AFRICA DEVELOPMENT AFRIQUE ET DEVELOPPEMENT

Vol. XXX, No. 3, 2005

Special issue: All knowledge is first of all local knowledge

Guest Editors: Theophilus Okere, Chukwudi Anthony Njoku & René Devisch

AFRICA DEVELOPMENT
AFRIQUE ET DÉVELOPPEMENT

Typeset by Sériane Camara Ajavon
Cover designed by Aissa Djonne
Printed by Imprimerie Saint Paul, Dakar Senegal

AFRICA DEVELOPMENT
AFRIQUE ET DEVELOPPEMENT
Vol. XXX, No. 3, 2005

A Quarterly Journal of the Council for the Development of Social Science Research in Africa

Revue trimestrielle du Conseil pour le développement de la recherche en sciences sociales en Afrique

Special Issue
'All knowledge is first of all local knowledge'

Guest-editors
Theophilus I. Okere, Chukwudi Anthony Njoku & René Devisch

CODESRIA would like to express its gratitude to the Swedish International Development Cooperation Agency (SIDA/SAREC), the International Development Research Centre (IDRC), Ford Foundation, Mac Arthur Foundation, Carnegie Corporation, the Norwegian Ministry of Foreign Affairs, the Danish Agency for International Development (DANIDA), the French Ministry of Cooperation, the United Nations Development Programme (UNDP), the Netherlands Ministry of Foreign Affairs, Rockefeller Foundation, FINIDA, NORAD, CIDA, IIEP/ADEA, OECD, IFS, OXFAM America, UN/UNICEF and the Government of Senegal for supporting its research, training and publication programmes.

Le CODESRIA exprime sa gratitude à l'Agence suédoise de coopération pour le développement International (SIDA/SAREC), au Centre de recherche pour le développement international (CRDI), à la Fondation Ford, à la fondation Mac Arthur, Carnegie Corporation, au ministère nórvégien des Affaires étrangères, à l'Agence danoise pour le développement international (DANIDA), au ministère français de la Coopération, au Programme des Nations Unies pour le développement (PNUD), au ministère des Affaires étrangères des Pays-bas, à la Fondation Rockefeller, FINIDA, NORAD, CIDA, IIEP/ADEA, OCDE, IFS, OXFAM America, UN/UNICEF, et le gouvernement du Sénégal pour leur soutien généreux à ses programmes de recherche, de formation et de publication.

Africa Development is the quarterly bilingual journal of CODESRIA. It is a social science journal whose major focus is on issues which are central to the development of society. Its principal objective is to provide a forum for the exchange of ideas among African scholars from a variety of intellectual persuasions and various disciplines. The journal also encourages other contributors working on Africa or those undertaking comparative analysis of Third World issues.

Africa Development welcomes contributions which cut across disciplinary boundaries. Articles with a narrow focus and incomprehensible to people outside their discipline are unlikely to be accepted. The journal is abstracted in the following indexes: *International Bibliography of Social Sciences (IBSS); International African Bibliography; African Studies Abstracts Online; Abstracts on Rural Development in the Tropics; Cambridge Scientific Abstracts; Documentationselienst Africa; A Current Bibliography on African Affairs,* and the *African Journals Online*. Back issues are also available online at www.codesria.org/Links/Publications/Journals/africa_development.htm

Afrique et Développement est un périodique trimestriel bilingue du CODESRIA. C'est une revue de sciences sociales consacrée pour l'essentiel aux problèmes de développement et de société. Son objectif fondamental est de créer un forum pour des échanges d'idées entre intellectuels africains de convictions et de disciplines diverses. Il est également ouvert aux autres chercheurs travaillant sur l'Afrique et à ceux se consacrant à des études comparatives sur le tiers monde.

Afrique et Développement souhaite recevoir des articles mobilisant les acquis de différentes disciplines. Des articles trop spécialisés ou incompréhensibles aux personnes qui sont en dehors de la discipline ne seront probablement pas acceptés. Les articles publiés dans le périodique sont indexés dans les journaux spécialisés suivants: *International Bibliography of Social Sciences; International African Bibliography; African Studies Abstracts Online; Abstracts on Rural Development in the Tropics; Cambridge Scientific Abstracts; Documentationselienst Africa; A Current Bibliography on African Affairs,* et *African Journals Online*. Les numéros disponibles de *Afrique et Développement* peuvent être consultés à l'adresse suivante: www.codesria.org/Link/Publications/Journals/africa_development.htm.

All editorial correspondence and manuscripts should be sent to:
Tous les manuscrits et autres correspondances à caractère éditorial doivent être adressés au:

Editor-in-chief/Rédacteur en Chef
Africa Development / Afrique et Développement
CODESRIA, Av. Cheikh Anta Diop x Canal IV B.P. 3304, Dakar, 18524 Sénégal.
Tel: +221 825 98 22 / 825 98 23 - Fax: +221 824 12 89
Email: publications@codesria.sn or codesria@codesria.sn
Web Site: www.codesria.org

Subscriptions/Abonnement

(a) African Institutes/Institutions africaines:	$32 US
(b) Non African Institutes/Institutions non africaines	$45 US
(c) Individual/Particuliers	$30 US
- Current individual copy / Prix du numéro	$ 7 US
- Back issues / Volumes antérieurs	$10 US

Claims: Undelivered copies must be claimed no later than three months following date of publication. CODESRIA will supply missing copies when losses have been sustained in transit and where the reserve stock will permit.

Les réclamations: La non-réception d'un numéro doit être signalée dans un délais de trois mois après la parution. Nous vous ferons alors parvenir un numéro de remplacement dans la mesure du stock disponible.

ISSN 0850 3907

Contents / Sommaire

Vol. XXX, No. 3, 2005

Book Reviews/Notes de lecture

Africa Development, Vol. XXX, No.3, 2005, pp. 1–19

(ISSN 0850-3907)

All Knowledge Is first of all Local Knowledge: An Introduction

Theophilus Okere,* Chukwudi Anthony Njoku,** & René Devisch***

Abstract

Against a monolithic view of knowledge production and the tendency to universalize science, this article calls attention to the unique genius and distinctive creativity and originality which underlines production of knowledge in any given cultural context. It takes seriously, the fact that, at its roots, knowledge production is context bound. Hence the authors emphasize the fact that all knowledge is first of all local knowledge. From this fundamental understanding of the true wellsprings of the production of knowledge, it argues against a mythic veil, which reformist modernity, especially, tended to place on the process of producing and transmitting knowledge. This deceptive myth about knowledge production, it opines, has had the negative impact of stereotyping, blackmailing, inferiorizing and derailing the production and sharing of knowledge and its artefacts in cultures other than the West. The colonial encounter, with its assumptions and presumptions, helped to rub in this vision of reformist modernity and to muffle the voices of colonised cultures. Hence such labels as 'indigenous' knowledge. In recognition, therefore, of the creative and genuine originality latent in every culture, this article seeks to empower cultures to realise, work on and appropriate the riches embedded in their own local knowledge tracts and trajectories. This appropriation by cultures, of their own rich genius, is, for the authors, the gateway

* Theophilus Okere is currently the president of the Whelan Research Academy for Religion, Culture and Society in Owerri, Imo State, Nigeria.

**Chukwudi Anthony Njoku, is a catholic priest of Owerri archdiocese, Whelan Research Academy for Religion, Culture and Society, International Centre, 162A Whetheral Road, Owerri, Nigeria. Email: Akuabata30@Yahoo.co.uk.

***René Devisch is Special Emeritus Professor of Anthropology at the Catholic University of Louvain, Leuven, Belgium.
Email: Rene.Devisch@ant.kuleuven.be.

to re-acquiring cultural dignity and self-confidence and indeed an opportunity for each cultural node to positively contribute to the commonwealth of world knowledge. Such variegated approach to mining the wisdom and ecological advantages of various cultural groups will enhance the sharing of knowledge in a spirit of both vertical and horizontal border-linking exchanges of riches found in different cultural contexts and knowledge fields. The ancient wisdom of the Igbo of south eastern Nigeria is used in the article as an illustration of this latent, culture specific genius. The article also highlights the mission of Whelan Research Academy for Religion, Culture and Society, Owerri, Nigeria, in creating awareness, space and forum for paying closer attention to indigenous knowledge tracts endangered in this derailment of a wider spectrum of cultural nodes of knowledge.

Résumé

Cet article s'élève contre la conception monolithique de la production de connaissances et contre cette tendance à universaliser la science. Il attire l'attention sur le génie et la créativité, et l'originalité distinctive qui caractérisent la production de connaissances dans tout contexte culturel. Cet article tient compte du fait qu'à la base la production de connaissances est avant tout liée au contexte culturel, d'où le caractère local, avant tout, de la connaissance. À partir de cette détermination fondamentale de la réelle source de production de connaissances, ce texte développe un argumentaire contre ce voile mythique que la modernité réformiste, particulièrement, a posé sur le processus de production et de transmission de la connaissance. Ce texte affirme que ce mythe trompeur de la production de connaissances a eu certains effets négatifs : il a contribué à stéréotyper, à placer en situation de chantage et d'infériorité, et a également déstabilisé la production et le partage de la connaissance et de ses produits par des cultures autres qu'occidentales. L'épisode colonial, avec son lot d'hypothèses et de suppositions, a contribué à instiller cette vision de la modernité réformiste, et à museler les voix des cultures colonisées, d'où certaines dénominations, telles que la connaissance 'indigène', etc. Au vu de l'originalité créative et authentique en latence dans chaque culture, cet article cherche à aider les cultures à réaliser, exploiter et s'approprier les richesses existant dans leurs propres voies et trajectoires de connaissance locales. Cette appropriation par les cultures elles-mêmes, de leur propre génie, est, selon l'auteur, la meilleure façon de rétablir la dignité culturelle et la confiance en soi ; ainsi, chaque univers culturel peut positivement contribuer à enrichir le patrimoine de connaissances universelles. Une telle approche cosmopolite tendant à exploiter la sagesse et les avantages écologiques de divers groupes culturels permettra de mieux partager la connaissance, dans un esprit d'échanges transfrontalier des richesses puisées dans différents contextes culturels et différents champs de connaissances, aussi bien dans un sens vertical qu'horizontal. Le savoir ancestral des Igbos, dans le sud-est du Nigeria, est cité dans cet article, pour mieux illustrer ce génie latent, spécifique à la culture de chacun. Cet article met également en exergue la mission de la

Whelan Research Academy for Religion, Culture and Society, à Owerri, au Nigeria, consistant à sensibiliser, à créer un espace et un forum permettant d'attirer l'attention sur les voies de la connaissance indigène, qui sont menacées par cette déferlante de composantes culturelles de la connaissance.

Political, epistemological and socio-cultural dimensions

All knowledge is first of all local knowledge. This simple statement regarding the humble roots of knowledge production and sharing is for us critical in addressing the vital issues of rehabilitating in today's increasingly interactive and polycentric world the corpus of what has variously been labelled as *ethnoscience and indigenous, endogenous or local* knowledge. On their side, the glitter and efficiency of the cosmopolitan science and technology mediated and propagated by the West (or the North) in the last few centuries as the one-and-only valid about the one-and-only universe, may sometimes unduly veil the local roots, cultural origins, history, and limited epistemological assumptions of that very science production. By 'local roots of knowledge' we refer to any given culture's unique genius, and distinctive creativity which put a most characteristic stamp on what its members in their singular context and history meaningfully develop as knowledge, epistemology, metaphysics, worldview. This particularity in the nodes and mode of knowledge is often a result of that mutual push and pull between the people and the potential in their history and life-world, their task-related networks and living communities. 'Local' therefore refers, not so much to a geographic location, but to any given people's singular set of organising principles (be they linguistic, socio-cultural, economic, ecological, technocratic, historical, religious) which run through them like a weave that is constantly being adapted, linking them up in a unique way with their forebears, fellow-people and life-world in an interaction with neighbouring socio-cultures and more encompassing, visible and invisible, environments. The local is therefore not referring to some exotic traits, but to a given people's particular, self-organising, transgenerational cultural weave. The particular local indeed indicates the active creative originality of vital contexts and networks, the originary well-springs of that given people's endogenous ability to shape and manage their world, generation after generation, in lines with their own genius. An Igbo proverb, *Mba na-asu n'olu n'olu, ma akwaa ukwara, oburu ofu (Different peoples speak different languages, but the sound of their coughing is the same)* captures this local heart of creativity and self-organisation. The local is not a passive substratum, but indeed an endogenous force or active set of principles and forces both moulded by and inspiring a given people's unique trajectories and aspirations to knowledge, sovereignty and dignity, as well as their unique mode of inhabiting their life-world.

In this essay, we shall illustrate our argument mainly by referring to the rich knowledge sources and practices of the Igbo of Southeast Nigeria. The following Igbo proverb indeed aptly captures the local source of experiential and practical knowledge: *Nku di na mba na-eghere mba nri, The firewood in a particular context is good enough for the cooking in that environment.* The proverb acknowledges the endowment of each ecosystem and life-world as well as its members' giftedness for finding genuine ways of meaningfully putting to full use the resources at hand. Another proverb, *Uche bu akpa, onye obula nya nke ya, Knowledge (experiential and thoughtful) is like a handbag, everyone carries his or her own)*, acknowledges the quotidian and indeed singular nature of such skilful knowledge. The proverb moreover suggests how much knowledge is never someone's monopoly, but shared in a respect of fellow-people's insights. We could say that the heart of this proverb is a step ahead of Aristotle's dictum that *All men by nature desire to know.* While Aristotle gives primacy to *the quest* for knowledge, Igbo elders and experts basically assume possession of knowledge as their starting point and aim at sharing and applying one another's modes of knowledge and ways of understanding and doing as their starting point. Such knowledge acquisition or transmission never occurs from scratch. Or as the Brazilian educationist Paulo Freire would say, learning is not happening to an empty vessel or a *tabula rasa.* Indeed, knowledge proficiency happens, in the Igbo view, via the giving and receiving or the conversation-like intertwining of the forces and insights at hand, namely as a transactional meeting of minds, skills and experiences. When stated in a council dealing with conflicts or other critical issues in the community, the same proverb moreover stresses the need not only to share insights but also to open up to ever new, possibly external, inputs.

A number of Igbo rhetorical questions forcefully stress how much knowledge should never stop developing along unforeseeable tracks proper to any meeting and sharing: *E si be gi eje be onye? O gi na achara m moto? I na enye m nri? (Does the pathway to other people's house begin from your own house? Are you the one who helps me avoid the on-coming traffic? Do you feed me?).* In other words, *Do you have any monopoly of knowledge? Do you control my affairs for me? Are you the one guiding my every step? Do I really depend on you for my survival and sustenance*? These questions call for humility and the realisation that knowing, comprehension, grasp and mastery are really, at heart, local in their (epistemological and phenomenological, hence metaphysical) origins. Knowledge has a many-sided face that ought to be gathered in for a richer integral development of its thrust. Re-stating that all knowledge is basically local knowledge undermines

the Reformist Modernity's pretence at monolithic knowledge trajectories for mankind. This pretence moreover tended to universalise science, which was in origin a local, historically determined, contingent ethnoscience. It tended to suffocate the voice, vision, and unique perspectives and contributions of the great variety of other and genuine knowledge systems and epistemologies from the many cultures of the world. Because of its particular civilisational roots, cosmopolitan science and its modern institutionalisation are more of a global than universal nature. Yet a pluralistic, non-patronising poly-logue between the great variety of local knowledge practices is still in need of criteria for horizontal border-linking without encroachment upon one another, that is a non-colonising cross-fertilising and thus reciprocally re-empowering of adjacent culture-specific knowledge fields at their very border-zones.

But African societies have since colonisation and till today been marked by 'othering' from the North. Its great civilisational traditions (in particular, political, medical, biological, commercial, and religious ones -cf. Janzen 1989, p'Bitek 1971) have been inferiorised and subdued in particular during the 19th and 20th centuries' colonial and missionary enterprise. That jaundiced *civilising mission* assumed that all 'traditional' knowledge in Africa, where their very presence were acknowledged at all, were obsolete. In the colonial era, western *Enlightened* knowledge and expertise were a priori proclaimed superior probably because of its roots in Classical Greek Antiquity and western monotheistic metaphysics, as well as its literacy and technocracy. Ostensibly propagated for 'the good of the colonised peoples', this western civilisational *version* of knowledge was being imposed on several levels, in particular through the colonial and Christian missionary schools. Religious conversion and education joined forces to help African communities to *catch up* with the West. Of course, the colonial school education did not remain without positive effects. It indeed initiated young Africans into a groping dialogue with the West, its literature and technological development, by making the western texts, histories, world views and technical skills accessible to them primarily by the breaking down of the linguistic barrier. This entooling was, however, carried out in a lopsided manner as it imposed its own definitions and hegemonic dichotomy of subject (the one who knows) versus object (the known, the measurable), 'developed or modern' versus 'not-yet-developed or traditional' (van Rinsum 2002), meanwhile obnubilating the basic realities and originary local African knowledge vectors (Hountondji 1995, p'Bitek 1971). In this othering, rather than genuinely being an enriching centre for the dialogue of civilisations, the colonial school turned out to be a rigid institutional setting for entrenching monologue if not an *Invention of Africa* (Mudimbe 1988), whilst excluding the voice of subordinated civilisations.

Through these schools, entire generations of young Africans were re-directed away from their originary cultural knowledge roots and sources. They were made to despise and abandon their so-called native linguistic tools for learning purposes. In most colonial schools, the use of vernacular language was punished. The young Africans were relentlessly exposed to western-style education and inserted into the language and discourses of the colonial master, whether this language was Afrikaans, English, Flemish, French, German, Italian or Portuguese. Nothing more fundamentally completed the rupturing of the generational link in the knowledge production and transmission. The voice of the elders and experts in Africa was literally cut off and silenced by that very strategic linguistic and literary re-routing. The young generation of Africans was severed from ongoing critical dialogue with their elders, Africa's 'informal intellectuals'. The tragic nature of this rupture was moreover rubbed in by the oracy in the older generations.

The alien language, content and style of colonial and missionary education intimately affected the students' learning ability and enthusiasm, and indeed contributed in narrowing their interests in various subjects on account of the difficulties posed by the linguistic and cultural barrier. The students' attention to mathematics and the exact sciences in particular declined. More than the social sciences, the exact sciences required extra-sophistication in the imaginative and representational capacities of students. The school idiom of mathematics, physics, chemistry and biology is indeed replete with cultural assumptions and models stemming from an overall scopic culture of dualistic space-time di-vision and arborescent (taxonomic) categorisation. In the western paradigmatic model of knowledge 'the universe is considered to be a text that can be decoded (...) Seen as regularly patterned and therefore knowable [by means of rational investigation], but at the same time contingent' (van Rinsum 2002:30). The curricula and the texts used in the colonial and mission schools were densely foreign in particular in their latent worldview and the lavish use of illustrations and applications from the West, that obviously were far-removed from the lived reality and sensibilities of the students, their cultural parameters and values, their ecology and life-world. All this contributed immensely in making the school education culturally alienating, enhancing the severance of the students from their cultural roots, values and mores. The books and education style offered virtually no positive, theoretical or even practical, relations to the life-context and existing familiar knowledge nodes to which that school knowledge could have been socketed, contrasted with, dialogued with, or separated from. At school, the local was never called upon as triggers of thought and reflection. This grand re-direction of the students mental energy and imaginative powers was re-enforced each

step of the educational *ladder* as the students graduated from primary to secondary and then to tertiary or university education. The more these young Africans advanced into 'the very core' of this educational – though alienating – journey *upwards*, the more they were led to subordinate their originary culture to their new and admittedly more *evolved* knowledge and worldview. The uprooting thrust of this education moreover fostered in the minds of the impressionable students the mistaken view that no valuable education had been taking place at home *prior* to the coming of European missionaries, colonial education officers and administrators to Africa. Christianity was proselytising the heathen, and the school figured as the privileged site to enter the true and universal knowledge 'for the sake of domesticating nature and making it eligible' (van Rinsum 2002:31).The deliberately imposed clear break between this imported version of education and the indigenous one *prior* to the arrival of the *white* man to the shores of *black* Africa, made it seem as if there were no teachers in these indigenous contexts, no education worth the name in Africa.

Numerous scholars have noted this derailment of indigenous knowledge in Africa, and the mimicry of the West which it fostered: think of Ajayi *et al.* (1996), Appiah (1992), Ashby (1964), Ashcroft et al. (1989), Assaba (2000), Bates et al. (1993), Bernal (1991), Bhengu (1996), Crossman (1999), Ela (1994), Eze (1997), Guyer (1996), Gyekye (1997), Hountondji (1994), Ki-Zerbo (1990), Masolo (1994), Mazrui (1978, 1992), Mudimbe (1988), Ndaw (1997), Ngugi wa Thiong'o (1986), Ramose (1999), Van Rinsum (2002), Wiredu (1996), Yesefu (1973). It was a realisation of this dissonance in colonial and missionary education in Africa which fired and powered the *Négritude movement* and featured prominently in the writings of its most outspoken champions as well as dominated the discourse of its principal voice, namely *Présence Africaine*. The passion to correct this misleading trend in exogenous education of Africans prompted and sustained the work of major African novelists, poets, musical artists and statesmen, such as Chinua Achebe, Anthony Kwame Appiah, Aimé Césaire, Frantz Fanon, Fela Anikulapo Kuti, Ezekiel Mphalele, Julius Nyerere, Okot p'Bitek, Wole Soyinka, Ngugi wa Thiong'o, Léopold Sédar Senghor. Some of the visionary African nationalists who spent their energies engaging in the struggle for Africa's independence, such as Ghana's Kwame Nkrumah, took up their pen to name this dissonance and as much as was within their powers strove to correct it. Eminent African historians, philosophers and theologians, such as Cheikh Anta Diop, F. Eboussi-Boulaga, Jean-Marc Ela, Kenneth Dike, Meinrad Hebga, Paulin Hountondji, Alexis Kagame, Joseph Ki-Zerbo, Issiaka Prosper Lalèyê, Ali Mazrui, Achille Mbembe, John Mbiti, Vincent Mudimbe, Vincent Mulago, Theophilus Okere, Tshiamalenga Ntumba, Kwasi Wiredu,

and numerous others have in their various ways put a finger on this derailment of African knowledge and called for a re-alignment or re-coupling of Africa's dislocated and obnubilated knowledge resources and practices.

In spite of the realisation that 'Things Have Fallen Apart', to paraphrase the telling title of Chinua Achebe's first novel (of 1958), the local knowledge systems in postcolonial Africa still continue to be marginalised. Both the African governments as well as the hegemonic arena of cosmopolitan science and universities, alike the international donors, go on aligning 'modern' knowledge with management, power, technical efficiency, whilst giving any local knowledge the inferior status it got from the European colonial and missionary teachers and administrators. Today, Africa severely suffers from an overall crisis of self-critical intellectual leadership. The dazzling crisis of many post-colonial African nation-states is essentially due, side to side to the structure of their historical determination, to their basic mimetic artificiality and alienness, the basic absence of informed and bottom-up consent in the amalgamated units, and the lack of socio-cultural embeddedness of the Constitution, civil code and bureaucratic machinery in any form of deep-rooted endogenous socio-culture and ethics. At independence, African governments were facing the unenviable task of uniting into a nation-state many previously self-ruling peoples, abruptly amalgamated and reigned as they were into jumbo territories by colonial rule. The task then at hand of blending their languages, cultures, and indeed varying political traditions and agendas, seems to have hit the rocks. The attempt to keep some political unity out of formerly loosely related societies, whose division was sharpened by their recent conversion to imperial world-religions and their world-strategic riches, has led the new governments to inimical compromises, moreover directly incapacitating the qualitative transformation of the inherited educational enterprise. Often the choice was made of the former colonial language as *lingua franca*, seen as a way of maintaining unity of the colonially amalgamated linguistic and cultural groups. Since independence, the question of determining the language, content and form of school education in most newly independent African states has moreover hinged on extraneous circumstances. Some governments do masquerade interest in the educational programmes and infrastructure designed by international donors so as to mark their 'political correctness', whilst overriding for example any consideration of the fundamental role of the mother-tongue instrument and the local cultural forms of decision-making and management in the educational process.

At independence, most African countries merely adopted the borders of the states as created in the late 19th century scramble for Africa and sustained by colonial rule. At independence, there was virtually no room to critically

re-appraise these national borders on account of the history of how they had been drawn in the first place, for what reasons they were constituted the way they were. Cracks in the very foundations of a number of such loosely amalgamated nation-states in Africa started showing from the first years of political independence and have had to be held together by force or dictatorship. A critical re-visiting of the basic foundations of the state borders and of the bureaucratic rationale in Africa ought to dig deep into the pre-colonial era. Post-colonial independence assumed that borders created by the colonial regimes. This was perhaps in the hope that unity of the various cultural and political units amalgamated by the colonial powers into one country would be realised. Unfortunately post colonial independence realities seem to argue that the embedded frictions and differences in the constituting groups seems to be in the way of progressive development of the various African countries. Different agendas seem to be corrupting the central administration of the various African countries and endangering political accountability. Perhaps it has become necessary that this earlier independence ought to give way to the more authentic and liberating independence and self-determination of the constituting groups, which would enhance responsibility and commitment in the progress of the units that would eventually emerge by consent of the various groups. Integral rethinking of the state borders and the election of the nation's governors in Africa is called for if Africa is to actively participate in the march of progress in the increasing globalised environment. At the moment, in most African states there is an urgent need to re-visit and re-energise the institutions dedicated to nurturing and building up the moral and human capital base, without which no nation-state can really develop for the benefit of the citizens. Most military dictators aimed at eroding the prestige and even self-esteem of African intellectuals, for example, by co-opting them as counsellors for programmes that have ended by undermining the school education and sidelining the University itself. In some cases there have been direct violent attacks on prominent critical members of the educational and scientific community, forcing a number of them into exile. The resulting South-to-North brain drain is as much a function of the economic pull as well as the response to *real* threats to the lives and survival of 'the fleeing brains'. This interference of some African governments in the educational sector has moreover adversely affected the image of the teaching profession, bringing it down drastically from its elevated mode from the 1950s throughout the 1980s, to something of scorn today, thus scaring away from a very important profession the best minds who now branch out into seemingly more respectable, stable and lucrative professions.

With a mere handful of exceptions, there has been the wholesale failure of the educational institutions and legacies left behind by the colonial agents and missionaries. Its agenda and ethos have been carried on almost by incredibly faithful proxy by local successors who mostly have bought into the basic assumptions and institutionalisation of the western-style education vis-à-vis the indigenous knowledge systems. Regrettably these heirs of the western mentors have retained the scorn with which African knowledge systems have been treated in the past.

A reversionary path of self-empowering border-linking: The appeal of *Aku ruo ulo, 'Making acquired wealth/knowledge have impact on the home front'*

The African colonial and missionary educational story is not in the final analysis a failure. Education indeed seeks to basically develop a scrutinising tool and a conceptualising equipment, namely a means for sharpening the intellect and providing avenues of agency for the dispossessed. Education aims at attuning the trainees to both critical enquiry, enthusiasm and commitment as a compass for developing other compasses, for creating other maps, for discovering new routes and educational plans and for understanding the world. In its very core, irrespective of the initial ideological thrusts and windows, education may develop horizons and trajectories of hope, re-invention, discovery, restoration and healing of oneself and one's root culture. There is indeed a subversive heart in the educational transaction, namely in the questioning and answering, the seeking and finding, the wooing and cooing, the varied exercising of the reflective faculty of the mind, which finally contains the seeds of freedom for the student or apprentice. Seeds and sharing of knowledge which have the capacity to make the apprentice to eventually become a master in charge of the art, theory and practice, able to practically and in a rhizome-like manner adopt and adapt new technologies in contemporary social, economic and political life, outside any imperialising grand narrative (Garuba 2003, Odhiambo 2002).

For example, a number of Igbo scholars, admittedly fewer than one would have hoped for, have been able to intermarry their western education and their mastery of genuine Igbo knowledge. In the field of history, for example, already in the 1950s, Professor Kenneth Onwuka Dike had the vision to realign African historiography: his seminal *Trade and Politics in the Niger Delta* played a key role decolonising of African historiography. Professor Dike himself was one of the founders of what is now known as 'Ibadan school of History'. The great achievements by Chinua Achebe point to the subversive hermeneutical promise of even colonial and missionary education. In Igboland, the growing harvest of the Ahiajoku Lecture Series witnesses to

the capacities of a few local scholars formed in the moulds of the western institutions to fruitfully turn their skills, aspirations, critical gaze and knowledge capacities into uncovering from within, and enfleshing, Igbo local reality. Such a re-orientation, resolutely beyond nativistic discourse and Afro-radical claims of selfhood (Mbembe 2002a, b), has the promise of enhancing the qualitative transformation of the students capacities and enabling them to achieve context-relevant insight in their chosen disciplines. The aim is to swing the pendulum towards an optimal realisation of the latent capacities and creative genius of the vast majority of students in touch with their intersubjective networks and culture of origin, whose resonance for history and belonging breaches the local/global divides. The critical consideration in our opinion is the reversionary path ensuring a robust line of communication, interaction and forward-looking contribution to the home front, even from the diaspora or the so-called brain-drain from Africa: tying one's knowledge up with the originary – the very core of the 'local' – is opening it up to life-sources ahead. All too numerous diasporic Igbo and other African intellectuals are presently anchored in various corners of Europe and America sustained in their arts, laboratory or other academic work, alike in their personal stamina, by the stable environment, enabling infrastructures, and availability of kindred spirits and sharpened interlocutors in their adopted institutions, communities and homes.

Some 'returnees' have come home from the diaspora with 'riches' (*aku*), above all knowledge that they have acquired in other knowledge traditions. These riches include new skills, methodologies, tools and perspectives, alike new eyes, ears, sensibilities and tastes, artistic or otherwise. Some are coming back with a sharper appreciation of the knowledge practices in their parents home. Able to take a perspicacious and critical view on both their originary culture and the foreign one in their diaspora, they are therefore, in many ways, a *border-linking* people, well placed to effect and bring home a cross-pollination of ideas, skills, techniques, methods, in the very spirit of *aku ruo ulo (making the wealth and knowledge they have acquired have an impact on their homes*. The classical injunctions or admonitions of the Igbo elders to their sons and daughters offer such border-linking reversionary path, as is expressed in the following proverbs: *Nwata ukwu njenje ka okenye isi awo ihe ama (The child who travels a lot often is wiser than the grey hair old man sitting in the village); Adighi ano ofu ebe ekili mmanwu (Deeper appreciation of the beauty of the masquerade can only be achieved by seeing the masquerade from several vantage positions)*; and *Njepu amaka (Travelling is enlightening)*. Yet, for Igbo elders, one's journey is only completed when one is back home: *E je alo, bu isi ije (Going and coming back; Going in*

order to come back), is the very *raison d'être* and fulfilment of the journey. It is a coming home to tell the story of the journey, share the insights gathered from far distant lands, and make the impact of the new knowledge or wealth acquired. It hints at an important feedback loop into the endogenous educational process. This de-briefing of the journey has the capacity to change a community's knowledge status quo. Indeed Igbo knowledge culture genuinely fosters such qualitative transformation through its eagerness to integrate new insights and perspectives, technologies and practices which have proved their richness, superiority, and greater functionality. The proverbs *Ahu ihe ka ubi eree oba (If what is more important than farming appears on the horizon then the barn needs to be sold)*, and *Egwu dagharia, atugharia ukwu egwu (If the melody changes, then the dance steps must also change)* underline the need to change with the changing circumstances, values, techniques and approaches. Indeed, Igbo culture is a knowledge culture with open ears.

Speaking metaphorically, the western-style education and its products need to show up for de-briefing to the local cultures in Africa (Odora-Hoppers 2002). The project of domesticating, bringing home western-style knowledge in Africa concerns earthing this knowledge in the African soil and tuning in with African spirituality, thereby healing the alienating and destructive division between mind and body, literates and non-literates, town and gown. It entails the cross-fertilisation *in situ* between the academic and the local context-bound knowledge practices and living arts (Gerdes 1999, Odhiambo 2002). The classroom should interconnect concretely and creatively with the life, memory and ethics in the homes and homesteads. This de-briefing of the journey so far and its critical dialogue with the local cultural modes of knowledge production and modes of being in the world is the task awaiting any programme of fostering an endogenous knowledge economy complying with sovereignty and dignity. It is not our intention to further detail, as has been done (Crossman & Devisch 2002, Devisch 2001), instances of re-appropriation in the complex terrain of shifting African identities and subjectivities. Yet such effort to redress the imbalance ought to avoid the danger of insulating Africa's educational pedagogy and infrastructure, a self-bottling or impoverishing inbreeding and clannishness. An education that aligns with the endogenous knowledge might break out of the place exogenously assigned to Africa within the (post)colonial structure of determinations and alienations. Education in Africa must foster gifted members of African communities or networks to also play an active part in this emerging globalised and intricately networked world. Another Igbo proverb, *E ji eshi ulo mara mma fuo ama (Becoming beautiful in the public eye starts at home)*, horns in on the need to have a strong home base. From

the mother-tongue and intersubjective base, the process of border-linking education that connects those concerned intimately to other knowledge cultures, begins and returns in a dialectical way, in the spirit of *aku ruo ulo*.

In contrast, the colonial and missionary education developed an intrusive if not uprooting *border-crossing*, leaping over not just the contextual realities and knowledge nodes of the particular students, hence in most education programmes it overlooked the plurality of the mother-tongues and life-worlds of those concerned. Such border-crossing education created the bizarre situation where Igbo students, for example, knew European history, geography and cultural realities better than they ever came to know about their Efik, Idoma or Yoruba neighbours. This leap was partly responsible for the students' and the new elites' extroversion of interests and tastes, to which we have earlier alluded. The colonial border-crossing overlooked its heavy orientation towards relating on the vertical South-North civilisational hierarchy, while hardly paying any serious positive attention to a border-linking of creative and empowering energies on the horizontal (i.e. South-South) axis. The wisdom of *E ji eshi n'ulo mara mma fuo ama (Becoming beautiful in the public eye starts at home)* was being side-stepped in the school education, with disastrous consequences on the educational, economic and political fronts. Witness for example, the alienating borrowing of political models from alien contexts, the mimetic cultivation and mimicking of western tastes or fashion with its heavy consequences for the very survival of local crafts and markets. Or conversely witness the perverse preying, by the new elites in state functions or in control of economic power, of local people's so-called animist unconscious 'for spurious cultural instruments to bolster their authority and legitimacy' (Garuba 2003:255).

An innovative border-linking education could expand its focus in concentric circles or outflowing ripples engaging in a knowledge of realities, cultures, values, histories and languages of one's neighbouring cultures. Indeed self-understanding and cultural re-rooting include a thoroughgoing understanding of one's neighbours and the other groups with which one has very frequent interaction and significant knowledge exchange. In their respective border-zones, such as interregional markets and seasonal festivals, neighbouring peoples make effort to understand one another but none of them has the ambition to supersede the other linguistically or culturally. In such zones of poly-logue and border-linking, there is a 'live and let live' in the tolerant co-existence of languages, spiritualities, skills and techniques.

While more disciplines may have important roles to play in the enterprise of re-appropriating and revalorising local knowledge practices on the formal state institutional scenes, anthropology and philosophy may help those in

charge for deepening self-understanding of, and border-linking between, local life-worlds and more global scenes. However, acutely aware how much western philosophers and anthropologists may formerly have misrepresented local people, realities and histories, particularly during the colonial period, the disciplines of philosophy and anthropology can in contemporary times henceforth contribute to unravel the knowledge riches of local worlds and foster intercultural exchange and empowerment of selves in their border-zones with interrelated worlds. This can be achieved especially through decolonising their scope and mental toolkit. Africans must become anthropologists to themselves by unveiling *their* cultural patrimony, memory and diversity of experiences, and giving fuller account to themselves and their interacting neighbours of who they really are, what they really have to offer themselves and the world. There is need to put African cultural riches into texts or better perhaps in multimedia documents that moreover report on, analyse and theorise from within their weave both the local cultures' genius and limitations. To the extent that anthropology as an internal hermeneutics of local cultures abandons its Eurocentric, patriarchal and logocentric biases, it may have an emancipatory effect on the examined culture's prominent and outgoing actors. Anthropology done in a receptive border-linking may foster local knowledge in the matrix of councils, rituals and local scripts being shared among *co-responsible* members. In the empathetic encounter which anthropology aims at, attention moreover should go to exploring and deepening cultural relationality with its emphasis on solidarity. Attention can also be given to the bodily and sensory ways of perceiving and experiencing enchanted being-in-the-world, performatively and contextually elaborated. An intimacy of affinity and co-affectivity then develops on the level of the border-zones between the student and the bearers of the culture. In the participant observation and the co-subjectivity-as-encounter at shared border-spaces (Lichtenberg Ettinger 2004), the co-subjects are incorporating and appropriating a trans-subjective *connaissance* (lit. co-birth) that precedes them, or is co-emerging in the moment of jointness. Such anthropological encounter weaves a texture of vibrating, intersubjective and intercultural, threads.

