	6'592.0	10.52	230.4	0.37
Djibouti	830	10.8	1.56	45.0	5.40	11.0	1.36
Equatorial Guinea	510	10.0	1.99	220.0	43.35	8.0	1.55
Eritrea	4'850	37.5	0.82	70.0	1.44	100.0	2.19
Ethiopia	83'100	880.1	1.06	1'208.0	1.45	291.0	0.35
Gabon	1'330	36.5	2.59	1'169.0	87.86	81.0	5.76
Gambia	1'710	76.4	4.47	796.0	46.58	100.2	5.87
Ghana	23'480	376.5	1.60	7'604.0	32.39	650.0	2.77
Guinea	9'370	26.3	0.33	189.0	2.36	50.0	0.52
Guinea-Bissau	1'700	4.6	0.27	296.0	17.48	37.0	2.26
Kenya	37'540	264.8	0.71	11'440.0	30.48	2'770.3	7.89
Lesotho	2'010	53.1	2.97	456.0	22.71	51.5	2.87
Liberia	3'750			563.0	15.01		
Madagascar	19'680	133.9	0.68	2'218.0	11.27	110.0	0.58
Malawi	13'930	175.2	1.26	1'051.0	7.55	139.5	1.00
Mali	12'340	85.0	0.69	2'483.0	20.13	100.0	0.81
Mauritania	3'120	34.9	1.10	1'300.0	41.62	30.0	0.95
Mauritius	1'260	357.3	28.45	936.0	74.19	320.0	25.48
Mozambique	21'400	67.0	0.33	3'300.0	15.42	178.0	0.90
Namibia	2'070	138.1	6.66	800.0	38.58	101.0	4.87
Niger	14'230	24.0	0.17	900.0	6.33	40.0	0.28
Nigeria	148'090	6'578.3	4.44	40'396.0	27.28	10'000.0	6.75
Rwanda	9'720	16.5	0.18	679.0	6.98	100.0	1.08
S. Tomé & Principe	160	7.7	4.86	30.0	19.09	23.0	14.59
Senegal	12'380	269.1	2.17	4'123.0	33.31	820.0	6.62
Seychelles	90	20.6	23.79	77.0	89.23	29.0	35.67
Sierra Leone	5'870			776.0	13.23	10.0	0.19
Somalia	8'700	100.0	1.15	600.0	6.90	94.0	1.11
Sudan	38'560	345.2	0.90	7'464.0	19.36	1'500.0	3.89
Swaziland	1'140	44.0	4.27	380.0	33.29	42.0	4.08
Tanzania	40'450	236.5	0.58	8'252.0	20.40	384.3	1.00

Togo	6'590	82.1	1.30	1'190.0	18.08	320.0	5.07
Uganda	30'880.0	162.3	0.53	4'195.0	13.58	2'000.0	6.48
Zambia	11'920	91.8	0.77	2'639.0	22.14	500.0	4.19
Zimbabwe	13'350	344.5	2.58	1'226.0	9.18	1'351.0	10.12
Sub-Saharan	757'880	12'098.3	1.65	138'310.0	18.28	23'904.2	3.23
AFRICA	963'530	35'411.2	3.77	264'475.0	27.48	50'406.4	5.34

Updated: 24.04.2008 Source: ITU World Telecommunication/ICT Indicators Database

On a cautionary note, Jensen recognizes that in Africa, these ICTs are normally shared in the family or community, sometimes with more than ten people using the same set, thereby making access and user statistics higher than what is provided.

Most (70 %) people in Africa still live in rural areas which are associated with negative factors such as poverty, high levels of illiteracy, unemployment, poor infrastructure, poor health services, remoteness, and poor services of all kinds (including information services). Rural areas can, however, also be viewed in a positive light, although this has less to do with information access, e.g. limited pollution, strong cultural traditions and values, food security and tourism. Urbanization has been associated with civilization, enlightenment and development mainly because it provides relatively better access to social and economic amenities. But it has also been criticized for creating a mass society that has lost its cultural roots, values and foundation. It is expected to find more and better libraries, telecommunication and mass media services, telephones, Internet mobile phone connectivity, computers and other information services in urban areas. Thus it is highly likely that one will hear less and worry less about the effects of the ICTs calling for cyberethics, such the internet, mobile phones, computers, and the television in Africa where the level of access is insignificant when compared to the developed world, or in rural areas in Africa when compared to urban areas. While ICTs continue to present new problems, it is also possible to invest less in internet ethics, computer ethics and cyber ethics in rural areas than in urban areas or in the developing than in the developed countries. Does this mean that the digital divide brings to the fore the uniqueness of African information ethics in the sense that people in Africa are likely to worry less about many information access and interaction issues and problems emerging from new technologies (e.g. cyberethics, internet ethics, computer ethics)? Would less time or opportunity spent watching TV, listening to the radio, using a mobile phone, using the internet, and in most cases sharing these devices within the family or community, define a unique information ethics for a region? Is this an information ethics of poverty and deprivation?

