

Review

Commons thinking, ecological intelligence and the ethical and moral framework of *Ubuntu*: An imperative for sustainable development

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This paper explores connections among the concepts of commons, ecological intelligence, and the sub-Saharan Africa moral and ethical framework of *Ubuntu* and their relevance for sustainable development. The ethical and moral framework of *Ubuntu* is presented as a cultural commons that speaks to values relevant for sustainability. *Ubuntu* is an ethical and moral framework to transition to sustainable living. *Ubuntu* is a moral and ethical framework that stresses collectivity and collective agency that are relevant for behaviour management and character formation that may contribute to sustainable lifestyles. It stands in contract to, for example, Western frameworks that overly emphasise individualism and individuality especially the stress on the individual's intellect, mental intelligence, and abstract thinking at the expense of individual and collective values necessary to realise sustainable lifestyles. Re-appropriation of this useful framework may lead to more effective education and communication for sustainable development.

Key words: Cultural commons, ecological intelligence, education and communication for sustainable development, *Ubuntu*.

INTRODUCTION

The precarious unsustainable state in which the world finds itself today requires more than ever before that we acknowledge solutions that are possible from different cultures of the world. In Africa this may require looking critically at its cultural commons. Its cultural commons revolve around observance of positive communal relationships, a deep respect for human values, and deep reverence for nature and the resources it holds (Gelfand, 1970; Shumba, 1995; Skolimowski, 1990). Its humanistic philosophy provides an ethical and moral framework of *Ubuntu* by which to live harmoniously with each other and with nature akin to the principles of sustainable development. *Ubuntu* reflects on life experiences and histories of people in sub-Sahara Africa and as an African philosophy it is about "resistance to the Western philosophical discourse that denies Africa its contribution

to world knowledge and civilisation" (Masolo, 1994:1 in Nabudere (n.d., p.2). *Ubuntu* remains today a rational ethical and moral framework at the root of African philosophy and being. Although it may be overlooked in Western thinking as ancient or tribal, it carries a lot of significance to educating and communication for sustainable development. Today, *Ubuntu* provides much scope for intergenerational learning and at the same time valuable knowledge for intergenerational learning whereby current societies learn from one another, and in this case the West learning from Africa.

The motivation for writing this paper arose out of an international workshop with Dr. Chet Bowers on the theme 'Educational reforms and the ecological crisis' hosted by the Swiss foundation for environmental education in Berne, Switzerland from 6th to 7th

November 2009. The workshop explored a number of points concerning the ways in which the linguistic colonization of the present by the past prevent learning about the local community indigenous knowledge, technologies, skills, and values that have a smaller ecological footprint and that provide alternatives to the Eurocentric or North American consumerist thinking and doing. These concepts, the critique of the neglect to consider the cultural roots of the ecological crisis as well as the reliance on only Western education frameworks are the essential focus of Bowers' scholarship (Bowers, 1993, 2008, 2009). Understanding the nature of one's local cultural commons and the powerful forces that are enclosing them is an important aspect of ecological intelligence and must form a critical aspect of education and communication for sustainable development. In his online book "Toward a post-industrial consciousness: understanding the linguistic basis of ecologically sustainable educational reforms", Bowers (2008: 11) poses the question: "Why is it so difficult for environmentalists and social reformers to recognise that the commons-oriented lifestyle that is ecologically sustainable is already being practiced in most communities around the world?" The question sparked the interest to look at the issues and the metaphors relating to ecological intelligence and relate theme to education and communication for sustainable development from a non-Western worldview.

This paper explores the concepts of cultural commons and ecological intelligence and assesses the relevance of the sub-Saharan Africa concept of *Ubuntu* as an alternative moral and ethical framework for sustainable development education and communication. *Ubuntu* is assessed to be a cultural commons that speaks to values relevant for planetary sustainability or for a transition towards sustainable societies. It stresses collectivity and collective agency that are relevant for behaviour management and character formation that may contribute to sustainable lifestyles. It stands in contrast to, for example, Western frameworks that overly stresses individualism and individuality, especially their stress on the individual's intellect, mental intelligence, and abstract thinking which often occur at the expense of individual and collective values necessary to realise sustainable lifestyles.

COMMONS THINKING, METAPHORIC NATURE OF LANGUAGE, AND ECOLOGICAL INTELLIGENCE

Chet Bowers' (2008, 2009) counsel for the revitalisation of the non-commodified and "non-monetised" aspects of cultural life and the environment to achieve sustainability which motivated the focus on *Ubuntu*. He calls for a commons thinking to strengthen communities and the ecosystems in which they live to alleviate the ecological

crisis. In this regard three concepts appeal:

- (1) Commons thinking
- (2) Metaphoric nature of language
- (3) Ecological intelligence

Commons thinking

The eco-justice dictionary (2005) online defines the commons as representing both the natural systems and the cultural patterns and traditions that are shared without cost by all members of the community. The natural systems include water, air, soil, forests, oceans, etc., while the cultural patterns and traditions include intergenerational knowledge ranging from growing and preparing food, medicinal practices, arts, crafts, ceremonies, etc. The commons represent what has not been transformed into market relationships as explained by Kenrick (2009: 51), the commons are "life sustaining or life enhancing resources and services that have not been divided up and assigned a monetary value in the global economy but instead are shared according to evolving arrangements and agreements among members of a community or group". Bowers (2008) makes a distinction between the environmental and cultural commons pointing out that the cultural commons represent the largely 'non-monetised' and non-commodified knowledge, skills, activities and relationships that exist in every community. The cultural commons are part of the intergenerational legacy within communities that enable people to engage in activities and relationships that are largely outside of the mainstream consumer, money dependent culture. They are passed from generation to generation along through face-to-face relationships that may include mentoring. Bowers (2008: 69) explains that the "activities and skills that are expressions of the cultural commons connect the generations in ways that are profoundly different from relationships that characterize relationships in a consumer-oriented culture". For example, moral reciprocity, receptivity to intergenerational learning and mentoring, and an awareness of what needs to be conserved as essential to community identity and self-sufficiency are more easily learned. Embodied experiences in the cultural commons are more likely to strengthen the propensity to cooperate rather than to compete, and lead to identifying oneself more in terms of mutually supportive relationships and personal talents rather than as an autonomous individual who relies upon consumerism as the marker of success.