The project of bringing local knowledge practices into the formal educational endeavours in Africa will follow a number of critical lines if it is to be viable in the long run. We have already indicated the critical importance of promoting the mother tongues of Africa as a major language of education not only in the primary schools but all the way till the university level. We do acknowledge that such a plea is somehow a visionary one and replete with dilemmas, as Ngugi Wa Thiong'o (1996) has warned us. Indeed implementing

these criteria practically poses challenges on various fronts, from mobilising political support to generating texts to support this linguistic turn. These will in turn underline the necessity to have schools of translation in context as an important branch of the educational infrastructure in Africa.

In view of the long history of neglect of local knowledge practices two interrelated and complementary lines of action are critical. The first aims at opening up local knowledge practices in the sphere of the formal institutions (state, economy, education) by creating new courses and discussion forums that elicit the neglected fields of local knowledge. It is a process of unfolding new knowledge routes, new trajectories of thought, digging and dredging new canals as outlets and inlets of ideas, knowledge models and means. It moreover entails a process of inaugurating naming, *ikpo aha*, as Igbo would put it, is literally, *calling into being, giving recognition, summoning forth,* thereby carefully outlining artful, practical and aetiological knowledge that the co-subjects themselves deem important. Naming new areas of knowledge allows for *ihughari ji n'oku (Turning over the yam so that the other side too can be roasted in the fire)*, turning over other dimensions of reality for auspicious and critical encounter. It is a process of re-directing the attentive eye, the receptive ear, around certain themes and subjects, so that they can be 'seen *again*' with fresh eyes, 'heard *again*' with new ears, and so that they thereby can reveal a *little bit more* of themselves than had been the case.

The second line of action will basically concern itself with healing the breach between local knowledge practices and other civilisational systems of knowledge, such as West- or East-African, Bantu, Islamo-Arabic, Berber knowledge systems, and beyond. This second line of action would concern itself with building bridges to start overcoming seeming faultlines in the cultural productivity and knowledge trajectories of African knowledge systems and practical arts (such as, of agriculture, architecture, medicine and marketing). It is about border-linking the local knowledge and practical arts with the ones developing in other continents, as has been the case since centuries of the pre-colonial political institutions throughout Africa and southern Asia (van Binsbergen 2003:235-316). This process prioritises the role of history in unravelling connections.

The role of Whelan Research Academy

The Whelan Research Academy (WRAC) was founded in 1999, at Owerri, Nigeria. The Whelan Research Academy's general objective is to foster advanced research in the entire field of the humanities and social and behavioural sciences, as well as stimulate scholarly interaction in an interdisciplinary and international setting. The uniqueness of the Academy above all lies in its particular aim which is to enhance a cross-pollination between the afore-

mentioned cosmopolitan sciences and the local African knowledge practices and living arts. For this, the Academy endeavours to bring out the best of intellectual and artful creativity of the scholars, as well as the 'informal intellectuals' and artists of local societies, meeting at the Academy to lift their research and (inter-)cultural border-linking at a higher level.

Two conditions are vital for inter-disciplinary and inter-cultural advanced research of a border-linking type. First, it is the Academy's role to offer a stimulating forum for the establishment of an intellectual community of scholars, informal intellectuals (such as, elders or experts in local knowledge practices) and artists (think of experts in the living arts, such as festivals, rituals, local community councils, as well as the expressive arts). Indeed, WRAC offers a forum for the regular meeting of this intellectual community from within the region and beyond, irrespective of religious affiliations, to engage in stimulating exchange of knowledge, ideas and skills. Secondly, the academic freedom promoted by the WRAC lies at the core of explorative border-linking in as yet unknown territory and its broadening effect on intellectual and artistic minds.

The Academy's mission is also to contribute to recover Africa's rich but presently dispersed intellectual capital in the Diaspora, by enabling some of this vast network of scholarly and technical expertise to have a healthy impact on the African continent.

The Academy offers opportunities for meeting and reflecting on research questions with a view to helping to create context relevant research agenda. It aims above all at improving the quality of African related research, fundamental reflection and creativity and to widen the intellectual and cultural horizons of its intellectual community and their respective societies. This orientation hopes to have a lasting impact for re-rooting the local cultures' well-springs, not only in the short, but also particularly in the long run.
The objectives of WRAC to create an interdisciplinary, international community of highly talented African and Africana-related scholars, intellectuals and artists, on a mission to conduct advanced border-linking research, are reached as follows:

1. Through the invitation at regular WRAC lectures, local workshops and international symposia of scholars, intellectuals, artists of high repute whose performance has been evaluated on originality, research ability, ability to exchange ideas, and productive promise.

2. Through a physical setting, in Owerri, which provides an infrastructure for these activities (including moreover archival documentation with particular attention to preserving oral heritage, art exhibitions and festivals),

a library, and possibly electronic access to libraries, universities and research centres.

3. Through editorial service for publications, such as the Academy's Annual Conference Proceedings, a Quarterly Bulletin of WRAC, and book publications of the findings of the Academy.

4. Through research incentives fostering focussed attention to specific, promising areas of local knowledge and the living arts.

5. Through collaboration with other, regional and international, research institutions and agencies in creating and realising applied scientific and artistic projects.

The Whelan Research Academy is not defending science for the sake of science, nor the living arts for the sake of art alone. Nor is it defending science or artful creativity only in utilitarian terms. Yet the Academy offers an interdisciplinary environment that is competitive, performance oriented and international. Here, scholars, intellectuals and artists from diverse disciplines and interests are in a position to meet for concentrated exchange, to become acquainted with new subjects and different approaches and so inspire each other to take a fresh look at their own research, and responsibility in sociocultural matters. This type of free, interdisciplinary and international community is rare and much needed to inspire one another and explore new paths down the garden of scholarly ideas.

The Whelan Research Academy for Religion, Culture and Society is also an opportunity structure to expand horizons of all sorts of religious, cultural, social and community health, political, economic, agricultural, architectural and communicational factors. The Academy's task is like that of a gardener or farmer, who waters and nourishes the soil, so that the plants in the garden or on the farm will grow and flourish.

References

Achebe, Chinua, 1958, *Things Fall Apart*, London: Heinemann.

Ajayi J., L. Goma and G. Johnson, 1996, *The African Experience with Higher Education*, London: James and Currey.

Appiah K.A., 1992, *In My Father's House: Africa in the Philosophy of Culture*, New York: Oxford University Press.

Ashby E., 1964, *African Universities and Western Tradition*, New York: Alfred Knopf.

Ashcroft B., G. Griffiths & H. H. Tiffin, eds, 1989, *The Empire Writes Back*, London: Routledge.

Bates R., V. Mudimbe & J. O'Barr, (eds), 1993, A*frica and the Disciplines: The Contributions of Research in Africa to the Social Sciences and Humanities*, Chicago: University of Chicago Press.

Bernal M., 1990, *Black Athena: The Afroasiatic Roots of Classical Civilization* II, London: Free Association Books.

Bhengu M., 1996, *Ubuntu: The Essence of Democracy*, Cape Town: Novalis.

Crossman, P., 1999, *Endogenisation and African Universities: Initiatives and Issues in the Quest for Plurality in the Human Sciences*, (Policy study on development co-operation), Brussels: Belgian Administration for Development Co-operation.

Crossman, P., & R. Devisch, 2002, 'Endogenous Knowledge: An Anthropological Perspective', in: C. Odora-Hoppers, O.c.: 96-125.

Devisch, R., 2001, *Cultures, Sciences and Endogenous Knowledge Practices: Some Anthropological Perspectives, in: Science and Tradition: Roots and Wings for Development*, Brussels: Royal Academy for Overseas Sciences & UNESCO: 29-53.

Diop C.A., 1954, *Nations nègres et culture*, Paris: Présence africaine.

Ela, J.M., 1994, *Rèstituer l'histoire aux sociétés africaines: promouvoir les sciences sociales en Afrique noire*, Paris: Harmattan.

Eze, E.C., ed., 1997, *Postcolonial African Philosophy: A Critical Reader*, Oxford: Blackwell.

Garuba, H., 2003, 'Explorations in Animist Materialism: Notes on Reading/Writing African literature, culture and society', Public culture 15(2):261-286.

Gerdes P., 1999, *Geometry from Africa: Mathematical and Educational Explorations*, Washington: The Mathematical Association of America.

Guyer, J., 1996, 'Traditions of Invention in Equatorial Africa', *African Studies Review* 39:1-28.

Gyekye, K., 1997, *Tradition and Modernity: Philosophical Reflections on the African Experience*, Oxford: Oxford University Press.

Hountondji, P., ed., 1994, *Les Savoirs endogènes: pistes pour une recherche*, Paris: Karthala.

Hountondji, P., 1995, 'Producing knowledge in Africa today' (M.K.O. Abiola distinguished lecture), *African Studies Review* 38(3):1-10.

Janzen, John, 1989, 'Health, Religion and Medicine in Central and Southern African Traditions', in: L. Sulliban, ed., *Healing and Restoring: Health and Medicine in the World's Religious Traditions*, New York: MacMillan.

Ki-Zerbo, J., ed., 1990, *Educate or Perish: Africa's Impasse and Prospects*, Dakar: UNESCO-UNICEF.

Lichtenberg-Ettinger, 2004, 'Weaving a Woman Artist with-in the Matrixial Encounter-event, Theory', *Culture & Society* 21:61-94.

Masolo, D., 1994, *African Philosophy in Search of Identity*, Bloomington: Indiana University Press.

Mazrui A., 1992, 'Towards Diagnosing and Treating Cultural Dependency: The Case of the African University', *International Journal of Educational Development* 12:95-111.

Mazrui A., 1978, *Political Values and the Educated Class in Africa*, London: Heinemann.

Mazrui A., 1992, 'Towards Diagnosing and Treating Cultural Dependency: The Case of the African University', *International Journal of Educational Development* 12:95-111.

Mbembe A., 2002a, 'African Modes of Self-writing', *Public Culture* 14(2):239-273.

Mbembe A., 2002b, 'On the Power of the False', *Public Culture* 14(3):629-641.

Mudimbe V., 1988, *The Invention of Africa: Gnosis, Philosophy, and the Order of Knowledge*, Bloomington: Indiana University Press.

Ndaw, A., 1997, *La pensée africaine: recherches sur les fondements de la pensée négro-africaine*, Dakar: Les nouvelles éditions africaines du Sénégal.

Ngugi wa Thiong'o, 1986, *Decolonising the Mind: The Politics of Language in African Literature*, London: James Currey.

Ngugi Wa Thiong'o, 1996, 'The Allegory of the Cave: Language, Democracy and a New World Order', *Black Renaissance/Renaissance noire* 1(3)

Odora-Hoppers, C., ed., 2002, *Towards a Philosophy of Articulation: IKS and the Integration of Knowledge Systems*, Cape Town: New Africa Education Publisher.

Odhiambo E., 2002, 'The cultural dimensions of development in Africa' (M.K.O. Abiola distinguished lecture), *African studies review* 45(3):1-16.

Ramose, B.R., 1999, *African Philosophy through Ubuntu*, Harare: Mond Books Publishers.

Sogolo, G., 1993, *Foundations of African Philosophy*, Ibadan: Ibadan University Press.

van Binsbergen, W., 2003, *Intercultural Encounters: African and Anthropological Lessons towards a Philosophy of Interculturality*, Münster: Lit Verlag.

van Rinsum, H., 2002, 'Wipe the Blackboard Clean: Academization and Christianization', *African Studies Review* 45/2:27-48.

Wiredu K., 1996, *Cultural Universals and Particulars: An African Perspective*, Bloomington: Indiana University Press.

Yesufu, T., ed., 1973, *Creating the African University: Emerging Issues in the 1970s*, Ibadan: Oxford University Press.

Africa Development, Vol. XXX, No.3, 2005, pp. 20–34

(ISSN 0850-3907)

Is There One Science, Western Science?

Theophilus Okere*

Abstract

All humans by nature desire to know and humans are distinguished from the rest of creation by the miracle of knowledge. If all cultures have developed their own forms of knowledge, the spectacular success of a certain form of knowledge, science, notably in the west, has frequently led to its being exclusively attributed to the west. Yet science remains only one of many forms of knowledge and the west only one of its producers. The success of the west has tended to marginalize other forms of knowledge and other contributions to knowledge and, thus to impoverish an otherwise potentially rich and complex world knowledge landscape. It has tended to inhibit or even prevent the development of a really universal, human-knowledge project. Its very success, due essentially to its sustained application to technology, has enabled the development of a false superiority over other forms of knowledge and a real power hegemony of the west over other peoples. The future of lasting peaceful co-existence in the world may depend, in part, on the emancipation of other knowledge modes and forms.

Résumé

De par leur nature, tous les êtres humains éprouvent le désir de savoir, et les humains se distinguent des autres êtres de la Création par le miracle de la connaissance. Bien que toutes les cultures aient développé leurs propres formes de connaissance, le succès spectaculaire, notamment en Europe, d'une forme particulière de la connaissance, la science, a fait que cette dernière a été exclusivement attribuée à l'Occident. Pourtant, la science ne représente qu'une des nombreuses formes de la connaissance et l'Occident n'est qu'un producteur de celle-ci, parmi tant d'autres. Le succès de l'Occident a contribué à marginaliser les autres formes de connaissance et autres contributions à la connaissance, et ainsi, a fini par appauvrir le paysage international de la connaissance, qui autrement, aurait pu être extrêmement riche et diversifié. Ce succès de l'Occident

* Theophilus Okere is currently the president of the Whelan Research Academy for Religion, Culture and Society in Owerri, Imo State, Nigeria.

a fini par inhiber, voire empêcher le développement d'un projet universel de connaissance humaine. Ce succès, dû essentiellement à l'application continue de la science à la technologie, a contribué à l'instauration d'une pseudo-supériorité de celle-ci sur les autres formes de connaissance, ainsi qu'à l'établissement d'une réelle hégémonie de l'Occident sur les autres peuples. La pérennité d'une co-existence pacifique internationale dépendra, en partie de l'émancipation des autres formes de la connaissance.

Over thirty years ago, while I was writing my doctoral thesis here in Leuven, a thesis incidentally titled: 'Can there be an African Philosophy? A hermeneutical inquiry into the conditions of its possibility', I was concurrently taking lessons in Cultural Anthropology. That course helped to shape the first part of my thesis which was a study of African Culture, the Igbo culture, and was written under the supervision of Prof. E. Roosens. The second and more specifically philosophical part of the work explored how the application of hermeneutics or the radical interpretation of culture was actually what philosophers did. This gave me the clue to a possible way of the creation of philosophies or the doing of philosophy in Africa or elsewhere: Interpreting rather than merely giving ethnographic narrating. My guides for this part of my work where Jean Ladriere and Paul Ricoeur and my conclusions can be summarized this way: Philosophy is nothing more than first, the assumption and then the questioning and critical interpretation of one's culture at the level of ultimacy and finality and of being. Or, put in a different way, it is trying to find answers to the deep questions of meaning and existence posed by and within one's environing culture. And if some people can do it for and from their culture as did Plato and Aristotle for Greek culture or Augustine and Aquinas for Medieval Christianity or Kant and Hegel for Enlightenment Europe, so should others be able to do the same for African or other cultures. It is clear that all philosophy is local and even individual before it can be universal; and nothing can be genuinely universally valid unless it was first authentically personal and inserted within a given culture. If this is the case for Philosophy, it is likely to be the case for human knowledge, since every form of human knowledge must be situated or generated from within a culture or bounded by presuppositions, prejudgments, interests etc. This is the frame of mind that I bring to bear on the question before us: whether there is only one science and whether this is western science.

Explanation of terms–science

To begin with, we shall need to define some of our major concepts, in order to clarify the ambiguities involved in their usage and perhaps, more convincingly present our answer to the double question. Let us take a look at the two

operative words-science and western. These are ambiguous and emotionally charged words invoking intense feelings of partisanship and, for some, even resentment. The etymology of the word 'Science' takes us to the *Latin scientia*. Scientia has been rendered into the next generation of European languages as knowledge, *savoir* and *Wissen*. Even without these terms having precisely one univocal use, even with their dictionary meanings bristling with nuances and synonyms and with a limitless ability for metaphor that makes their connotation all the more elastic and elusive, we can still say in general what Scientia or knowledge is: a special activity or mode of being of man by which man relates to reality from the perspective of the truth, truth here meaning somehow getting at reality as it is. But 'Science' has acquired a history and is no longer an innocent dictionary word generally and vaguely translating the latin scientia. It surely retains this primary meaning coinciding with the activity of the human mind in relation to reality whereby its natural curiosity for the truth is satisfied.

When Aristotle, in the first book of the Metaphysics wrote that 'all men by nature desire to know', he was using the term 'know' in the general, commonsensical understanding of the term, common to the people of his day and culture, to people of our day and apparently to all human beings. This knowledge or science includes acquaintance with, getting into the deep and true meaning of, having familiarity with and getting the real truth about something. But science has also often been restricted to the building of bodies or systems of truth about specified regions of reality, following certain well defined methods of inquiry. But the early Greeks who reflected much on the matter distinguished various forms and levels of knowledge, depending on the type of object known and the aspect under which it was known. Mainly using the phenomenon of CHANGE as criterion, Plato was convinced the only fit object of true knowledge (*episteme*) was the unchanging form or idea, while any consideration of the particular material object of our sense experience could only qualify as opinion (*doxa*). But it was Aristotle who worked out a systematic and comprehensive range of varieties of knowledge, a variety of the objects of knowledge and a variety of the ways of knowing. After distinguishing sensation which is common to man and animals, from knowledge which is man's peculiar activity, he established a list of the many levels of being which would also form the object of knowledge- the non-living, the living, the vegetable world, the animal world, human beings and God. And for each of these levels in the chain of being, he also mapped out the various aspects or headings under which it could be known. In this way he was able to divide the whole area of knowledge into disciplines, some of which he was the first to establish and develop as sciences or systems of

knowledge. By the time these two ancient Greek masters were done, we were left with the idea of science or true knowledge as the knowledge of any level of being in a way that accounts for it. And knowledge accounts fully for its object by knowing all its four causes. This would truly qualify knowledge as science in the higher sense of a system or body of truths, the *scientia rerum per causas*, the knowledge of things through their causes. So far for the second level of the meaning of science.

A third and even more specialized meaning of science was to erupt with the work of Copernicus, Kepler and especially Galileo in the seventeenth century. This is modern science, science in its most restricted sense. It is very narrowly limited both in its subject area and its method of approach. This science, essentially astronomy, physics and chemistry, considers only inanimate matter, bodies or anything with mathematical properties. It considers only quantity and totally discounts the quality of bodies. Galileo himself sets out the basic presuppositions of this science by disregarding non quantifiable entities as merely subjective. He regards them as mere names, citing the famous example of tickling which, however real it is felt to be, cannot have a faculty of tickling because it is non-real, subjective and even illusory. Only elements that yield to measurements and give information on the quantitative aspects of material phenomena are concerned with the real world. Only they relate to the objective world and only they can yield science. This science, without doubt, has been spectacularly successful, especially when applied as technology to bring material well being and to construct useful tools for man's comfort. But by its self-imposed limitations and restrictions, which also mostly explain its huge success, it excludes vast areas of reality, vast areas of possible true knowledge including their corresponding methodologies and it excludes other forms of knowledge.

The 'west' and the 'western'

At this juncture we should say a few words on the other operative term in the title, the West, a word which has become notoriously ambiguous. The simple points of the compass, East and West, have been shifting meaning for ages, perhaps from as early as the decisive battles of Marathon, Thermopylae and Salamis, when the Greek forces repulsed those of the Persian Empire. Perhaps, even earlier, when Europeans first heard of China and India. But when Emperor Constantine established Constantinople as the Eastern Capital of the Roman Empire, he created East versus West as an administrative and political category. Christendom was to divide along the same fault- lines, following the bitter fight for papal supremacy and culminating in the Great Schism, with the East speaking Greek and the West speaking Latin. This ironically left Greece to the East though it had been 'the West' at Marathon.

It also gave a brand new meaning and a religious twist to East and West. As Islam spread from the Middle East (as did Christianity), reaching as far west as Spain and as far east as China and India, somehow, it came to be identified along with Buddhism, Hinduism and Milthraism as Eastern and, once again East and West became yet another level of religious division and polarization. The discovery of the new world, the colonial conquests and missionary expansion even further confused geography, culture and religion. Today, places as far away from Europe and as far apart geographically from each other as North-America and Australia are referred to as Western, though this hardly ever applies to the Navajo of North America or the aborigines of Australia. Then again, the rise of Marxism in the Soviet Union, Eastern Europe and China added ideological, political and economic dimensions to the East/West polarization.

So then which West? With so many dimensions to the term, there is bound to be some overlapping. But it would be fairly correct to say that the west today as it is likely meant to be taken in our title, designates a culture first and then a culture area. This would mean roughly the culture or cultures whose core is the old European, Western Christendom, but stretching backwards historically and spiritually to appropriate Greco-Roman civilization and continuing to the present day into whatever regions of the earth these peoples and cultures have migrated to.

Although we have long been used to such culturally divisive slogans as: East is East and West is West and they shall never meet, recently the use of the term West has tended to become more triumphalistic, jingoistic and exclusionary, conferring bragging rights on some people and buttressing claims of superiority vis à vis the others. Being Western and above all feeling Western seems to have become a way of counting oneself among the 'chosen people', if not the 'master race' itself. Being Western has become a new nationalism, even a new fascism and it may contain all the pitfalls of the old, not excluding intellectual xenophobia. This seems now to apply to science. Starting from the Enlightenment, when the first stories about other, different and stranger peoples and places reached Europe, the new context of contrast and comparison soon portrayed Europeans in better light than their new objects of curiosity. Very soon, this acquired a racist dimension. The West became 'civilized Europe' and the rest of the world, those exotic others discovered by European travellers, became heathens and savages fit only to be conquered and enslaved, colonized and christianised to become civilized. Civilization was now defined in western terms and by western standards. The contribution of the rest of the world to the common pursuit of humanity could be conveniently ignored or quietly co-opted with little or no acknowledgment.

Reason which ultimately would mean humanity itself, virtually became western. Success soon to be defined as military and industrial power and conquest over others only boosted the vaulting hubris and the world was readied for the boastful claims of the Greek miracle in philosophy and now the sole and exclusive possession by the West of the one, unique science in the world.

'Western science': Which level of science?

But what science is this? It certainly can not be what we named earlier as first level science, that is, science as knowledge in general At this first level one may say that science is one and also many. It is one in the sense that all men by nature desire to know. To claim such a prerogative exclusively for one people or culture or to deny it to others would be to disqualify those others from the class of human. All human beings as a matter of fact, somehow do have some knowledge. However, science is also many in the sense that, since such basic knowledge is human activity per excellence, it is also supremely historical in a supremely pluralist world. That is why, as in every human activity, there must be more than one way, in fact many ways of doing it, each human group/culture structuring and colouring its own knowledge according to the specificities of its own environment.

We come now to the next level of knowledge or science. This is science as a systematic or organized knowledge. We are talking now of the age old and ever growing creation of bodies of truth that for centuries has constituted the matter of formal education. Today it is these bodies of knowledge that constitute the disciplines and curricula taught at all levels of learning, primary, secondary and tertiary. To call them bodies of knowledge is the same thing as to say that there is not just one science as insinuated in the title. The very name university says as much. The *universitas studiorum*, the institution for all knowledge, the institution where the matter and business of science is most directly carried on, negates the claim of one unique science. The concept of the universitas studiorum has been predicated on the need to cater for a plurality of sciences serving the promotion, preservation and enhancement of human knowledge. The scientiae which together formed the universitas were understood to be different in their subject matter and often also in their methodology. In his *Kritik der Wissenschaften* given in Hamburg in the winter semester of 1968-1969, Carl Friedrich Freiherr von Weizsaecker gave an overview of every subject or discipline taught at the university. He arranged the sciences in five main groups. The first are Mathematics and the abstract sciences of structure. Second, the sciences of inorganic nature, that is, physics, chemistry, astronomy and the technology deriving from them. Third, the sciences of living beings, zoology, botany and biology. Fourth are the sciences

of man, medicine, psychology, social sciences and law as well as history, philology and language studies. Fifth, the sciences, if they can be so called he says, that treat of the ultimate ground of all these sciences, philosophy and theology.

Western contribution to science

This is the impressive, though by no means the exhaustive roll call of the sciences, a rich but incomplete harvest of human knowledge. It is still growing, as systematic knowledge is being accumulated around an ever increasing portion of the infinite variety that is reality. In assessing this panorama, and contemplating the density of input by square kilometre of the world map, the enormous contribution of the Western tradition can not be overestimated. It actually remains unrivalled. From the schools of Athens through the monastic schools of St Benedict, from the Cathedral schools of Charlemagne to the first of the medieval universities and those of today, a tradition of learning and science has been nurtured and bequeathed to the world, a tradition that constitutes one of the finest achievements of the human spirit. But this acknowledgement is a far cry from reducing all sciences to one or attributing all of it to the west.

Science: Mankind's collective achievement

No one can deny the overwhelming contribution of the west to science so understood. But it would be absurd to suggest that such overwhelming dominance amounted to a monopoly or to discount the contribution of other civilizations or other branches of the human family to science. At least one should remember China and India. At least one should remember ancient Egypt and Babylonia, where, not only early beginnings, but also crucial advances had been made in the sciences and in technology. To remember these cultures, to be aware of their contributions to the beginnings of Astronomy, Mathematics and Medicine as we now know them, should be enough rebuttal of those wild 'we versus them' and 'we alone-know-it-all' claims made in the name of the West. A mathematics, for instance, that has its roots and rudiments in virtually every known human culture, that has been on written record in ancient Egypt and Mesopotamia for millennia, that develops immensely in ancient Greece, gets re-invigorated by medieval, Islamic culture and wins prestige and appreciation from its successful use in the 17th and 18th century physics, attaining its present 'maturity' in 19th century Europe – such a science cannot legitimately be claimed for one culture, western or otherwise. As with mathematics, the story of the rest of the major branches of science has been a continuum. Granted the history and extent of culture borrowings, it can be presumed that every scientific revolution has been a revolution on

an existing state of science, an addition to an already existing and growing legacy of humanity. What humanity knows has been the outcome of all the contributions of all times and cultures. Exclusive claims can only be qualified as usurpation.

Western science as natural science: strengths and weaknesses

We now return to the narrowest meaning of science for which no doubt claims of sole and total ownership are being made on behalf of the West. Is it the only science and is it essentially and wholly Western? One need not dispute its mainly western origin from Galileo through Newton and Descartes. Neither would any one doubt the successful application of this science in spectacular ways to lighten the drudgery of life. What characterizes it however is its narrow focus, a restrictive definition of both its object and its method, restricting itself essentially to a fraction of the vast subject matter of knowledge as well as to a fraction of the many ways of human knowing. This exclusive concentration of focus has contributed to the great success of modern science, but this success has been ambiguous at best and, for some, it has been a human tragedy. 'Science' in the form of technology has been extremely successful. It has made possible a revolution in man's living environment, liberating him from drudgery and saving time and energy for leisure and comfort. By unleashing the enormous potential of man as tool maker, it is realizing the ambitions of mythologies from Icarus to Faustus, the dreams of fairy tales and the marvels of magicians and alchemists through history. In making dreams reality, science has proven to be the most effective means to procure the most effective tools and toys for improving the material condition of man. But in the process it has become more a science for the materially useful and less the science in quest of the true, a know-how rather than a knowledge. Thus in so restricting itself, it has become less than itself.

Moreover, when science fashions such dreadful efficiency to serve an agenda of power, (consider Hiroshima or the depleted Ozone layer, or the scientific-military-industrial complex), the avowed purpose of dominating nature easily turns into the domination of fellow men and ethical problems of enormous proportions may arise, problems to which science has no clue, much less an answer, since quantity, not man or society or values have formed its alpha and omega. Such Science becomes a failure if it cannot master its own ambiguities or control its own home-made Frankensteins. In that way, the very future of mankind could be and may have been irreversibly compromised. Further more in pursuing this successful experiment, Science has one-sidedly privileged a form of knowing, at the same time devaluing other complementary and necessary forms of knowledge. It is well known that a certain 'physics envy' has affected many sciences, including those like

the human sciences, with not the remotest affinity to physics, as they ape its warped methodology in other to attain something of its success.

In all this, the looser is man the knower himself, as the 'know thyself' of Socrates, the 'what shall I do?' and the 'what may I hope for' of Kant remain unheeded as advice and irrelevant as questions in Science. In short, Science has been most impressive in dealing with inanimate matter, less satisfactory in handling life, but totally and woefully incapable of explaining purpose or values or spirit or mind or beauty or good and evil, those very realities it refuses as reality but which most deeply concern and really define man as man. Science has rather too successfully pushed the empiricist/materialist agenda and, on the wings of its brilliant success, is helping to globalise a less than global view of the world and reality.

Such success has empowered science or rather promoted the merger of knowledge and power. It has enabled Western science not only to impose and maintain the power of the West over other peoples, but to threaten the knowledge of other peoples with extinction. The marginalisation of other people and the inferiorization and devaluation of their dignity and humanity has gone hand in hand with the disqualification of their knowledge systems and are in turn cited as proof of the supremacy of western Science and as guarantee of Western domination. It was with the disqualification of other knowledge systems that the ground was cleared for the claims of the West being the sole possessors of the solely valid knowledge of all time, for all men of all cultures. This sounds too much like being and acting as the only remaining knowledge super power in the world.

Critique of science

Thomas Kuhn has done the world a great service in helping to demythologise western science and to debunk some of the arrogant claims made on its behalf. By objectively delineating the route to normal science and the nature of modern science, he has drawn attention to the roads not travelled. He has highlighted the role of paradigms in directing the process of scientific work and in foreclosing and modifying the results of science. He has deflated the idea of linear progress in science and has painted a realistic picture of the march of science as something more limited, more tentative, more ambiguous. To be able to make such claims one is likely to have forgotten the roots, the routes and the rooted-ness of science, thinking to have a science that is the result of pure reason, timeless and placeless and without any baggage of cultural prejudice, a pure science in quest of pure truth, pursued without any interest, without any presuppositions, sine ira et studio. Such a history-less science could only be an absolute science of which none would be capable but God himself.

A critical history of modern science would need to point out that:

1. It is fatally flawed or at least insufficiently equipped as the one form of knowledge that is valid for all mankind and adequate for all of reality.
2. This incompleteness and inadequacy suggest that science must have to accommodate 'other sciences' or forms of knowledge and other knowledge traditions. It is high time that those other traditions and forms of knowledge cease being marginalized so that the defaults of modern science may be corrected and important lacunae filled.
3. The knowledge hegemony of western science, in so far as it claims universal validity, has been punctured even from within. If neither physics, which is the modern science par excellence, nor mathematics, the perfect and basic science, can now speak with one authoritative voice, since they are known to harbour their own internal contradictions and have shed their earlier aura of exactness, infallibility, universality and necessity, then the ground should be clear for a healthy and much needed pluralism in science.
4. The knowledge traditions of other cultures, long driven underground by the powerful western behemoth should be revived and an effort should be made to let the world's knowledge systems bloom together, to enrich, correct, cross pollinate and complement each other for the good of mankind.

Other knowledge traditions

In this connection we have mentioned the ancient civilizations of Egypt and Mesopotamia, and of India and China as cradles of Science. Many other contemporary, non-western cultures have written records of their knowledge traditions. But what of the many, cultural traditions that have preserved no written records? What of the poor, illiterate sub-Saharan Africans? Should their knowledge traditions, if they exist at all, be taken seriously? We know what a barrier mass illiteracy has created for these civilizations. But if we grant that written records help immensely in preserving and handing over knowledge, we know also that, of them selves, they do not create knowledge. Formal education is also a great advantage, but living traditions of informal education have their own advantage. If we grant also that the degree of 'scientificness' will always be debatable and, even when settled, will still be variable, there is no doubt that these peoples do have their own science or bodies of knowledge. For one thing, a science like medicine will have to be taken for granted as a genuine science native to every culture in history.

Since disease has been universal throughout history, so also has been the science of curing and healing, involving diagnosis and the knowledge of herbs, potions, lotions and their potency. Any group of humans that has so far survived as a group could have done so only thanks to a science of medicine. The science of agriculture must also be as universal. The complex process of coordinating the knowledge of soils, of weather and climate, of crop types and seasons of planting, tending and harvesting can not demand of anything less than a sure grasp of systematic knowledge of these matters. Other sciences have flourished in one area or time or the other, often circulating within a secret society. Some people developed knowledge and expertise in metallurgy, others in mathematics; some have specialized in rain-making others in astronomy. In many African cultures the greatest emphasis was laid not on the sciences of nature or on those of inanimate matter but on the sciences of man, especially as chronicled in philosophical wisdom and more especially in ethics. Instead of paying so much attention to nature, the Igbo knowledge tradition has been rather heavily anthropocentric, man-concerned and man-oriented.

The validity of Igbo medicine

Igbo local knowledge as in medicine, avoids the analytic abstraction which is the hallmark of western-based science and epistemology. In this medical science, the sum of the parts is not necessarily equal to the whole. The human being is not just equal to all his component atoms or molecules or even his anatomy and physiology. This is why the inadequacies of western medicine as practiced in Igbo land stem not only from its exorbitant costs or its totally foreign theoretical basis, but especially from its 'body-parts' approach to healing. An Igbo man jokingly remarked of a fellow ailing Nigerian octogenarian who frequently travelled overseas for treatment, that he seemed to have a specialist doctor for every single part of his body. The criticism of the old man implied a criticism of western medical science which fails to see the patient as integer and tries to cure him in fractions. Due to its inherent materialist and reductionist philosophy, Western medicine sees man as simply his material body and a sick man as merely a sick body; it totally ignores or fails to view together as a complex whole, the psychological, social, spiritual and even moral dimensions of the one to be made whole (healed). The so-called quacks of African medicine may have their faults, but it is not that of failing to see the wood for the trees. It may consist in their inability to reduce a complexity to a single-name disease, but part of their own success is their power to see in a given illness many more forces at work in the patient than germs or microbes. Or it may be simply due to their reliance on a cosmology populated with a multitude of micro and macro forces, visible and invisible,

natural, preter-natural and super-natural, creating a disease etiology more credible and effective because more comprehensive than western medical practice. The difference is clearly a difference of world views, each of which supports a certain science of medicine.

The example of medicine is typical, but it was not just local medicine that was devalued by the knowledge arrogance that came with colonization. Local arts and technology were criminalized into extinction. The local brewing technology was outlawed for producing what was officially labelled 'illicit gin'. Local languages were ashamed of themselves as they were banned from the schools and attracted sanctions if they were ever used in school. This colonial policy had the effect of producing local educated speakers learned and fluent in English but who were illiterate in their own languages, languages which they had been brought up to despise. These were considered inherently unsuited for 'scientific' work and a drag on progress and modernization.

In the last decade or so, Nigeria on which English was imposed as a lingua franca, has also undertaken the program of decimalization of numbers and measurements. Already the earlier imposition of the British weights and measures had caused great confusion in the study of mathematics and engineering and for ordinary folk, a nightmare in transacting a bizarre currency system. But all of this imposition totally ignored a prior existing, indigenous, pre-colonial system of numeracy long in use throughout Igbo land. This system with 20 as base, was capable of dealing with any level of high numbers and could have formed the basis of an indigenous arithmetical system. But its use has been banned by official fiat and its gradual loss of relevance among the ordinary folk may lead eventually to some form of extinction. Such cultural imperialism has led to that colonization of the mind so often complained about, which is still at work today, contributing to a certain scientific underdevelopment.

There is only one science, western science

The notion that there is only one science, western science is pure dogma, a dogmatic belief supported by purely ideological positions, some stated, others not. Some such positions are 'we are Westerners and we have it while non-Westerners do not', although we have seen that being Western has not been a consistent tag of identity. 'The whole of nature is only matter and it is fully rational, that is to say, mathematizable. Science can mean only one thing: the study of matter and its quantity, operating with exact measurements', though we know that science should in principle, exclude no part of reality (cf. the Renaissance title of a book: *De omni re, scitu et scibili et de quibusdam aliis)*. 'Science is always true, its results exact, necessary and universal' – though if this is so, only God would have such science or else one would

have to deny the bounded, situated and perspectivist nature of human knowledge. 'Science is always progressive, advancing irreversibly in linear fashion from a less perfect to a more perfect status', though this would contradict its avowed quality of being always true and infallible, with nothing to correct or improve.

Luckily today, after decades of self analysis and criticism, modern science is renouncing some of its wild claims and has become more humble. After Thomas Kuhn there is hardly any more belief in the linear crescendo of progress in science. After Riemann and Gauss, Lobachevsky and Bolyai, science no more believes in one unique Geometry but rather in a number of geometries. After Heisenberg, rigid, doctrinaire determinism has been replaced by indeterminacy and there are no more claims of a Science of exact certainties valid for all reality. After Karl Popper we now acknowledge the possibility of error in science. After a decade of a hermeneutics of Natural Science, a consensus is building up that: a) scientific knowledge is socially constructed, constructed by cultures, world views, locations, problems, dreams, resources, instruments and representations (J.H. Fujimura 1998). b) Science should be aware that it is necessarily partial in the representation of its objects and a full account of reality would include every perspective. It should be wary of flaunting credentials of objectivity, neutrality, transparency and universality (Sarah Franklin). Nor should Science c) see itself as superior to alternative epistemologies or scoff at indigenous knowledge systems as nonsensical, superstitious, irrational or mythical (Lorry Ann Trupp 1989). And with the self criticism now part of Science and especially of Anthropology has come an admission that other cultures and other peoples may have credible knowledge systems.