3. Conclusion

In the footsteps of Bernd Frohman (2007:135), questions remain as to whether there is or should be a type of information ethics that is solely pursued in Africa. Our major question though is to what extent colonialism within the context of religion, occupation, education, slavery, the marginalization of indigenous knowledge, language (e.g. Francophone, Anglophone, Lucophone), political democracy and PEST linkages and affiliations to the former colonial states, has influenced information

ethics in Africa both positively and negatively. Similarly how does the conceptualisation and contextualisation of IE theories and relationships between ethics, laws and mores on one hand and on the other hand multiculturlism, transculturalism and interculturalism define and explain our understanding of African information. The foregoing discussion raises more questions than answers although some may produce quite obvious answers.

References

- Asai Ryoko (2010) NEKAMA Men Living Different Lives on the Internet.IREI, Vol.13,
- Bell, D. 1973. *The coming of post-industrial society: A venture in social forecasting.* New York: Basic Books.
- Capurro Rafael (2010) Multiculturalism and globalization. Email exchange between Dennis Ocholla and Rafael Capurro, March 3.
- Fallis, Don. (2007). Information ethics for twenty-first century library professionals. Library Hi Tech, Vol. 25(N.1), 23e36, Available Online. http://dlist.sir.arizona.edu/1820/01/ fallislibraryhitech.pdf. Accessed 15 April 2008.
- Froehlich, Thomas (2005). Abrief history of information ethics. Computer Society of India (CSI)11e13, Available Online. www. capurro.de/csi June2005infoeth.pdf. Accessed 15 April 2008.
- Frohmann Bernd(2007) Assembling an African Information Ethics. International Review on Information Ethics(IRIE), Vol. 7.[Online] http://www.i-r-i-e.net/inhalt/007/14-frohmann.pdf, Retrieved 19 February 2011
- Hountondji, P.J.(1996) African Philosophy: myrth and reality. Paris, Hutchinson & Co Ltd
- Information Ethics. (n.d.). From Wikipedia, the free Encylopeadia.
- Kwasi Wiredu (1998) Anglophone African Philosophy. In Edward Craig(Ed.), Routledge Encylopeadia of Philosophy Vol.1. London, Routledge,
- Makumba M. Maurice(2007) Introduction to African Philosophy. Nairobi, Paulines Publications Africa
- Murove, MF. (2003) 'Preserving Our Collective Memory: An Ethical Inquiry into the Future of the Archival Tradition in
 - Africa SA Archives Journal, pp. 13-23.
 - http://en.wikipedia.org/wiki/informatio_ethics. Accessed 17.04.08.
- Odera Oruka, H.(1991) Sage Philosophy: Indigenous Thinkers and the Modern Debate on African Philosophy. Leiden: E. J. Brill, 1990. Rpt. Nairobi, Kenya: African Center for Technology Studies (ACTS) Press,
- Ocholla, Dennis N.; Onyancha Omwoyo Bosire and Johannes Britz. 2010.

 Can information ethics be conceptualized by using the core/periphery model? *Journal of Informetrics.4*, 492-502 [Online] doi:10.1016/j.joi.2010.05.001
- Ocholla, Dennis N. (2009) Information Ethics Education in Africa. Where do we stand? *International Information and Library Review*, Vol.41,2,79-88
- Ocholla, D.N. & Onyancha O.B. 2006. The marginalized knowledge: An informetric analysis of indigenous knowledge publications, 1990–2004. *South African Journal of Libraries and Information Science*, 71(3): 247–248.
- Sembok, Tengku (2004). Ethics of information communication technology (ICT).

UNESCO, Regional Unit for Social and Human Sciences in Asia and the Pacific (RUSHSAP)Available from. In Philip Bergstrom (Ed.), Ethics in Asia-Pacific (pp. 239e325).Bangkok: UNESCO, Available from. http://unesdoc.unesco.org/images/0013/001359/135911e.pdf.

Wa Thiongo, Ngugi. 1986. Decolonizing the mind: The politics of language in African literature. Nairobi: Heinemann, Kenya.

World Bank. n.d. *Indigenous knowledge (IK) program*.http:// www.worldbank. org/afr/ik/.

Wojtczak, Andrzej. (2002), Glossary of Medical Education Terms. White Plains: Institute for International Medical Education. http://www.iime.org/glossary.html. Accessed 30 October 2007.