The commons are always pitted against the "forces of enclosure" (Bowers, 2008, 2009; Kenrick, 2009). Bowers (2008:70) explains that the "cultural commons are under constant threat from ideological, techno-scientific

developments, and efforts of the market system to incorporate different aspects of the cultural commons into the market system, thus transforming what remains of community self-sufficiency into dependence upon the market and a money economy". According to Kenrick (2008:51) these forces of enclosure "attempt to appropriate, own and sell resources that were once accessible not through the power of money but through the rights and responsibilities gained by being a member of the community". The forces of enclosure are exploitative and may be explained in terms of discourse that espouses an ideological orientation of dominance.

A case study of grazing lands in Botswana shows this (Peters, 1987). Bowers (2008) explains that the word enclosure is inseparable from the word commons. "Life in the commons is always in danger of being enclosed; that is, being transformed in ways that create dependencies, exclusions, silences, exploitation, and environmentally destructive activities and relationships. Enclosure in more ancient times took the form of status systems, the privilege and rights of the nobility, armed struggle, and mythopoetic narratives. In its modern form, enclosure is achieved through private and corporate ownership, as well as by approaches to education that promote a form of individualism that lacks the skills and knowledge that are part of the intergenerational knowledge that sustains the cultural commons. (Bowers, 2008: 15)".

The processes of enclosure reflect the tendency that our well-being depends on controlling and exploiting both other people and the environment rather than caring for the well-being of others, people and the environment. Kenrick (2009) explains that processes of enclosure are characterised by 'dominance thinking' while commons thinking is marked by a belief that people can achieve "their well-being on collectively caring about those around them" rather than "improve their own lives at the expense of their neighbours" (p. 53). Thinking in a commons way and working towards "revitalising" the local, national, and global commons are crucial to tackling the root causes of both the economic and ecological meltdown. These observations make it imperative to reflect on the implications of other systems whose worldviews and whose ethical and moral norms are different.

Metaphoric nature of language

The metaphorical nature of language is central to Bowers' analysis of the ecological crisis and the development of eco-justice pedagogy (Bowers, 2008; 2009). Bowers explains that thought is metaphorical in nature and that thought tends to fit new material (concepts, knowledge, and ways of doing) to old schemas and thus Western interpretations of the present circumstances become couched in old schemas. This

leads to continuity in Western cultural patterns of thinking from the past to the present.

As he further explains, the "micro-ecology of words, analogies, and interpretative frameworks that are the basis of today's discourses, always have a history. To be more specific, they have their origins in earlier culturally specific ways of thinking". (Bowers; 2008: 12). Consequentially, the taken for granted cultural assumptions, that are Western root metaphors, shape educational agendas of today. As he explains, the root metaphors carry forward earlier culturally specific patterns of thinking leading to the reproduction of past forms of cultural intelligence and morality. Unfortunately, some of the Western root metaphors are not relevant to realise the sustainable world we seek in the 21st century and beyond. Under the name of globalisation, these root metaphors tend to be wrongfully presented as universal concepts and yet as Bowers (2008, 2009) observes, they carry forward many environmentally destructive misconceptions of the past. Other cultures, on the other hand, have metaphors that lead to less destructive tendencies. Bowers proposes the need for us to critically interrogate these mainstream Western root metaphors if we are to shift to new forms of analogical thinking. These root metaphors include mechanism, progressivism, anthropocentrism, individualism, economism and evolution. In non-Western societies these metaphors may serve as part of the rationale for the processes of enclosure that led to colonisation and subjugation of tradition and its forms of education.

Western root metaphors may have been important in specific circumstances but they appear problematic especially when viewed from a sustainability angle or when viewed from a different culture and world view. These root metaphors have led to exploitative and consumeristic attitudes (McCay and Acheson, 1987; Rolston (III), 1990; Barkey, 2000; Atfield, 2003) that have contributed to the worsening, degraded ecological state of the Earth (Bowers, 2008, 2009). In non-Western contexts, especially Africa, these metaphors served to legitimise enclosure of the commons and the subjugation of local people and their ways of life. Peters (1987) suggested that African commons thinking and life was antipathy to colonial thinking. Bowers (2008; 2009) suggests the need to recognise these root metaphors and the danger they pose to ecological sustainability when both Western and other societies adopt the historical meaning ascribed to them.

For instance, mechanism reflects the thinking that everything including organic processes in nature are mechanistic (or machine-like) in their nature. Progressivism tends to represent change as contributing to a linear form of progress and suggests that this change and progress is in opposition to traditions. An anthropocentric view of the world places us humans at

the centre of the universe. (Rolston (III), 1990; Barkey, 2000; Attfeld, 2003; Bowers, 2009). In it, the tendency is to promote the view of the individual as the “basic social unit” who must strive for autonomy as a consumer. The environment and all in it are to be exploited as resources and that exploitation represents progress.

This exploitative attitude to the environment is emboldened by economism which tends to reduce everything to its market value (Bowers, 2008). It entails commoditisation of actions, relationships, products, and services. The social Darwinian view of cultures as undergoing a process of evolution has led to the thinking that some indigenous cultures are evolving from a backward and primitive tribal state toward a developed and modern state. In this regard, Western cultures are the most evolved and modern. Such Western assumptions about the way the world works and our places in it require critically interrogation as they appear to contain elements of racism in their portrayal of traditional cultures as pre-logical, irrational, and tribal.