Towards a pluralistic and complementary world science

After the demise of these discredited ideological positions, one needs only to consider a few facts to invoke the possibilities for science suggested by the world around us which is the object of all human knowledge. Consider the richness of the world's knowledge traditions based not only on the world's human riches but also on the variety which reflects the diversity of man's environment and his ways of adapting to it. Consider the richness of the subject matter of knowing dictated and suggested by the infinite wealth of beings and things and facts in the universe, the different flora and fauna, affecting all human situations and needs, bodily, emotional and spiritual. Consider all the why and how questions arising from both nature and culture and the infinite variety and permutations of possibilities that human creativity could think up. All this not only suggests, but actually has elicited already a variety of knowledge forms and traditions.

So is there only one science and is it only western science?

Perhaps a good answer would be found by trying to ask and honestly answer similar questions, such as: Is there one Music and is it Western music? Is there one Philosophy and is it Western philosophy? And one could formulate the same question with regard to Theology, Mythology, History, Architecture, Medicine and Religion. The only answer that would not be absurd has to be in the negative.

What can be done to be true both to Knowledge/science and to humanity? The First step to take, especially if one wants to generalize about humanity, is to acquaint oneself with humanity in all its plural manifestations as cultures around the globe. Knowledge of other cultures can only impress a bona fide student of man and imbue him with respect for the variety of ways man has modified, adapted to or otherwise used his environment. Respect for this rather than a self-centred reading of history, respect for man and for pluralism in a many sided world and reality, that is the key to saving our world from the type of dangerous ignorance our title seems to portray. A dialogue or a debate, an interaction or even a mere peaceful, non-threatening juxtaposition of cultures and knowledge systems has been advocated. If for instance some of the knowledge traditions of non-western societies could be given more exposure either by getting recorded and published or by being exposed to university level research and teaching, they might get the needed boost. Any of this should be possible and probably some of it is already at work. Incidentally, many of us are already living out such a dialogue in our personal lives. Many an African, Asian or third world scholar or elite has been, in their person, the unwitting theatre of moral and cultural battles, the confluence of several cultural, ideological and spiritual currents flowing notably from Western culture and their own traditional culture. They have therefore been learning to blend at least two knowledge traditions, now threading gingerly between them, now opting to follow one path rather the other. The often uneasy co-existence of heterogeneous and conflicting currents, systems or ideas in one individual is marked by the powerful pull of the Western element, amply validated by the undeniable material benefits and marvels of Western techno-science. But there also remains a powerful pull to the other side, often just a suspicion that all is not right 'on the Western front' and a sense of incompleteness or even hollowness in its impressive and glittering artificiality. Then again one sees something valid and compelling in the indigenous knowledge system, an insight, a value 'that never was met elsewhere'. If we can personally marry or reconcile these tensions within us, and some of us do, some lessons might yet be learned for science and for mankind and for the integration of the sciences of mankind.

References

Anderson Warwick, 2002, 'Post-colonial Techno-science' in *Social Studies of Science*, 32/5-6, Oct. - Dec.

Barth, Fredrik, 2002, 'An Anthropology of Knowledge' in *Current Anthropology*, Vol 43, No 1, Feb 2002.

Devisch, Rene, 2001, 'Cultures, Sciences & Endogenous Knowledge Practices: Anthropological Perspectives' in: *Science and Tradition: Roots and Wings for Development*, Brussels: Royal Academy for Overseas Science & UNESCO: 29 - 53.

Franklin Sarah, 1995: 'Science as Culture and Cultures of Science', *Annual Review of Anthropology*, 24, 163-84.

Habermas, Juergen, 1971, *Knowledge and Human Interests*, Hamburg: Boston Press.

Kuhn, Thomas S., 1970, *The Structure of Scientific Revolutions*, Chicago: University of Chicago Press.

Nader, Laura, ed., 1996, *Naked Science, Anthropological Inquiry into Boundaries of Power and Knowledge*, New York, London: Routledge.

Ravetz. J. R., 1970, *The Merger of Knowledge and Power: Essays in Critical Science*, London & New York: Mansell Publishing Ltd.

Standen, Anthony, 1950, *Science is a Sacred Cow*, New York: E.P. Dutton & Co. Inc. von Weizsaecker, C. F., 1969, *Kritik der Wissenschaften*, Tonbandnachschrift.

Africa Development, Vol. XXX, No.3, 2005, pp. 35–47

(ISSN 0850-3907)

Traditional Igbo Numbering System: A Reconstruction

Patrick Mathias Chukwuaku Ogomaka*

Abstract

This article presents the properties of the traditional and decimalized Igbo number systems and the principles governing their formulation. It looks at the cultural and religious uses of Igbo traditional number system and their implications for the development of curricular in not just mathematics and ethno-mathematics in tertiary level education, but also in arithmetic for primary and secondary school levels.

Résumé

Cet article présente les propriétés du système traditionnel et décimal de numérotation igbo et les principes qui régissent leur formulation. Il examine les utilisations culturelles et religieuses du système de numérotation traditionnel igbo et leurs implications sur le développement de programmes d'enseignement pas seulement en mathématiques et en ethno-mathématiques dans le supérieur, mais aussi en arithmétique pour le primaire et le secondaire.

> A person who does not know where he/she is coming from most probably does not know where he/she is going to. *Nti bu nka.*
>
> *A na esi no ulo mma ma napuwa ama.* A man is least in what he knows not. I hold him the least who knows the least.

* Professor Patrick Mathias Chukwuaku Ogomaka has been teaching Mathematics Methods, Educational Statistics, Measurement, Evaluation and Research Methods in the University of Nigeria, Nsukka and the Imo State University, Owerri.

Introduction

The formulation and development of any number system constitutes one of the most important bedrocks of mathematics, science and technology. Each of the various number systems is a beautiful creation of the human mind and active will, indeed a real invention. As a system each has a set of rules, principles and properties that govern the formulation and existence of number names and numerals other than the basic ones.

Many cultures (as regards distinct language groups) formulated and developed to some degree distinct number systems but the majority of such systems did not have numerals. By numerals we mean symbols or figures (that are enduring and generally acknowledged within the language group that developed the number system) denoting and standing for number names of the system so developed. Of the number systems that have numerals, a few are recorded in some details while a few others are mentioned in passing in some texts. Consequently, many people think that language groups, whose number systems have no numerals or are not recorded, did not develop number systems. Indeed they think that such language groups borrowed and translated some number systems and numerals into their languages and made use of them traditionally.

Another source of concern is that the records of the few number systems as published, are very simple. The properties of the number systems are not indicated and discussed. Also there are no articulated principles and rules given as governing the formulation and existence of number names and numerals especially those other than the basic ones. People therefore tend to think that the number names and numerals are revealed. They fail to appreciate the invention and beauty of these number systems and their religious and cultural underpinnings.

This article presents a brief summary of:

(i) a reconstructed traditional Igbo number system;

(ii) the modified or decimalised Igbo number system;

(iii) the properties of the traditional and decimalised Igbo number systems and the rules/principles governing the formulations of other number names as derived from the basic ones; and

(iv) some cultural and religious uses and curricular implications of the traditional number system.

The Igbo number systems – number names

The Igbo developed their traditional number system long before their contact with the Europeans. However, there is no evidence that the original or traditional Igbo number system had any numerals. Nonetheless in the recent past traditional Igbo people (non-literate in any other number system) used various assortments of tally marks and symbols to represent or record numbers, accounts or quantities of things, money or commodities they were concerned with on secured available surfaces. In the past also some cultural, religious, and sociopolitical organization of the Igbos had their various reserved number symbols.

Following the extensive and continued contact with the west and the worldwide desire to go metric and decimal, the Igbos in the recent past decimalised their number system. In essence there are the traditional (as reconstructed here) and the decimalised Igbo number systems. Table 1 as given below shows corresponding Hindu-Arabic numerals and number names in English to some reconstructed traditional and decimalised Igbo number names.

Table 1: Hindu-Arabic Numerals and English Number Names Corresponding to Some Traditional and Decimalised Igbo Number Names

Hindu-Arabic Numerals	English Number Names	Traditional Igbo number Names	Decimalised Igbo number Names
1	One	Otu	Otu
2	Two	Abuo	Abuo
3	Three	Ato	Ato
4	Four	Ano	Ano
5	Five	Ise	Ise
6	Six	Isii	Isii
7	Seven	Asaa	Asaa
8	Eight	Asato	Asato
9	Nine	Itolu	Itolu
10	Ten	Iri	Iri
11	Eleven	Iri na otu	Iri na out
12	Twelve	Iri na abuo	Iri na abuo
13	Thirteen	Iri na ato	Iri na ato
14	Fourteen	Iri na ano	Iri na ano
15	Fifteen	Iri na ise	Iri na ise
16	Sixteen	Iri na isii	Iri na isii

Table 1: Hindu-Arabic Numerals and English Number Names Corresponding to Some Traditional and Decimalised Igbo Number Names (contd.)

Hindu-Arabic Numerals	English Number Names	Traditional Igbo number Names	Decimalised Igbo number Names
17	Seventeen	Iri na asaa	Iri na asaa
18	Eighteen	Iri na asato	Iri na asato
19	Nineteen	Iri na Itolu	Iri na itolu
20	Twenty	Ogu	Iri abuo
21	Twenty-one	Ogu na out	Iri abuo na out
22	Twenty-two	Ogu na abuo	Iri abuo na s abuo
27	Twenty-seven	Ogu na asaa	Iri abuo na asaa
30	Thirty	Ogu na iri	Iri ato
40	Forty	Ogu abuo	Iri ano
80	Eighty	Ogu ano	Iri asato
97	Ninety-seven	Ogu ano na iri na asaa	Iri itolu na asaa
100	Hundred	Ogu ise	Nari
154	One hundred and fifty-four	Ogu asaa na iri na ano	Otu Nari na iri ise na ano
176	One hundred and seventy six	Ogu asato na iri na isii/Bere ano na Ogu itolu	Otu Nari na iri asaa na isii
200	Two Hundred	Ogu iri	Nari abuo
335	Three hundred and thirty five	Ogu iri na isii na iri na ise	Nari ato na iri ato na ise
400	Four hundred	Nnu	Nari ano
900	Nine Hundred	Nnu abuo na Ogu ise	Nari itolu
1000	One Thousand	Nnu abuo na ogu iri/Nnu abuo na ukara	Puku
8000	Eight thousand	Ogu nnu	Puku asato
160,000	One hundred and sixty thousand	(Nnukwuru nnu) Nde	Nari Puku na puku iri ise
1,000,000	One million	Nde isii na puku ise	Nde
64,000,000	Sixty-four million	Nnu nde/Ijeri	Nde iri isii na nde ano
1,000,000,000	One billion	-	Ijeri

The dash put in Table 1 under the traditional Igbo number names as corresponding to one billion does not in any way imply that no traditional Igbo number name can be contrived to express one billion. After all 'Puku nde' in the traditional Igbo number system gives the number 8,000 x 160,000 which

Is 1,280,000,000 – one billion two hundred and eighty million. It is left as an exercise for the reader to contrive, may be after learning or reviewing the rules for forming number names in the reconstructed traditional Igbo number system.

Properties of the reconstructed traditional Igbo number system and rules for forming its number names

Of course every system has its unique properties for it to be a system. It may also share some common properties with others systems. A system must in addition have rules or laws governing the affairs and concerns of the system. The traditional Igbo number system is no exception to the above observations.

The Traditional Igbo Number System (TINS) is vegesimal (a base twenty system). It also has a minor base or a sub-base which is decimal or denary (a base ten system). Basically, counting in the system is done in bundles of twenty or possible positive integral powers of twenty. Consequently most of the numbers that are positive integral powers of twenty within the range of counting of the traditional Igbo person, have distinct names. The developers of the traditional Igbo number system were most probably informed or guided by the number of fingers and toes a normal person has, in deciding the main base (vegesimal) and minor base (decimal) of the system. Thus the traditional Igbo number system has such basic number names as Otu, Abuo, Iri, Ogu, Nnu, (20^2), Puku, (20^3), Nde, (20_4 & 20_5) (Nnu nde) /Ijeri, (20_6). The traditional Igbo number system, therefore has fifteen basic number names. Note that 'Nan' (100) as used in the decimalised Igbo number was not at best generally used in TINS. Of course it does not fit into TINS since 100 is not an integral power of twenty. These 15 basic number names were used as basis for forming other counting numbers. Besides these 15 basic number names and any others derived from them, TINS had names for fractions generally and specifically.

These names are exemplified by:

(i) mpekele which means fraction;

(ii) ukara which means half;

(iii) Otu na uzo ise which is one fifth;

(iv) Abuo na uzo ato as one third; etc.

As stated earlier, TINS has rules and principles that governed the formulation of non-basic number names. Thus in forming number names the TINS employed one, two or three of the additive multiplicative and subtractive rules. In employing the additive principle, it is only the main base in its integral multiples and powers and the minor base that may be added onto.

In using the multiplicative principle, it is only the main base that are multiplies by integers. The use of the subtractive principle involves usually subtracting the number one, two, three, four or five (though rarely) from the main base, the integral multiple or power of the main base or the minor base. Illustrations of:

(a) only the additive principle;

(i) Iri na ano (Ten and Four, 14)

(ii) Ogu na iri na ise, (Twenty and ten and five, 35) and

(iii) Nnu na ogu na otu (four hundred and twenty and one, 421).

(b) Multiplicative rule alone;

(i) Ogu ato (20 in three places ie 20 times 3, 60)

(ii) Nnu ise (400 by five; 2000)

(iii) Puku asaa (8,000 by 7; 56,000)

(iv) Nnu iri (400 by 10; 4000)

(c) Subtractive rule only (usually applied in commerce or in accounting),

(i) Bere abuo n'iri (Take away two from ten; 8) and

(ii) Bere ato n'ogu (take away three from twenty; 17)

(d) Use of the combined rules

(i) Ogu ano na isii (twenty by four and six, 20 x 4 + 6 = 86)

(ii) Nnu abuo na ogu ise (four hundred by two and twenty by five ie 400x 2 + 20 x 5= 900)

(iii)Bere ato n'ogu isii (Take away or cut off three from five twenties ie 20 x 5 - 3 = 97)

(iv)Bere otu n'nnu na ogu ato (Take away one from four hundred and three twenties, 400 + 20 x 3 - 1 that gives 459)

Generally when numbers are stated the highest valued component (or its multiple) is stated first then the rest, following the descending order of values. Examples are as given below:

(i) Puku ano, nnu ato, ogu ise na iri na asaa (8000 x 4 + 400 x 3+20 x 5 +10 + 7 ie 32,000 + 1200 +100 + 10 + 7 = 33,317)

(ii) Nnu iri, ogu asaa na itolu (400 x 10 + 20 x 7 + 9 = 4,149)

However, when the subtractive rule is employed, the number to be subtracted is stated first then the other components are stated, following the general

rule. (See illustration (C) above). Also in using the multiplicative principle the base or the positive integral power of the base is stated first followed by the multiplier, but when the multiplier is one or in extraordinary cases a positive integral power of the base, then the multiplier is stated first. Examples are as follows:

(i) Otu puku na ogu ise

(ii) Nnu Puku

(iii) Ogu nnu (ihe)

(iv) Puku nde etc

It is important to point out here that there is an alternative to any number names formed using the subtractive principle. Most of the times the subtractive principle is employed to ensure;

(a) economy of words and/or

(b) the ease of carrying out a basic arithmetic operation.

Illustrations

(a) (i) 'Bere ato n'ogu ise' is also 'ogu ano na iri na asaa' (The first is of five words while the second is of six words).

(ii) *Bere ise n'nnu ego* can alternatively be stated as *ogu ego iri na itolu na ego iri na ise*. While the first has five words the alternative has ten words.

(b) (i) *Gbakoo bere ano n'gu asato na ogu na iri na asaa*. This will quickly give *ogu itolu na iri atoo* (Add eight twenties minus three and one twenty ten and seven. One twenty and eight twenties give nine twenties, there is still one ten and seven minus four gives three.

Altogether there are nine twenties, one ten and three and these sum up to 193.

(ii) *Mubaa Bere otu n'ogu ato nga/uzo ise* (ie multiply) (three twenties minus 1) by five). The above gives: *Ogu iri na ise ewepuru ise, na obu Bere ise n'ogu iri na ogu ise* (3 x 20 - 1) x 5) = (15 x 20-5).

The above indicates that the Igbos were aware that multiplication was distributive over subtraction (or addition).

Properties of and rules involved in the Decimalised Igbo Numeration System (DINS)

The numeration system of the Igbos is at present decimal/ denary. That is to say that counting is done in bundles often and some positive integrals often. Thus the systems has numbers as: Iri (101) - 10, nari (102) - 100, Puku (103) = 1000, nde (106) - 1,000*000 and Ijeri (109) = 1,000,000,000.

Consequently the decimalised Igbo numeration system has some semblance with the modern decimalised Hind-Arabic cum English number system. It has no numerals of its own rather the Hindu- Arabic numerals has been adopted.

As far as the *decimalised Igbo numeration system* (DINS) has gone, it has 14 basic number names (Otu, abuo,..., iri, nari, puku, nde and Ijeri). In the strict sense DINS is not a place' value system. Nevertheless DINS employs some value ordering in the expression/stating of number names. In stating any number, the highest component (in terms of integral powers of ten or its multiples) of the number is stated first then the subsequent components in a descending order or values. Also DINS employs the additive or the multiplicative rules, separately or jointly in the formulation of number names from the 14 basic number names. The system unlike the TINS does not employ the subtractive rule.

Illustrations

(a) Additive rule

(i) Iri na isii (10 + 6 = 16)

(ii) Nari na iri na abuo (100 + 10 + 2 = 112)

(b) Multiplicative rule

(i) Nari ato (100 x 3 = 300)

(ii) Iriasato (10 x 8 = 80)

(c) Combined rules

(i) Iriasaanaano (10 x 7 + 4 = 74)

(ii) Nari ise, iri ato na asaa (100 x 5 + 10 x 3 + 7 = 537)

(iii) Nari puku ato, nari ise na iri asato na isii (100 x 1000 x 3 + 100 x 5 +10 x 8 + 6 which is equal to 100,586).

From the illustrations above, observe that:

(i) the highest value of integral power of ten (in the number involved) is started with, then subsequent ones or its multiple, in strictly a descending order of values in the formulation of the number names;

(ii) when a positive integral power often (other than ten) is used in multiplying a higher valued positive integral power of ten in the formulation of a number name, the multiplier is stated first, and

(iii) in stating number names there are no place holder like zero as used in the Hindu-Arabic numerals given above.

Some uses and interpretations of numbers in some Igbo traditional subculture and societies

Traditional Igbo people, like many other traditional people used and interpreted numbers in a number of ways. In very broad terms the traditional Igbo people had: (i) the everyday or common place use and (ii) the humanistic (religious, mystic, socio-political) uses and interpretation of numbers.

General, everyday or common place usage

In everyday use, numbers have both cardinal and ordinal sense. In the cardinal sense, the traditional Igbos used numbers; as quantitative adjectives, or in answering the question how many? Thus people talk of '*ego iri, ogu ego ogu iri na ise, etc*'.

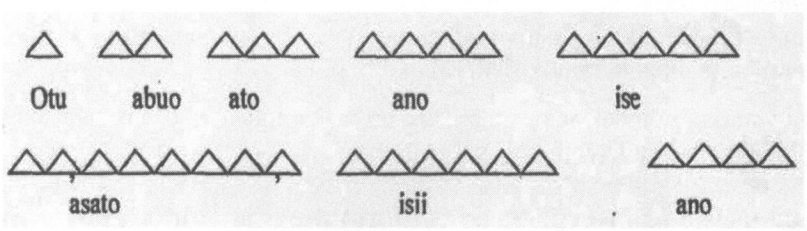
An ordinal number indicates not only how many but also answers the question in what order? For example the day of the month is really ordinal (Wilder 1973). It is surprisingly a fact of life that the traditional Igbo person like every other person (including those living today) confused or mixed up the cardinal and ordinal sense use of numbers when counting objects.

Illustrations

(i) Supposing there are seven or more objects and an Igbo persons wants to count them, the person will certainly pick up or touch the objects one after the other and assign numbers to them.

Assigning 'Otu' to an object is in order but assigning the number abuo, ato,... or asaa to a single object respectively could only be meaningful if it is being said that this is the next (an explanatory way is to say) nke mbu, nke abuo,..., nke asaa.

(i) Supposing there are objects arranged in separate heaps or collections and the question is asked how many distinct objects are in each heap or collection? Then the cardinal sense usage of numbers becomes clear.



Thus the above presentation shows: one object, two objects, three objects, four objects, five objects, eight objects, six objects and four objects.
Consequent upon the ordinal and cardinal sense usage of number, the traditional Igbos might have developed their large number concepts and names from agricultural and commercial activities. Such activities most probably included:

(i) Reckoning and counting seed yams/coco yams, for example, that they planted in or harvested from farms or stored in farms or bans (nnu ji/ede = 400 yams/ coco yams planted may be by one person in one day).

(ii) Keeping accounts of or counting money (for instance ego ajara = cowries or cowry shells) for businesses, dowry payments, debt settlements, or purchase of land, property or slaves. Thus the Igbo people of yester years talked of ogu nnu ihe/ego or puku ayara --) 8,000 cowry shells for instance.

Social and religious uses and interpretation of numbers

In many situations and instances the traditional Igbo people see or use number names as if the number names:

(i) are totems,

(ii) possess some powers or individualities or

(iii) are agents of gods or gods' representatives.

Generally the *traditional Igbo person* (TIP) sees even numbers as being more 'amicable' or acceptable than odd numbers are as omens and with respect to the cardinality of items or objects used in gifts. The TIP (especially if titled will jovially (or with all seriousness) reject gifts in odd numbers. In many Igbo societies, the TIP used the story or myth about the Gorilla's obsession for pairing objects available to it/ that comes its way to stress and teach the desirability of using even numbering objects for gift. The TIP may have been informed or made to take the above decision or accept such an attitude, belief or rule because of the fact that most parts of the body of a normal person are in pairs.

Further more the number of each set of objects presented during rituals for appeasing the gods or burial ceremonies of TIP (especially titled ones) was even most of the times. Although six (isii/ishii) as sacred, it is not to be mentioned by name when objects are counted during some occasions or in some circles. It is rather expressed as 'Ihe a na eji akaru mmadu/mmanya' (something used to castigate or speak bad of man/wine). Those circle or situations include 'Okonko' and occasions or places where wine is shared and enjoyed. Most probably not the same but the Greek culture and the Pythagorean School saw six as a 'perfect number (may be since 1+ 2 + 3 = 1x2x3 = 6) (Wilder 1973). In the Igbo tradition (ato, ano, na asaa), three, four and seven are sacred or portentious.

Their being so may be informed from the expression:

(i) *Ihe ruo ato ya ato n'anya* (a thing that reaches three stays forever or becomes irrevocable or unforgivable);

(ii) *Ahia ano ubochi ano, izu.* (four markets of four days – complete circle/completeness)' [izu = one week in Igbo traditional calendar]

(iii) *Ikpa asaa, mmiri asaa, izu asaa* (most distant perilous journey, the length of the lunar month (on which the traditional Igbo calendar hinges).is izu asaa (28 weeks).

Another mystic/religious usage and interpretation of numbers in traditional Igbo setting is illustrated during the breaking of kola nuts. The traditional Igbo kola nut has at least three cotyledons for it to be accepted as normal. When a kola nut is broken by a person, the number of cotyledons the kola nut has portends the god/goddess that has or rather is associated with the kola nut. The number of cotyledons a kola nut has may also point to the character/ mood of the presenter, the person it is presented to or the occasion. Thus kola nut may be said to belong to or represent:

(i) the dumb spirit if it has two cotyledons;

(ii) the spirit of valour, strength, fearlessness or extraordinary courage, if the nut has three cotyledons (in the traditional setting such a kola nut (Oji ike) is taken by acclaimed warriors, strong medicine men and men of extraordinary deeds;

(iii) the god/goddess of fertility or fecundity if it has more than four cotyledons (*Oji Umunne, Oji izu - ahia ano ubocht ano*). There are a host of other such usages and interpretations of numbers in the traditional Igbo settings. In my humble opinion those others ought to be studied and documented.

Curricular implications and recommendations

This author is a teacher. He sees a lot that is of use for the business of teaching and learning. The teaching and learning of the richness and beauty in thought and culture can engender interest in the study of numbers or Mathematics. It may provide some positive distraction from the drudgery of routine classroom computations. The use of the additive and the subtractive principles in formulating number names and the applications of the fact that multiplication is distributive over addition and subtraction are of immense interest in the study of mathematics and ethno-mathematics.

The mathematical concepts and principles inherent in the above have been restricted to tertiary mathematics curricular. The study of the TINS shows that these concepts and principles can be taught and learned at even the primary school level. The learning of such concepts and principles make arithmetic computations a lot easier and meaningful. Certainly the teaching and learning of TINS will add to the richness and variety in the area/discipline of Igbo language and culture.

Summary

The Igbos developed and used a number system a long time before their contact with the western world. The TINS though devoid of numerals:

(i) is mainly vegesimal and to a little extent decimal

(ii) has 15 generally acknowledged basic number names

(iii) employs the additive, multiplicative and subtractive rules (singly or in some combinations) in the formulations of non-basic number names but

(iv) is not a place value number system. Recently the Igbo number system is decimalised. This recently decimalised number system: has 14 basic number names; employs the additive and the multiplicative rules in forming number names other than the basic ones; (although it has no numerals of its own) uses the Hindu- Arabic numerals and is not a place value system.

Besides the common place and general uses and functions of numbers, the traditional Igbo person attaches religious, mystic and humanistic functions to numbers. To the traditional Igbo person, numbers are portentious, totems and have their individualities. The study of these number systems have far reaching curricular implications. It is an area of Igbo culture that deserves serious investigation and documentation.

References

Ogomaka, P.M.C, (in press), 'Number Systems including some Indigenous Number Systems'. *Teaching Modules for Secondary School Teachers of General Mathematics*, Abuja: NMC

Ogomaka, P.M.C. & Akukwe, A.C., 1998, 'School and Work place Mathematics in Imo State: Some implications', *Nigerian Journal of Curriculum and Instruction*, Vol. 7, No 1:13-18

Ohuche, R.O, Ezeilo, J.O.C; Eke, B. I, *et al.*, 1986, *Everyday Mathematics for the Junior Secondary School*, Book 1, Enugu: Fourth Dimension Publishers.

Oyelese, J.O & Macdonald, T., 1992, *Nelson Secondary Mathematics: Students' Book*, Edinburgh: Thomas Nelson and Sons Limited.

Vygodsky, M.V., 1992, *Mathematics Handbook Elementary Mathematics*, Moscow: MIR Publishers.

Wilder, R.L., 1973, *Transworld Student Library: Evolution of Mathematics Concepts*, London: Transworld Publishers.


Africa Development, Vol. XXX, No.3, 2005, pp. 48–65

(ISSN 0850-3907)

Ethnomathematics, Geometry and Educational Experiences in Africa

Paulus Gerdes*

Abstract

The paper traces historically reflections about mathematics, education and culture in Africa, that culminated in the emergence of ethnomathematics as a research field. A brief overview of ethnomathematical research in Mozambique and of historical research related to mathematics in Africa is presented, followed by examples of the integration of ethnomathematics into teacher education to stimulate the development of social—and cultural—mathematical awareness. The paper concludes with some trends in using ideas from ethnomathematics in education in Africa.

Résumé

Cet article fait un recensement historique des réflexions qui ont été menées dans le domaine des mathématiques, de l'éducation et de la culture en Afrique, et qui ont favorisé l'émergence de l'ethnomathématique, comme champ de recherche. Ce texte présente un bref aperçu de la recherche en ethnomathématique au Mozambique, mais également de la recherche historique en mathématiques en Afrique. Puis, il présente quelques exemples d'intégration de l'ethnomathématique dans l'éducation scolaire, censée favoriser la sensibilisation sociale et culturelle aux mathématiques. Cet article se termine sur quelques tendances montrant comment appliquer quelques principes d'ethnomathématique dans le domaine de l'éducation en Afrique.

* Dr. Paulus Gerdes is Professor of Mathematics. Director, ethnomathematics Research Centre, Maputo, Mozambique. E-mail: pgerdes@virconn.com.

Ethnomathematics is the relatively young field of research that started to emerge in the 1970s and 1980s among mathematics educators and researchers worried about the mathematical marginalisation of the peoples, in particular the poor, of the Third World and of people of African descent and other minorities in the First World (for an overview, see Gerdes 1996). The Brazilian Ubiratan D'Ambrosio, who also worked for UNESCO in Mali, and who visited Mozambique in 1978, is often called the 'father of ethnomathematics'. He proposed his ethnomathematical programme as a 'methodology to track and analyse the processes of generation, transmission, diffusion and institutionalisation of (mathematical) knowledge in diverse cultural systems' (D'Ambrosio 1990). In the context of the African continent several concepts had been proposed to underline the existence of mathematical ideas and practices in African cultures before and simultaneously with the transplantation of schooling and mathematics curricula from the so-called West to the continent:

- '*Indigenous mathematics*' (Cf. Gay & Cole 1967). Criticizing education of Kpelle children (Liberia) in 'western-oriented' schools – they 'are taught things that have no point or meaning within their culture' – Gay and Cole proposed a creative mathematical education that uses the indigenous mathematics as starting point;
- *Sociomathematics* of Africa (Zaslavsky 1973): 'the applications of mathematics in the lives of African people, and, conversely, the influence that African institutions had upon the evolution of their mathematics';
- *Informal* mathematics (Posner 1978, 1982): mathematics that is transmitted and that one learns outside the formal system of education (referring to Côte d'Ivoire);
- *Mathematics in the socio-cultural environment* [S. Doumbia, S. Touré (Côte d'Ivoire) 1984]: integration of the mathematics of African games and craftwork that belongs to the social-cultural environment of the child into the mathematics curriculum;
- *Oral mathematics* (Kane 1987): in all human societies there exists mathematical knowledge that is transmitted orally from one generation to the next (Kane's doctoral dissertation studied numeration systems in West Africa);
- *Oppressed* mathematics (Gerdes 1982): in African countries there exist mathematical elements in the daily life of the populations, that have not been recognized as mathematics by the dominant (colonial and neo-colonial) ideologies;

- *Non-standard* mathematics (Gerdes 1982, 1985a): beyond the dominant standard forms of 'academic' and 'school' mathematics there has developed in all cultures mathematical forms that are distinct;
- *Hidden* or *frozen* mathematics (Gerdes 1982, 1985a, b): although, probably, most of mathematical knowledge of the formerly colonized peoples has been lost for ever, it is possible to reconstruct or 'unfreeze' some of the mathematical thinking, that is 'hidden' or 'frozen' in old techniques, like, e.g., that of basket making;
- *People's* mathematics as a component of people's education in the context of the struggle against apartheid in South Africa (Julie 1989);
- *Implicit* mathematics (Zaslavsky 1994).

These concept proposals were provisional. Some of them emerged also in cultural contexts outside Africa. The various aspects illuminated by these concepts have been gradually united under the more general 'common denominator' of D'Ambrosio's ethnomathematics. This process has been accelerated by the creation of the *International Study Group on Ethnomathematics* (ISGEm) in 1985.

An early forerunner of reflections about mathematics education and African indigenous cultures was Otto Raum. He published in 1938 the book '*Arithmetic in Africa*', based on his experiences in South Africa and Tanganyika.

Ethnomathematical research in Mozambique

In 1985 I concluded a study on culture and the awakening of geometrical thinking. The study reveals mathematical activity in diverse cultural practices. As most 'mathematical' traditions that survived colonisation and most 'mathematical' activities in daily life are not explicitly mathematical, i.e. the mathematics is partially 'hidden', the first aim of this research was to 'uncover' the 'hidden' mathematics. The first results of this 'uncovering' are included in book 'On the awakening of geometrical thinking' (Gerdes 1985b; cf. Gerdes 2003) and slightly extended in 'Ethnogeometry: cultural-anthropological contributions to the genesis and didactics of geometry' (Gerdes 1991a).

At the end of the 1980s it turned out to be possible to integrate into MERP some young, well-motivated Mozambicans. They had earned their M.Ed. in mathematics abroad, like Abdulcarimo Ismael, Marcos Cherinda and Daniel Soares, who after initial teacher education in Mozambique had continued their education in the Germany. Later they concluded doctoral theses in the field of ethnomathematics. Abdulcarimo Ismael's dissertation is entitled 'An

ethnomathematical study of Tchadji - about a Mancala type board game played in Mozambique and possibilities for its use in Mathematics Education' (Ismael 2002). Marcos Cherinda's thesis (2002) deals with the mathematical-educational exploration of mat weaving patterns. Daniel Soares' thesis (2004) deals with the geometrical knowledge of house builders, in particular in the provinces of Sofala and Zambezia in the centre of Mozambique. Before they had participated in several collective studies, like the one on numeration and counting systems in Mozambique (Gerdes 1993). For instance, the following papers were published: 'The origin of the concepts of 'even' and 'odd' in Makhuwa culture (Northern Mozambique)' (Ismael), 'Popular counting practices in Mozambique' (Ismael & Soares), 'A children's 'circle of interest in ethnomathematics' (Cherinda). A third generation of Mozambicans who became interested to take part in ethnomathematical research is composed of some of our students. For instance, Salimo Saide did field work among Yao women in the north of the country, analysing the geometry of their pottery decorations (Saide 1998). Evaristo Uaile analysed some aspects of basket weaving among the Changana in the south. Gildo Bulafo did field work among Tonga women in the south-eastern province of Inhambane in order to understand better their geometrical ideas and arithmetical know-how in weaving the beautiful hand bags. Abílio Mapapá started to study the geometrical thinking of children who produce miniature wire cars. The booklet 'Explorations in ethnomathematics and ethnoscience in Mozambique' (Gerdes 1994a) presents an introduction to the work of the younger generation, including in the fields of culture and biology, physics and chemistry.

In the book 'African Pythagoras. A study in culture and mathematics education' (Gerdes 1994b) it is shown how diverse African ornaments and artefacts may be used to create a rich context for the discovery and the demonstration of the so-called Pythagorean Theorem and of related ideas and propositions. A series of earlier papers are included in the books 'Ethnomathematics: Culture, Mathematics, Education' (Gerdes 1991b) and 'Ethnomathematics and education in Africa' (Gerdes 1995a).

One of the principal lines in my own research since the end of the 1980s has been on the historical reconstruction, analysis, and educational and mathematical exploration of mathematical elements of the pictograms drawn by story tellers from the Cokwe in Eastern Angola. The book 'SONA Geometry: reflections on the tradition of sand drawings in Africa south of the Equator' (Gerdes 1993-4, 1994c, 1995c, 1997a) reconstructs mathematical components of the Cokwe drawing-illustration-tradition (Angola) and explores their educational, artistic and scientific potential. In the book 'Lusona: Geometrical recreations of Africa' (Gerdes 1991c, 1997b) mathematical

amusements are presented that are inspired by the geometry of the sand drawing tradition. For children (age 10-15) the booklet 'Living mathematics: drawings of Africa' (Gerdes 1990) has been elaborated. The last part of the book 'Geometry from Africa' (Gerdes 1999) presents an introduction to Sona and Lunda geometry. The mathematical potential of Lunda designs is further explored in the book 'The beautiful Geometry and Linear Algebra of Lunda Designs' (concluded).

Another research line is the one on mathematical aspects of twill weaving in diverse cultural contexts, as attested by the comparative study 'The circle and the square: Geometric, artistic and symbolic creativity of basket weavers from Africa, the Americas, Asia and Oceania' (Gerdes 2000) and by the book 'Geometry, Symmetry and Basketry in various African and American Cultures' (Gerdes 2004).

Gerdes and Bulafo (1994) published a book on the geometrical knowledge of the mostly female weavers of the sipatsi handbags (expanded edition Gerdes 2003). This investigation of mathematical knowledge of women has been continued in the study by Gerdes (1995b, 1996a, 1998a) on women and geometry in Southern Africa, where suggestions for further research are presented.

Geometry / Mathematics in African history and cultures

The books 'Women, Art and Geometry in Southern Africa' (Gerdes 1998a), 'Geometry from Africa' (Gerdes 1999) and 'African Fractals: Modern Computing and Indigenous Design' (Eglash 1999) present overviews of geometrical ideas in African cultures. The African Mathematical Union (AMU) created in 1986 the AMU Commission on the History of Mathematics in Africa [AMUCHMA]. AMUCHMA has the following main objectives:

a. To improve communication among those interested in the history of mathematics in Africa;

b. To promote active co-operation between historians, mathematicians, archaeologists, ethnographers, sociologists, etc., doing research in, or related to, the history of mathematics in Africa;

c. To promote research in the history of mathematics in Africa, and the publication of its results, in order to contribute to the demystification of the still-dominant Eurocentric bias in the historiography of mathematics.