These root metaphors have been ascribed meanings that have helped create and globalise a consumer oriented culture that has led to irreversible ecological damages, for example, species extinction and climate change. These root metaphors, wrongfully assumed to have a universal meaning, reinforce the “mindset that underlies a number of key characteristics of Western culture that still are not being addressed even by environmental thinkers” (Bowers, 2008: 9). This wrongful assumption of universality has provided a moral justification for ... “What amounts to the linguistic colonization of other cultures, an indifference toward recognizing how words framed by the choice of analogies in the distant past continue to be the basis of today’s thinking about how to introduce reforms that reduce the destructive impact on natural systems, the silences about the cultural commons that have been carried forward by Western philosophers and social theorists—silences that serve the interests of market liberals who want to rely upon the “invisible hand” (that supposedly operates in free markets) to determine the fate of individuals and cultures, the surprising widespread acceptance of an Orwellian political vocabulary that makes it difficult to recognize the traditions of civil liberties and intergenerational knowledge that are being undermined by powerful interest groups who are promoting economic globalization. (Bowers, 2008: 9)”.

Ecological intelligence

Ecological intelligence is connected to the relational view of the world (Sterling, 2009) and different cultures have their ecological intelligences. It is thus important to learn from the different forms of information exchange within

the local cultural and natural systems. Ecological intelligence is attained when we recognise, unpack, interrogate, and modify the long-held cultural assumptions and root metaphors of individualism, progress, anthropocentrism, economism, etc. The concept arises in response to the limits of the modernist worldview which rejects the dominant mechanistic view of the world in favour of holistic, organisimic or ecological worldview. Eco-philosophers view ecological thinking as “essentially relational or connective thinking, but it is more than that: it is ethical, valuative, and expresses our humanity” (Sterling, 2009: 78). Ecological intelligence involves questions and probes how things relate in their context, questions why things are the way they are and in whose interest. Ecological intelligence expresses appreciation for what is good, appreciates inclusivity, and it demands creativity, innovation, and ethicalness. It requires questioning the consumer oriented culture of globalisation and a recognition and understanding of how individuals are nested in cultures and how in turn cultures are nested in natural systems. Bowers (2009: 6) stresses the importance of the “constant interplay of consciousness, embodied experience within different cultural and environmental contexts, collective memory, and biographically informed expressions of intentionality” as the origin of ideas rather than the “the belief that their ideas originate from their own thought processes”. Accordingly, ecological intelligence entails learning from the complexity of the interactive cultural and biological patterns and dependencies. It entails thus making decisions that contribute to the mutual support and moral reciprocity within the community. Ecological intelligence entails that decisions and actions taken do not further degrade natural systems and that these decisions and actions are not limited by earlier modes of Western thinking, which (Bowers, 2008, 2009) finds inadequate for dealing effectively with the ecological crisis.

As such, ecological intelligence does not lie within the individual, it must be collective intelligence. It entails thinking relationally “to comprehend systems in all their complexity, as well as the interplay between the natural and man-made worlds” (Goleman, 2009: 3). Such intelligence does not arise from one’s individual thought processes, rather it entails to learning from experiences in the cultural and environmental context. Ecological intelligence is a culture bound concept and whose exercise entails looking at the human-human-nature relationships with a clear moral and ethical referents. These relationships define how people relate to each other respectfully and how they socially act together as well as how people relate to other forms of life leading to respect for diversity and interdependence. Some cultures, such as the case in much of Western society, will have ecological intelligences that are more mechanistic and consumeristic in outlook while others will

be more humanistic and relational, such as the case in Africa societies. Those that are consumeristic have a larger ecological footprint and need to undergo transition towards more humanistic, relational, and less consumeristic lifestyles.

AN ETHICAL AND MORAL FRAMEWORK FOR EDUCATING FOR SUSTAINABILITY

Western education in Africa has historically been part of a process of enclosure, a consequence of colonisation. As a result Western education promoted initially through missionary activity has served by and large to supplant local traditions viewed as primitive, tribal, and backward. Post-colonial education systems of education have not shaken off the messianic message of Western education and continue to face challenges related to relevance. This lack of relevance can be inferred to the root metaphors carried in the philosophical bases of education as suggested by Bowers (2008, 2009). For example, the interpretation of anthropocentrism in the West that carries the notion that Man is superior and separate from the natural world (Bowers, 2008; Rolston (III), 1990; McCay and Acheson, 1987) is not consistent with the worldview of Africans. Africans by and large do not reduce nature to a dominated and exploited resource as justified by Jedo-Christain teachings (Barkey, 2000; Atfield, 2003). As demonstrated in this paper, the cultural commons of Africans are less degrading to the environment and hence our proposal that traditional African ecological intelligences as well as ethical and moral frameworks frequently overlooked as ancient or tribal, it carry a lot of significance to educating and communication for sustainable development. They provide much scope for inter-generational learning and at the same time valuable knowledge for intra-generational learning whereby current societies learn from one another – and in this case – the West learning from Africa.

Besides, in Western thinking, the individual forms the basic social unit while in the African worldview an individual is a person because of others. An adage exists, for example, in the author's Shona language of Zimbabwe: *Munhu vanhu* (upon literary translation this says "a person is people". This means that a person can only become a mature responsible citizen with support of other people in his/her family and community). In an interview for Beliefnet.com (accessed 12 November 2009) Archbishop Desmond Tutu (2004) explained *Ubuntu* to be "the essence of being a person. It means that we are people through other people. We cannot be fully human alone. We are made for interdependence, we are made for family. When you have *Ubuntu*, you embrace others" (p. 2). Africans believe and think in terms of group solidarity or in terms of community. In real terms

an individual cannot be autonomous as to be free from observance of community norms and responsibilities. Indeed, for the African "the solitary individual is a contradiction in terms and therefore, you seek to work for the common good because your humanity comes into its own community, in belonging" [Tutu in Nabudere (n.d., p. 5)].

Further to this, the lack of relevance of education in Africa is linked to what Bowers (1993, 2009) describes as the sender-receiver model of communication characterising Western education. Taking this literally into an African context, by colonial precedent, the voice of the sender (Western education) is more important than the voice of the receiver (African oral traditions). The result has been a neglect to take into account indigenous knowledge, moral-ethical codes, and ways of knowing that include direct experience and orally transmitted intergenerational knowledge. While these forms of knowledge and mechanisms for their transfer may not meet Western canons of what counts as knowledge, these represent the cultural commons with potency for educating and communicating for sustainable development. A lot of Western metaphors for social progress, individuality, the market economy, and globalisation are not valid when taken as universal concepts for educating for sustainable development (Sterling, 1990; Bowers, 2009). Besides, in educating for sustainable development, there is need for an ethical and moral framework; in sub-Sahara Africa, this moral and ethical framework is *Ubuntu*. This philosophy "in its different settings, is at the base of the African philosophy of life and belief systems in which the peoples' daily-lived experiences are reflected" [Nabudere, (n.d., p. 1)].

Ubuntu is an African ethic, a humanist sub-Sahara African philosophy, and a way of life that emphasises co-operation, compassion, community and concern for the interests of the collective, for others and respect for the dignity of personhood (Barrett, 2008; *Ubuntu* Network, 2007). *Ubuntu* expresses wholeness and oneness (*ubu* = wholeness; *ntu* = oneness) [Nabudere (n.d.)]. It connotes community, human dignity and welfare as central to existence and to development efforts. It stresses the connectedness and interdependence of the human community. The *Ubuntu* network (2007), *Ubuntu* World forum of civil society networks, and the Institute of Advanced Studies of the United Nations University (2002) adopted it for its stress on cooperation, solidarity, humaneness, and for its stress on harmonious existence with all creation and thus for its relevance to ecological sustainable development. An individual with *Ubuntu* derives self-confidence and self-assurance from knowing that he or she belongs in a greater whole (Tutu in *Ubuntu* Network, 2007). *Ubuntu* inspires significant networks and actions towards sustainable development.

The *Ubuntu* World forum of Civil Society Networks finds

it as an ideal it promotes cooperation between individuals, cultures and nations. In addition to basing efforts to construct world that is more humane, just, peaceful, diverse and sustainable the *Ubuntu* forum finds inspiration in *Ubuntu* for its work to lead the world to transition from a culture based on force and imposition towards a culture of peace, dialogue, justice, equity, and solidarity. *Ubuntu* inspired the *Ubuntu* declaration on sustainable development (*Ubuntu* alliance). *Ubuntu* also finds application in management as shown the book, *Ubuntu: The spirit of African transformative management* (Mbigi and Maree, 2005). Mbigi and Maree view *Ubuntu* as a universal concept whose values should be harnessed “into a dynamic, transformative force for reconstruction and development” (p. 6). They go on to appeal that “we must harness the social experience and innovation of the African people and align them with successful management techniques from the West and East” (p. vi). This social experience includes a solidarity tendency relevant for management and development projects. *Ubuntu* inspired the development of the Linux computer operating system and thus brings its spirit to the software world.

UBUNTU AND EDUCATION AND COMMUNICATION FOR SUSTAINABLE DEVELOPMENT

While Africa lags behind in technology, its genius and achievement lies in its social and political philosophies and systems (Mbigi and Maree, 2005; Nabudere., n.d.). *Ubuntu*, the focus of this paper, for example, revolves around recognition of the human worth, communal relationships, a deep respect for human values, and a strong reverence for the natural environment and the resources it provides. Subsequently the author has used its equivalent in the Shona language (the author’s mother language), the most widely spoken language in Zimbabwe. However, the second largest language, Ndebele, expresses it too as *Ubuntu*, and hence in Zimbabwe, the expression *Ubuntu/Unhu* is commonly found. *Ubuntu* is Unhu (Humaneness) and *Ubuntu* is Munhu (Human being complete with Unhu). The practice and upholding of Unhu or *Ubuntu* has been called Unhuism or *Ubuntuism* (Samkange in Barret, 2008). The Shona say one has Unhu when one exhibits good behaviour, decency, respectfulness to others, pleasantness and honesty (Gelfand, 1970). In addition to “great brotherhood” the Shona way of life observes “compulsory equality for all within narrow margins of wealth, for it must be clear that if a man is not permitted more land than he needs, he cannot accumulate great wealth” (Gelfand, 1970: 2). He observes that so much thought has gone into the Shona’s study of human relations and into a search for peace, happiness and

freedom and thus their philosophy revolves around munhu—the human being with an almost complete neglect of the material aspects of life (Gelfand, 1970). This feature contrasts the Shona worldview with that of the modern Western world. It is important, as Gelfand reminds us, to recognise that to the Shona, all the kinsmen are born equal and have the same potentiality for Unhu, which defines the good character of each person.

In Africa, education has by and large lacked relevance and served as a source of enclosure of this cultural commons. This included loss of traditional good manners, loss of consideration and respect for others, and loss of equality as those who are Western educated tend to exhibit an air of superiority over those who are not so educated.

Unhuism and ecological intelligence

Collective solidarity is at the heart of Unhuism and this solidarity provides the very essence of existence and ecological intelligence. Ecological intelligence requires individuals to share their knowledge with others and to collaborate consistent with Unhuism. Goleman (2009: para 4) explains the importance of collective intelligence stating that: ... “the ecological abilities we need in order to survive today must be a collective intelligence, one that we learn and master as a species, and that resides in a distributed fashion among far-flung networks of people. The challenges we face are too varied, too subtle, and too complicated to be understood and overcome by a single person; their recognition and solution require intense efforts by a vastly diverse range of experts, business people, activists by all of us. As a group we need to learn what dangers we face, what their causes are, and how to render them harmless, on the one hand and on the other, to see the new opportunities these solutions offer and we need the collective determination to do all this”.