The AMUCHMA newsletter, published in English, French and Arabic, informs about sources on mathematical ideas in African cultures. So far, twenty-nine issues of the AMUCHMA Newsletter have been published. The English language edition of the AMUCHMA-Newsletter is available on-line

(www.math.buffalo.edu/mad/AMU /amuchma_online.html). At the 6th Pan-African Congress of Mathematicians held in Tunis (September 2004) the AMU launched the annotated bibliography '*Mathematics in African History and Cultures*' (Gerdes & Djebbar 2004), with over a thousand references to studies on mathematical ideas in Africa's history from immortal times to the present, including references on the integration of indigenous/endogenous mathematical knowledge into mathematics education.

Integration of ethnomathematics into teacher education: Social- and cultural-mathematical awareness

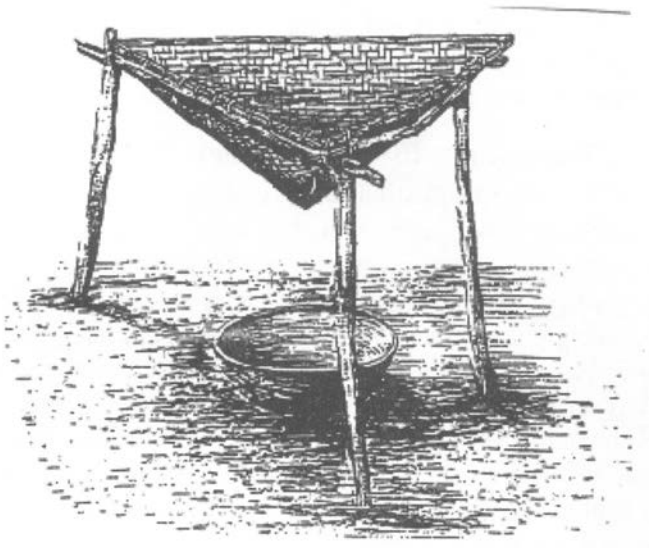
In this contribution to 'All knowledge is first of all local knowledge', I would like to include some of my personal experiences with bringing African knowledge and wisdom into the university mathematics classroom. I will summarise some examples presented earlier in the paper 'Developing social- and cultural-mathematical awareness in mathematics teacher education in a multicultural African context (Mozambique)' (Gerdes 1998b). The first example of a dialogue between a teacher educator and his students dates back from one of the first quick one-year mathematics teacher education programmes, early after Mozambique's independence in 1975, at the Eduardo Mondlane University at the end of the 1970s.

First example

Basket weavers from the North of Mozambique produce a pyramidal funnel (see Figure 1), called 'eheleo' in the Makhuwa language. To do so, they start with weaving a square mat, completing it unto the middle and then inter-weaving the two halves of outstanding strand parts. As a result, the funnel's mouth has the form of an equilateral triangle. In the 'Geometry' course I taught at the time I displayed an 'eheleo' to my students and asked: 'What can we learn from the artisans, from their production technique?' 'May it suggest us a method to construct equilateral triangles?'

Students reacted rather sceptically: 'It seems a very clumsy method to do so ...'. But the objective of the artisan was to produce a funnel, and not to construct an equilateral triangle. Can we adapt the artisans' method to serve our purpose? For instance, how can we transform a square of cardboard paper into a pyramidal funnel?

Figure 1: Makhuwa woven funnel ('eheleo')



The students found a way to fold the cardboard square in such a way that it transforms into a pyramid. Then we organised a little competition. One group of students had to construct equilateral triangles with ruler and compass, while another group by folding a square. Some students were quicker using the first method, others using the second. The point was made. We all could learn from those Makhuwa basket weavers from the North. Then we advanced, posing another question: Is it possible to generalise the 'eheleo' method. Indeed this is possible, and the students found out that by folding a regular octagon in the same way as the square, that then a regular heptagon could be constructed. By folding once more, a regular hexagon appears. More, in principle all regular polygons may be constructed in a similar way by starting with (easy to fold) regular 8-, 16-, 32-, 64-, 128-gons (etc.). General surprise emerged among the students. Had not the German Gauss proven that many regular polygons, including regular heptagons, are impossible to construct with ruler and compass? The students arrived at the conclusion that what is possible to construct depends on which are the means that are available and that are admitted. They understood that admission implies a choice that is culture-dependent. They understood that it is possible to discover new (strong) construction methods by reflecting on cultural elements of the country. All students felt proud of the 'eheleo' method for constructing

regular polygons. And as one of them observed 'Not all mathematical ideas come from the 'West!' In other words, their cultural-mathematical self-confidence had risen.

The following examples are from experiences at the Universidade Pedagógica (UP), founded in 1986. This university prepares teachers and other educational specialists, like educational planners and educational psychologists, in 4 to 5 year 'licenciatura' programmes. It started in Maputo and established branches in Beira (centre of the country, 1989), Nampula (north of the country; 1995), and Quelimane (central north-east, 2003). One of the objectives of the obligatory course '*Mathematics in History*' for the students in Mathematics Education programme is to contribute to a broader historical, social and cultural perspective on and understanding of mathematics. The first theme '*Counting and Numeration Systems*' gives a good start, as the students can begin with analysing and comparing together the various ways of counting and numeration they learned in their life, discovering the rich variety at the national level. Thereafter, they are brought into contact,with systems both from other parts of Africa and the world, and from other historical periods. The introduction of optional courses in 1993 gave my colleagues and me, the chance to introduce courses like '*Culture, Symmetry and Geometry' and 'Ethnomathematics and the Teaching of Mathematics in Secondary and High Schools*' with a strong cultural component. Before the introduction of optional courses (for which the students receive credits), we experienced with 'circles of interest' or clubs, in which students (and interested lecturers) take voluntary part, focussed on a general theme of 'Ethnomathematics' or on more specific themes like 'Mathematical and educational exploration of basket weaving techniques', 'Geometry of African sand drawings', and 'Lusona - African Geometrical Recreations'. For taking part in these 'circles of interest' the students receive 'diplomas of participation'. Those students who showed particular interest in the themes analysed in the optional courses or 'circles of interest' have been invited to accompany 'children's clubs' (e.g. on the theme 'Thousand and one beautiful weaving designs', directed by Marcos Cherinda) and/or to do fieldwork in their home regions. All participants have been stimulated to develop specific (sub) themes for experimentation in secondary or high schools. The realisation of the optional courses, 'circles of interest' and fieldwork constitutes both part of the research integrated in our Ethnomathematics Research Project and a possibility to develop (and reflect on this development) social- and cultural-mathematical awareness, as the following examples may illustrate.

Second example

One theme in an optional course I gave on '*Culture, Symmetry and Geometry*' (1994) for fourth year students was the geometry of the weaving of the 'sipatsi' bags among the Gitonga speaking population in Inhambane province. The making of 'sipatsi' with their band decorations (see the examples in Figure 2) is traditionally a female domain, although more recently also some men learned to weave them.

Figure 2: Examples of decorative bands on 'sipatsi' bags

In the course, there were only two female students. When the theme of the 'sipatsi' came up, they appeared more sceptical than their male colleagues: 'Those basket weavers do not apply mathematics', suggesting to advance with some more 'modern' topic. After analysing together how important it is, before starting to weave, to take into account the periods[1] in order to get good quality 'sipatsi', where on the cylindrical wall each decorative motif appears exactly a whole number of times, the female student who had been more reluctant to accept the 'sipatsi' theme, remarked that she did not believe that the basket weavers were capable of doing the necessary mental calculations; it was only 'good luck' or 'intuition'. Her ideas began to change, when she started to analyse herself some beautifully decorated 'sipatsi': in the case of the combination of decorative bands in Figure 3, the total number of plant strands in each of the two weaving directions has to be a common multiple of the two periods (3 and 10), that is of 30, and this number has to be known before starting the weaving, as it is impossible to increase or decrease later on the number of plant strands; now she realised that starting with 'good luck' or 'intuition' really did not 'do the job'.

Figure 3: Combination of two different bands on the same 'sipatsi' bag

Once increased her interest in the geometry of the 'sipatsi', she started the work with enthusiasm and fervour on enumeration and generation problems I proposed to the students: How many possible band patterns (of the 'sipatsi' type) of given dimensions p and d do exist, whereby p denotes the period of the respective decorative motif and d its 'diagonal height?' She was the first to find several solutions and she explained proudly to her colleagues her results and the reasoning that led to them. Coming from another region of the country, grown up in the capital, her appreciation of the craft and knowledge of the female basket weavers had changed radically, and she showed more confidence in her own capacities to obtain new results.

The next two examples consist of the testimonies of two graduates of the 'Universidade Pedagógica', both from the north of the country.

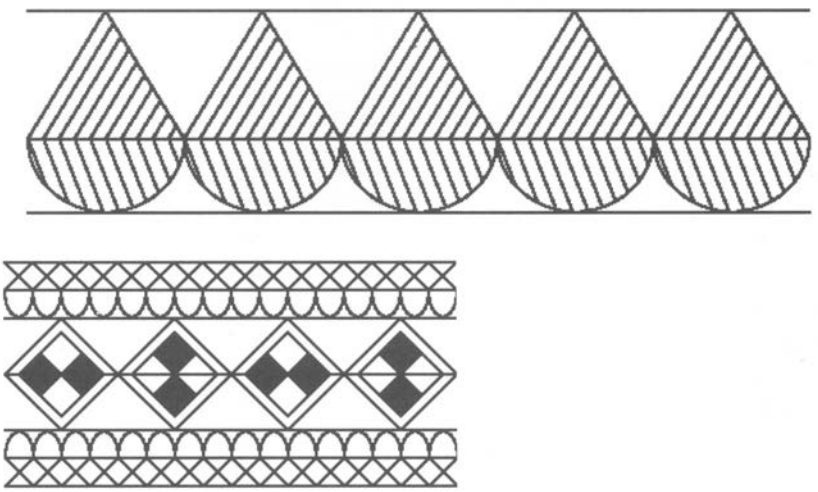
Third example: Testimony of Salimo Saide

I was born June 20, 1965 in Lichinga, capital of the northern Niassa Province. There I went to primary and secondary school. From 1985 to 1987 I took part in a teacher education program. From 1987 to 1991 I taught Mathematics and Physics at the secondary school of Pemba, capital of the Cabo Delgado Province where I co-ordinated the local Mathematics Olympiads. In 1991 I came to Maputo to continue my studies and in 1996 I concluded my 'Licenciatura' in Mathematics and Physics at the 'Universidade Pedagógica'.

In 1977 I had the opportunity to read a book written by the priest Yohana, entitled 'Wa'yaowe', that means 'We the Yao people'. It opened a whole new horizon for me. I was lucky to be able to read and write Yao - in school only Portuguese is taught. When I came to Maputo I thought my dream had died. However, when I took part first in a voluntary 'circle of interest' on mathematical elements in African cultures and then in the optional course

'Ethnomathematics and Education' my dream started to live again. I found a strong link between mathematics and the art of my grandparents. My participation let me return to my land, let me remember my grandmother, her decorated mats and baskets, and her beautiful 'nembo' – tattoos and pot decorations (see Figure 4). The idea 'caught' me and during my holidays I made three field trips to Niassa to study the geometry of ceramic pot ornamentation. Now after finishing my studies, I hope to return to my land, to continue my research and to teach mathematics integrating the 'nembo' of the Yao people into it' (cf. Saide 1998).

Figure 4: Examples of 'nembo' strip decorations on pots



It was not easy for Salimo to realise his fieldwork. Sometimes it took him various encounters on several successive days to win the confidence of the old female pot makers, as they did not understood easily why a young man, speaking with the accent of someone educated in the cities, could be interested in their nowadays downgraded and disappearing female art and craft of pot decoration; why would he be interested to see their tattoos when the churches, both Christian and Islamic, have been combating tattooing so strongly? However, once he won their confidence, they were happy to speak about their craft and art, and about how they learned it, to discuss with the student alternative ways of reviving, of valuing their symbolic language, their knowledge, wisdom, and creativity. For instance, it was suggested to decorate 'capulanas' - square woven cloths worn by the women around their middle - with ceramic 'nembo' and T-shirts with tattoo 'nembo'.

Fourth example: testimony by Abel Tomo

I was born on June 26, 1970 in Cuamba in the Makhuwa speaking part of the Niassa Province. My father and mother are peasants. In their leisure time, my father weaves colourful baskets, and my mother makes decorated pots. While in primary school, I began to ask myself how could my parents be able to make such beautiful objects without having been to school; they even did not know mathematics. I felt a strong contradiction between school and home, particularly in the mathematics lesson. For secondary school I went to the Nampula province. There I took part in my leisure time in a 'circle of interest' organised by an archaeologist. In the course of helping him I started to understand the history and culture of the Makhuwa, but still did not understand the relationship with mathematics. I could not solve the contradiction. Five years ago I came to Maputo to study Mathematics and Physics at the 'Universidade Pedagógica'. Through the course 'Mathematics in History' I got some ideas to reflect about, but the optional course 'Ethnomathematics and the teaching of mathematics' really opened my eyes. I wanted to do field work among my people, and in December 1995 – January 1996 I went to Niassa and Nampula, and learned a lot from older peasants about how they fabricate beautiful objects. I learned from boys and girls in the villages how to make several toys. And so I began little by little to understand the geometry of my parents. Having now finished my university program I will return to my people, trying to value its knowledge in my teaching.

Teachers like Salimo and Abel - who as students voluntarily took part in 'clubs' and optional courses related to culture and mathematics education - return, well motivated, to their home provinces, determined to work as mathematics teachers in such a way that it is both useful for their people and dignifying to its cultural heritage.

Fifth example

Marcos Cherinda is a native Ronga speaker from the south of Mozambique. During several years he lived with his sister, a nurse, in Nampula in the north, becoming fluent in Makhuwa. At secondary school he took part in various clubs related to the culture of Nampula, and exploring his drawing talents he elaborated a band strip on Nampula's history. In 1980 he came to Maputo to take part in an accelerated two-year teacher education program at the Eduardo Mondlane University. As one of my students he showed much interest in cultural aspects of mathematics (education), and I invited him to write a paper on circles in Makhuwa culture for '*Tlanu*', the Mozambican Journal on Mathematics Education. He contributed a paper on the use of the circle concept among fishermen from Nampula province (see one of his illustrations, reproduced in Figure 5). After two years of teaching in a

secondary school, he went to Europe to do M.Ed. in mathematics education. Upon returning in 1989, he was recruited as an assistant lecturer at the 'Universidade Pedagógica', teaching geometry and integrating himself into the Ethnomathematics Research Project, and he did fieldwork in the Maputo and Inhambane provinces. He took part in various 'circles of interest' and co-operated in the optional courses given. Since a few years he organises 'children's clubs', integrating students, exploring, in particular, possibilities to use a weaving board to develop geometrical knowledge - the theme of his Ph.D. thesis 'The use of a cultural activity in the teaching and learning of mathematics: The exploration of twill weaving in Mozambican classrooms' (Cherinda 2002).

Figure 5: Drying fish in a circle on Mozambique's island (Nampula Province)

Experimentation with ideas from ethnomathematics in education

Ethnomathematical and historical research clearly shows that mathematical education did not start in Africa with the arrival of the 'white man' to the shores of Africa. Ethnomathematical research findings urge to reflect about fundamental mathematical-educational questions: Why teach mathematics? What and whose mathematics should be taught, by whom and for whom? Who participates in curriculum development? etc.

In the final section of this paper three examples of (complementary and partially overlapping) trends in using ideas from ethnomathematics in education in Africa, will be briefly presented.

The first example illustrates an experience with the incorporation into the curriculum of elements belonging to the socio-cultural environment of the pupils and teachers, as a starting point for mathematical activities in the classroom, increasing the motivation of both pupils and teachers.

Example: Cowry games in Côte d'Ivoire

In 1980 a research-seminar on 'Mathematics in the African socio-cultural environment' was introduced at the Mathematical Research Institute of Abidjan (IRMA, Côte d'Ivoire). Salimata Doumbia directs the seminar. One of the interesting themes analysed by her and her colleagues is the mathematics of traditional West-African games. Their work deals with classification of the games, solution of mathematical problems of the games and exploring the possibilities of using these games (e.g. Nigbé Alladian) in the mathematics classroom.

One plays Nigbé Alladian with four cowry shells. On their turn, each of the two players casts the cowry shells. When all four land in the same position, i.e. all 'up' or all 'down', or when two land in the 'up' position and the other two in the 'down' position, the player gets points. In the other cases, one 'up' and three 'down', or, three 'up' and one 'down', a participant does not get points. As the researchers of IRMA found experimentally that the chance of a cowry shell to fall in the 'up' position is 2/5, it came out that the rules of the game had been chosen in such a way that the chance to win points is (almost) the same as to get no points. Doumbia concluded 'without any knowledge of calculation of probability, the players have managed ...to adopt a clever counting system, in order to balance their chances' (Doumbia 1989). This and other games are embedded into the secondary school curriculum as an introduction to probability theory and computer simulation. Interesting examples are given in the book by Doumbia & Pil (1992).

The next example presents an experience with the conscientization of future mathematics teachers and teacher educators of the existence of mathematical ideas similar to or different from those in the textbooks among people with little or no formal education; learning to respect and to learn from other human beings, possibly belonging to other social/cultural (sub)groups.

Example: Market women in Mozambique

Lecturers and students of the 'licenciatura' Programme in Mathematics Education for Primary Schools at the Beira Branch of Mozambique's Universidade

Pedagógica have been analysing arithmetic in and outside school. On interviewing illiterate women to know how they determine sums and differences, it was found that the women 'solved easily nearly all the problems, using essentially methods of oral/mental computation, i.e., computation based on the spoken numerals. The methods used were very similar to those suggested by the present day mathematics syllabus for primary education, but including some interesting alternatives' (Draisma 1992). For instance, 59% of the interviewed women calculated mentally 62-5 = ..? by first subtracting 2 and then 3, i.e. they used the same method as is emphasised in the schoolbook. Another 29% of the women subtracted first 5 from 60 and then added 2, and 12% subtracted first 10 from 62, and added the difference between 10 and 5, i.e. 5.

Did these women *(re)invent* their method? Did they learn them? From whom and how?

When multiplying, most of the interviewed women solve the problems by doubling. An example illustrates the process 6 x 13 = ..? Schematically the solution is the following: 2 x 13 = 26; 4 x 13 = 2 x 26; 2 x 26 = 52; 6 x 13 = 26 + 52; 26 + 52 = 78. Does each of these women (re)invent the doubling method spontaneously? Or does there exist a tradition? If so, how is the method taught and learnt?

The last example illustrates the preparation of future mathematics teachers to investigate mathematical ideas and practices of their own cultural, ethnic, linguistic communities and to look for ways how to build upon them in their teaching.

Example: Peasants in Nigeria

Shirley (1988) and his students at the Ahmadu Bello University in Nigeria conducted oral interviews with unschooled, illiterate members of the students' home communities. They found that 'although some of the (arithmetical) algorithms used by the informants are similar to those taught in schools, some interesting non-standard techniques were also found'. Shirley advises that one should assign teacher-student to find (ethno) algorithms in their communities - literate or illiterate, rural or urban, as 'Too often, school lessons leave the impression that there is only one way to do a given task'.

Note

1. Period = the number of plant strands in one direction to generate a copy of the decorative motif. In the examples in Figure 7, they are 6, 8 and 8 respectively.

References

D'Ambrosio, Ubiratan, 1990, *Etnomatemática: arte ou técnica de explicar e conhecer*, Editora Ática, São Paulo.

Cherinda, Marcos, 2002, 'The Use of a Cultural Activity in the Teaching and Learning of Mathematics: The Exploration of Twill Weaving in Mozambican Classrooms', Unpublished Ph.D. thesis, Witwatersrand University, Johannesburg.

Doumbia, Salimata,1984, *Mathématiques dans l'environnement socio-culturel Africain*, Abidjan : Institut de Recherches Mathématiques d'Abidjan.

Doumbia, Salimata, 1989, 'Mathematics in traditional African games', in: C. Keitel, P. Damerow, A. Bishop, P. Gerdes (eds.), *Mathematics, Education, and Society*, Paris: UNESCO, 174-175.

Doumbia, Salimata & Pil, J.,1992, *Les jeux de cauris*, Abidjan: IRMA.

Draisma, Jan, 1992, 'Arithmetic and its didactics', in *Report of the first year of the Master's Degree Program in Mathematics Education for Primary Schools* (August 1991–July 1992), Instituto Superior Pedagógica, Beira, 1992, 89-129 (mimeo).

Eglash, Ron, 1999, *African Fractals: Modern Computing and Indigenous Design*, Piscataway: Rutgers University Press.

Gay, John & Cole, Michel, 1967, *The new mathematics and an old culture, a study of learning among the Kpelle of Liberia*, New York: Holt, Rinehart & Winston.

Gerdes, Paulus, 1982, *Mathematics for the benefit of the people*, CARIMATH, Paramaribo (mimeo).

Gerdes, Paulus, 1985a, *Conditions and strategies for emancipatory mathematics education in underdeveloped countries*, For the Learning of Mathematics, Montreal, 5(3), 15-20.

Gerdes, Paulus, 1985b, *Zum erwachenden geometrischen Denken*, Maputo: Eduardo Mondlane University (mimeo).

Gerdes, Paulus,1990, *Vivendo a matemática: desenhos da África*, São Paulo: Editora Scipione.

Gerdes, Paulus, 1991a, *Ethnogeometrie. Kulturanthropologische Beiträge zur Genese und Didaktik der Geometrie*, Verlag Franzbecker, Bad Salzdetfurth, 360 p. (new edition 2003).

Gerdes, Paulus, 1991b, *Etnomatemática: Cultura, Matemática, Educação*, Maputo: Instituto Superior Pedagógico.

Gerdes, Paulus, 1991c, *Lusona: geometrical recreations of Africa*, Maputo: Instituto Superior Pedagógico.

Gerdes, Paulus, ed.,1993, *A numeração em Moçambique - Contribuição para uma reflexão sobre cultura, língua e educação matemática*, Maputo: Instituto Superior Pedagógico.

Gerdes, Paulus,1993-1994, *Geometria Sona: Reflexões sobre uma tradição de desemho em povos da África ao Sul do Equador*, Maputo: Instituto Superior Pedagógico, (3 vol.).

Gerdes, Paulus, ed.,1994a, *Explorations in Ethnomathematics and Ethnoscience in Mozambique*, Maputo: Instituto Superior Pedagógico.

Gerdes, Paulus, 1994b, *African Pythagoras: A study in culture and mathematics education*, Maputo: Instituto Superior Pedagógico.

Gerdes, Paulus, 1994c, *SONA Geometry: Reflections on the tradition of sand drawings in Africa south of the Equator*, Maputo: Instituto Superior Pedagógico, Vol. 1.

Gerdes, Paulus, 1995a, *Ethnomathematics and Education in Africa*, Stockholm: University of Stockholm Institute of International Education.

Gerdes, Paulus, 1995b, *Women and Geometry in Southern Africa, Suggestions for further research*, Maputo: Universidade Pedagógica.

Gerdes, Paulus, 1995c, *Une tradition géométrique en Afrique: Les dessins sur le sable*, Paris: L'Harmattan, (3 vol.).

Gerdes, Paulus, 1996a, 'Ethnomathematics and mathematics education: an overview', in: A. Bishop (ed.), *International Handbook of Mathematics Education*, Kluwer, Dordrecht, 909-944.

Gerdes, Paulus, 1996b, *Femmes et Géométrie en Afrique Australe*, Paris: L'Harmattan.

Gerdes, Paulus, 1997a, *Ethnomathematik dargestellt am Beispiel der Sona Geometrie*, Heidelberg: Spektrum Verlag.

Gerdes, Paulus, 1997b, *Récréations géométriques d'Afrique - Lusona - Geometrical recreations of Africa*, Paris: L'Harmattan, 127 p. (Bilingual edition in French and English).

Gerdes, Paulus, 1998a, *Women, Art and Geometry in Southern Africa*, Lawrenceville NJ / Asmara: Africa World Press.

Gerdes, Paulus, 1998b, 'On culture and mathematics teacher education', *Journal of Mathematics Teacher Education,* Dordrecht (Netherlands), Vol. 1, No. 1, 33-53.

Gerdes, Paulus, 1999, *Geometry from Africa: Mathematical and Educational Explorations*, Washington DC: The Mathematical Association of America.

Gerdes, Paulus, 2000, *Le cercle et le carré: Créativité géométrique, artistique, et symbolique de vannières et vanniers d'Afrique, d'Amérique, d'Asie et d'Océanie*, Paris: L'Harmattan.

Gerdes, Paulus, 2003a, *Awakening of Geometrical Thought in Early Culture*, Minneapolis MN: MEP Press.

Gerdes, Paulus, 2003b, *Sipatsi: Cestaria e Geometria na Cultura Tonga de Inhambane*, Maputo: Moçambique Editora.

Gerdes, Paulus, 2004, *Geometry, Symmetry and Basketry in various African and American Cultures*, Special book edition of Visual Mathematics, Belgrad (forthcoming).

Gerdes, Paulus & Bulafo, Gildo,1994, *Sipatsi: Technology, Art and Geometry in Inhambane*, Maputo: Instituto Superior Pedagógico.

Gerdes, Paulus & Djebbar, Ahmed, 2004, *Mathematics in African History and Cultures. An Annotated Bibliography*, Cape Town: African Mathematical Union.

Ismael, Abdulcarimo, 2002, 'An ethnomathematical study of Tchadji: About a Mancala type board game played in Mozambique and possibilities for its use' in *Mathematics Education*, Unpublished Ph.D. thesis, University of Witwatersrand, Johannesburg.

Julie, Cyril, ed., 1989, *Proceedings of a Conference on the Politics of Mathematics Education*, NECC Mathematics Commission, Cape Town.

Kane, Elimane, 1987, *Les systèmes de numération parlée des groupes ouest-atlantiques et Mande. Contribution à la recherche sur les fondaments et l'histoire de la pensée logique et mathématique en Afrique de l'Ouest*, Unpublished PhD thesis, University of Lille, Lille.

Posner, Jill, 1982, 'The development of mathematical knowledge in two west African societies', in *Child Development*, Chicago, Vol.53, 200-208 [based on her Ph.D. thesis, 1978].

Raum, Otto, 1938, *Arithmetic in Africa*, London: Evans Brothers.

Saide, Salimo, 1998, *On the Geometry of Pottery Decoration by Yao Women*, in: (Gerdes, 1998a), 203-230.

Shirley, Lawrence, 1988, *Historical and ethnomathematical algorithms for classroom use*, Zaria: Ahmadu Bello University, (mimeo).

Soares, Daniel, 2004, *The incorporation of the geometry involved in traditional house building in Mathematics Education in Mozambique. The cases of the Zambezia and Sofala Provinces*, Unpublished Ph.D. thesis, University of the Western Cape, Rondebosch.

Zaslavsky, Claudia, 1973, *Africa Counts: number and pattern in African culture*, Prindle, Weber and Schmidt, Boston (new edition: Lawrence Hill Books, Brooklyn, NY, 1979, 1999).

Zaslavsky, Claudia, 1994, 'Mathematics in Africa: Explicit and implicit', in Grattan-Guinness, Ivor (ed.): *Companion Encyclopedia of the History and Philosophy of the Mathematical Sciences*, London: Routledge, Vol. 1, 85-92.

Africa Development, Vol. XXX, No.3, 2005, pp. 66–77

(ISSN 0850-3907)

Identification, Collection and Domestication of Medicinal Plants in Southeastern Nigeria

A. E. Ibe* and Martin I. Nwufo**

Abstract

Field studies were conducted to investigate the medicinal plants, through identification, collection and domestication of these plants in southeastern, Nigeria. Questionnaire, personal interview and review of available records shows that out of forty-three plants about fifteen were undergoing domestication in the course of this research. This study revealed that much has not been done to domesticate these medicinal plants in Southeastern Nigeria. It was equally discovered that the medicinal plants have other uses as some could be used as vegetables, fruits, trees, ornamentals etc. From the results of this study, it is believed that nature has everything we need to exist happily on earth. But our inability to positively exploit nature makes the difference. If the result and recommendations of this study are strictly implemented, we hope for a better future.

Résumé

Des études de terrain ont été menées sur les plantes médicinales, grâce à un processus d'identification, de collecte et de domestication de ces plantes dans le sud-est du Nigeria. L'élaboration de questionnaires, des entrevues personnelles, ainsi que le travail de collecte des documents disponibles ont révélé que sur quarante trois plantes, environ quinze étaient soumises à un processus de domestication, pendant cette recherche. Cette étude a également montré que toutes les mesures nécessaires n'ont pas été prises pour la domestication de ces plantes médicinales dans le sud-est du Nigeria. Nous avons également découvert que les plantes médicinales peuvent être employées à d'autres fins et peuvent ainsi

* A. E. Ibe is currently a lecturer in the Department of Crop Science and Technology, Federal University of Technology Owerri, Imo State, Nigeria.

**Martin I. Nwufo, Professor of Plant Pathology, Department of Crop Science and Technology Federal University of Technology, Owerri, Nigeria.

être utilisées comme des légumes, des fruits, des arbres, des plantes ornementales, etc. Les résultats de cette étude révèlent que la nature nous offre déjà tout ce dont nous avons besoin pour vivre heureux sur cette terre. Mais c'est notre incapacité à l'exploiter positivement qui fait la différence. Nous avons cependant toutes les raisons d'être confiants en l'avenir, si les résultats et recommandations de cette étude sont rigoureusement appliqués.

Introduction

In Southeastern, Nigeria many fruits, spices, herbs and leafy vegetables used as food and for medicinal purposes are obtained from the wild where there may be as many as a thousand species. To date, little attempt has been made to identify, domesticate and cultivate these plants despite the fact that they constitute a large proportion of the daily diet of the rural dwellers. The implication is that several of these plants could become extinct due to deforestation menace and the reluctance of people to venture into the forest to harvest them. The net result is that some of these plants such as *Neem* (Azadirachta indica), *Ncheonwu* (Ocimum viride), *Utazi* (Gongronema ratifolia), *Uziza* (Piper guinenses), *Uda* (Xylopia acthiopica), *Ehuru* (Monodora tenuafolia) are difficult to find in urban markets.

Some of the indigenous plants, their spices and herbs are used generally to prepare pepper soups which are hot and spicy especially during the cold season. In addition, they are very important in the diets of post postpartum women during which time it is claimed that these spices and herbs aid the contraction of the uterus. Spices and herbs are generally known to possess antibacterial and antioxidant properties (Iwu 1989). It is likely that indigenous spices and herbs found in Southeastern Nigeria may also possess these properties.

Leafy vegetables and fruits found in the wild also contribute immensely to the diet of Nigerians. Leafy vegetables contribute significant amounts of ascorbic acid, protein, minerals (particularly calcium) and carbohydrate to most diets (Rice et.al, 1986). Leafy vegetables obtained from the wild include *Oha* (pterocarpus soyauxii), *Okazi* (Gnetum ofericanum), *Onugbu* (Vernonia amygdalina), *Ugu* (Telfaria occidentalis).

Fruits and nuts which are found in the wild include *Udara* (Crysophyllum albidium), Ube Okpoko (Dacryodes edulis), *Nmimi* (Denoettia tripelata), *Ugba* (Pentaclethra macrophylla), *Kashu* (Anacardium occidentalis) etc. These fruits also provide nutrients, protein, especially ascorbic acid and minerals. Fruits, in addition to being eaten raw, can also be processed into fruit drinks.

With this identification process on course, information on the traditional uses of plants by the people of Southeastern Nigeria reveals that some plants are used for folklore, medicine, foods, snacks, fruits animal feeds, dyes and ceremonies.

Collection is a motivated act which prepares ground for a useful grand work to be done. By this we mean that collection is made purposefully to domesticate the plants.

Considering the importance of these wild fruits, vegetables, spices and herbs, the aim of this study is to investigate ways of identifying, collecting and domesticating these indigenous plants that are obtained from the wild.

Materials and Methods

Two methods of data identification and collection was used for this study. They are: (a) Questionnaire and (b) Oral interview method.

The dual method approach was adopted in recognition of the fact that not all the classes of respondents such as certified Native doctors, Herbalists, Qualified Medical practitioners and indigenous herb users can read and write. The area covered within Southeastern zones include Abia, Ebonyi, and Imo State respectively. Thus Questionnaire method was effective among the literate class(es) e.g. Qualified medical practitioners and few native doctors and herbalists.

All together, 50 questionnaires each were distributed for the three states mentioned above and about 15 respondents each were interviewed orally and their responses were recorded. Among the 50 respondents, 70 percent (35) were male while 30 percent (15) were female.

Our study territory covered:

- Abia state: Umuahia - Umudike, Ikwuano - Oboro, Bende - Etiti-ulor and part of Ubakala
- Ebonyi state: Ohaozara, Ivo, Onicha, Abakiliki Local Government Area.
- Imo state: parts of Owerri west - Obinze, Oforola, Okuku, parts of Ohaji and Ikeduru etc.

In every area we visited the categories of respondents we were working with not only gave their responses, but went further to involve themselves partially in the field work. They took us to the fields where those medicinal plants were identified wholly or partly. Then progressive attempts and efforts were made to collect the needed diagnostic features and propagative materials from those plants.

Diagnostic features examined

The diagnostic features, morphologically examined for each plant, were based on their flowers, stems, fruits, leaves, seeds and the type of habitat where they grew.

Identification and collection procedure

The local name and its medical contribution(s) to humanity are first established through the help of any of the categories of users mentioned earlier. Plants that were difficult to be identified in the field were later identified with the help of texts and bulletins, handbooks such as (*Flora of West Africa* (Hutchinson and Dalziel 1954) *and Your Guide to identifying some ArableLand Weeds of South Eastern Agricultural Zone of Nigeria*, (Ray P.A. Unanma 1982)).

Procedure for domestication

For each plant whose propagative material was collected from the wild, different conditions of propagation were tested. The two media used were the soils (top and sub) and the saw dust. The materials were then planted at reasonable depths.

Results and discussion

Table 1 shows plant specimens identified and collected in some of the Local Government Areas of part of Southeastern zones visited and their local names.

Among the 50 respondents, 70% were male while 30% were female. Among these numbers 35 acquired the skill through society, 10 by inheritance and 5 through formal education. Almost all the respondents claimed to cure similar ailments namely: Malaria, Sexually Transmitted Disease (STD), ear ache, head ache, Poison (human), snake and scorpion bites, wounds and bleedings, Eczema and body rashes etc. Parts of the plants used for the cure were merely extracts from the leaves, roots and barks.

Only 10% of the respondents had their hospitals registered with the government and had their patients accommodated at their hospitals wards. Others treated come from their home. 10% of the respondents have tried to domesticate one or more of those plants, but none practiced domestication on large (Commercial scale). Propagules used were mostly roots, stems and corms.

Some of the plants studied have no viable seeds, some have recalsistrant seeds while others have viable orthodox seeds. For those without viable seeds, domestication was made possible by the use of vegetative means of propagation such as stems as in *Ogbu* (Indigofera tinctoria), stock as in *Iganwaezigana* (Chromolaena odorata) etc.

During domestication trials too, it was observed that different seeds and different propagules germinated over a range of time which varied from species to species. These differences in germination period was observed to depend on the physiology of the seed, with emphasis on the amount of food reserve in the endosperm which in turn reflected on the vigour of germination and the growth of seedling (Ogwuru 1995).