Ecological intelligence is shared and distributed and becomes thus part of a whole culture. As Goleman (2009) explains ecological intelligence is synergistic with social intelligence enabling us to coordinate and harmonize our efforts. It is through collaboration and the exchange of information that the essential ecological insights accrue enabling decisions and actions for ecological sustainability. These tenets of ecological intelligence are consistent with principles in *Ubuntu* or in the case of the Shona, Unhu (Barret, 2008). For example, three maxims of Unhuism or *Ubuntuism* point to the affirmation that, first, one’s humanity depends on the humanity of others and thus it becomes essential to establish respectful human relations with them. Secondly, in the face of a decisive choice between wealth and the

preservation of the life of another human being, then one should opt for the preservation of life. Thirdly, it is commonly acknowledged that the king owed his status, including all the powers associated with it, to the will of the people under him (Samkange in Barret, 2008). Unhu is thus a part of a moral and ethical framework that closely connects people with each other and with other life forms in their natural environment (Gelfand, 1970; Barret, 2008). It carries in it the ecological intelligence that explains both the respect and the reverence of nature (Shumba, 1995; Skolimowski, 1990).

Unhuism and the collective finger theory

Ubuntu is a value ethic for collectivism which stands in stark contrast to individualism as it has been portrayed in Western metaphors (Bowers, 2008, 2009). Individualism is a social outlook that stresses independence, self-reliance, and individual pursuit of goals and desires without tolerance for external interference by other people or institutions in society. This stands in stark contrast to collectivism and communalism (Omo-Fadaka, 1990) that is built on the philosophical system of *Ubuntu*. The familial and the communal are stressed over individual goals. While individualism makes the individual the basis of all reality and all society, *Ubuntu* defines community as defining the individual. An individual grows to become human together with others and not alone. Reciprocally, an individual is defined by what his/her community is or is not.

This collective solidarity is of central importance for education and communication for sustainable development and reflects on the ecological intelligence of the people. In the first instance, the commons belong to all in the community and not to one individual, and thus the utilisation and conservation is a communal and collective responsibility.

Social and environmental attentiveness and sensitivity is part of the *Ubuntu* framework and therefore sustainability can only be achieved working together and not as individuals. Three Shona adages demonstrate the importance of community and solidarity: *munhu munhu nekuda kwevanhu* (a person grows into a person of good morals with support of others), *simba rehove riri mumvura* (the strength of a fish is found in the water), and *chara chimwe hachitswanye inda* (literally meaning one finger cannot crush lice it needs other fingers). The latter is the basis for what Mbigi and Maree (2005) call the collective finger theory to stress the importance of collective education and action. What this means is that one grows into a responsible person with support of others and that we derive strength from the support of the community. It is clear that for the Shona, collective

agency is valued more than individual agency which is relevant to Goleman's (2009) suggestion of collective ecological intelligence.

Unhuism and the Nhorowondo concept

Ubuntu has been the basis of inter-generational learning through remarkable oral traditions of Africans basing on the spoken word (Gelfand, 1970). One oral tradition of the Shona is Nhorowondo, the story behind the historical evolution of a custom, observance, belief or practice. This has been applied to a theory of corporate management whereby appreciating the historical roots of any practice or technique is the starting point before its successful adaptation (Mbigi and Maree, 2005).

Understanding the historical origin and evolution of observances, beliefs and practices is important to understand place, people, and their commons. On this, Bowers (2009) speaks of the linguistic colonisation of the present by the past contending that contends that words have a history, they are metaphors. As such learning takes place by metaphorical thinking whereby new things are explained by known metaphors, that is, by reference to known analogs. In this case, some of the African *Ubuntu* analogs reflected (and still reflect) a desire for ecological and social sustainability. As such, *Ubuntu* root metaphors can provide appropriate explanatory frameworks that cover many aspects of life today including our understanding of sustainability and how to strive towards it. Western root metaphors are not universally valid and thus *Ubuntu* provides viable alternative metaphors for sustainable development. Among the Shona as the case with other Bantu, understanding the historical origin and evolution of root metaphors is developed and passed from one generation to the next through various oral modes including Ngano (story telling), rituals and ceremonies. Knowledge is acquired through oral transfer through the spoken word from one person to the next and from one generation to the next. The spoken word and language as noted by Bowers (2009) encodes the inter-generational knowledge and wisdoms of the local ecosystems and their sustainable management.

The concept of Nhorowondo is important in education and communication for sustainable development. For example, certain traditional practices have been simplistically dismissed as backward. This is the case for certain land use management practices especially in southern Africa; a case in point is the slash and burn or shifting cultivation practice. It turns out that if this practice were analysed, people would see the evolution of this practice in the need to adapt to marginal areas of bioregions and land unsuited for crop agriculture to which people were relegated too under colonialism. The

Nhorowondo approach would reveal the history and socio-political relations and forces of enclosure that led to particular land use adaptations. Further, it would reveal the value added to fertility of acid soils by the potash-rich ash. It raises the soil pH enabling healthy growth of certain staple crops; this appreciation was the result of embodied learning. Experience showed that crops that would otherwise not grow at all would grow in soils mixed with ash.

The scientific, technological, and social rationality of the slash and burn or shifting cultivation land husbandry is often ignored yet valid when taken in context. The ecological region in which this method of land husbandry is mostly practiced is marked by Miombo woodlands which thrive in soils of the order Oxisols; the eco-region extends from Angola to Mozambique, from Tanzania, to the south of the DRC and to Zimbabwe in the south (Chidumayo, 1999). Soils of the order Oxisols in this eco-region are highly weathered, easily leached, and their pH of 4.0-4.5 is quite low and acidic. Such a low pH is unsuitable for growing crops such as maize, finger millet, sorghum, or cassava that provide subsistence for local communities. With slash and burn practice, the ash from the burn in concentrated spaces, raises the soil pH because the ash contains up to 83% potash (Chidumayo, 1999), enabling the cultivation of these staples. Furthermore, the heat generated by the burning of the biomass fumigates the soil, kills any existing weed seeds, and reduces the soil to a fine tilth, reducing labour requirements for cultivation of the soil. What this means is that, the value of indigenous farming practices to the management of soil fertility must not be discounted.

In this study we see the underlying scientific rationality in the traditional land-husbandry practices. Other cases include the use of herbal medicines, food processing and preservation, and in many others. These must be recognised in innovations and interventions that seek to moderate such practices for sustainability in the modern context. Bringing awareness of the scientific and technological basis of indigenous practices in mainstream education and training holds the possibility for improving quality and relevance of education. The Nhorowondo approach would make us more critically aware the scientific and technological basis including the soil and atmospheric chemistry, and of the historical necessity of certain indigenous practices while at the same time promoting reflection on the unsustainable elements of those practices. It must not be the business of education and globalisation “to emancipate individuals from the intergenerational knowledge of their communities” as Bowers (2009) would forcefully express it.

Unhuism and reverence for nature

Reverence for nature is an important feature among the

traditional Shona. Reverence for nature arises from their belief in a vital force possessed by everything in nature, animate or inanimate; for all Bantu, all beings in the universe possess vital force (Gelfand, 1970). The natural environment is thus considered sacred and mysterious and thus certain taboos and observances existed to prohibit contact with natural ponds, forests, and mountains where spirits are said to live. Such places could not be accessed and explored unless when sanctioned for appropriate purposes. Taboos and totemic observance exist to prohibit ordinary use of certain plant or animal species. Fruit trees are not to be cut or used for construction or as sources of firewood. Even when clearing land for agricultural fields, fruit trees were conserved. In the gathering of fruit, thatch grass, construction poles and fibres, and so forth, one is only expected to collect what was adequate to satisfy needs. One could not collect excess, as these resources are free, belonging not to one but to all in the community. This attitude led to conservation of resources and to the preservation of the ecosystem in which they were found. The ethical and moral framework that is Unhu made it a serious transgression to waste and to denigrate the natural environment. A person who does so could be referred to as a witch (muroyi), a label one cannot comfortably live with in society. Adherence to Unhu thus meant living in harmony with others and with nature. Such harmonious relationships together with the non-monetisation of natural resources meant that balance was maintained. Education and communication for sustainable development therefore must take into account the relevance of traditional cultural knowledge and values. In this regard, A global assessment of the 1989 recommendation on traditional “culture” (Seitel, 200: 281) made the “revitalisation of traditional knowledge, skills and practices, aiming to regulate natural resources through the implementation, for example, of fishing and hunting taboos, is itself largely constituted in the interrelationship between people and the environment” beneficial for sustainable management of the environment. Further to this, sustainable development needs to be seen, therefore, as a cultural process that should permeate everyone’s conscience. Sethi (2001) making a passionate but insightful contribution to the Smithsonian conference, (Seitel, 2001) presented a paper “A seed is not shy of germination”. His presentation demonstrates that what is viewed as economical and technological ways of production can debase both local cultures and the environment. Economy and technology can impact negatively on social conditions and lifestyles in a culture, and here is what Sethi expressed:

“Who protests when pesticides poison our foods? Or preservatives debase our cooking and eating styles? And who has studied how fertilisers and hybrids have changed our perception of season and the ecological and

agricultural cycles? When a river is poisoned, all the culture that it supports also dies. Shouldn't the department of culture think about all this as being a cultural as well as an environmental concern? ... Does cultural identity not suffer when the built environment envelops us in a homogenised, spiritless landscape and when the education system teaches us to abandon what is our own? (Sethi, 2001: 84)".

Education for sustainable development must contribute, therefore, to the development of a critical awareness of the role of local cultures in development and critically interrogate the impact of science and technology on those cultures and their development. In doing so, there is need to interrogate and question the Western root metaphors of progress and development and their potential to enclose the cultural commons. Educators must stress the recognition and acceptance of diversity, and of appreciation of context and culturally bound alternative solutions to problems.

CULTURAL COMMONS AND EDUCATING FOR SUSTAINABLE DEVELOPMENT

The relevance of the above reflections can be seen in the importance it places on bringing relevant aspects of indigenous knowledge and values into mainstreaming education processes. Emphasis is placed on exploiting the educational value of traditions and customs that have potential to address the sustainability question. The world Summit on Sustainable Development (2002) acknowledged that "cultural diversity is as critical for the world's development as is biodiversity". Sustainable development is, therefore, partly a process of cultural development whereby traditions, behaviours, values and expressions through the process of reciprocal exchange are subject to renewal consistent with Article 1 of the Vienna declaration on the right to development (1996). It is through education that this right as well as social and cultural progress can be realised. Learning about one's culture and those of others is a learning need that contributes to social justice and tolerance of cultures and worldviews that are different from one's own. This message of acceptance and tolerance for diversity founded on the intrinsic value of respect for life in *Ubuntu/Unhu*, has either been poorly communicated or not at all in Africa. Since culture is a fundamental part of each individual and community, the fabric of society and the totality of human experience (Ngulube, 1999), it necessarily must be the basis for education for sustainable development. Ngulube further explains that culture is "the fabric of society in its overall relation with development and as an internal force of that society, ensuring that individual needs and their collective fulfilment are at the centre" (p. 186).