Table 1: Plant Specimens Collected in Some of the Areas in the Southeastern States

Local Names	Plants (botanical names)	State
Osi-isi	Emilia cocinea	Ebonyi State
Ovee	Telfairia occidentalis	Ebonyi State
Uko	Milicia excetsa	Ebonyi State
Ndianwu	Ocimum viride	Ebonyi State
Ogba-kpee	Cnestis ferruginea	Ebonyi State
Mgbimgbi	Carica papaya	Ebonyi State
Onugbu	Vernonia amygdalina	Ebonyi State
Kashu	Anacardium occidentalis	Ebonyi State
Inene	Amaramthus spinosus	Ebonyi State
Umimi	Denoettia tripelata	Ebonyi State
Okpete	Palisota hirsuta	Ebonyi State
Olorohuru	Chromoleana odorata	Ebonyi State
Ede	Colocassis esculenta	Ebonyi State
Ogbu-evo	Euphobia heteriphylla	Ebonyi State
Ogwu ugwoo	Mitracpus villosus	Ebonyi State
Ube	Daeryodes edulis	Abia State
Akuinu	Garcinia kola Haked	Abia State
Inene-nwata	Combretum racemosum	Abia State
Echu-ayahi	Landdolphia owariensis	Abia State
Osikapa	Oryza sativa	Abia State
Ogbu	Indigofera tinctoria	Abia State
Ugba	Pentaclethra macrophlla	Abia State
Dogoyara	Azadiracha indica	Imo State
Ugiri Nwautoba	Lophira alata	Imo State

Table 2: Plants used in traditional medicine and their medicinal remarks

1) Botanical Name: Anacardium occidentalis L
Local |Name: *Kashu* Family: Anacardiaceae Parts used: Barks and leaves Remarks: Extracts of leaves used to bath patients with malaria.
2) Botanical Name: Xylopia aethiopica
Local |Name: *Uda* Family: Annonaceae Parts used: Seeds Remarks: Powered seeds inhaled byNursing mother
3) Botanical Name: Landolphia owariensis
Local |Name: *Echu ayahi* Family: Apocynaceae Parts used: Roots Remarks: Roots extracts used as Vermifuge. Cures obesity through induced vomitting
4) Botanical Name: Rauwolfia vomitoria
Local |Name: *Urubia* Family: Apocynaceae Parts used: Roots Remarks: Root extract drank to reduce Labour pains.
5) Botanical Name: Chromolaena odorata
Local |Name: *Iganwaezigana* Family: Asteraceae (compositae) Parts used: Leaves Remarks: Leaves extract used for cuts & wounds for fast healing
6) Botanical Name: Colocassia esculenta
Local |Name: *Ede* Family: Araceae Parts used: Leaves Remarks: Leaves extract used to heal Cracked foot heels
7) Botanical Name: Caladium bicolor
Local |Name: *Okpakara* Family: Araceae Parts used: Leaves Remarks: Leaves extract used to cure Convulsion in children

Table 2: Plants used in traditional medicine and their medicinal remarks (contd.)

8) Botanical Name: Amaranthus spinosus
Local |Name: *Ineni* Family: Amaranthaceae Parts used: Leaves and stem Remarks: Paste of leaves and stem with palm oil used to cure pile and stomach aches.
9) Botanical Name: Acanthus montanus
Local |Name: *Agamsoso* Family: Acanthaceae Parts used: Roots Remarks: Root extracts used to bath to Relieve aches and pains.
10) Botanical Name: Newbouldia spinosuslaevis
Local |Name: *Agirioshishi* Family: Bignoniceae Parts used: Leaves Remarks: Leaves paste to cure migrane pains
11) Botanical Name: Dennettia tripelata
Local |Name: *Umimi* Family: Annonaceae Parts used: Alcoholic extract of roots and Remarks: pepper mixed with potash recommended for the treatment of gonorohoea by drinking.
12) Botanical Name: Dacryodes edulis
Local |Name: *Ube* Family: Burseraceae Parts used: Stem bark Remarks: Bark powder made into paste with Honey and rubbed on the body to reduce body aches.
13) Botanical Name: Ananas comosus
Local |Name: *Parapu* Family: Bromeliaceae Parts used: fruits Remarks: Fruit recommended for eating during High fever.

Table 2: Plants used in traditional medicine and their medicinal remarks (contd.)

14) Botanical Name: Adansonia digitata
Local |Name: *Agba* Family: Bombacaceae Parts used: Fruits pulps leaves and roots Remarks: Extract of the fruit pulp used as eyedrop to cure measles. Leaves used as expectorant diuretic and for the treatment of liver and kidney diarrhoea. Powdered roots given for malaria treatment.
15) Botanical Name: Canarium schweinfurthri
Local |Name: *Ubemgbada* Family: Burseraceae Parts used: Stem barks Remarks: Power of stem bark with potash applied on the swollen limbs of pregnant women.
16) Botanical Name: Carica papaya
Local |Name: *Mgbimgbi* Family: Caricaceae Parts used: Leaves Remarks: Leaves extract used for malaria
17) Botanical Name: Chlorophylum macrophyllum Aschor
Local |Name: *Ukpazi* Family: Ciliaceae Parts used: Seeds Remarks: Seeds powdered with native chalk chewed for relief of footache.
18) Botanical Name: Palisota hirsute
Local |Name: *Okpete* Family: Commelianaceae Parts used: Roots & Leaves Remarks: Roots juice used for treatment of gonorrhoea. Leaves extracts used to stop bleeding on wounds.
19) Botanical Name: Vernonia anygdalina
Local |Name: *Onugbu* Family: Compositae Parts used: Leaves and stems Remarks: Leaves and stem chewed to cure stomach, aches

Table 2: Plants used in traditional medicine and their medicinal remarks (contd.)

20) Botanical Name: Combretum racemosum
Local |Name: *Inenenwata*
Family: Combretaceae
Parts used: Roots and leaves
Remarks: Decoction of the roots and leaves used for abortion.
21) Botanical Name: Emilia occionea
Local |Name: *Osiisi*
Family: Compositae
Parts used: Leaves
Remarks: Leaves extract used to cure earache
22) Botanical Name: Cnestis ferruginea
Local |Name: *Ogbakpee or Ojieyi*
Family: Connariaceae
Parts used: Leave
Remarks: Decoction of leaves used for dysentry
23) Botanical Name: Telfariria occidentalis
Local |Name: *Ovee*
Family: Cucubitaceae
Parts used: Leaves
Remarks: Leaves extract used for treatment of convulsions in children.
24) Botanical Name: Vaccinium myrtillus
Local |Name: *Uri*
Family: Fruit juice
Remarks: Fruit juice remedy for joint aches
25) Botanical Name: Ocimum viride
Local |Name: *Nchanwu*
Family: Labiatae
Parts used: Leaves
Remarks: Burnt leaves drives away ants (especially white ants).
26) Botanical Name: Oryza sativa
Local |Name: *Osikapa*
Family: Graminae
Parts used: Grains
Remarks: The grain extract used to cure body rashes.

Table 2: Plants used in traditional medicine and their medicinal remarks (contd.)

27) Botanical Name: Saccharum officinarium
Local |Name: *Ichara ucho* Family: Graminae Remarks: Stem juice given to malaria patients to restorate vitality.
28) Botanical Name: Euphorbia heterophylla
Local |Name: *Ogwu-eva-osisa* Family: Euphorbiaceae Parts used: Leaves Remarks: Cleans the stomach and cures constipation by causing purging of the stomach when dish prepared with the leaves is eaten. eg. Yam porridge.
29) Botanical Name: Garcinia kola heckle
Local |Name: *Akuinu* Family: Guffiferae Parts used: Seeds Remarks: Seeds used for cough and catarrh.
30)Botanical Name: Cassytha fili
Local |Name: *Gbanigerige* Family: Lauraceae Parts used: Stem used during epilepsy attack.
31) Botanical Name: Albizia gummefera
Local |Name: *Ogwu akpee* Family: Leguminosae Parts used: Roots Remarks: Roots paste with salt and pepper used for scorpion bites.
32) Botanical Name: Pentacletira macrophylla
Local |Name: *Akpaka/Ugba* Family: Leguminosae Parts used: Stem bark Remarks: Stem bark paste used to counter act the effect of poison.
33) Botanical Name: Indigofera tinctoria
Local |Name: *Ogbu* Family Name: Legiminosae Parts used: Stem leaves and twines Remarks: Stem chewed to cure cough and decoction of Leaves used to cure chest pains The twine paste cures dislocation. Also the Warm leaves dismise bruises.

Table 2: Plants used in traditional medicine and their medicinal remarks (contd.)

34) Botanical Name: Dialium guinense wild

Local |Name: *Unuagu*
Family: Leguminosae
Parts used: Leaves
Remarks: Decoction of leaves used for stomach ache.

35) Botanical Name: Azadiracha indica

Local |Name: *Ochoikaoneme/Dogoyaro*
Family: Meliaceae
Parts used: Leaves
Remarks: Decoction of leaves used to cure malaria.

39) Botanical Name: Musa paradisiacal

Local |Name:
Family: Musaceae
Parts used: Leaves
Remarks: Decoction of leaves used to cure swollen stomach.

40) Botanical Name: Vitellaria paradoxa

Local |Name: *Osisiekwume*
Family: Sapotaceae
Parts used: Fruit
Remarks: Fruit oil used for body pains and aches.

41) Botanical Name: Senna occidentalis

Local |Name: *Uri-Oka*
Family: Leguminosae
Parts used: Leaves
Remarks: Leaves extract used for cure of malaria and also crushed leaves used for eczema.

36) Botanical Name: Milicia excelas

Local |Name: *Uko*
Family: Moraceae
Parts used: Roots & leaves
Remarks: Decoction of leaves or roots cure stomach aches.

37) Botanical Name: Lophira alata

Local |Name: *Ugiri Nwautobo*
Family: Ochnaceae
Parts used: Leaves
Remarks: Paste of the leaves with potash and local gin used for fast healing of wounds.

38) Botanical Name: Mitracarpus Villosus

Local |Name: *Ogwu Ugwo*
Family: Rubiaceae
Parts used: Leaves
Remarks: Leaves used for eczema

42) Botanical Name: Nicotiana tabacum

Local |Name: *Anwuru or utaba*
Family: Solanaceae
Parts used: Leaves
Remarks: Leaf paste with palm oil and potash used tocure tooth ache.

43) Botanical Name: Celtis durandi

Local |Name: *Egid*
Family: Ulmaceae
Parts used: Roots
Remarks: Alcoholic extract of roots used for malaria and fever.

Conclusion

The entire study on the identification, collection and domestication of some medicinal plants have given us the statement of truth, that right from creation, God endowed mankind with invaluable natural gifts upon which all the so called scientific findings and contributions are centred, with the ultimate aims of identifying those natural endowments and harnessing the benefits derived from them to suit the problems of mankind. Further research work is hereby solicited especially in the areas of chemical composition of the medicinal plants.

References

Adam, C. E., Banford, K. M. and Early, M. P., 1964, *Principles of Horticulture, 2nd Edition*, Cambridge University Press, Cambridge and London.

Awake, May 1998, 'Can the Rainforests be saved?', *Journal of the Watchtower Bible Tracts Society of New York*, USA.

Iwu, M., 1989, 'Food for Medicine' in: M. Iwu, (ed.), *Dietary Plants and masticetories as sources of biologically active substances*, University of Ife Press, pp. 303-310.

Ogwuru, C.C., 1995, 'Domestication of Medicinal Plants in Ebonyi State', B. *Agric Project*, unpublished.

Unanma, R. P. A., 1982, 'Your Guide to Identifying some Arable Land Weeds of Southeastern Agricultural Zone of Nigeria, Extension Research Liaison Service, National Roots Crops Research Institute', Umudike, Nigeria, *Extension Bulletin*, Vol. 1 pp. 41-42.


Africa Development, Vol. XXX, No.3, 2005, pp. 78–92

(ISSN 0850-3907)

Healing Insanity: Skills and Expert Knowledge of Igbo Healers

Patrick Iroegbu*

Abstract

This paper gives insight into how Igbo healers of Southern Nigeria conceive of insanity and apply endogenous knowledge and expertise to heal it, contrary to the belief that cosmopolitan orthodox medicine only can provide efficacious cure for insanity. Resort to community support and culture remains people's widely shared way of dealing with insanity and related disturbances. While pharmaceutical drugs are being made available to health seekers, local herbal and ritual resources as well as communicational and bodily skills do constitute the asset for holistic healing. Although research shows tensions between the local, Christian and biomedical views, the paper argues that effective healing tends to be successful when the etiology and treatment include due ancestral compliance work in harmony with people's views, emotions and life-worlds. The paper offers an endogenous theory of symbolic release underlying a genuinely Igbo cosmological and epistemological strategy, side by side with the ritual of tying and untying for releasing the forces hampered by intrusion, and for achieving treatment based on culturally meaningful herbal and animal resources. To rescue the help-seeking individual and kin-group, as a first principle, the forces that tie the afflicted need to be rusticated before effective results can be obtained with treatment.

Résumé

Cette communication expose la conception que les guérisseurs igbos du Sud du Nigeria, se font de la folie, ainsi que la façon dont ceux-ci se servent des connaissances et de l'expertise endogène pour la guérir, contrairement à la croyance répandue selon laquelle seule la médecine orthodoxe cosmopolite serait en mesure de soigner la folie. Le recours au soutien et à la culture communautaires

* Patrick E. Iroegbu is currently lecturer in anthropology at Grant MacEwan College-University Studies, Edmonton Alberta, Canada. E-mail: iroegbuP@macewan.ca.

demeure une des méthodes les plus consensuelles de traitement de la folie et des troubles connexes. Même si les médicaments pharmaceutiques demeurent disponibles, les ressources aux herbes et rituelles locales, ainsi que les moyens communicationnels et corporels constituent un réel atout favorisant le traitement holistique de la démence. Même si les recherches effectuées ont relevé des tensions entre les conceptions locales, chrétiennes et biomédicales, cet article soutient que les traitements thérapeutiques se révèlent efficaces, lorsque léétiologie et la thérapie intègrent un savoir-faire ancestral, en symbiose avec les opinions, les émotions et les univers de vie des individus. Cette communication propose une théorie endogène de la libération symbolique, à la base d'une certaine stratégie cosmologique et épistémologique authentiquement igbo, qui s'accompagne du rituel consistant à attacher et détacher, dans le but de libérer les forces tourmentées par l'intrusion, mais également dans le but de mettre en place un traitement basé sur des ressources aux herbes et animales ayant une certaine signification culturelle. Pour venir en aide à l'individu ou au groupe de personnes apparentées, il faut tout d'abord extraire de la personne les forces qui l'habitent, avant de pouvoir procéder à un traitement efficace.

In Igboland, Southeast Nigeria, cosmopolitan biomedicine at first sight seems to be commonly perceived as the standard resort for health care. Indeed, Igbo easily consume pharmaceutical drugs. And yet, most people do rely on indigenous expert healers and folk remedies for more than half of their health needs, and most strongly in cases of lasting illness and when insanity, *ara*, is at the horizon. In these domains, Igbo culture does not fully espouse western modernity's compulsion to subdue 'unreason' to 'reason' alike the invisible to the visible, or to relate one's ill health to merely physical and/or intrasubjective states. For Igbo, health is something shared intercorporeally and intersubjectively, both in the this-worldly and other-worldly or the visible and invisible realms. A physical ailment or *disease* most often reverberates as sickness when it entails a social dysfunctioning and labelling. This may extend to a subjective experience of *illness* or misfortune in particular when its meaning is being defined in the canvas of (intergenerational) moral debts and bewitchment among kinsfolk. Likewise, a physical (biomedical, pharmaceutical) *cure* is to be paralleled by a community-based response and appropriate *healing* of the illness.

The paper draws on eighteen months, in the course of 1996-2001, of ethnographic participant observation, next to case studies and survey work, among healers and their patients in Mbano Local Government Area and neighbourhoods close to Owerri, the capital city of Imo State in Southeast Nigeria. My focus, on both communal health-seeking behaviour and emergent cultural meaning production, is especially indebted mainly to Ahyi (1997), Devisch (1993), Janzen (1978), Kleinman (1980), Lambo (1961), Last and

Chavunduka (1986), Turner (1987). My research findings go contrary to held views in Christian and biomedical circles, which seem to overlook the following state of affairs:

1. Local knowledge and action systems, folk or ritual healing, faith healing, and cosmopolitan medicine, as well as Western-type development programmes in Igboland, alike also the dynamics of migration to towns, seem to an alarming degree be developing in disconnected ways. These various dynamics seem embedded in different sociologics, i.e. they operate according to different aetiological, transactional and solidarity registers, and according to different views on (the origins of) good health, sickness or illness.

2. Systematicity in Igbo indigenous health care is to be found in the practices (proper to the afflicted family, the lay therapy management group, the healers, and the initiatory cults) rather than in a systematic body of expert knowledge or a quasi-science.

3. Literature on Igbo expert and folk medicine has all too much been swathed in half-truths. On the one hand, this literature entails a strong Christian if not dismissive bias defining Igbo indigenous medicine as antithetical to the faith of Christian or the healing churches. On the other hand, there is scant reliable information for setting up a formal public health policy in view of upgrading folk healing, and exploring or strengthening its complementarity with biomedicine.

4. The sociocultural and class differences between the great majority of people, on the one hand, and the State or Church authorities including the University trained elite, on the other hand, exacerbate the communication gap between indigenous medicine and cosmopolitan biomedicine at least on the institutional and policy-making level. Both systems fundamentally differ in their premises about the nature of health, disease causation, and remedy.

5. And still, Igbo folk and expert medicine is increasingly being relied upon and utilised by about eighty percent of the population. There is an important decrease of in-patients in psychiatric hospitals (such as, Mgboko psychiatric hospital in Obioma Ngwa Local Government Area in Abia State). The current severe socio-economic crisis forces the afflicted to rely more on local networks in their neighbourhood. Many formal urban organisations (linked with the State, paid labour, cash economy) are dwindling in favour of very personalised networks.

6. There is lack of scientific insight into how Igbo medicine is changing in orientation and in its response to current needs and demands.

7. Following the scope of our observations, Igbo medicine retains the thread of oral tradition and the local worldview in line with ancestral cults and with the coverage of biomedicine remaining low. Most practitioners of Igbo medicine emphasized that the healing, which they offer, has largely and strongly maintained its integrity vis-à-vis the consequences of the 19th century slave trade, the Christian hostility and biomedicine.

The above-mentioned state of affairs concurs to the rather desperate calls from a few Igbo scholars and elders (among others at the 1988 *Ahiajoku Lectures*), affirming that though Igbo people do possess precious medical resources, the latter remain too much devoid of scholarly attention. As Anezionwu (1988:40-41) points out, 'the body of traditional medicine in Nigeria has remained largely outside the culture of writing in any language. Why should this remain so? Is it because of doubtful monopoly of our medical secrets? We can demonstrate the authenticity, validity and verifiability of the system'. The fact is that these deeply rooted practices have been interpreted by many Christianised intellectuals as 'evil and devilish'. Hence, on their behalf, Igbo elders now refer to these practices as a matter of Igbo identity and a dignifying way of life that have to be recovered.

It is to be acknowledged that biomedicine and local healing practices, be they expert or folk ones, are of a very different, yet partially complementary, nature (Ademuwagun 1979, Feierman & Janzen 1992, Last & Chavunduka 1986). The expert healer's view on the body, his rituals and use of plants entail a proper symbolic approach regarding the co-shaping of the individual body, social life, and the life-world. Expert healing addresses the patient's body within the larger social field and world-making, in resonance with ancestral compliance. That means the cultural mode of healing effectively draws from and emphasizes obligation, alliance and respect to ancestors, descendants and community as a key moral tradition far beyond the biological analysis of parts of the human body. In this way, people owe their own lives and corporeal wellness to their ancestral fortification and community in addition to showing responsibility for transmitting forces that shape healthy balance of the individual and society in a highly culturally cohesive way.

Exploring health beliefs and practices

The Igbo concept of good and ill health is eccentrically constituted: health is a sum, first, of the person's relations with the family and community members, alike with the invisible world of the medicine deity (*agwu*), the earth deity (*ala*), the ancestral cult spirits (*ofufe ndi ichie*). The ancestral spirit is the transmitter and guardian of one's family and personal genius (chi), and its power (*mmuo*). Good and bad fortunes are ascribed to *chi*. One's capacity

to live a quality of life is achieved primarily with the support of one's *chi* as well as, if needed, through proper ritual treatment in particular by *ofo na ogu* (key symbols to declare innocence, justify conscience, achieve retribution and justice, and obtain ancestral help). Forces, such as thunder (*amadioha*) or town and village deities, may be called upon to bring harm to targeted victims. Other extrahuman forces, such as *mami wota* (mermaid) or *ogbanje* (ghost or spirit children), may cause suffering and illness. Good or ill health is also the outcome of people's invisible and potentially harmful dealings with one another through evil eye, envy or jealousy, witchcraft (*ita amusu*) or sorcery (*nshi na aja*), curse (*ibu onu*) or the calling down of extrahuman wrath (*iku ofo na iju ogu*). Such aggression may cause physical injury or insanity, as well as the loss of property, a job, one's beloved ones, and the like. Offended ancestors and evil spirits (*ajo mmuo*) may cause debilitating misfortunes, illness and death. There are moreover social misfortunes, such as the inability to find a loving and stable marital partner, win social status and public authority in one's community. To sustain health and society, people and their invisible allies join forces and rely on competent healers.

Extrahuman vocation and training of healers

Folk healing is open to every member of society, whereas expert healers, called *dibia*, cover a variety of major medical and societal needs requiring expert knowledge, healing skills and resources. A *dibia* is elected to this function by the great medicine deity, known as *agwu*. The extrahuman vocation and long initiatory training into the full art of healing are very demanding. A *dibia* is both a restorer and transmitter of life, a healer, medicine man/woman and priest. The healer is one who blows away and ties in maleficent forces and crises that disturb the individual and society. Healers engage in a great number of ritual and healing activities to address ailments, illness, social and cosmological disorder. A healer's fame rests on his level of training and the form of expertise.

Table 1: Healers by training and expertise

Level of training	Form of expertise
1. *dibia okpo, epum*: original, pioneer healer	5. *dibia afa*: diviner or doctor of secrets
2. *dibia ezumezu*: complete healer	6. *dibia aja*: priest or doctor of sacrifice
3. *dibia nkiti*: ordinary healer	7. *dibia mgborogwu*: doctor of roots
4. *dibia onye oha*: community healer	8. *dibia okpukpo*: bone setter
	9. *dibia omumu*: fertility healer
	10. *dibia owa-ahu*: surgeon

For example, a *dibia okpo*, is also called *epum* or *dibia ntu ala*, names signifying how much the call to the office of healer is considered as a highly particular and original, if not innovative one. Such calling is moreover endorsed by the lineage ancestral deity. Healers of this statutory category distinguish themselves as 'apart' or 'sacred' and they therefore live and stress the highest moral standard. They pride themselves by saying *abum dibia okpo*, *epu m*, meaning that one is an original or sacred healer. *A dibia onye oha* holds important ritual symbols for the community. He is a prestigious healer (such as, Nze Emeka Vernatius Iwu of Agbaghara Nsu) who may act as a king-maker. Such prestigious healers hold four *Ofo* or distinguished sacred symbols, namely *Ofo Ndi Ichie*, *Ofo Ezumezu*, *Ofo Kamalu*, *Ofo Agwu*. Among his co-healers, he is referred to as *dibia onye oha*, that is, a healer who embodies the collective health, productivity and strength. He may moreover be called on for cooling the land (*iji-ala*), rain-making (*iha na ichu mmiri*)) and appeasing the thunder deity (*imezi ihe amadioha*). The following table shows how ndi dibia or healers are called according to their specialist domain of skill and care.

Table 2: Healers and their specialist domain of care

Appellation	Domain of care
1. *Dibia afa, dibia ogba aja*	Divination diagnosis
2. *Dibia aja, or nchu aja, or anya odo*	Priest, ritual expert
3. *Dibia onye oha*	Community matters, king making
4. *Dibia mgborogwu*	Root and herb expertise, herbalism
5. *Dibia ara*	Insanity
6. *Dibia ogbaokpukpo*	Bone-setting
7. *Dibia ogbanje*	*Ogbanje* healing, care for spirit children
8. *Dibia amosu*	Witchcraft healing
9. *Dibia mmanwu*	Masquerade guarding
10. *Dibia amadioha*	Rain and thunder matters
11. *Dibia omumu*	Fertility healing and attending
13. *Dibia owa ahu or okwochi*	Surgery related ailments
14. *Dibia owu mmiri*	*Mami wota* crisis
15. *Dibia anya, nti, etc.*	Cure of eye or ear problems

A healer may combine various specialisations. Most healers address the common afflictions, such as malaria (*akom*), aches and pains (*ahu mgbu na ikwukwe*), as well as fever (*oyi*). Most may also deal with infections, such as measles (*akpata*), HIV/AIDS (*oria amuma ahu*) in their own right; as well as lasting diarrhoea (*otoro*, lit., excessive looseness of the bowels). Most

healers are illiterate, and so learning and communication take on oral forms. A few are literate and note down most of the things of their profession, including deliberations in their association's meetings and businesses. It is, moreover, not easy to find out how healers operate on a daily basis and how their healing works, except through considering their initiation. This is what the healers, Lambert Opara and Sunday Iroabuchi told me clearly:

> How could you see when your eyes are still the same? How could you perform a successful ritual when you have no insight and are not backed up with the force to do so? How could you sort herbs and roots, and mix them wisely, when you have not established good contact with the locality? How are you even safe to do so amidst forces surrounding an illness when you continue to interpret the facts in daily life in your own limited and unclear way?

This declaration suggests that healing entails a special sense and art at a core of culture that is out of reach for the uninitiated. Just as the healing of insanity elaborates on the central metaphor of tying (*ikechi*), as I will show, the same applies to aetiological examination and the relationships between patients, healers and clients.

Aetiology and implications

Healers, unlike psychiatrists, rarely perceive insanity as incurable. A complex set of genuine aetiologies of insanity provides a framework of inclusive explanation of illness, death and misfortunes. Causes voiced out range from interpersonal violence to ancestral wrath. Insanity is viewed as a major impairment. It refers to behaviours at odds with the expected proper behaviour in the household and society. It hinders appropriate sensory interaction and thinking. People considered sane are meant to be able to carry on their usual daily cores, balance emotions, handle problems in a positive manner, develop self respect and show deference as well as take appropriate initiatives. Those trapped by insanity experience a significant impairment of thought, emotional instability, distorted perception, wrong orientation, and confused memory, even live with inability to meet the ordinary demands of life. Common warning signs of insanity are many and varied. A person may exhibit one or several symptoms of incapacitation, such as withdrawal from contact, chronic fatigue, confused or altered thinking, inappropriate expression of emotions, and loss of touch with common reality. Other such mental troubled signs include distorted ability to cope with challenges, inability to take care of oneself, one's needs, one's display of self, as well as insensitivity to violence towards self or other, and exhibition of delusive and hallucinating mannerisms. Stigma, through public ridicule and rejection, is the biggest derailment.

Insanity moreover signifies that society has failed to properly handle its inner conflicts and problems. Where that is the case, it is assumed that it thereby gives a hole for the evil forces to penetrate and derail the weakened person and his or her network, undo his or her identity and sense of responsibility, morality, and honour. This shows that insanity is largely an incidence onto which a community transfers its own weaknesses, paradoxes, difficulties, while at the same time using the insane to heal or recover.

Pathways to healing

Paths and phases of aetiology and treatment of the insane involve many diverse rituals, as well as medicinal root and herbal treatments. First, divination involves going to ask extra-human forces considered wiser than human to obtain explanation. By way of questioning what has caused insanity, those concerned seek to understand what form of intervention is required, such as sacrifice, treatment with roots, and counselling, in view of attaining recovery and reintegration in society.

Ritual intervention, including incantations, concentrates on closing off the insane from the burden, as well as opening him or her to release, by the use of ritual keys (*igodo amuma*). Once this is achieved, the head of the insane is treated with roots, vegetal and animal concoctions rubbed into some seven parallel cut marks to disassociate and free the ill person from delusion bothering the heart and brain.

Tying and retying (*ekike*) are techniques that precede the forms of release in a symbolic way. Tying is not only skilfully employed to frame the problem, on the one hand, but also to define care in building the spaces of normality. In order to produce release, intruding forces are tied up cosmologically in a way that normality is restored between the subject, the gods and spirits, and the lineage community. It is to ensure that boundaries of life, crisis, obligation, responsibility and continuity are restated in an organized, culturally functional, and reciprocal exchange.

A theory of symbolic release

Igbo medicine envisages the healing of insanity to result from what I define as a frame of symbolic release. This is an important attribute for controlling and healing insanity, whereby a release from the intrusive forces and circumstances of insanity may occur. It is crucial to our argument to address the question of what symbolic release is and why the term is appropriate for understanding the healing of insanity. It is to be noted first that a treatment is not primarily a matter of medicinal roots and herbs. It always begins with important ceremonies, which are meant to be therapeutic by alleviating the condition of the insane patient. It is this symbolic effect that I call symbolic

release. It is one which clears the way for the root and plant concoctions to effect change to the patient's body and life-world. The notion of symbolic release refers to both the therapeutic action and its connection with rituals and plant use in the management of insanity. Outside the symbolic release pattern, the use of drugs would alleviate the ailment only to a limited extent. And when symbolic release applies, threats on the weakened patient are hereby being eliminated so as to facilitate his or her recovery and the re-framing of kinship relations. The patient then stands a pretty good chance to get healed. When expert healers succeed in re-establishing the relationships that were shattered, they moreover, recover the patient's ecological givens and physical and social conditions for a definitive cure. Psychiatrists cannot achieve the same holistic embrace, and yet in their cases, instances of success are rare (Ahyi 1997:236).

The entire framework of symbolic release amounts to explain that the socio-psycho-cultural work of healing is also one, which is transposed to intentions and processes; and thereby one supposed to be, moreover, operative in the realm of the invisible. As to what happens in the various techniques of symbolic release, the practices of knotting stand to establish a means of dealing with barely localisable sources of disturbance. Disturbance in this case is located outside the victim's body or in-between the victim, his or her life-world and relevant others. Thus it must be drawn in the context of aetiological and therapeutic reasoning. Such a reasoning process always corresponds to why certain things happen in certain ways. The idea goes to point out why even some people ask for the reasons behind certain things they are told they did. For example, a patient might ask if it is true that he or she carried out a particular strange act. Realities of con-fusion exist and make people feel subtly doubtful of their inner selves and incapable of understanding what it is all about. The system of releasing a source of intrusion works as a sort of cover-up, which is manipulated, to shade off other realities. 'They are therefore there to mask other realities' (Ahyi 1997:227).

The operative force of this explanatory healing model is partly focused on the patient who has to be released. Its entirety, I would say, is based on the particular matter at hand disturbing the patient. Healing in this context means creating spaces and frameworks to combat the source of aggression and the affliction. It does not focus primarily on the patient and the symptom. It is to neutralise the force of the intentions or instigators in the disturbance. In summary, if the instigators are spirits, they must be blocked off through a framework of pacification. And if they happen to be mischievous spirits or genies of a particular location vamping distress factors, efforts will be made to placate them, shift them, or drive them out. They will be tied in. The

operative field of healing, in other words, is located in some other being, some other environment, within the group or in the spirit world (Ahyi 1997:227). The basic difference between such indigenous healing and the biomedical psychiatric treatment is that healers heal relationships by building or redynamising multilayered spaces of normality, whereas the latter basically cure only body and psyche. By curing bodies, I mean that patients are apparently on their own for their own defects for which they are given pharmaceutical drugs. This practice does not sustain consensus in-between the body and the social group and life-world, that should heal the patient through the power of re-vitalising relationships and re-ordering what Myss (1996:35-38) describes as memory of negative energy registered in the human body. In other words, according to the Igbo view human emotions impact physically our bodies. Connecting energies through the tying up of experiences and turning them back to make up the patient's emotional energy suggests that healing can convert experiences of affliction into a biological complex process of harming or healing.

The symbolic release model proper to Igbo and indeed most African healing entails the culturally shaped reliance on extrahuman forces and the power of symbols. Epistemologically speaking, it is important to recognise this. The entire heritage of the local knowledge system and its *modus operandi* (interacting process of culture, symbols and forces in function and sensitivity to mental, emotional and physical well being) is most important to the extent that psychiatrists in Africa unavoidably practice on the horns of a dilemma (Ahyi 1997:230). Clearly, the endogenous explanatory model, in reference to spirits, is a challenge and underlies a point for success contrary to institutionalised hospital psychiatric practice.

Another important attribute of symbolic release concerns the crucial issues of temporary alleviation punctuated by relapses and definitive cures. As Ahyi (1997:238) has observed, 'it is intriguing that while psychiatrists interpret fresh hysterical crises as relapses into illness, cult healers view them as new visitations from the spirit world'. When that becomes the case, healing is designed to reintegrate the patient not as one with the identity of sick person but as a messenger of the source originally of intrusion by some deity or spirit, which has to be refashioned accordingly. Healing is made to give a patient a new vision in life without having to isolate or discourage him or her. Patients are perceived as part of a continuing process of world-making that elaborates the paths to healing.

The symbolic release is therefore a systematic practice that, moreover, creates social bonds that last, and which all parties to the process of healing – the healer, patient and caregivers – obviously want to maintain. As a model

of explanation of the care process, it is essentially therapeutic and culturally dynamic in view of results, since the model discloses the endogenous elements that make up and bring about effectiveness to the reality of the insane. The point here is that, it is not the consideration of symptoms alone that decides what enters into what should be done. That is to say, healers are not primarily interested in symptoms. They show how symptoms are only indicators, and even so, many of the symptoms are not particularly useful. Given to this view, they rely on a system that holds the whole process together through information derived from plural investigative devices. In this way, ancestors and deities speak out and prescribe a workable healing layout. The assumption is that in order to cure insanity brought on by, say, emotional shock, an equally powerful and emotional release is needed to re-establish the lost balance. In other words, only because psychiatry has confined the meaning of insanity to mental disturbance, its practitioners have not considered the possibilities of its 'ecological management' through the help of other forces, use of roots and plants and other substances 'good to think with' so as to ensure systematic release of negative forces and regain balance in the life-world. Insanity in the Igbo healers' view is much broader than the term mental disturbance. Hence healing insanity involves the mind-body relation, as well as the social environment and the life-world.

For healers to be genuinely understood involves the understanding of spiritual energy dynamics, the divination and therapeutic alliance relationship they rely on. The symbolic release premise in healing entails so-called para-normal elements which are so important in daily life. Ahyi (1997:243) has, moreover, reported a case where telepathy seemed to have some material foundations, illustrating the issue in this hypothesis. It is about how a particular plant use remobilised a marriage relationship. To mark his marital commitment, the groom was invited to urinate on it. Later the partners quarrelled and separated. Yet in view of overcoming this rupture, the same plant was given to the bride to urinate on, whilst focusing her thoughts and wishes for her husband to return to her. It did happen. The case illustrates that healing may actually work via defined and pronounced intentions, and that is what healers devote the framework to achieve. Without adequate ears or receptive mood to understand experiences of ill persons and the explanatory models they display about them, knowledge systems continue to stay apart, thereby making one or the other a bunch of incomprehensible elements. Since people are hexed, tied in, or blocked, causing them untold hardships, they degenerate into emotional troubles such as hypertension, depression and sudden outbursts of violence, and eventually become uncontrolled, deranged, insane. Healing may entail going back to the actual root cause. The following

excerpt from Ahyi (1997:245) reporting a case, echoes very much what I also registered in the field:

> Listen, we put two types of hex on him. First, we asked a poor villager to go beg him for one of his old seminary gowns. He gave it up as alms, and we used it to hex him. He had left his mark on the garb, so even though he wasn't physically there, he was present. We decided to do two things with his gown. We tied a piece of it to a pigeon, recited an incantation over it and let it fly. Pigeons are thought to have good memories. The moment the pigeon flew off with a piece of his gown, our man could no longer become a seminarian intending to be a priest (his career choice). He had a permanent headache and failed to cope with his studies. After handicapping him in this way, with incantation recited, the remainder of his garb was tied to a ram. Since then a permanent erection had occurred, triggering his chasing of women from dawn to dusk. With fear not to disgrace himself, being a former seminarian, all his time had been spent fighting the erection. So he had hypertension. Psychiatrists treated him for headache, cold, hypertension, etc. To cure him properly, two stakes buried for fourteen years as a link to his illness had to be dug up as a *first treatment.*

It is this expression of *first treatment* as in the above citation that would permit for the use of roots and herbs, and this is what I mean by the concept of symbolic release. That is, the first things done to clear the way for drug or herbal therapy are accompanied by those other releases that remobilise sound relations with the life-world, until a final cure is achieved. Symbolic release is shown as a factual explanation of how healing is tailored and points to the intricate ways in which realities are drawn with meaning to exist elsewhere. This sort of meaningful reality is in the invisible realm, imperceptible that one cannot see it with one's physical eyes or common sense perspective. Thus realities do not only entail the tangible aspects; they include also extra-sensory ones, some of which are referred to symbolically and in the belief world. It exemplifies that in the invisible domain, there is a lot of information sui generis awaiting discovery and tied in with phenomena we do not understand in our common discourse (Ahyi 1997:246). It is basic that in the healing of insanity, the ultimate aim must be to affect or alter the 'will' of the intrusive 'distress' forces. Increasingly, it is becoming obvious that therapeutic volition, although difficult to quantify, could be most decisive in determining the outcome of healing. Where therapeutic will is low the efficacy of sophisticated symbolic release, followed by the use of roots and herbs can easily be neutralised. High therapeutic will may somehow sharpen the potency of roots and herbs to effectively resist the evil forces.

Of trees and symbolic release

African healing systems project the sensitivity of trees and plants into humans, as a way to understand the properties pertaining to more embracing non-human domains. Igbo healers summon the belief that certain trees can overhear and record conversations, sounds and signals, and therefore they conceive of them as dwelling places and domains of extrahuman forces. Trees and humans interact in rituals involving birth, growth, marriage, health, illness and death. Examples of trees and woods linked to life crisis rituals and defences of boundaries abound. Healers see trees as most vital symbols of life and eternity as opposed to graves as symbols of death and the fading of memory (cf. Zelter 1998:221-231). This is the dimension linking up ancestral knowledge and herbalism in symbolic release for the healing of insanity.