In this regard, the philosophy of *Unhu/Ubuntu* is quite appealing. Culture reflects, therefore, a value system and a system of rationality that can be influenced whether or not society and its members choose to live in a sustainable way or not. It can positively be a dynamic force for change or negatively can serve to resist change (Ngulube, 1999) and a people's cultural identity (including their awareness of such an identity) may be the springboard of their development effort (Hagan, 1990: 10). Hagan (1990) cites principles regarding cultural identity from Ali Mazrui's (1980) book "The African condition". Mazrui observes that culture provides lenses of perception, a way of looking at reality, and a world view. It provides standards of evaluation. What is good and what is evil, what is beautiful and what is ugly, what is legitimate and what is illegitimate are all rooted in criteria provided by culture. It is culture that conditions motivation; what motivates individuals to act or refrain from acting, what inspires individuals to perform well or to really exert themselves, is partly inspired by cultural factors. Quite importantly, culture provides a link between man and his environment and thus provides the ecological intelligence to both exploit and conserve it. The means of perceiving the environment determines the value placed on the environment, and the ends and means with which the environment as a resource is exploited. As shown in the case of *Ubuntu/Unhu*, cultural values, cultural ethical principles and aspirations influence people's valuing and the mode of exploiting and utilising their resources.

Culture, what UNESCO terms the software of human development (Ngulube, 1999), is, therefore, a major determinant of sustainable development. Ngulube (1999: 187) asserts that "It helps to build blocks in moulding identity and ethnic allegiance, attitudes to work, saving and consumption, and influences political behaviour; building values that can drive collective behaviour and future action towards achieving development". Education for sustainable development must develop the cultural ethos that makes it possible for people to take responsibility for improving the quality of their lives and for living sustainably. It must provide for understanding of the cultural problems related to health and pollution, environment, agriculture, urbanisation, population, and employment patterns and practices (Ngulube, 1999).

What has been tried here is to show the relevance of one aspect of a cultural heritage, *Unhu/Ubuntu*, as an ethical and moral framework for educating and communicating for sustainable development. Balbo (2004: 28) notes that "... heritage exists in so far as it is collectively recognised as such, either nationally or locally. Heritage is then a common good, in that it reflects values shared by the society and in which society recognises its identity". Pini (2004: 7-8) explains that a cultural heritage is a source of social cohesion "creating

consensus around objectives of sustainable development". Bouchenaki (1999) explained to the Smithsonian Institute heritage conference that "we must ensure the preservation of the ethical heritage, a heritage in which biodiversity is embraced in its infinite forms as a means to establishing unity, a oneness that represents our strength and our hope for the future" (p. 6). Paragraphs 11 of the integrated framework of action on education for peace, human rights and democracy (UNESCO, 1999) states:

..."education must teach citizens to respect the cultural heritage, protect the environment, and adopt methods of production and patterns of consumption which lead to sustainable development. Harmony between individual and collective values and between immediate basic needs and long term interests is necessary (UNESCO, 1999; pp. 439-440)".

The framework of action demands of us to recognise and accept the values which exist in the diversity of individuals, genders, peoples and cultures and develop the ability to communicate, share and cooperate with others. It reminds us that we are citizens of a pluralist society and multicultural world as opposed to the monoculture image of globalisation. As such we "should be able to accept that their interpretation of situations and problems is rooted in their personal lives, in the history of their society and in their cultural traditions" (UNESCO, 1999: 439). Revitalisation of the cultural commons (Bowers, 2008, 2009) thus makes complete sense.

From this study, it is important to discern the conceptual similarities between sustainable development and ideas expressed through *Ubuntu*. Sustainable development is a complex and nebulous concept characterised by multiple definitions and resistance. *Ubuntu* stands as a resilient philosophy that provides the alternative and relevant logic and an ethical framework to inform education and communication for sustainable development in the African context.

SYNTHESIS: CULTURAL COMMONS, UBUNTU, ECOLOGICAL INTELLIGENCE, AND SUSTAINABLE DEVELOPMENT

Ubuntu is demonstrably a rational ethical and moral framework for sustainable living comparable to but different from the Judeo-Christian framework on which basis the Western concept of ecological stewardship and dominion over nature is built (Barkey, 2000; Attfield, 2003). As observed by Sterling (1990), the belief of master and possessor of Nature is based on the Cartesian duality setting human beings "apart and over nature, thus opening the way for a relationship that is primarily exploitative and manipulative" (p. 78). This

created an anthropocentric universe for Western society that places humans on a privileged pedestal over other forms of life on earth (Bowers, 1993; Barkey, 2000; Attfield, 2003). Rolston III (1990) notes that the "greatest of the science-based values" is exploitative resource use that in the process created a consumerist value complex in which the environment is reduced to "a little more than a resource" (p. 71). Basing on the logic of economics to exploit and use resources ever more efficiently has led to great losses of biodiversity.

In contrast, the *Ubuntu* provides a world view of the environment as "home" and a strong axiological framework relevant for harmonious co-existence with nature and for ecological sustainability. Rolston III (1990) points out in those traditional cultures whose logic holds the view of ecology as a home results in co-existence of people with other forms of life. It is in this sense that people from these cultures sometimes "see more comprehensively" axiologically than scientists (p. 71). This axiological intelligence reflects on the place of values in achieving ecological sustainability and saving the commons. As noted by Engel (1990), moral values and cognitive beliefs of a culture play a crucial role to people's adaptation to their natural environment. Rolston III (1990) asserts that "Using traditional values as a catalyst, we might draw our model of Earth from ecology, rather than from physics, chemistry, computing, or mechanics" (p. 79).