In addition to that, healers recall that trees are commonly thought by both specialists and common people to be repositories of the souls of the death awaiting reincarnation. Trees are also made to hex the living with the earth and lineage. For example, the afterbirth (*alulo* or umbilical cord) of humans is very often tied to a tree or buried at its base. The Igbo call this 'a life insertion' into the lineage world. Such a tree (usually a palm tree) is called *nkwu alo*, and becomes the child's alter ego. The child sees himself or herself in the tree as well as connected with the ancestral life source. In numerous symbolic representations, metaphors and stories, *nkwu alo* connotes the life source and insertion containing bodily domains from afterbirth to the ashes of the dead. Trees are referred to symbolise the reproductive couple, that is, the human potential for regeneration. It is conceived as comprising both female and male principles. Some ethnographic information has been presented showing the occurrence of such symbolism in different cultural contexts (e.g. Bloch 1992, De Boeck 1994). The association between tree and personality is important for healers who see the continuity of the life-world and the community stability standing within trees. Some major trees trigger their usage for representing and healing broken boundaries. Trees express genealogical continuity and so help to shape our understanding of how others address, rank and organise themselves. In this way, healing insanity is strengthened by a culturally negotiated stability in the power and significance of trees and life-world.

Conclusion

I have not only drawn out, but also referred to various strategies of tying ritual necessitating the use of elements so significant in Igbo culture. Such meaningful tying rituals are devoted to block or unleash sources of spiritual and sorcerous attacks that result in insanity. From the details, the strategies of symbolic release treatment are compelling to the forces and agencies

causing insanity. Once a level suitable for a patient's release is reached, the treatment moves on to the next stage involving roots, herbs, minerals, and animal substances.

As I have shown, Igbo medicine practitioners engage in a wide range of endogenous skills and practices to remobilise the resonance and re-empowering interconnectedness between the physical, social and cosmic bodies. Essentially, healing insanity entails necessary initiations into the medical practice, the reasoning and empowerment of the ancestral tradition, symbols and ritual objects. Healers, moreover, seek to address genuine causes of insanity and remobilise categories of meaning, healing forces, voices, moralities and ways of intersubjectivity. They show, moreover, how techniques are drawn from life-world scenes, ancestral forces, or the realm of water and forest resources. Igbo medicine deity, agwu, channels the selection of authentic healers and sustains their appropriate initiations and discipline to foster good health.

References

Ademuwagun Z.A., 1979, 'The Challenge of the Co-existence of Orthodox and Traditional Medicine in Nigeria. In: Ademuwagun Z. A. et al., (eds), *African Therapeutic Systems*, Walthan, Mass: Crossroads Press, pp. 165-170.

Anezionwu, N.O., 1988, *Chukwu ka Dibia, Ahiajoku Lecture*, Owerri, Culture Division.

Ahyi, G.R., 1997, 'Traditional Models of Mental Health and Illness in Benin', In: Hountondji P., (ed.), *Endogenous Knowledge: Research Trails*, Dakar: Codesria.

Bloch M., 1998, 'Why Trees, too, are Good to think with: Towards an Anthropology of the Meaning of Life', In: Rival L., (ed), *The Social Life of Trees, Anthropological Perspectives on Tree Symbolism*, Oxford: Oxford University Press.

De Boeck F., 1994, *Of Trees and Kings: Politics and Metaphors Among the Aluund of Southwestern Zaire*, American Ethnologist, 21(3):451-473.

Devisch R., 1993, *Weaving the Threads of Life: The khita gynecological healing cult among the Yaka*, Chicago, University of Chicago Press.

Feierman, S. and Janzen, J.,eds., 1992, *The Social Basis of Health and Healing in Africa*, Berkeley: University of California Press.

Janzen, J.M., 1978, *The Quest for Therapy. Medical Pluralism in Lower Zaire*, Berkeley: University of California Press.

Kleinman, A., 1980, *Patients and Healers in the Context of Culture: an Exploration of the Borderline between Anthropology, Medicine, and Psychiatry*, Berkeley: University of California Press.

Last, M. and Chavunduka, G.L., eds., 1986, *The Professionalisation of African Medicine*, Manchester University Press and International African Institute

Lambo, T.A., 1961, 'A Plan for the Treatment of the Mentally Ill in Nigeria. The Village System of Aro', In: L. Linn, (ed.), *Frontiers in General Hospital Psychiatry*, New York: University of New York Press, pp. 215-231.

Myss, C., 1996, *Anatomy of the Spirit: The Seven Stages of Power and Healing*, New York: Three Rivers Press.

Turner, V., 1967, *The Forest of Symbols: Aspects of Ndembu Ritual*, Ithaca, N.Y.: Cornell University Press.

Zelter, A., 1998, 'Grassroots Campaigning for the World's Forests', In: Rival L., (ed.), *The Social Life of Trees: Anthropological Perspectives on Tree Symbolism*, Oxford: Oxford University Press.


Africa Development, Vol. XXX, No.3, 2005, pp. 93–111

(ISSN 0850-3907)

Cultural Modes of Comprehending and Healing Insanity: The Yaka of DR Congo

René Devisch*

Abstract

This paper looks at a particular autochthonous medical knowledge and practice of Yaka healers in peri-urban Kinshasa and rural southwestern Congo. It first presents a sequential analysis of the well-known mbwoolu healing cult, directed at types of affliction most of which I would characterize as deep depression and related insanity. The mbwoolu patient is first led into a state of fusion with the group, with the aid of rhythmic movement and music culminating in a trance-possession. Following this, the initiate undergoes a therapeutic seclusion lasting from one month to some nine months in an initiatory space in which a dozen or so statuettes or figurines are laid on a bed parallel to the patient's. In a play of mirrors between the figurines and the patient, the latter's sensory perceptions and body movements are redirected and rejuvenated. The figurines thus function as doubles that the patient incorporates or inscribes in his or her own bodily envelope, which now constitutes a new interface with others. In the course of a verbal liturgy that unfolds to the rhythm of the initiatory rite, the initiate is gradually enabled to decode and incorporate traces of the collective imaginary conveyed by these figurines and liturgy. The statuettes enact a cosmogony in which the patient is intimately involved throughout. In this, the patient is led into an ontogenetic passage from a fusional and primal state towards a particular and sexualised identity, one with precise contours and situated within a social hierarchy and a historicity of generations and of roles.

* René Devisch is Special Emeritus Professor of Anthropology at the Catholic University of Louvain (Leuven, Belgium). E-mail: Rene.Devisch@ant.kuleuven.be.

Résumé

Cette communication porte sur certaines connaissances et pratiques médicales autochtones des guérisseurs yaka dans la zone péri-urbaine de Kinshasa et dans le sud-ouest rural du Congo. Elle présente tout d'abord une analyse séquentielle du célèbre culte thérapeutique mbwoolu pratiqué pour des affections telles que les profondes dépressions et la folie. Le patient mbwoolu est amené à un état de fusion avec le groupe, grâce à des mouvements rythmiques et de la musique conduisant à un état de transes. Ensuite, l'initié fait l'objet d'un isolement thérapeutique de un à neuf mois, dans un espace initiatique dans lequel une dizaine de statuettes ou figurines environ sont placées sur un lit parallèle à celui du patient. À travers un jeu de miroirs entre les figurines et le patient, les perceptions sensorielles et les mouvements corporels de ce dernier sont reconstitués et rétablis. Les figurines font ainsi office de double, que le patient intègre à sa propre enveloppe corporelle, qui constitue à ce moment-là une nouvelle interface entre lui et les autres. Au cours d'une liturgie verbale ayant lieu au rythme du rite initiatique, l'initié devient peu à peu capable de décoder et d'intégrer les fragments d'imaginaire collectif contenus dans ces figurines et cette liturgie. Les statuettes mettent en scène une cosmogonie dans laquelle le patient est intimement impliqué. À travers ce processus, le patient se retrouve dans une phase ontogénétique, en étant transporté d'un état fusionnel et primal, vers une identité spécifique et sexualisée, aux contours précis, tenant compte de la hiérarchie sociale et de l'historicité des générations et des rôles.

Introduction

The study deals with a professional African medical knowledge practice in Yaka society in southwestern Congo and Kinshasa. It analyses the well-known *mbwoolu* cult which addresses what I would label as deep depression and related insanity. Interpretatively the author contends that following a fusion with the group, accomplished with the aid of vibrations, rhythms, music and culminating in a trance-possession, the *mbwoolu* patient undergoes a therapeutic seclusion lasting from one month to nine months or more, in the presence of a dozen or so statuettes or figurines, which lay on a bed parallel to his own. The play of mirrors between the figurines and the patient mobilises his sensory perceptions and body movements. The figurines therefore take on the function of doubles that the patient incorporates or inscribes in his bodily envelope serving as his interface with others. Through a verbal liturgy that evolves to the rhythm of the initiation, the initiate begins to incorporate—and to some extent decode—the traces of the collective imaginary or unconscious conveyed by these figurines and liturgy. Thus the figurines serve increasingly as poles of specular identification. The cult places gestation in the foundation of self-making and self-understanding.

The *mbwoolu* figurines enact a cosmogony, intimately associating the patient with it throughout. This phylo- and ontogenetic evolution focuses on the gradual transition from the silurid to the complete, sexualised and adult human being, founder of family and generations and vested with social roles. By manipulating these objects, and covering them with red paste before coating his or her own body with this substance, as well as by addressing a ritual discourse to them that becomes ever more elaborate, the ill person incorporates the form and the 'in-formation' of these traditional figures. At the same time, the initiate associates him- or herself with the phylogenetic passage from the imaginary to the symbolic, as well as from the sensory to the verbal and the tactile to the figurative. Similarly, he or she associates him- or herself with the ontogenetic passage from a fusional state towards a sexualised identity with precise contours, situated within a social hierarchy and a historicity of generations and of roles.

African interregional traditions of therapeutic techniques and health solutions as well as their teachings have, in central and southern Africa, till today flourished best in decentralised societies and on the margins of powerful states. Today these professional traditions hold side to side to bio-medicine and the folk curative practices. Through analysing a particular professional African medical knowledge system, the present study wants to arrive at an endogenous understanding of how interacting bodies, in the healing process, or more precisely in the intertwining of affect, imagination and will, can become complaisant with the sensory forces, imagery and symbolism fuelling the cult, in consonance with the group's life world and its dynamics of intercorporeity and intersubjectivity.

Yaka culture in Kinshasa and south-west Congo[1] associates a person's health (*-kola*) and well-being (*-syaamuna*) with the web of vital forces (*mooyi*) he or she is embedded in. Such a condition entails a form of being-in-the-world shared with others, a well-balanced and mutually invigorating interbeing (*-kolasana*). Inasmuch as the Yaka consider a prosperous health as a quality of good kin ties, ill health is similarly seen as a problem among blood relatives. Symptoms of physical disorder, bodily deficits and other alterations of health become socially alarming when they begin to hinder the individual inappropriate social interaction and involvement in the sphere of daily life.

The body is the existential ground of culture and self (Csordas 1990). It is the site through and in which being-with and being-for (intercorporeal and intersubjective interbeing) and shared meaning come about. For the Yaka, good health moreover entails a well-balanced, culturally defined, consonance and transduction between body, group, and life-world: these are understood somehow as (physical, socialised and signifying) bodies in resonance. The

sensory body is the fleshy and witty interface between the experiencing subject and culture, subjectivities and world: it is the locus of an inter-embodiment and the seat of the intersubjective world of which much is in the realm of the unspeakable, the inexpressible (Ahmed & Stacey 2001, Weiss 1999).

These intercorporeal and intersubjective modes of borderlinking (Lichtenberg Ettinger 1999, 2004), engagements, sensibilities and ties either converge and compose constructively (in good balance), or they may deregulate (in a state of imbalance, confusion and malfunctioning), deflect, block or get dissonant. More particularly, Yaka consider that an incapacitating affliction (*-beela*), such as blindness, deafness, the inability to walk, or most dramatically insanity, involves a slippage in particular in the balanced (both ontological, experiential and idiosyncratic) interplay with the maternal source of life. In other words, the affliction disrupts the life-bearing and individualising ties an individual is elicited to weave through his or her mother. This individualising weave, constitutive of self, regards first of all one's most basic bodily, particularly sensorial, modes of being-in-the-world, one's pristine childhood memories, one's idiosyncratic vital ties and moral engagements with the *matrilineal* or *uterine kin* and thus with the uterine source of life (the primary and fusional object). Moreover, the Yaka notion of personhood (i.e., the shaping of self in lines with the culturally patterned modes of experiencing and organising the world) is premised on this uterine engagement with others in the embodied field of perception and practices. By contrast, in Yaka society links of *agnatic* filiation issuing from the founder ancestor of the partriline define one's social identity or set of identities embedded in social norms (Devisch 1993:115ff). The social role and the public shaping of social identity are elaborated most publicly and supervised by the male patriarchs.

Approximately 400,000 Yaka presently inhabit the savannah land of the Kwaango region of southwestern Congo bordering Angola. Yaka culture is partly the outcome of a prolonged interplay of domestic traditions, akin to the ones of the neighbouring Kongo, on the one hand, and Luunda feudal political institutions above the village level, superimposed by the conquering Lunda three centuries ago, on the other hand. In rural Yaka land women practise subsistence agriculture, whereas hunting is men's most prized productive activity. In Kinshasa, the Yaka population, forming the dominant group in a few suburbs and shanty towns, is estimated at some 300,000.

Healing cults

Initiatory healing is aimed at reshaping the initiate's culturally shaped modes of experiencing and organising the world, including his or her sensorium and body-self. The initiatory healing primarily addresses the body in the field of

uterine descent. The healing is organised in the borderzones of the established socio-cultural order (Devisch 1993, Devisch & Brodeur 1999). In such border-zones, the initiandi are being welcomed in an initiatic staging and playful ambience of inversion or even bordercrossing and ecstatic excess. They are led in a fold of interbeing (between life and death; foetus and mother; interior and exterior). Healing cults of affliction (*phoongu*) offer cultural, embodied and cosmological traditions. These cults pertain to a translineage and interregional cultural heritage in the Bantu cultural zone. Some cults have spread from the equator down to the Cape of Good Hope (Janzen 1982, 1992, Turner 1968). The cults' healing arts contribute to durable shape and encode the initiates' culture-specific sensoriums and kinesthetic sensibilities (Geurts 2002), most vital kin relations, core social values, understandings and experiences of health and illness.

I will deal only with *mbwoolu*, one of among the some fifteen affliction cults to be found in Yaka land. It is a major possession (*phoongu yakhaluka*) and healing cult (*phoongwa mooyi*). I am drawing on my own observation in rural Northern Yaka land (1972-74, 1991), and on my follow-up case-studies during annual sojourns, in 1986-1992, in Kinshasa. *Mbwoolu* proves itself to be very popular for it is practised in almost every village of northern Yaka-land as well as among the older generation of Yaka who have emigrated to Kinshasa. Both its ritual tradition and the ills it is concerned with are transmitted along uterine line, *mbwoolu* addresses a set of symptoms of lack of humoral balance, and forms of depression and anxiety. It firstly concerns the disabled and rehabilitation patients, particularly those new-born whose 'skull is considered too weak' or children who 'fail to crawl or stand upright' 'at an appropriate age'. It may also be sought for the healing of motor problems due to birth or misfortune, such as growth defects, polio, anaemia, accidents, stiffness or pains in the joints and lack of erection. The *mbwoolu* cult is secondarily invoked in the treatment of grave and chronic fevers, in particular those occurring in children or due to sleeping sickness or malaria. In these cases it seeks to stabilise forms of serious humoral disequilibrium, to regain a balance of the wet/dry elements of the body. The symptoms of such an imbalance may include exceptional emaciation, especially in women, and/or chronic diarrhoea accompanied by bleeding and white stools, black urine, a chronic and productive cough with fever, and river blindness. Thirdly, the cult seeks to heal persons suffering from what I would label a deep depression (a psychiatric category which is not in use in the Yaka nosology) or delusion (*-lawuka*), namely persons who have lost self-esteem or feel imploded and living outside of themselves. They withdraw from social contact, close up on themselves in a mute, disoriented and inflexible state. They may feel engulfed

by frightening nightmares, fear and confusion related to dark ravines and haunted rivers, or to having capsized in a pirogue and thrashing helplessly about in deep waters. Such recurring nightmares may variously depict ominous encounters with snakes in the bush or the house, or being struck by lightning.

The healing: A sequential portrayal of the distinct scenes

The *mbwoolu* therapeutic treatment entails the following sequences evolving moreover as a rite of passage.

Sequence 1: The etiological diagnosis and the arrival of the maternal uncle and the healer

Inasmuch as the Yaka consider a prosperous health as a quality of good kin ties, ill health is similarly seen as a problem among consanguines. Symptoms of physical disorder, bodily deficits and other alterations of health become socially alarming when they begin to hinder the individual in the accomplishment of his or her tasks. This occurs, for example, when bodily impairments exclude the patient from appropriate social interaction and involvement in the sphere of daily life.

The uncle, the husband or the father and occasionally also other kinsfolk examine the family history, the fields of extrahuman forces and authority relations within the kin susceptible of having caused the affliction or of being disturbed by it. If the illness is lasting or severe, family elders will call upon a mediumistic diviner to divulge the origin and meaning of the affliction in the family history (Devisch 1993:169-179, Devisch & Brodeur 1999:93-124). It is the diviner's task to situate the origin of the client's affliction in a field of sorcery and spirits, while at the same time unmasking the complicity and disastrous effects in the fabric of family relations. Elders of the patient's family subsequently invite a healer, who himself once suffered from the same ailment, to organise the very *mbwoolu* treatment by which he was initiated into the art of healing.

Before turning the patient over to a *mbwoolu* healer, the family group invites the patient's maternal uncle to participate. In his avuncular position as the one who has given his sister (namely, the patient or patient's mother) for marriage, and in relation to her offspring, the uncle represents the relations of descent between the generations, as well as the blood tie between brother and sister, ascendant and descendant, mother's brother and sister's children. Having liquidated the tensions and significant problems within the group concerned with the afflicted person, the family heads offer the uncle a payment in order that he remove all possible obstacles to the cure. This event is usually planned for a new moon and is held in the presence of the whole village community that has assembled near the house of seclusion.

A *mbwoolu* healer, chosen from outside the circle of close kin, has meanwhile been invited to organise the cure. He only treats the ailment he himself or his mother before giving birth to him once suffered from; this is of course the very treatment that initiated him or his mother into the therapeutic art. When arriving on the spot, the healer may, in a trance-like manner, display the symptoms that led to his mother's or his own initiatory treatment. He thereby displays a concrete model for the symptoms and the initiatory cure. For the time of the cure, the healer assumes a transitional and emancipatory role of the maternal uncle of the patient, literally of 'male mother, male spouse, male source'. Just as the uncle, he symbolically integrates a double, hence androgynous function. In his *maternal* function, the healer represents both the patient's genitrix, as well as the group which has married off the genitrix. The ties he sets out with the patient are playful and intimate, as for example through touch and massage. On the other hand, the healer shows his more virile and *paternal* function, his professional competence and the norms and their sanctions transmitted in the uterine line that he exemplifies. To testify to this, he holds in his right hand the insignia which recall his initiation, namely his pharmacopoeia witnessing to his initiatory knowledge and his prerogatives. The healer undertakes the healing as a representative of an ancient therapeutic tradition or of a venerable and sacred healing cult. As such, he is able to provide protection against particular contingencies and whims.

Sequence 2: The installation of the initiatory house

The healer's intervention visually starts around a new moon. This activity occurs in and around the seclusion house: it is either the patient's dwelling, or of a hut built or transformed specifically for the cure. On the eve of the initiation and in the presence of the patient's uncle and family, the healer begins to 'bound off' and to 'protect' the ritual space against sorcerers and malefic influences. The healer acts here as a hunter or a trapper, taming and trapping the evil or the disease in a way analogous to the snaring of a wild animal in a trap, the greed or envy of the evildoer-alike of the game? being the very trap. With this in mind, a long liana vine is hung along the front and back walls of the dwelling and attached to the centre pole supporting the roof. A second vine is attached to the roof and side-walls perpendicular to the first. The vine transforms the hut into something of a mortuary house, since it is a same sort of liana which is laid in a similar manner over the corpse wrapped in the mortuary cloth. The healer plants the *khoofi* shrine in front of the dwelling while 'reciting the ancestral origin of his art'. The *khoofi* shrine is essentially a bundle of three sticks of different species to which is added at the base some riverplants, old palmnut pits, nailclippings from the

respective initiates and some *khawa* ('explosive elements used in ritual arms'). This device is intended to declare to all living above and below the earth that an initiation is about to commence; it equally prevents any ill-meaning interference.

It is on the morning of the initiation that the healer digs out the so-called *mbwoolu* pit, some four or five feet in width and four feet deep, close to the eastern wall on the outside of the seclusion house. The pit is surrounded by a high circular or rectangular fence of poles and palm leaves extending from the hut. The healer then sets about making four niches, literally mouths to the centre of each wall at the bottom of the pit. He there conceals *mbwoolu* figurines with the aid of vegetation from the river. The figurines have either been freshly carved by one of the patient's kinsmen or some may have been renewed following their inheritance from a deceased *mbwoolu* initiate. The initiate will be able to squat on the figurine called 'the river-dog' (see below) which has been laid in the middle of the pit.

Sequence 3: The initiates' river journey

The initiation ceremony itself commences only in the late afternoon. All of the participants congregate around the entrance to the seclusion house. They include the *mbwoolu* healer of course, and a young male or female servant. The patient is referred to as *n-twaphoongu*, literally the cult's head or face. A title is also given to the patient's husband or father as 'the person responsible for the afflicted'. 'The owner or lineage representative responsible for the cult' is also in attendance: this is the patient's mother or brother representing the line of descent, usually matrilineal, through which the *mbwoolu* is active. These key participants are joined by many other family and village members who take up chanting initiation songs, some of which are common to various cults. The patient enters the pit; sometimes the lineage head, along with the mother should the patient be female, and a servant also join in. Each of them squats on the bottom facing a niche as the healer makes an invocation for the protection of the initiates. He then commences an incantation, keeping time by stroking a notched wooden instrument, whose refrain is gradually taken up by the attendants. At nightfall, the healer may suddenly begin to fill the pit with water which he pours over the initiates' heads. The water has been brought from the river in earthenware jars the same morning by women relatives. It is intended that the pit be filled in order that the patients' illnesses would be drawn down with the flowing water and leap onto the figurines, so that the pit thus filled may 'enter in gestation'. The 'ritual bath' is considered complete when the figurines begin to float and the initiates appear to be bathing. At this point the pit is covered with a white cloth. Pouring water over the initiates and the singing of songs induces in the initiates, and particularly in

the patient, a shaking and trembling which leads to the *mbwoolu* trance-possession.

Sequence 4: Seclusion of the patient

As darkness falls, at bedtime around 9 pm, the healer aids the initiates to climb out of the pit all the while maintaining his chant. One by one he anoints their arms with kaolin. It is usually the left arm which is anointed, for the affliction is more commonly believed to be inherited through the uterine line. The healer secludes the initiates in the house of seclusion. They are put to rest or sleep (*-niimba*) on the bed placed there, a procedure which is called *-buusa khita*, 'to be lain down for initiation'. It is said that the statuettes remaining in the pit undergo a similar form of seclusion-mutation. Ritual protections such as fences and traps are placed around the entrance, walls and roof of the hut as well as next to the posts which support the bed. The bed on which the patient lies throughout the seclusion is made from wood of the parasol tree and river plants. The parasol tree is the first plant to grow high on land left fallow as it reaches its full height in only three years. Its straight trunk branches out only at the top.

Sequence 5: 'Winning hold over the anomaly'

At the termination of the so-called 'three day' initial seclusion period, the healer leads the initiates to a nearby river where they must undergo a test. They are made to enter the water and are then told to literally 'eat things from the shore' by somehow transforming themselves into scavengers or predatory fish. The patients are then led out of the ritual compound and dance around the village, moving from house to house 'collecting offerings'. This whole procedure serves to exhibit how well the patient is actually acquiring a new social status.

On this evening a legal proceeding takes place during which 'a charge is brought against the source of the illness' (*-fuundila fula*). During this trial ill fortune is overcome and turned round into a process of recovery. The ritual cane is planted firmly into the ground. The pharmacopoeia wrapped in cloth of both the healer and the initiate are attached to the top along with a small bag containing *fula*, the bits of agricultural and other offerings collected by the patient during the afternoon. The *mbwandzadi* (literally 'river-dog') statuette, to which a fowl is tied, is placed close to the cane. The patient, the husband or wife, the uncle, the lineage head and the healer then all simulate a struggle to grasp hold of the cane and thump it on the ground. In time with this rhythmical movement, they chant several songs. A particular one develops a litany of social relations and type of wrongs which may have been associated with them (Devisch 1993:208ff). The patient's past and his or her problems are reflected in the charges thus made, and when the chant evokes the origin

of the patient's misfortune the latter usually falls into a state of trance. Once the patient has succeeded in winning hold of the cane he or she is urged to 'reveal the origin and circumstances of the sickness and suffering' (*-taaka mafula*) or of the grievances held. While this cathartic indictment is called *fula*, it is clear from the ritual and social context that the struggle portrayed is in fact an enactment of the unmasking and arrest of the 'origin of the anomaly', also called *fula*. At the outset, the cane signifies the anomaly (e.g. the failure to stand upright) and its origin (*fula*); this symbolism of misfortune is inverted such that it now denotes rehabilitation, good fortune, and hence recovery. The healer will likely be busy during the night teaching the patient, mainly through songs, the curative use of plants and the various prohibitions which the patient will be required to respect during the initiation period and for the rest of his or her life. At sunrise the lineage head reappears and 'buys back the ritual cane'—and thereby his rights over the initiate—from the healer, offering him several lengths of cloth in exchange.

Sequence 6: 'Cooking the statuettes'

The investiture of the freshly carved *mbwoolu* figurines into their healing function, alike the patient's cure itself, is associated with the transformative process of cooking, and more implicitly of incubation/gestation. The patient, from disabled or incomplete as he or she was, undergoes a gestation and remodelling in ways prefigured or exemplified by the figurines. As a sign of their undergoing incubation, both the statuettes in the pit and those in the cooking vessel, literally are 'put to rest', namely positioned upside-down. The pot is covered with a white cloth and contains a mixture of river water and ichthyotoxic plants in which the figurines bathe. The toxic concoction, called *zawa*, symbolises the killing of those fish-like agents which have caused the patients' disability.

At this point the healer 'sacrifices a fowl', the same bird provided by the lineage responsible for the *mbwoolu* cult which has been tied since the previous evening to the ritual cane. He breaks the legs of the chicken and draws it around the legs, arms and head of the initiates. Tearing open its beak, the healer kills the fowl with his teeth. This manner of killing the bird emulates that of a rapacious animal seizing and devouring its prey, or the way in which a riverine bird might snatch a fish from the water. He then sprinkles the blood over the initiates' limbs, the statuettes, the pharmacopoeia and over the pit. These gests are accompanied by the recitation: 'Feed yourself from the chicken's blood, keep away from the blood of men'. The spiral movements with which the healer draws the fowl around the initiate's body indicates a disentangling of whatever may be binding and disabling the body of the patient. The chicken is thereupon prepared for a common family meal

by the female servant. Apart from its clear homeopathic reference to the disorder and its cause, the sacrifice and the sacrificial meal intend to underscore the 'foster' relationship between the patient and his or her family. The initiate will thereafter keep one of the chicken's legbones in his or her personal pharmacopoeia.

Sequence 7: From seclusion to reintegration

The initiates return to seclusion following the sacrificial meal. They must there respect a number of dietary and behavioural restrictions. The initiate is, for example, required to hide under a white cloth whenever he or she leaves the seclusion house during the daytime. Initiates are otherwise forbidden to walk around or participate in domestic or conjugal life. The patient is prescribed to regularly 'wash his or her body with a mixture of plants to gain weight'. The lotion is a mix of river vegetation, moss and mud taken from the river. Their application thus evokes a homeopathic or selfdestructive action upon the patient's own impairment. The *mbwoolu* figurines also play an important role in accompanying the initiates during this phase of seclusion. The statuettes are placed on a bed made from the parasol tree. This bed is either placed next to that of the patient or is attached to the western wall of the hut and elevated parallel to the patient's bed. The seclusion may stretch from one to nine or more months, depending on the time needed for convalescence, or that required for the patient's kinsmen to produce the fee demanded by the healer. On the last night of seclusion, the initiates, healer and family elders all wake and sing, again 'bringing a charge against the source of the illness'. They thus lead the initiate once more into a state of trance. The healer at this point may transmit more of his 'art of healing', and especially of his knowledge of herbal medicaments. The initiate then bathes in the river.

The healing cult is not complete until the patient is made capable of fulfilling his or her conjugal and parental roles. The life-bearing avuncular ties made with the healer during the treatment must be loosened in favour of a form of more distanced exchange relation, such as that between wife-taker and wife-giver. The patient is then free to take up normal social life and rejoin the conjugal dwelling. The initiation has, however, led to a lifelong consecration to the *mbwoolu* cult which is now centred around the shrine of statuettes and continues to involve various dietary and behavioural prescriptions. The initiate is fully invested into the *mbwoolu* legacy when the lineage member sponsoring the cult helps the initiate to bound off and regain autonomy: he 'dresses the initiate up with iron or copper armrings which prevent seizures' The initiation culminates with dancing and singing. The initiate resumes the responsibilities of family life and the next child born to the couple will be named *Mbvwaala*, after the initiate's ritual cane.

Feeling and Oneiric Insight in the Passion of Forces and Signs

Looking at the initiate and the way he or she is led to participate in the cult ritual, we see to what extent *mbwoolu* has a *transitional* function and is astonishingly *paradoxical* and *trangressional* (Nuckolls 1996). *Mbwoolu* addresses a relatively specific complex of symptoms of lack of balance, coded in terms of a disbalanced humoral logic and disrupted interbeing. Above all *mbwoolu* brings to the fore both the culture's sensory order in as much as this particular configuration of senses and elaboration of the skin-ego re-mobilise cultural habits, as well as a social order and world-order that the patient embodies. The patient's sensitivity to the spirit world and religious referents shapes a fluidity between his or her inner world and the shared social order and world-order. In the *mbwoolu* cult, the sensory as well as the imaginary and symbolic order (Juillerat 2001) of Yaka culture are being mobilised through the rhythm, the gestures and the context-sensitive themes of the songs and dances, the fittings of the ritual house, the prayers, the massages and many other activities. Thus are brought into play the functions, qualities and transitional spheres of that libidinous and subjective dimension in the person to which are tied the social and ethnic logic. Indeed, the *mbwoolu* cult draws its inspiration and spirit from an extremely vital, imaginary, untamed and energetic universe that the Yaka culture relegates to the domain of the collective phantasms related to the night, the forest and the water spirits, to death throes, orgasmic communion, gestation, parturition, the bonding of the mother and her suckling, as well as to trance-possession. These untamed sources of energy from which the subject can draw, constitute the Yaka culture's specific idiom for dealing with the zones of the unconscious, or rather, the imaginary. It is as if the ritual embraces such an imaginary and transgressional excursion not only for the purposes of a resourcing, but also with a view to a discovery, a ramble through the shared borderzone of intra-uterine and post-natal mother-infant jointness-in-gradual separatedness and conducible affectivity. The cult places gestation in the foundation of self-making as a co-emergence with the other and the world. In the perspective of the cult, the matrix of vibrating mother-infant threads in the corporeal realm already opens an originary intersubjectivity and co-affectivity (Lichtenberg Ettinger 2004). The therapy moreover (re-)knots ties with the norms and attributes of the external world, that is, with the established social order and adulthood. The healer aims, then, to elevate the collective imagination into a socially sanctioned symbolic order and governable practices, and this by further exploring, without dichotomising, the borderspace between life and death, pleasure and displeasure. He projects the sub-historical time of the ceaselessly re-emerging maternal life-bearing capacity into the matrixial

space-time of the rite. Thus co-emerge and are etched in the ritual scene, the matrilineal re-origination, the ancestor and the spirits, the metaphysical origination of society and of the patient and his or her family.

Theme 1: The riverine origins of *mbwoolu*: from silurid to human being, from phylogenesis to ontogenesis

The initiates as well as the texts, chants and exegesis all affirm explicitly that 'mbwoolu originates from the water/river'. In the esoteric language of the cult, and particularly in its chants, the patient's illness or deformity is compared to 'a tree trunk stuck in the mud which hinders the ferryman from passing', or similarly to 'a pirogue that keels over or floats adrift'. The initiation process itself is correspondingly referred to as a river-crossing, and the healer as a ferryman. So it is that the *mbwoolu* shrine generally includes a pirogue with a miniature oar or paddle. It is possible to ascertain the latent models of identification as much for the illness as for the cure from the linguistic and dietary prohibitions imposed on the initiate. This is particularly the case when the person goes into a trance of a psychotic nature upon hearing or seeing the prohibited and identificational animal in question. For *mbwoolu* initiates, these prohibitions apply principally to a suborder of silurids or fresh water catfish, *leembwa, yikhaaka* (Cypriniformes, Siluroidei), as well as *n-tsuka* and *ngaandzi* (Cypriniformes, Percoidei). To my knowledge they are equipped with lung pouches and therefore may be considered air-breathing fish. The first three species mentioned, at least, are scavengers who feed on almost any type of vegetable or animal matter. They are also nocturnal predators, and have been nicknamed mbwandzadi, literally river dog. Both the species *leembwa* and *yikhaaka* are scale-less with small fins.

The silurid inspires a basic metaphor in the *mbwoolu* cult, rendered artistically by the twisted statuettes and the stridulator made from a notched bamboo slat. The silurid offers a latent model of identification for the patient seeking deliverance from physical handicaps (developmental problems, stiffness, sexual impotence) as well as from forms of insanity. Silurids possess a substantial number of human characteristics: they breathe air, detect and emit sounds, have a mouth located on their ventral side, do not have scales, have a skeletal armour that becomes more and more visible with growth; they are omnivorous predators, protect their eggs, and are even capable of leaving the water. It is said that their armour gives them an 'erectile strength'. This protects them from other predators and retains its form even after desiccation, attributes that furnish a transformative metaphor in the treatment of impotence or lack of erection. The silurids habitually build their nests in the mud and hide their eggs under leaves. During the night, silurids may

leave the water in search of food, slithering on the humid earth. They bury themselves in the mud when the river dries up.

Certain species of silurids, and in particular *ngaandzi*, a species of 'electric fish', are capable of paralysing their victims. These last detect sound and produce strident sounds themselves. The low humming note they emit is so loud that it can be heard at some 100 feet distance when the fish is out of the water. This same sound is reproduced during the rite by means of the stridulator. These silurids are artistically represented in the twisted figurines. All references, accidental or otherwise, to the silurid can incite a trance-like outburst on the part of the initiate. Flexing the elbows and clenching the fists, he or she strikes his or her sides convulsively with the elbows. To me, this entire mimic enacts in succession not only the movements and sounds of the silurid, but also those of a person thrown into the water, or having a harrowing nightmare. The initiate emits anguished cries that confirm that the patient or initiate is possessed by *mbwoolu*:

Brr, brr ...	Brr, brr ...
aa mé, ngwa khasi	poor me, Uncle
aa mé	poor me
aa mé	poor me
aa mé, ngwa khasi	poor me, Uncle
brr, brr ...	brr, brr ...

The initiate may then collapse and remain immobile for some time.

Theme 2: Choice of identity by incorporating[2] transitional qualities

The patient is incited to make identity choices by incorporating the transitional qualities of rhythm, a shower of water amidst a trance-inducing resonant envelope, a sacrifice, the cult house and danced chants, as well as - specified under Theme 3-- through the anointing in mirror-image of the figurines and his own body.

During this ritual a shift in transitional functions takes place. The intermediary space is set up successively by the relatives responsible for the patient and especially the uncle, by the healer and then by the altar of cult figurines. A progressive shift occurs. First the initiate is undergoing a fusional absorption in the rhythm and the music. Then tactile, olfactory and auditory contacts develop, and are finally interwoven into an increasingly elaborate borderlinking utterance or message relayed by the figurines. The acoustic and tactile bath of rhythm and sounds, as well as the shower, establish the transitional or borderlinking antennae of *jouissance*, transitivity, human contactibility that move beyond the limits of boundaries between inside and

outside. It is at the boundaries between village and bush, at the turning point of day into night, that the initiates enter their seclusion in the pit near the initiatory house. The drums and the chants offer a bath of sound and melody enveloping the self and bearing it along on the rhythm, the flow of sounds, the modulations and harmony of the drums and chants in unison. The patient finds him- or herself untangled, unfettered, unbent, unlaced, severalised: in a state close to trance, the patient vibrates at one with the collective rhythm. So operates a co-poiesis of 'I' and the 'non-I'. The carnivalesque and transgressional atmosphere, alike the trance-possession does not operate a fusion but a simultaneous emergence and fading of the I and the non-I, such as the persecutive spirit.