It is also imperative to observe that, applied especially to the African context, some of Garret Hardin's (1968) thesis points on the "tragedy of the commons" were misapplied. Two notions that led some western economists to assume Hardin's thesis to imply that privatisation and property rights lead to the protection and conservation of the environment, and to the rationale use of resources suffice (McCay and Acheson, 1987).

First is the notion that people are not capable of putting collective interests ahead of private interests leading to overexploitation of the commons as individuals compete to take as much as possible. Secondly, it is assumed that freedom and equality forces individual interests to come ahead of system interests. Consequently, no one protects natural resources and thus freedom leads to ruin for all. In Africa, this may have contributed to the extreme colonial antipathy against communal property systems and the philosophical grounds on which they were based (Peters, 1987).

As shown in earlier sections, the *Ubuntu* framework regulates the behaviour and actions of individuals in favour of cooperation, solidarity and homogeneity, and collective responsibility and action. Enforcing norms and standards of behaviour of the individuals or groups including in their exploitation and consumption of natural resources is part of this collective responsibility. In the context of traditional society and *Ubuntu*, there too are

morals, adages, and taboos and prohibitions developed to guide exploitation and conservation of resources both fauna and flora. These taboos made for reverence of certain forests, ponds, rivers, and certain animals (Shumba, 1995; Omo-Fadaka, 1990; Omari, 1990), indeed, reverence for nature is an underlying intrinsic value in African culture (Shumba, 1995; Skolimowski, 1990). Besides, land and natural resources in it were not subject to private ownership, they were part of the communal property system (Peters, 1987). The concept and practice of inheritance safeguarded natural resources by creating awareness and anticipation of common rights. The younger generation naturally understood that land and natural resources would eventually be theirs. It is noteworthy that in the African context, society tends to have communal tendency and livelihoods are “not dependent on commodity production for the market, there is no tendency towards maximisation of profits or the creation of an economic surplus” (Redclift, 1987: 151).

This paper simply demonstrates the efficacy of a resilient African traditional rationality and axiological framework, *Ubuntu*. This social construction provides the moral values and cognitive beliefs of a people to responsibly exploit and conserve the local commons (Redclift, 1987; Engel, 1990). Engel (1990) points out that moral ideals form the moral conscience by which people care for the world around them. More than this, it has been recently demonstrated that in Zimbabwe, indigenous communities may act in the same manner as the recently advanced concept of communities of practice connotes (Pesanayi, 2009). Communities of practice show tendency of joint enterprise, of mutual engagement, and of shared repertoires of communal resources (Wenger cited in Pesanayi, 2009). In the case study of Zimbabwe, these indigenous communities are “sources of knowledge for adaptation strategies to climate change, if the socially constructed knowledge is valued, and if the power of distributed cognition that exists in communities of practice can be mobilised” (Pesanayi, 2009: 71). As noted by Peters (1987), with respect to Botswana, colonial settlers had antipathy against communal systems and communalism that served as the basis of traditions of African countries (Omo-Fadaka, 1990). As Omo-Fadaka (1990) observes, the communal organisation was built on the basis of a well evolved “philosophical system and its own way of interpreting and projecting reality” (p. 178); *Ubuntu* is this philosophical system. Omo-Fadaka concludes that African countries sustainable development will be more effective by investing “their traditional concepts with new meanings” (p. 178). Redclift (1987) giving greater emphasis to the indigenous knowledge and experience made the observation: “... what we mean by environmental management often ignores or devalues the experience of poor people in the developing

countries, those who are often closest to the problems. We are often in danger of importing solutions to environmental problems from the experiences of the developed countries, using methodology and an epistemology which is of little relevance to different circumstances.

To begin to achieve success at implementing workable environmental policies in the South we must first unlearn much of what we know about conservation and the environment in the development countries” (p.133).

CONCLUSION

Appreciation of the concepts of commons, ecological intelligence, and the sub-Saharan Africa moral and ethical framework of *Ubuntu* may contribute to improved relevance of education for sustainable development. As demonstrated, *Ubuntu/Unhu* is a cultural commons that speaks to values relevant for sustainability. While Western societies endeavour for a transition towards sustainability, many African societies have a value base desirable for a sustainable world. There is a need to look back and see what is relevant from the cultural traditions and customs of local people. *Ubuntu/Unhu* is a moral and ethical framework that stresses collectivity and collective agency that are relevant for behaviour management and character formation that may contribute to sustainable lifestyles. It stands in contract to, for example, Western frameworks that overly emphasise individualism and individuality especially their emphasis on the individual’s intellect, mental intelligence, and abstract thinking at the expense of individual and collective values necessary to realise sustainable lifestyles. In the colonial past, education served as a force of enclosure, and now needs to embrace indigenous knowledge and values. It must no longer be the business of education and globalisation, as Bowers (2009) expresses it in his book “towards an ecojustice pedagogy”, to emancipate individuals from the intergenerational knowledge of their communities. Rather, the ecological intelligence and the intellectual and ethical heritage in local communities must be taken into account in order to effectively educate for sustainable development.

In addition to acknowledging Chet Bowers intellectual counsel, perhaps what we need is to take into account the view that indigenous cultures are “societies of production” while modern development institutions are “societies of appropriation” (Sohn-Rethel, 1986; Redclift, 1987). Each type differs from the other by the rationality of practices and their epistemological grounds. In societies of production, outsiders can frequently appreciate that practices make sense (that is, practice is rationale) but the epistemology employed in arriving at these practices is obscure to outsiders (that is, theory is

irrational). This perception of irrationality is a consequence of the failure to decode the culturally coded and embedded epistemology. In societies of appropriation employing “rational” scientific knowledge, social practices are irrational with people losing control over their environment but scientific knowledge replaces traditional epistemology (Redclift, 1987; p. 152). This paper has provided for the outsider the rationality of *Ubuntu* and its efficacy as a resilient tradition and framework for sustainability.

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