For his part, the healer seeks to domesticate the eruptive manifestations of the *mbwoolu* spirits by forming a sort of alliance with them. In his avuncular role, the healer acts as one giving away the bride, as he who introduces the patient into a relation of alliance or marriage with the spirit. The cult figurines serve as the recipients of the *mbwoolu* spirit in its positive capacity. Next, the animal *sacrifice*, standing in for the sacrifice of the possessed-ill person, is intended to radically transform the originally morbid relationship with the spirit. The beneficent capacity of the spirit is transferred to the shrine: the spirit becomes a tutelary. By killing the sacrificial chicken with his teeth, the healer re-elaborates the meeting between the spirit aggressor and its victim, whose negative aspects he inverses by redirecting them in a positive healing (nourishing and expurgating) sense. The origins of the illness, as it was indicted during the simulacra of a trial and struggle, is transferred to a non-human receptor, ensnared into the pharmacopoeia: this receptor is composed of an amalgam of signifiers, handicaps and illnesses, which the healer must take care to tie up by means of various ligatures in order to enlace the binding evil in its own entanglement, that is to say, twist it in an autodestructive or homeopathic fashion against itself.

During the ritual, the music and dancing evolve in a playful and transgressional mood. The patient, initiandi and public perform a sensory borderlinking. The senses are ways of embodying cultural categories. The rhythms and resonance are tuning the cultural values of adherence, cosmo-centred self into a deeply bodily, hence intercorporeal and intersubjective experience. The initiation chants sung to dance rhythms are those that mothers and grandmothers have so often sung in the form of lullabies.

Metaphorically, the house of seclusion is a womb and the seclusion a foetal condition. The fittings of the ritual house and the dictates governing the seclusion reinforce this significant dimension. Indeed, the door of the ritual house and the mode of entry have a genital connotation. A curtain of

raffia palm hides the entire entranceway, which is called *luleembi* or *masasa*, a word that in Koongo -which is very close to the Yaka tongue- means pubic hair. The use of raffia palm is hardly surprising when we know that it served formerly for the weaving of raffia skirts for the initiandi. As night approaches, and they are on the point on entering the house of seclusion, the healer and the patient chant: *Kongoongu a mwaneetu*, 'In this primordial womb, let us lay our infant down'. The initiate lives in a relaxed and warm body to body contact with his or her co-initiates.

Theme 3:From incorporation to incorporated decoding

The *mbwoolu* shrine generally contains some eight or more statuettes, twenty to forty centimetres in height, slender, about the thickness of a branch. Their stylistic characteristics have been described by Bourgeois (1978-79). When speaking to the statuettes the initiate addresses them with the respectful title of chiefs, or also by the term *makuundzi*, protectors or supports (i.e. that shore up, for example a bed, a roof, a banana tree, a disabled human body). In a show of deference to the chiefs the initiate kneels before the shrine and claps the right hand in the left and vice versa. He or she then presents the palms of the hands and leaning forward presses the knuckles to the earth as a sign of homage and submission. Taking a statuette in each hand, the initiate then strikes his or her shoulders, arms and sides with them, and spits kola nut on the heart of each figurine.

The unction in a play of mirrors between the patient's own body and the figurines performs a transitional function towards intersubjectivity. The unction affirms the boundary or the bodily envelope as a source of comfort and as a mirror. By the daily unction of his or her entire body, the patient stimulates his or her body tone, and the sentiment of being intact and cohesive. By inflecting the source of smell and limbering up the skin, the unction awakens tactile receptivity, adaptive permeability or a predisposition to stimulation. It articulates the *skin-ego* ('le moi-peau', as coined by Anzieu 1985) as a bodily faculty of regeneration, formation of the ego, confidence, indeed, of communication with the world of the water spirits and the unconscious. The skin has a function as intermediary and transitionality. It holds each of us together, quite literally contains us, protects us or keeps us discrete.

Each figurine is a programme, a code (a resource for theorising the stretched and expanded intersubjectivity, i.e. of the constant play of mutual affecting and co-eventing of mother and infant). To enter into the skin of these figurines is to enter severality and encounter: 'The massage becomes the message' (Anzieu 1985:38). The figurines form a multiple skin inducing encounter with one's severality, transsubjectivity, that is socialised, idealised

and protective. One's own skin becomes the internal, receptive or 'invaginated' layer of the plural identity in formation. The phantasy world that these figurines trigger and incorporate offers to the initiate a plural imaginary, a subjectivity of gestation, of intercorporeity. Through the interaction with a series of identificatory cult figurines, the patient develops his or her identity of interbeing, as a unity of social and individual skins, to re-envelop him- or herself with him- or herself.

Side-to-side to the sensory, pathic relationship with the matrixial, the initiate develops a more gnosic one of symbolisation in language and of identification by incorporation (Maldiney 1973).The cult figurines offer and model an *ecology of body and affect*. Through the cult and the cult utterance, the patient decodes the archaic-mythic message relayed by the figurines. This message takes on an oracular value, transforming a fate into a destiny, while prompting specular identification.

Theme 4: The heart as the centre of the person in a state of becoming
At the close of the unction, the initiate chews a cola nut and spits some on the various figurines in the region of their hearts. In an esoteric language, he or she utters the particulars of each figurine and issues injunctions to them. The initiate repeats this ritual every time he or she feels in distress or when he or she seeks to structure the turmoil provoked by dreams, or, again, by the initiatory chants he or she hears around the seclusion house in the evening. By transferring this intermingling of tonic and injunction onto the hearts of the figurines, the initiate fortifies the heart as a centre of listening and of interiorisation, and as the seat of knowledge and of the choices that inform one's deeds.

The Yaka say the cola nut has the form of a heart. This tonic nut is the privilege of the elders, and in particular, of those who safeguard 'the heart and the unity of the hearth, concord and cordiality' (*yibuundwa*). The heart constitutes the capacity to balance ancestral tradition and the messages of others (received through the ear, the eye or in dreams) and emancipate them in cordiality. The heart is the hearth of the person in the image of the family hearth, that is, it is the source of harmony and concord (*mbuundwa mosi*, literally 'a single heart') between parents and children. According to the Yaka, the heart is the site of the capacity to balance the ancestral tradition and the messages of the others with a view to promoting them in 'con-cordia' within the family. The heart is not especially regarded as the organ of blood, passion, attraction or repulsion, which are affects deriving much more from the fields of the olfactory, and of ludic and generating sexuality. The heart is the centre of the inner, gnosic or representative gaze (Maldiney 1973) of the person (*muutu*), which assures the unity of his multiple involvements, and his multiple

pathic implications on the level of the orificial and sensory body (*luutu*). The heart is the organ that receives the messages decoded by hearing or sight, taking them in and mulling them over, that is, visualising them by projecting their content onto scenes of the past or the present world. The heart is as much a screen as it is a source and a form of knowledge, virtue, discretion, moral judgment, choice, conscience, communication, loyalty and pride or remorse. In touch with the drives, the heart 're-flects' and revitalises the wisdom and words of others. Thus the heart is the basis of the mutual inclusion of the social and individual identities, of the social subject and the person in progression and transformation.

Acknowledgements

The research among rural and urban Yaka has been financed by the Belgian National Fund for Scientific Research, the Fund for Scientific Research-Flanders, the European Commission Directorate-General XII (B4 Sector Health - STD2 0202-B and STD-TS3 CT94-0326), and the Harry-Frank Guggenheim Foundation, New York. It was carried out in collaboration with the IMNC (Institut des Musées Nationaux du Congo), as well as CERDAS (Centre for the Co-ordination of Research and Documentation in Social Science for Africa south of the Sahara) based at the University of Kinshasa. I thank Peter Crossman for his editorial help.

Notes

1. I was privileged to live in the Taanda village settlements in the north of Kwaango along the Angolese border, about 450 kilometers south-east of Kinshasa, from January 1972 to October 1974. In 1991, I could revisit twice the Taanda region. It was as a participant in everyday life there that I was able to witness two *mbwoolu* initiation rites and maintain regular contact with four *mbwoolu* healers. During my annual three- to six-week sojourns, since 1986, in the poverty-stricken Yaka milieu in Kinshasa, I could moreover interview at length half a dozen *mbwoolu* healers practising in Kinshasa.
2. By the term 'incorporate' which I do not use in its accepted psychoanalytic sense, I seek to render a Yaka perspective that situates the formation and the constitution of the individual identity on the level of the sensory envelope of the relational body, that is, on the level of the skin, the orifices, the senses and exchanges between one individual and another. This identity is not conceived as an introjection in one's inner core or heart of hearts. Thus I will also avoid the terms internalisation and introjection, mainly out of respect for the Yaka genius. In any event, these notions derive from an intersubjective context, whereas the *mbwoolu* cure operates principally in a liturgical sphere where gesture, esoteric utterance and cult figurines with benevolent natures and esoteric names, serve as mediums for phantasy and inner emotion.

References

Ahmed, S. & J. Stacey, eds, 2001, *Thinking through the Skin*, London: Routledge.

Anzieu, D., 1985, *Le Moi-peau*, Paris: Bordas.

Bougeois, A., 1978-79, *Mbwoolu Sculpture of the Yaka, African Arts* 12(3): 58-61; 96.

Buakasa Tulu Kia Mpansu, 1973, *L'impensé du discours: Kindoki et nkisi en pays kongo du Zaïre*, Kinshasa: Presses universitaires du Zaïre.

Csordas, T., 1990, *Embodiment as a Paradigm for Anthropology*, Ethos 18: 5-47.

Devisch, R., 1993, *Weaving the Threads of Life: The Khita Gyn-eco-logical Healing Cult among the Yaka of Zaire*, Chicago: University of Chicago Press.

Devisch, R. & Brodeur, C., 1999, *The Law of the Lifegivers: The Domestication of Desire*, Harwood Academic Publishers.

Geurts, K., 2002, *Culture and the Senses: Bodily Ways of Knowing in an African Community*, Berkeley: University of California Press.

Janzen, J., 1982, *Lemba 1650-1930: A Drum of Affliction in Africa and the New World*, New York: Garland.

Janzen, J., 1992, *Ngoma: Discourses of Healing in Central and Southern Africa*, Berkeley: University of California Press.

Juillerat, B., 2001, *Penser l'imaginaire: essais d'anthropologie psychanalytique*, Lausanne: Payot.

Lichtenberg Ettinger B., 1999, *Regard et espace-de-bord matrixiels: essais psychanalytiques sur le féminin et le travail de l'art*, Brussels: Les Editions de La Lettre volée.

Lichtenberg Ettinger B., 2004, 'Weaving a Woman Artist with-in the Matrixial Encounter-Event', *Theory, Culture & Society* 21:61-94.

Maldiney, H., 1973, *Regard parole espace*, Lausanne: Editions l'Âge d'Homme.

Nuckolls, C., 1996, *The Cultural Dialectics of Knowledge and Desire*, Madison: University of Wisconsin Press.

Turner, V., 1968, *The Drums of Affliction: A Study of Religious Processes among the Ndembu of Zambia*, Oxford: Clarendon.

Weiss, G., 1999, *Body Images: Embodiment as Intercorporeality*, London: Routledge.

Winnicot, D., 1975, *Jeu et réalité*, Paris: Gallimard.

Africa Development, Vol. XXX, No.3, 2005, pp. 112–129

(ISSN 0850-3907)

Subjectivity in Servitude: The Servant and Indigenous Family Arrangement in Written Igbo Drama

Frances N. Chukwukere*

Abstract

Membership into the African family may be on the basis of natural (birth) or social (marriage, adoption, apprenticeship, etc) selection. The present paper examines the roles of eleven servants in eight plays written in Igbo language by six authors. The work considers the perception of the servant by other characters in these works of art, the way in which each of these servants perceives him/herself, and the roles of the servant in the development of the entire fictional enterprise. Finally, the theory of subjectivity: the conscious and unconscious thoughts and emotions that largely account for the relationship between the individual and the society, is used in the present work to explain the authors' presentations of the servants in these dramatic works of fiction.

Résumé

L'on devient membre de la famille africaine sur la base d'une sélection naturelle (naissance) ou sociale (mariage, adoption, processus d'apprentissage). Cette communication analyse le rôle de onze domestiques, dans 8 pièces de théâtre écrites en Igbo, par six auteurs. Elle s'intéresse à la façon dont les autres personnages perçoivent les domestiques dans ces pièces de théâtre, ainsi que la perception que ces employés de maison ont d'eux-mêmes, et le rôle des domestiques dans l'univers traité dans le roman. Enfin, cet article traite de la subjectivité, c'est-à-dire des pensées conscientes et inconscientes qui déterminent la relation entre l'individu et la société. Cette forme de subjectivité est évoquée dans cette communication, pour mieux expliquer le portrait qui est fait de ces domestiques dans ces fictions.

* Dr. Chukwukere teaches Linguistics, Igbo language, Literature and Culture at Imo State University, Owerri, Nigeria.

Introduction

The family exists in all kinds of economic, social and religious situations. The nuclear family structure comprises a man, a woman and their children. The extended family, as is typical in Africa, comprise fathers and mothers, sons and daughters, brothers and sisters, uncles and aunts, nieces and nephews, parents and grandparents, cousins, wives sharing one husband, wives married by several brothers and, indeed servants. This is but a limited view too, of the scope of the family, because in many Igbo communities, a whole village that has common ancestry is regarded as a family. Typically; members of a family are guided by a principle of sacred blood covenant: *umune* that prohibits the shedding of blood among them, and in the Ngwo-Igbo area, the principle of *oshie* guards against inter-marriage and the shedding of blood among about five, whole communities. On a smaller scale, many family members in Igboland, as well as other African communities are guided by the incest taboo: they can not have sexual intercourse with one another, nor can they intermarry.

Membership into a family is pre-selected for one through accidents of birth especially, and less through marriage and other social arrangements like business. Marital union, at least in modern times is not predetermined for a person in advance to an extent that she or he must live with an arrangement largely deemed inconvenient. Similarly, a business agreement sets a time period within which an apprentice may live with and work with his master (apprentices under such an arrangement are often male), and under such a situation we may not regard the apprentice as a *bona fide* member of the family. Such a temporary member of the family is regarded as one who is in a state of servitude to his owner.

A dictionary definition of servitude by *Oxford Dictionary of Current English* (6th edition) does not perhaps capture all the intricate arrangements of states of servitude, for all such states, in the contemporary sense, are not necessarily '*the condition of being a slave or being forced to obey another person*'. However, this definition as well as two other definitions of a servant in this dictionary are important to our study. The dictionary's first definition of a servant is '*one who works in another person's house, and cooks, cleans, etc*' while another is '*a person or thing that is controlled by something*'. These three definitions will form our conceptual focus in our study, as we critically examine writers' positioning of the temporary family member of the type called *nwa odibo* (literally: little servant) in Igbo works of fiction of the dramatic mode. We hope through this study to make important statements about the ways in which servitude as practised in our contemporary society

creates certain forms of ambiguity about a person's perception of self and others. We shall attempt to address the following questions:

1. What are the roles of *nwa odibo* in written Igbo drama?
2. How do other characters in the dramatic work perceive the role of *nwa odibo*?
3. How does *nwa odibo* take his or her assigned position in the larger context of family roles?
4. To what extent does the role of *nwa odibo* help the development of the overall work of art?
5. Using the theory of subjectivity, to what extent can we explain the author's presentation of the self-image of *nwa odibo* as well as the image of him or her, seen from the perspectives of other characters in the work of art?

To seek answers to these questions, we have employed different literary and structural-linguistic tools from the works of six authors in eight dramatic works written in Igbo namely: Inno Nwadike's (1989) *Onye Kpaa Nku Ahuhu* (1992; 2000), *Omume onye na-edu ya* (1990), and *Nwata Bulie Nna Ya Elu*; J. C. Maduekwe's (1979, 1993) *Otu Mkpisi aka*; Goddy Onyekaonwu's (1982; 1991) *Oku Uzu Daa Ibube*; Walter Eneore's (1982) *Oji Isi Kote Ebu*; and G. I. Nwaozuzu's (1998) *Ajo Obi* and Nkechi Okediadi's (2002) *Ihe Onye Metere*.

We list the writers' names for *nwa odibo* in each of their works as follows:

J. C. Maduekwe (1979, 1993): Echi

Walter Eneore (1982): Udumgbo, Ibe and Okechi

Goddy Onyekaonwu (1982): Aligwoekwe

Inno Nwadike (1989): Arisa

Inno Nwadike (1990): Umelo

Inno Nwadike (1992; 2000): Ibekwe

G. I. Nwaozuzu (1998): Oti and Orie

Nkechi Okediadi (2002): Nwaadi

The roles of servants

With the exception of Orie in the works of Nwaozuzu (1998) that serves her 'owners' alongside a male servant, all the servants in the eight books are males. Servants live in the houses of their 'guardians', hereby called their 'owners', with such owners occupying positions, of course, much higher in authority than the servants. The roles of the servants may be divided along the simple, fairly complex, complex, and criminal axis. The simple tasks of servants include running brief errands such as summoning someone to their owners' presence, as well as receiving visitors on behalf of their owners.

Such is the role of Okediadi's (2002) Nwaadi in the house of Okezie and Chinyere as he is sent to call the attention of Ahaotu to his master's presence. Similarly, Nwadike's (2000) Ibekwe receives visitors for his owner, Iloka as well as informs the town crier about his master's wish to give an open invitation to all members of the community to his house for a feast. In the same vein, Onyekaonwu's (1991) Aligwoekwe is sent by his owner and the paramount ruler of the community- Eze Omaliko to summon the village high priest to his presence. In all these instances, their tasks are simple and their presence in the scene brief. At other times, the functions of servants are fairly complex, being a bit more laborious and would usually include also the tasks described as simple above. In these instances, some servants do not only run errands; they also take care of the entire household when the family head is away. Udumgbo is asked by his master and paramount ruler of the community to take charge of the affairs of the home as the ruler goes away on a short trip (Eneore 1982:19). Similarly, Arisa takes charge of home in the absence of his owners: Nnenna and Ikechukwu (Nwadike 1989); while the task of admitting a stranger into the house who has impersonated his master, is mistakenly done by Oti, with terrible consequences (Nwaozuzu 1998). Echi performs the duties of cleaning and scrubbing, going on errands outside the home, taking charge of the house when every member of the family of Ukoha and Mgbokwo is away as well as cooking most of the family meals (Maduekwe 1979:32, 38, 39, 52). Indeed the role of Echi best falls into our third classification of the task of the servant, which comprises a series of complex functions. This brings to the fore the positions of other family members including the heads of the house as well as others especially those within the same age bracket as the servant. The elderly couple: Ukoha and Mgbokwo have one son, Chikwe, and two daughters, Nwamaka and Obiageri. While Nwamaka is often away from home in her selfless struggle to provide for the sustenance of the entire family, the other two are irresponsible and give their parents several sleepless nights. No members of the family assist the servant, Echi, in the general household chores, except Mgbokwo. Mgbokwo's husband, Ukoha, is only the statutory head of his household, since he leaves the responsibilities of family sustenance in the hands of his oldest daughter, Amaka. He also appears incapable of having any worthy, positive impact on his only son, Chikwe, who is both wayward, and a drunk. Echi, by virtue of his free interactions with family members, may be described as more privileged than other servants in other Igbo works, whose positions demand not only obedience and deference but also distance, as hallmarks of their relationships with their owners. But as much as Echi interacts quite freely with all, the onerous duties of housekeeping brings to the fore the contradictions inherent in his position as a marginal, temporary member of the household.

By the demands of an owner, a servant may perform criminal acts including intimidation, kidnap and murder. In such instances, servants act under the dictatorial power of their master who uses them for jobs seen as too dirty for such a master. These are the positions assumed by Eneore's (1982) servants: Udumgbo, Ibe and Okechi, who are used by their master to perform various forms of terrorist acts including holding as ransom, a messenger, Oluona, sent to the paramount ruler by another ruler from a neighbouring community; murdering a famous diviner, Nwaelemele, a few hours after he has prepared an efficacious charm that would ensure the protection of the ruler from external foes; and seizing one of the two wives of their master, whom they lock up in a dungeon, pending her execution day as the powerful ruler decides (Eneore 1982:35-36; 48, 55-56; 65). In all instances, the servants are loyal, trustworthy and obedient.

With the exception of a few, servants are presented as people with a limited intelligence, seen often from their speech and their mode of interaction with other members of the family as well as other characters in the dramatic works. Thus, people that interact with such servants find them stupid, shallow-minded, and frivolous. Indeed some servants as represented in these works of fiction can be said to have a very myopic view of the world around them, as some appear destined to remain in servitude all their lives. Such may be said of Maduekwe's (1993) Echi, Nwadike's (1989) Arisa and Nwaozuzu's (1998) Orie and Oti to mention a few.

The four servants in the above works are people with less than average intelligence, frivolous, and too meddling for others to tolerate. These features make them take most speeches literally as well as render them comic characters. For instance, Echi rushes into his owner's presence to answer her when he mistakenly thinks she has called him. He cries when his owner comments that she is retiring to bed without dinner because she is too sleepy to wait. Echi weeps because he thinks his owner will die of hunger, in her sleep. In another scene, Echi, the fool rushes to his owner's presence with a bowl of water and soap when his owner uses the metaphor of dirt, to lament over her daughter's immoral acts that have brought shame to the family. Answering the anonymous call seems a regular trait of servitude, as Orie in the works of Nwaozuzu (1998) also tries to answer her owner's call, not knowing that Obiageli, her owner has pronounced the word *oria* (illness) in her speech, not *Orie*. Orie's servile counterpart Oti stammers, he speaks incoherently, and the theme of food preoccupies most of his speech. On his own, the choice of Nwadike's (1989) Arisa to use wrong English tenses as well as inappropriate gender-markers in his addresses is regarded by other characters as an indication of his stupidity: Arisa not only proffers answers

to unasked questions, he launches into a series of uncoordinated explanations that are largely unnecessary, thereby prompting his female owner to remark rhetorically: *Kedu ka agadi nwoke di ka gi si ezuzu ka ewu*?: why would a man of such an advanced age as you behave as stupidly as a goat? (Nwadike 1989:18). Many of the servants in these dramatic works are addressed in such uncomplimentary language by other characters in these works and we examine a few below.

Perception of *nwa odibo* by other characters: The verbal insults

Characters in the dramatic works with whom the servant interacts with perceive him in different ways. In many of the instances in the drama, their owners see them as indispensable; they are needed for several roles not convenient for their owners to perform by virtue of their position in the family. Surely, the duties of Udumgbo, Okechi and Ibe in the royal household of Chief Olulu (Eneore 1982) are assignments that cannot be taken up by persons that have any iota of conscience. Similarly, we observe the important position of Maduekwe's (1993) Echi in the life of his female owner Mgbokwo, whom he fondly calls *nne m ukwu* (my distinguished mother). Mgbokwo, despite her frequent use of harsh, abusive words on her servant, appears to be fond of him even as she finds him very wanting in natural intelligence. She and her husband have stated that Echi's behaviour is a panacea to heartache (Maduekwe 1993:39 and 56). She finds him quite indispensable, and often wonders aloud what the situation would have been for her, if she did not have a servant as loyal as Echi. Her wayward son Chikwe is aware of this fondness, and has accused her of partiality:

> Ama m ri na oka eju gi afo iwere Echi mere nwa nwoke di n'ulo a, chupu m; ma chi kere anyi dum ekechaala, nye anyi onodu: I'm quite aware of the fact that you would have been satisfied to let Echi assume the position of the male child in this household, and to chase me out of it. However, God our creator has assigned us our positions (Maduekwe 1993:40).

Mgbokwo's implicit confidence in her servant is clearly demonstrated by her insistence that he should be enlisted in the precarious expedition for the rescue of her last daughter, Obiageri. Mgbokwo sees this journey as an easy task for her servant Echi if only he is enlisted as part of the team, even as her only son shows open pessimism in joining. Mgbokwo showers her praises on Echi's indispensability:

> O buru na o ga-akari unu akuku ka m dunyere unu odogwu m bu Echi; Ama m ya na o na-acho imere m ihe obula na-akpa m: If this is going to be a Herculean task for you, I shall enlist my hero Echi. I do know that he desires to attend to all my needs (Maduekwe 1993:65).

As much as Mgbokwo shows obvious trust and fondness for her servant Echi, she perceives him as stupid, shallow-minded, and credulous also. Many servants in the works of fiction under survey are presented by writers in this light with the result that their owners and other characters in the works treat them with little respect and dignity. Such is the treatment received by Echi, whose female owner, Mgbokwo abuses on a constant basis as follows: '*Nwoke makakwu a*': this stupid man (Maduekwe 1993:38), '*Lee ukwu oso ya, dawu dawu dawu dawn, ka akpa ji*': see his running footsteps, dawu dawu dawu dawu, like a sack of yams (Maduekwe 1993:39). Echi is shown in the play to be a mature man too old to still be a servant but for his material poverty and limited intelligence. Thus he is insulted by his owner because of his unfortunate situation in the following words: '*Uchu gbakwa gi agadi nwoke nu*': may you be accursed, you old man (Maduekwe 1993:55).

Other members of the family do not treat Echi with any respect either, hence the youngest daughter, Obiageli calls him '*agadi nwoke na-agba odibo*': an elderly man that is still in servitude (Maduekwe 1993:30) in his face. Another name that Obiageli uses to insult Echi is '*akakpo a na-eti aku n 'ikpere*': the dwarf upon whose knee one cracks the palm kernel (Maduekwe 1993:31). She further uses the following abusive words, all in an attempt to anger the servant Echi: '*Agala luru nwaanyi, muru umu nke gi. Noro ebe a na-efe umu onye ozo*': If you like do not ever consider getting married and raising your own children. Remain here and worship another person's children (Maduekwe 1993:31). Chikwe insults him in another scene: '*Zuzupu ebe a, agadi nwoke na-agba odibo*': Get away from here with your stupidity, the old-man-servant (Maduekwe 1993:53). '*Ugo na udele ha na-eriko ihe? Ka ha na-asako ahu*?': Do the eagle and the vulture eat together? Or do they take their baths together? (Maduekwe 1993:53).

Similarly, Nwaozuzu's (1998) Oti and Orie receive few compliments from their female owner, Obiageli, who uses the verbal instruments of name-calling as well as words of threat to humiliate them. She tells her male servant Oti that the goat is more knowledgeable than he is (Nwaozuzu 1998:11). She hushes him at other times, in the following words: '*Mechie gi onu jee mewe ihe e ziri gi*': shut up your mouth and go back to your duties (Nwaozuzu 1998:11). To Orie, she threatens: '*M tie gi ihe ebe a i nwuo*': if I dare beat you up you will be dead (Nwaozuzu 1998:16). In the works of Okediadi (2002), Nwaadi, the servant does not fare better as Okezie his master rains down the following curses at him: '*Egbe igwe gbagbuo gi, onye nzuzu*' : May the thunder strike you dead, the stupid one (Okediadi 2002:49). And, Nwadike's (1989) Arisa appears quite used to the rain of abuses from his male and female owners: '*Onye nzuzu*': stupid person; the goat (Nwadike

1989:18), '*Aturu mmadu*': the human-sheep, '*zuzupu m n'ihu*': Get out from my face with your stupidity (Nwadike 1989:28).

In some instances, it does appear that the insults received by the servants in these plays are less due to their limited intelligence than the mood of their owners at those points in the dramatic scene. It is observed that some of these servants are victims of scapegoatism, as many receive larger doses of verbal abuses when other issues not caused by the servants provoke their owners. Such is the case with Nwaozuzu's (1998) Orie, whose owner, Obiageli insults shortly after a brawl with her husband, Ezenwata over suspicions of extramarital affairs with her husband's best friend, Onyema. The same situation will also be seen to be at work in Maduekwe's (1993), play, as Echi is shouted upon by his owner after receiving the bad news of her daughter's decampment from the boarding school. In Nwadike (1989), Arisa's female owner is troubled by childlessness, and uses the servant as a scapegoat, comparing his stupidity and her situation of childlessness. In spite of all these verbal humiliations, none of the servants in the eight plays, except Nwadike's (1989) Arisa seems to bear any ill feeling towards his or her owner. We now look at the servant's self-perception of his function in the family.

Nwa odibo: Self-perception in the family network

Observations from the eight dramatic works under study reveal that all the servants appear quite content with their functions and roles. They do not complain, and each gives out his or her best according to the demands of the family he or she lives in. For example, the servants of Eneore's (1982) paramount ruler carry out their master's assassination orders, wrong imprisonment and other forms of jungle justice. They do not for once question the moral justification for these unlawful acts, and they act with as much precision and immediacy as demanded by their mentor and ruler of the community. Nwaozuzu's (1998) Orie and Oti appear happy as they attend to their daily chores, quite contented that they have quite enough food to eat (Nwaozuzu 1998:142). Nwadike's (1989) Arisa sings happily as he attends to his routine duties of house cleaning, and would occasionally take a few draws from the bottle of whisky, stored in the cupboard in the sitting room. He is nevertheless angered that his owners as well as their family friend constantly insult him through uncomplimentary names, as revealed by his grudging speech to himself:

> *Nne m ukwu kpoo m ewu, nna m ukwu akpoo m ewu, Ngozi akpoo m ewu. Amaghikwanu m ma adi m ka ewu. Ha kpochaakwa m ewu na aturu, ubochi nile mu na ha bikwa; m na-agara ha ozi. Ya diwanu*: My madam calls me the goat, my master calls me the goat. Ngozi calls me the goat. I'm not sure

> if I have the features of the goat. They call me the goat and the sheep, yet I live with them and serve them. Not to worry (Nwadike 1998:35-6).

By far, any one that reads Maduekwe's (1993) drama would find the servile character of Echi a fascinating one indeed. Despite his over age, supposed stupidity and very poor financial family background, Echi refuses to be humiliated or intimidated by members of his temporary household. With the exception of his direct owners who are also the heads of the family that he serves, Echi does not treat with kid gloves the attitudes of the children. Despite the insulting words of especially his female owner Mgbokwo, Echi still demonstrates steadfast love and respect for her, but does not reserve much of these for her irresponsible children. At any opportunity he has to give them a piece of his mind, Echi never lets such an opportunity pass unused. In fact, Echi is often the one that initiates the insults he receives from the children, referring to their youngest daughter, Obiageri as '*ike eru ala'* 'one whose buttocks are never seated'- a metaphor for one that is perpetually absent from home (Maduekwe 1979:30). To the only son of the house, Echi refers as '*onye njenje*' 'one that is always on the move'- an idea similar to the earlier one he has used for Obiageri (Maduekwe 1979:53). Echi does not appear bothered by the children's insults on him, so far as he has an opportunity to give each a piece of his own mind. He seizes the opportunity of his owners' absence from the scene to address Chikwe, in the following words:

> *Leenu nwa ure, nwa njo, nwa ntuchapu, onù mmnya...Lee nwoke abughi nwoke na ezi na ulo ebe o bu okpara ga-anochi anya nna ya ma o nwuo*: Look at the child of filth, the bad child, the child that should be put out, a drunk. Look at a man not man enough in a family where he is to take after his father upon his father's death (Maduekwe 1993:53).

As Chikwe fires back at him with other invectives, Echi appears unperturbed by the insanity-accusation directed upon him by his opponent, choosing rather to assert the uniqueness of his behaviour, in his own words:

> *I si na m bu onye nzuzu, ka m buruwa; ma mara na mu bu onye ara ji uche m awi*: If you say I'm a fool let me be, but you should realize that I'm a mad person with a conscious mind (Maduekwe 1993:53).

On the surface level it is not clear why Echi behaves like an under-aged child in the presence of his owners, but displays in their absence, remarkable sense of intelligence, self-dignity, and a sharp analytical focus, all of which run contradictory to his supposed imbecility for which he is largely accused. Echi may rightly be described as a servant with a unique sense of self-importance, his apparent show of stupidity notwithstanding. Even as he rains down insults upon the debauched Obiageri for the heartache she has caused her

family Echi carries the pots outside to wash, leaving on his trail one parting insult to her:

> *Ka m ga mee ihe m na-aga ime. obughi ka nwa ngana nogide m ebe a* (let me go and continue with my work, this lazy child should not take much of my time (Maduekwe 1993:32).

On the whole, servants in many Igbo drama do not function as simpletons, even as many are presented as such in the Igbo dramatic works; they are there to fulfil other very important roles that help in the development of the plots of these works. We now examine some of their roles in the construction of the dramatic plot.

The servant as the building block of the dramatic plot

The appearance of servants in some Igbo drama is very brief, such as being summoned into the dramatic scene with a brief instruction, which they leave immediately to attend to. In such cases, their impacts in the drama are not very strong, as their functions appear to be the enhancement of their owners' status as persons of repute and means. Such a role may be seen to be the case with Onyekaonwu's (1991) Aligwoeke, who appears only once as his master and paramount ruler, Eze Omaliko summons him to his royal presence. Similarly, Nwadike's (1990) Umelo is summoned only once to the presence of his owner and paramount ruler of the community, simply known as Eze. In another drama, Nwadike (2000) enlists two characters: Obuzuo and Ibekwe as servants of Emuka and Iloka respectively, but only Ibekwe appears, although very briefly in the dramatic plot. The servant Ibekwe has appeared at the early part of the drama to usher in a visitor to the presence of his master, Iloka. He also appears towards the end of the drama as his master orders him to inform the town crier to announce an open invitation to the whole members of the community. Just like the servants in Onyekaonwu (1991) and Nwadike (1990), the speech and appearance of Nwadike's (2000) Ibekwe in the dramatic scene is highly limited, and his appearance seems premised on reasserting his master's status as a man of untrammelled wealth and power. The servants of Chief Olulu in Eneore (1982) namely, Udumgbo, Okechi and Ibe do not only help to statutorily assert the powerful status of their master, they are the instruments of their master's power. However, much as they appear at several times in the dramatic scenes, their speeches are as limited as those of the others examined above, for they appear in these scenes under the instances of their owners. The briefness of appearance of the servants above may be contrasted with the sustained appearance of Arisa (Nwadike 1989) and the ubiquity of Echi (Maduekwe 1993) and Orie and Oti (Nwaozuzu 1998).

The character of the servant Arisa may rightly be described as more sustained than the brief appearances of others examined above. He has interacted with more characters than his counterparts examined above, speaking first with a visitor, Ngozi (Nwadike 1989:16-17), his female owner Nnenna (Nwadike 1989:18 and 22) and with his male owner Ikechukwu (Nwadike 1989:27-8). On another occasion, Arisa is summoned by his female owner who sends him out with a letter to a prophet in connection with her ceaseless search for an end to her childless state (Nwadike 1989:35).

In a similar vein, Maduekwe's (1993) Echi, and Nwaozuzu's (1993) Orie and Oti may rightly be described as servants upon whose actions the major dramatic plot is built, hence our use of the word ubiquitous to describe each. Echi does not answer true calls only; he answers imaginary calls too, hence his constant unwarranted presence at several dramatic scenes. Furthermore, the servant Echi interacts directly with all the members of the family with the exception of Amaka, perhaps because the latter is always away from home in her struggle to provide for her poor parents and two irresponsible siblings. Even without any dramatic interaction with Amaka, Echi reserves his comment for her work overload:

> *O kwa Nwamaka na-ede ura nile a? Nwokpuru, atara m ya uta; ebe o na-adoli ka ya kpachie ego yafuru efu? Ma ebe o kacha bu ma o ga-ekwekwa m hie ura tupu oke okpa akwaa mbu, etetakwa m*: Is it not Nwamaka that is heaving out these snores? Poor thing, do I blame her, as she labors to make up for her stolen money? But most important is whether she would spare me some sleep before the first cock-crow and my rising up again (Maduekwe 1993:54).

Earlier than now, Amaka had fallen a victim in the hands of tricksters who duped her of her entire business earnings, and her plight does not escape unnoticed by Echi the servant as seen in his above comments.

Orie and Oti in the works of Nwaozuzu (1998) also appear in several scenes as they answer their owner's calls as well as attend to their servile duties including fetching water for family use. By far the dramatic importance of Oti and Orie comes out in bold relief, as their male owner Ezenwata leaves with his friend Onyema for a trip out of town.

The same Ezenwata is found dead under mysterious circumstances early in the morning the next day, inside his own room in the family-house. As Ezenwata prepares for the botched journey with his friend earlier on, he appears to seek the permission of his two servants even as his wife comments that the brief absence from home does not necessitate a speech as detailed as the one being made by him. Subsequently, when a voice that sounds as his own, announces his return very late at night, Oti the servant is the person he

calls to let him in, long before the arrival of Obiageli to the scene. Thus, Oti unwittingly let into the house his master's friend, Onyema, who has impersonated Ezenwata in order to quietly dump the latter's lifeless body inside the bedroom and leave immediately before any member of the deceased's family would see him. As investigations into the mysterious death of Ezenwata rages, Oti the male servant is less helpful in providing clues surrounding the death as he is in stressing the abundance of eatables in the house! It is the female servant Orie that provides a clue about the estranged relationship between the couple, Ezenwata and Obiageli, a few weeks before the mysterious death of Ezenwata.

Servants provide subtle clues that assist the development of the dramatic plots, not as seen in the contributions of Orie alone in providing important clues that would absolve her female owner from suspicion of murder, but also in other ways as demonstrated by Maduekwe's (1993) Echi. His language can rightly be described as ominous words that provide important clues that help in the artistic build-up of the dramatic plot. His retort to the family's decision to send Obiageri to college turns out prophetic:

> *Obiageri m hucharala odinihu ya, mara na o togbo n 'efu. Uru gini ka ije koleji ga-abadiri ya? Onye mmadu amabeghi ma o ga-esite ebe ahu gbafuo, sowe ihe uto uwa*: Obiageri, whose future I already foresee, will come to nothingness. Of what value will her going to college be for her? Nobody knows if she will escape from there, going after the pleasures of life (Maduekwe 1993:32).

In the end, Obiageri does exactly as Echi has predicted: leaving school without her parents' knowledge, entering a community of outcasts as second wife to a strange man, giving birth to a baby under what the community regards as abominable circumstances, and losing her life in the process. For the irresponsible son of his owners, Echi predicts:

> *Abughi nwoke gi a ga-ala gi n 'ihi; ka anyi kuru n 'aka*: Your unmanly behavior will result in your destruction. Let's make a bet (Maduekwe 1979).

The cowardly Echi is struck to death by lightening as he unwittingly goes with Nwamaka on a rescue mission of Obiageri and her baby from the strange land of Gudele.

The important roles of these servants in the building up of the plots of the drama notwithstanding, their servile roles remain ill transformed, even as the rest of the major characters get a fair deal of poetic justice. Other main characters like the owners of the servants are seen to assume new roles by the end of the work, but *nwa odibo* is still steeped in servitude, with no resolution to his or her state. Oti and Orie remain servants even as their

surviving female owner, Obiageli, the wife of their former male owner remarries and takes them to her new home as servants (Nwaozuzu 1998:142-3). No mention is made of Arisa 'the goat', as the ceaseless search for a child by the couple is finally resolved (Nwadike 1989:53-7). Two of the servants of the paramount ruler are captured while one dies with him as each carries on, the orders of their master to torture others as well as defend their owner (Eneore 1982:76-7). The conditions of Maduekwe's (1993) Echi do not appear readily changed even as the only son of the family dies tragically. These unresolved dramatic servile characters, the self-perception of the servants as well as other peoples' perception of them, have quite important significance in our discussions of subjectivity in Igbo indigenous family.

Subjectivity in servitude and the indigenous Igbo family

The characters, roles and resolutions of members of the family, including temporary members like the servants are enormously varied in indigenous Igbo-African social system, and in this instance, we note that writers are yet to recapture the variegated forms of servitude. For instance, writers of Igbo drama are yet to situate and recapture the female servant and her roles in the indigenous family arrangement.

Each member of the family does occupy a heterogeneous social space that is partially allocated in such a way that not every one has an equivalent space. The family form and ideology, as re-articulated in Igbo written drama define and organize the concepts of liberty and of symmetry in human relations, and in this instance, the servant balances contentedly at lowest rung of the ladder. Using the term of contentment presupposes that family members assume their roles to operate on a natural, acceptable and commonsensical axis. The ways of being an individual, called subject positions, is central to the theory of subjectivity- the conscious and unconscious thoughts and emotions, which may largely account for the relationship between the individual and the society. The social relations entered by every individual including the family pre-exists him or her, and each learns their modes of operation as well as the values whose maintenance they strive. One would describe the roles of the servile characters as natural roles; yet this is only one out of the numerous ways to understand them. As succinctly stated by Chris Weedon:

> to appeal to the 'natural' is one of the most powerful aspects of common-sense thinking, but it is a way of understanding social relations which denies history and the possibility of change for the future (Weedon 1994:4).

The 'subjective' is often described as an action or belief that is based on one's ideas or opinions rather than facts; thus there is the concomitant belief that such ideas or opinions that are not based on facts are false or unfair.

However, the extent to which moral values and knowledge are based on truth as we see them in the world is highly contentious, for humans see realities only to the extent that the communal and social world of their existence permit. An Igbo proverb states succinctly: *Mmadu anaghi arogaru nro ebe o gatubeghi:* One's dream experiences do not get beyond familiar places. Though this is but a limited view, it makes sense in our understanding of the way people make an everyday sense of their lives. And, this way that people make sense of their lives is, according to Weedon (1994) '*a necessary starting point for the understanding of how power relations structure society*' (Weedon 1994:8). Central to the theory of subjectivity is the role of language, and this brings into focus the significance of Igbo dramatic works in the analysis of subjectivity in indigenous Igbo concept of servitude.

Actual as well as possible forms of social organization including their likely political and social consequences are defined and contested at the site of language. Language is also the site where our sense of selves and our sense of others are defined and constructed and contested. Through language, social policies in the modern world, occupational structures as well as sexist attitudes that flow from subjective assumptions take coherent shapes, which, in the words of Louise Howe (1972) end up 'determining the lives of everyone within the family' (Howe 1972:21). With the exception of a few, all servants in the Igbo dramatic works under survey appear to accept their positions as a preexisting role to which they have no control over. We further note Chikwe's statement (in Maduekwe 1993:40) above, about the pre-destined positions of asymmetrical privilege between the heir and the servant in the family social life. Chikwe's statement demonstrates the exclusive right of the oldest or only son of an Igbo family to take up the mantle of leadership in the event of his father's death. This family-inheritance stance already outlined in the consciousness of Chikwe, marks out the acceptance of the principle of inequality in interpersonal relations. Transposed into an ideological state, these create the inequality of humans, of peoples and races. The authoritarian family structure, which best describes the household of Mgbokwo and Ukoha, is one that sees the father figure as the head of the household, yet leaves major family decisions to the mother. In favour of this observation is the work of Emmanuel Todd, which notes:

> For, strangely enough, the emphasis placed upon the father-son tie does not prevent the authoritarian family from giving women, in practice, an important position (Todd 1989:64).

The lukewarm attitude of Chikwe may be traced to his father's incapability of imparting the necessary models of hard work and diligence in his only male child, being himself a lukewarm father-head. Argues Todd:

> The authoritarian family structure is a mass of contradictions. It seeks to apply the principle of authority and produces anarchy as much as discipline. It simultaneously creates a rigid family core, shaping and stifling the individual in its vertical structure, and frees men who are rejected by the domestic group and have no previously defined place in the society...Finally, it emphasizes continuity in the male line yet gives women a major role (Todd 1989:65).

With the tragic death of Chikwe, the implicit position of Echi the old, foolish servant in the network of family roles and representation is highly debatable.

Subjectivity organizes different positions of family members, and in this case, the writers of these eight dramatic works are doing just that, as they construct the character of the servant including his roles, perception of self as well as his perception by other characters. Needless to say, writers unconsciously reproduce images and concepts believed to be central to the understanding of the family social life including the definitions of servitude therein. As much as servants are often persons from more disadvantaged families than the ones they serve, the extent to which servitude and humour, limited intelligence and stupidity coalesce is highly disputable when the theory of subjectivity is used to critique these works. Similarly, the extent to which owners act out various forms of misplaced aggression towards their servants remains yet to be seen as an action specific to these servants than a symptom of power asymmetry in the family network. As some of the works show, it is not only servants that are spoken of in humiliating words by their owners, the asymmetrical power structure in the family appears to also be premised on who has the right to use insults, what we may call hate speech over the other. It has been pointed out elsewhere (see Chukwukere 2003) that it is banal to lay a comparison between the perception of women and other less privileged people in the society. However, the similarity between the 'harmless' hate speech directed at servants by their owners, and ones directed at wives by their husbands in some of these works can hardly be ignored:

> meghekwa onu gi ozo ugbu, Amadioha amabipu gi isi. I na-aju m ajuju?: If you open your mouth any further, thunder will strike off your head. Are you questioning me? (Okediadi 2002:38).

The above words are used by Okezie to address his wife Chinyere over a dispute about Okezie's planned inheritance of his dead brother' wife. Also insulting are the humiliating false accusations of infidelity levelled against

Obiaegeli by her husband Ezenwata (Nwaozuzu 1998:24-29). Although the two husbands above have initiated the insults, wives are observed to take unkindly to these insults, as they react in ways that will be seen as disrupting to their husbands' settled allegations and ways of thinking, at those points in time. The subsequent beating of Chinyere by her husband may be seen as overt demonstration of physical rather than mental superiority of each member of the couple in a marital relationship. When these characteristics are examined in the context of servants' positions we observe that servants stand as victims of inferiority, seen from the eyes of their constructors (the Igbo writers) as well as the male and female characters in the works of fiction.

The theory of subjectivity accounts for the way that the principle of selectivity is the hallmark of Igbo writers' construction of the servant. Selectivity in this instance ensures the construction of reality that excludes as well as denies other interpretations of reality. States Robert Wuthnow:

> The selective aspect of human consciousness means that reality, as it is perceived is always something less than what might have been perceived. It also means that different realities can be constructed from the same objects and events, depending on the characteristics upon which attention is centered (Wuthnow 1976:62).

We agree with Wuthnow's (1976) further observation that reality is constructed in accordance to the purposes, predisposition, past experiences, and the symbols and imageries that a conceiver brings to bear on it. And, if servitude presupposes an unquestionable acceptance of roles including abusive ones, then the behaviour of many of the servants in Igbo works of fiction equals none other in this regard. Quite important therefore, is the role of internalization of oppression in the theory of subjectivity. As Paulo Freire rightly points out:

> The oppressed, having internalized the image of the oppressor and adopted his guidelines, are fearful of freedom. Freedom would require them to reject this image and replace it with autonomy and responsibility... It is rather the indispensable condition for the quest for human completion (Freire 1997:29).

And to advance the principle of freedom, the importance of hate speech such as we see in the asymmetrical relationship between the servant and other members of the household cannot be overemphasized. Samuel Walker's (1994) enunciation of hate speech (recapturing a Minnesota ordinance) as any symbol, which arouses anger, alarm or resentment in others on the basis of race, colour, creed, religion or gender, is highly a limited conception indeed. This is because subjectivity disallows the perception of an action or speech as abusive by a person so addressed, even as such an action or speech is, as

evidenced by its apparent acceptance by mot servile characters of Igbo dramatic works.

On a final note, we see the character of Echi in Maduekwe (1993) as a dynamic one indeed, one that we may rightly describe as a cat with nine lives. The author, by his artistic creation of the servile character of Echi, does demonstrate that the social embeddedness of a subject is not total and final; subjectivity as a social process provides space for questioning, challenging as well as rupturing the very premise upon which shared assumptions are instituted. Regenia Gagnier (1991) does point out that change can occur through the subject's mediation and 'transformation of structures and systems, including systems as large as language or the state' (Gagnier 1991:10). Echi contributes his own quota as he responds to the stifling structures of the social life in his own unique way: acceptance, denial, questioning and rupturing those. The complex situations that Echi finds himself in his temporary family makes him to take up multiple positions, some of which may be interpreted as deliberate efforts to 'act the script', reserved in the culture for the 'poor foolish servant'. At the same time that he maintains a balance as the family powerhouse in terms of physical strength, Echi the fool is also the prophet, who tries to warn the recalcitrant members of the family about their impending doom, which comes to pass at the end of the dramatic work. Surely, subjectivity may not be accepted and justified only; it can be questioned too as well as ruptured. In all instances, Maduekwe's (1993) Echi may be seen to be playing these multiple roles at once.

Conclusion

Family roles are premised on several socio-cultural, economic, political, attitudinal as well as linguistic assumptions, and in these instances, the role of the servant is encapsulated in those assumptions from which other members of the family take up their own roles. In practice, these rarely conform to the status quo, even as writers of Igbo drama try to grant them relative stability, especially the roles, self-perception as well as others' perception of the servile character. Surely, the servant in the eight Igbo dramatic works share certain common attributes including their loyalty, hard work and acceptance of their servile roles. However, the extent to which these characterizations are premised on writers' taken-for-granted assumptions, is given a necessary impetus in our theory of subjectivity. As this paper argues, servitude is not pre-given; acceptance of servitude including the verbal humiliation as well as unresolved conditions does not translate to servile contentment. Subjectivity helps us account for the ways in which the oppressor as well as the oppressed help justify the discriminatory practices. It also enables us account for the ways in which an oppressed group may question,

challenge as well as rupture the marginalized attitudes of the society against them; attitudes believed to come all too 'naturally' because of the conditions of existence among members of the society. An Igbo proverb remarks rightly: Uto ndu ekweghi si mara etu a didebere: The sweetness of life disallows one from conceiving of the plight of others.

References

Chukwukere, F. N., 2003, Nwaanyizie: Towards an Indigenous Alternative to Feminism in Igbo, In *Nigerian Journal of Developmental Alternatives*, Maiden Edition. Forthcoming.

Eneore, W. C., 1982, *Oji Isi Kote Ebu*, Owerri: Longman.

Freire, P., 1997, *Pedagogy of the Oppressed*, Revised Edition, New York: Continuum.

Gagnier, R., 1991, *Subjectivities: A History of Self-Representation in Britain, 1932-1920*, Oxford: Oxford University Press.

Howe, L. K., 1972, *The Future of the Family*, New York: Touchstone.

Maduekwe, J. C. 1979; 1993, *Otu Mkpisi Aka*, Owerri: Longman.

Nwadike, I. N., 1989, *Onye Kpaa NkuAhuhu*, Onitsha: Kawuriz and Manilas.

Nwadike, I. N., 1990, *Omume Onye na-edu Ya*, Uruowulu-Obosi: Pacific.

Nwadike, I. N., 1992; 2000, *Nwata Bulie Nna Ya Elu*, Uruowulu-Obosi: Pacific.

Nwaozuzu, G. I., 1998, *Ajo Obi*, Awka: Format.

Okediadi, N., 2002, *Ihe Onye Metere*, Enugu: Unic Oriental.

Onyekaonwu, G., 1982; 1991, *Oku Uzu Daalbube*, Owerri: Longman.

Todd, E., 1989, *The Explanation of Ideology: Family Structures and Social Systems*, New York: Basil Blackwell.

Walker, S., 1994, *Hate Speech: The History of an American Controversy*, London: University of Nebraska Press.

Weedon, C., 1994, *Feminist Practice and Poststructuralist Theory*, Cambridge, Mass.: Basil Blackwell.

Wuthnow, R., 1976, *The Consciousness Reformation*, Los Angeles: University of California Press.

Africa Development, Vol. XXX, No.3, 2005, pp. 130–134

(ISSN 0850-3907)

I Dance Ala-Igbo

Chikwendu P. K. Anyanwu*

I dance Ala-Igbo
The land of many dances.

Be it the vibrant hip rocking
Of Nkwa Umu Agbogho;
The systematic body swaying
Of Abigbo men's dance -
I dance Ala-Igbo.

Be it the slow, proud, pet- seeking steps
Of Ugo-na-chömma;
The fast trotting steps of Nkponkiti,
I dance Ala-Igbo.

I dance on the road
With the gorgeous and threatening steps
Of Mmanwu dance.
I dance softly and friendly into every home
With the acrobatics of Ulaga dance.

When I dance Eshè and Nwokorobo
The deaf hears the sound of my brass waistband.
In the exciting steps, twists, and leaps of Atilogwu
The eyes of the blind begin to stare.
I dance Ala-Igbo,
The dance of many instruments.

---

* Chikwendu P. K. Anyanwu is a Catholic priest of Owerri Archdiocese, Nigeria.

Be it the titiro-tiro of the two eyed Oja
To which I leap,
Leap like an innocent calf;

Or the shiki-shiki of Osha - gossips of little beads
To which I shake,
Shake like a twig
Dancing out the accusations of the wind,
I dance Ala-Igbo.

Whether I bend to respond with my whole body
To the kele-nke-diri-ge of syncopating Igbogbo,
Or stand erect and nod my head
To keep the deep, steady, mellow beats,
From Udu, the tubby, chubby easy lady,
I dance Ala-Igbo.

However it pleases me
I can dance
As far as Nkwa is doing its work
In the comity of instruments.

I dance the different sounds
Of her many instruments.
I recognise each,
Doing its own thing
Its own way,
Yet, I recognise the rhythm
That carries them along in one great dance.

I see in the different beats of her instruments
The generous heart of Igbo dances
That welcomes every step that wants to dance.
Different steps, my people; one rhythm,
Let's dance Ala-Igbo.

Part II

I dance all her dances -
Joyful and painful;
And I feel very proud for they make me
The centre of attraction.

But some men think that I am a woman
Because I rock my hips to everyone's delight.
For that reason I dance the Bende War dance
Let them see the awesome vibrations of a man's breasts.

Ready for action!
See my machete!
See the heads on my head!

'cause men have made me to shake:
I dance,
In fury;
And close my mouth with frond.

This is not the time to talk:
To plead,
To ask;
Or wait to hear your word.

My blood is boiling hot:
It boils,
So hot;
I feel its time to act.

Ala-Igbo!
Obodo dike!
Eke n'egwurugwu!
It is you I dance.

I hear the Ogene from the town crier
I wake up and attend the meeting of Umunna.
I hear the warning sounds of Ikoro
And we do what Amala said,
to keep our land safe.

So I danced,
So I used to dance,
Syncopating freely at will.

If I danced in the night
The sun rose, smiling.
If I danced in the light,
The sun delayed its setting.

Part III

Once upon a time,
Men began to forsake the dances of our land
And the instruments of our dances
For artificial sounds crossed the oceans
To turn our men round and round
As a woman turns akara in the frying pan.
They followed the sound of metal trumpets
Broke the Ele-mmiri, the natural tuu-tutuu....
No more the expressive gestures
Evoked by the sweet dialogues of Ngelenge
Since the ivory keys found a seat in the obí.
On these keys, men play discord,
And tell us it is chromatic.
Because we knew nothing of this instrument,
Whatever they played was music from the masters.
So did Lugard play in our land,
With all the tremulous discords
And we called him Lord;
And Zik danced - wide legs
Across those rivers that gave the tune
For the chromatic Nigeria.
Poor Zik! His trousers were torn, no tailor.
The notes are still chromatic, still crying.

I dance Ala-Igbo
Not spreading my legs so wide,
Not to lose my costume,
My beauty, my dignity, my pride.

Come, sound Uhe! Sound Ikoro!
Call my people: 'Come home!'
Arise Okokondem!
Call them to dance - dance together
The tune of peace - Ala-Igbo, Biafra
Whatever it means,
As far as it is the place of the rising sun.
Machine guns cannot give us the sound
After all, our daughters dance other lands.

I was born with a dance.
That's the dance of my heartbeat.
I love you when you dance your own dance.
Why will you not love me when I dance my own dance?

Everyone is born with a dance.
And no one can dance the dance that is not his,
Except on borrowed feet.
How come other men dance their own dances
But wouldn't let me dance my own dance?

My dance is Ala-Igbo
The land where the Sun begins to smile
On Lugard's discordant notes.
Hoping that one day,
Men will know and uphold the difference
Between the face of the rising sun,
And the face of the setting sun.

And I proclaim my dance day and night
For a city set on a hilltop cannot be hidden.
Dance what you like.
Dance to compromise.

I dance Ala-Igbo.
The only dance that sets my life free.


Africa Development, Vol. XXX, No. 3, 2005, pp. 135–142

(ISSN 0850-3907)

Review Article/Revues de livres

'Spectralizing Bergson and the Dilemmas of Decolonization'. A review of Messay Kebede, *Africa's Quest for a Philosophy of Decolonization*, 2004.

Sanya Osha,
Centre for Civil Society, University of Kwazulu Natal,
South Africa

It is sometimes amazing that decolonization continues to generate interests and debates in African philosophical circles. This is not to say the theme of decolonization is not important. Indeed it is a relevant preoccupation. However, what we need is a continuous problematization of the discourse of decolonization to reflect 1] the changing sociopolitical conditions within the African continent; 2] to include in our analyses global configurations within the contemporary moment and how they impact on the conditions in the African continent; 3] to meditate on the historical transformations in the discourse of decolonization itself in order to keep track of its turns and changes; 4] to reconceptualize the project and discourse of decolonization where and when necessary with a view to doing away with them altogether if old conceptual models fail to describe adequately present realities.

Messay Kebede, in his book, *Africa's Quest for a Philosophy of Decolonization* (2004), clearly does not take the points just enumerated into account. He fails to define or clarify in a satisfactory manner what precisely he means by decolonization. Ngugi wa Thiong'o has done important conceptual labour on the discourse of decolonization but he is hardly mentioned. Even Kwasi Wiredu (1980, 1996), one of Africa's foremost philosophers and major theorists of conceptual decolonization is not treated on the basis of his work in this domain. Kebede's text commits a great number of fallacies in relation to ideas and important African philosophical figures. Some of these include, postmodernism, deconstruction, ethnophilosophy, negritude, Senghor, Mudimbe and Wiredu. And it is important to address some of these fallacies.

Even the choice of theoretical periods and models is often obsolete when not incongruous. For instance, Levy-Bruhl is adopted as a primary figure on whom to heap the blame of Eurocentric racism. Within the context of old-fashioned anthropology, Levy-Bruhl is a notable figure but we have

become used to beginning the critique and condemnation of Eurocentricism around the figures of Kant, Hegel and Hume (Gates Jr. 1992). None of these famous Western philosophical figures is discussed comprehensively in the important and continuous task of denouncing Eurocentricism and other related virulent forms of racism. Kebede points out that had the scourge of racism been absent global economic growth and development would have been much higher;

> some theories suggest that Europe could have obtained higher economic gains if it had avoided the cumbersome and inhuman practice of political and cultural subjugation and opted for the development of the continent through free economic exchanges' (2004:9).

However, none of these theories is mentioned and neither are the implications of this proposition exhaustively explored.

Messay's conceptualization of ethnophilosophy is also very problematic. He regards John Mbiti and Léopold Sédar Senghor as major proponents of ethnophilosophy. In order to put the discourse and counter-discourses of ethnophilosophy into proper perspective, it is important to turn to the work of Paulin J. Hountondji.

Placide Tempels, a Belgian missionary, initiated the ethnophilosophical turn in philosophico-anthropological discourses in Africa with the publication of his pioneering text, *Bantu Philosophy in 1945*. Hountondji mentions that this text was written primarily for a European audience in which the Bantu subject is characterized as a mere anthropological cipher, a non-presence awaiting the attentions and ministrations of the European adventurist/ influence: missionary, administrator and soldier. In his words,

> it aims on the one hand at facilitating what it calls Europe's 'mission to civilize' (by which we understand: practical mastery by the colonizer of the black man's psychological wellsprings) and, on the other hand, at warning Europe itself against the abuses of its own technocratic and ultra-materialistic civilization, by offering her, at the cost of a few rash generalizations, an image of the fine spirituality of the primitive Bantu (1996:49).

Thus, an important injunction is made: the colonizer can 'civilize' the 'native' on the condition that she possesses the appropriate spiritual qualities.

Tempels' corpus provoked a few intellectual reactions from a Rwandan priest, Alexis Kagame. Kagame attempts to construct a universal ontology drawing from an Aristotelian philosophy of consciousness. Similarly, in incorporating Greek syntactical structures in relation to his mother tongue, his entire theoretical project fails in Hountondji's view:

> His critique, [...] is not a radical one. He should have renounced Tempels' whole project instead of accepting its dogmatic naiveté and carrying it out

> slightly differently. Kagame should not have been content to refute Tempels, he should have asked himself what the reasons were for his error. Then he might have noticed that Tempels' insistence on emphasizing the differences was part and parcel of the whole scheme, the reconstruction of the Bantu Weltanschauung, inasmuch as the scheme was not inscribed in the Weltanschauung itself but was external to it (Ibid:51).

Hountondji grants that Kagame has a powerful theoretical temperament but concludes all the same that his 'work simply perpetuates an ideological myth which is itself of non-African origin' (Ibid:44). Other prominent ethnophilosophers Hountondji mentions include Makarakiza, Lufuluabo, Mulago, Bahoken, Fouda and in some respects, William Abraham. This important historical background is absent in Kebede's discussion of this major African philosophical tendency. Other important assessments of ethnophilosophy within the canon of contemporary African philosophy are those by V. Y. Mudimbe (1988, 1991).

Kebede simply mischaracterizes ethnophilosophy: 'Ethnophilosophers come out strongly in favour of the existence of African philosophy because they find the colonial denial of African philosophy highly insulting and degrading' (2004:83). It should be recognized that even the project of ethnophilosophy can be defined in racial terms and this classification is needless to add quite important. There are both Western and African schools of ethnophilosophy which reinforce and antagonize one another. No mention is made of this crucial distinction. In fact, at a point, he terms Hountondji's method as 'critical ethnophilosophy' (2004:87). This characterization is very problematic. Does he mean to cast Hountondji as the ultimate anti-ethnophilosopher which indeed he is or to state that Hountondji advances a more critical project of ethnophilosophy which he does not? Hountondji's entire metaphilosophical programme has been dominated by a relentless attack on both the project and status of ethnophilosophy in whatever guise. This point cannot be over-emphasized.

There is an apparent confusion between Senghor's conception of negritude and ethnophilosophy. For instance this confusion (in not seizing the opportunity to differentiate the boundaries between the project of ethnophilosophy and negritude) becomes apparent in the following statement: 'Léopold Sédar Senghor's specification of emotion as an African speciality promotes the same idea of African irrationality with even greater strength' (2004:85). There is never a consistent attempt to differentiate negritude and ethnophilosophy, rather, there is the recurring tendency to formulate both as the same enterprise. In fact, Kebede makes a very sweeping and unduly damaging remark; 'Unable to rescue Africa, the glorification of the black essence by the negritude philosopher thus leads to nothing' (2004:60). Many

readings of Senghor have been undoubtedly critical usually on account of his identitarian essentializations. For example, famous criticisms of Senghor have been made by Wole Soyinka. He writes, 'Leopold Sedar Senghor is a priest- but a failed one' (1999:97). He argues that the main reason for the failure is that: 'Senghor appears compelled to query deep into the humanism of the oppressed to escape the undeniable pressure of history, counter its imperatives in the present with an excursion into pristine memory, and forge from within its parity and innocence, an ethos of generosity whose lyrical strength becomes its main justification' (1999:105). However, there are also complementary readings of Senghor.

Paul Gilroy writes of him in very favourable terms:

> Senghor is a convenient representative of the generation of colonial intellectuals who faced fascism on the battlefield and then used their confrontations with it to clarify their approaches to freedom and democracy, culture and identity. Senghor's work exhibits a similar pattern in which fervent humanism is combined with, but somehow not contradicted by, a romantic ethnic particularity and an appreciation for cultural syncretism and transcultural symbiosis. The Senegalese poet, statesman, resistance fighter, socialist, and influential theorist of Negritude, hybridity, and cultural intermixture ... (2000:91-92).

This sort of reading transforms the traditional image of Senghor as a proponent ethnic particularity and the cult of black inner rhythm with its anti-rationalist connotations. Soyinka's reservations in this light appear narrow-minded while the usual allegations of essentialisms in the face of a restated quality 'for cultural syncretism and transcultural symbiosis' now appear lame and untrue. Kebede's reading of Senghor is clearly based on presuppositions of essentialism and within the frame of an unreconstructed logic of what postcolonialism entails.

Kebede's primary concern, as we have to keep reminding ourselves since it forms the thrust of the title of his book, is decolonization. And yet as we have noted decolonization remains hardly theorized in the text. Wiredu on the other hand, has demonstrated why the project of conceptual decolonization should be a central concern in contemporary African philosophy. Accordingly, he argues that 'the agenda for contemporary African philosophy must include the critical and reconstructive treatment of the oral tradition and the exploitation of the literary scientific resources of the modern world in pursuit of a synthesis' (1996:112). Wiredu has proffered both definitions and elaborations of decolonization as it relates to contemporary African philosophy. One does not come across the same qualities regarding the topic in Kebede's text.

Similarly, there are attempts to stress the relevance of postmodernism as a conceptual approach for processes of agentialization in Africa. Most of these attempts, nonetheless, fall flat. Kebede subscribes to the only partially accurate view that postmodernism is overwhelmingly indebted to the influence of Nietzsche and Heidegger. There are far more influences than this narrow view admits. He posits the opinion that 'what makes postmodernism crucial for Africa is that the theory rehabilitates Africa even as it suggests alternative ways of achieving modernity and development' (2004:140) and yet earlier, he had also expressed the view that 'the emergence of postmodernism from the womb of Western philosophy remains a mystery' (2004:126). Deconstruction crops up a few times in Kebede's text and he mentions V. Y. Mudimbe as belonging to the African school of deconstruction (surprisingly Achille Mbembe is hardly mentioned nor discussed in this regard). Yet this term is, as Derrida once very reluctantly called it, difficult and problematic. Deconstruction has as its central concerns 'the deconstruction of the metaphysics of the 'proper', of logocentricism, linguisticism, phonologism, the demystification or the de-sedimentation of the autonomic hegemony of language (a deconstruction in the course of which is elaborated another concept of the text or the trace, of their originary technization, of iterability, of the prosthetic supplement, but also of the proper and of what was given the name of exappropriation) (Derrida 1994:92). These clarifications are absent in Kebede's discussions of the topic.

Let us examine a few more of Kebede's preoccupations. On African historic religion he writes 'Mbiti defends traditional African religions on account of their closeness to the original, non-hellenized message of the Bible. What the West stigmatizes as primitive is the innocent human being, the one that remains loyal to the original wish of the Creator' (2004:76). The discourses on African traditional religions have long since moved beyond these kinds of jaded anthropological notions. Fanon is also discussed but as usual the picture of him that emerges from Kebede's reading is neither totally accurate nor completely agreeable. According to him, 'Frantz Fanon occupies a distinct place by the argument that only a philosophy of violence consummates the rejection of both otherness and the restoration of the past' (2004:94). He also makes the point that 'Fanon's resolution to convince the colonized that they have no other option than recourse to violence is at best exaggerated and highly restrictive' (2004:101). Indeed there are far more sophisticated readings of Fanon available. A most astute reading is offered by Homi Bhabha:

> It is not for the finitude of philosophical thinking nor for the finality of a political direction that we turn to Fanon. Heir to the ingenuity and artistry of Toussaint and Senghor, as well as the iconoclasm of Nietzsche, Freud and

> Sartre, Fanon is the purveyor of the transgressive and transitional truth' (1986:viii–ix).

Bhabha's analysis locates Fanon's importance in a multiplicity of discursive domains and not just as a theorist of colonial counter-violence or critic of ethnophilosophy as he is branded in Kebede's reading. Nigel Gibson on his part states that Fanon's '*Wretched of the Earth* is perhaps one of the most important pieces of engaged and critical transition literature available' (2004:1).

V. Y. Mudimbe is a theorist who crops up many times for mention. Again the discussions of Mudimbe are not altogether satisfactory. A remark such as 'in terms of deconstruction and relativization, what Mudimbe has achieved does not seem to surpass negritude' (2004:127) is simply very confusing. How 'does deconstruction and relativization' figure within this particular equation? Mudimbe's main project has been the Foucauldian deconstruction of the African subject (infrahumanity) and forms of subjectivity within the Western anthropological archive. His primary method in this regard is an archaeological focus on a wide range of disciplinary texts and domains: literary, linguistic, philosophical, religious and anthropological.

Kebede at crucial moments seeks to validate the political importance of his philosophical project, after all, any conception of decolonization ultimately has strong political implications. In this regard, a few passages are particularly striking; 'The recognition of the concomitance of myth and rationality, of traditionality and modernity, is the appropriate way to diffuse the African dilemma' (2004:208). Also, he writes, 'closely following the arguments of Bergson, I endorse the autonomous existence of the myth-making function together with the empowering purpose of the function, the understanding being that excessive valorization of rationality results in the complete asphyxia of the power of the mind' (2004:212). Two points are worth noting here; an easy acceptance of the influence of Bergson and the centrality of the poetic elements in the constitution of philosophical projects. How does this project differ in fact from the more accomplished projects of Senghor and Mudimbe who often come up for condemnation? The sudden espousal of poetry in the middle of the attempt to put up a front of philosophical respectability seems to be a weariness with the philosophical enterprise itself.

Kebede begins his discourse on decolonization on a very familiar terrain, a re-presentation of Levy-Bruhl's ascription of pre-logicality to the African subject. Levy-Bruhl's anachronistic anthropological project has been promptly criticized and stripped of any lasting intellectual value. In contemporary African philosophical discourse, the denigration of the African subject and the counter-discourses of that denigration obviously have more interesting

ontologies and intellectual frames of reference; for instance V. Y. Mudimbe's scholarly account of the mummification of the black subject in Greek antiquity or Wiredu's reconceptualizations of Akan traditional worldviews in the garb of analytic philosophy.

The recurring figures in his philosophical preoccupations are Levy-Bruhl, Tempels, Senghor, Bergson and sometimes Marx. Other figures are Hountondji, Mudimbe and, to a lesser extent, Wiredu. However, Kebede's engagement with other projects of decolonization together with his own conceptualization of decolonization is rather uneven. There are new genealogies of colonialism to be taken into consideration (read for instance, McClintock 1995 and Stoler 2002). Even the Fanonian theorization of colonial relations has been radically re-written and re-interpreted by contemporary theorists such as Bhabha, Gates Jr., and Gibson. Such radicalizations are necessary in order to ensure that meaning is not lost in the various processes and stages of decolonization. The inherent binarisms of the traditional colonial structure are always open to critique. Kebede's assumptions about that structure reinforce the same old stereotypes about colonial relations. In the present age of globalization, there is the necessity to reconsider the meaning and possibilities of decolonization within contemporary politics. New forms of colonization are occurring in which definitions of 'centre' and 'periphery' become quite problematic as what is regarded as the global gets colonized by its opposite in ways in which its character is radically transformed. Kebede's concept of decolonization excludes the important cultural, sociopolitical and economic configurations of contemporary globalization and it is based instead on the reinforcement of various primordialisms (within a certain understanding of the global); the nation-state, the old international and national identitarian politics. The new configurations (within the political economy of the global) that are occurring have obviously affected the trajectories of decolonization and the very meaning of the term. Kebede does not demonstrate an appreciation of this radical transformation and shows that he still operates within a pre-Fanonian mind-set. We have to rethink the notion and possibilities of decolonization and their various kinds of usefulness in the age of contemporary globalization.

Similarly, in Kebede's text, the project of decolonization is re-presented within an undeconstructed format which excludes the necessary and important categories of class, gender and sexuality. Indeed patriarchal nation-state structures in Africa need to be appropriately critiqued to demonstrate much of what they exclude. We have to learn to tell new stories not only within the old narrative frameworks but with new languages as well. Perhaps decolonization in the face of the contemporary politics of the global has

become obsolete as a conceptual category; and perhaps it now time to theorize the notion of de-agentialization within the context of the global.

References

Bhabha, H., 1986, 'Forward: Remembering Fanon Self Psyche and the Colonial Condition', Frantz Fanon, *Black Skin, White Masks*, London: Pluto Press.

Derrida, J., 1994, *Specters of Marx: The State of the Debt, the Work of Mourning, & the New International*, trans. Peggy Kamuf, New York: Routledge.

Gates Jr., H. L., 1992, *Loose Canons*, New York: Oxford University Press.

Gibson, N., 2004, 'Fanon, Marx and the New Reality of the Nation: Black Political Empowerment and the Challenges of a new Humanism in South Africa'. Paper delivered at the Centre for Civil Society, University of KwaZulu-Natal, South Africa, July.

Gilroy, P., 2000, *Against Race: Imagining Political Culture Beyond the Color Line*, Cambridge: Harvard University Press.

Hountondji, P., 1996, *African Philosophy: Myth and Reality*, Bloomington and Indianapolis: Indiana University Press.

Hountondji, P., 2002, *The Struggle for Meaning: Reflections on Philosophy, Culture and Democracy in Africa*, Athens: Ohio University Center for International Studies.

Kebede, M., 2004, *Africa's Quest for a Philosophy of Decolonization*, Amsterdam and New York: Rodopi.

McClintock, A., 1995, *Imperial Leather: Race, Gender and Sexuality in the Colonial Conquest*, New York and London: Routledge.

Mudimbe, V. Y., 1988, *The Invention of Africa*, Bloomington and Indianapolis: Indiana University Press.

Mudimbe, V. Y., 1994, *The Idea of Africa*, Bloomington and Indianapolis: Indiana University Press.

Muppidi, H., 2004, *The Politics of the Global*, Minneapolis: University of Minnesota Press.

Soyinka, W., 1999, *The Burden of Memory, the Muse of Forgiveness*, New York: Oxford University Press.

Stoler, A. L., 2002, *Carnal Knowledge and Imperial Power: Race and the Intimate in Colonial Rule*, Berkeley: University of California Press.

van Binsbergen, W., 2003, *Intercultural Encounters: African and Anthropological Lessons Towards a Philosophy of Interculturality*, Hamburg: LIT.

Wiredu, K., 1980, *Philosophy and an African Culture*, Cambridge: Cambridge University Press.

Wiredu, K., 1996, *Cultural Universals and Particulars*, Bloomington and Indianapolis: Indiana University Press.


Africa Development, Vol. XXX, No.3, 2005, pp. 143–146

(ISSN 0850-3907)

Book Reviews

Richard Werbner, 2004, *Reasonable Radicals and Citizenship in Botswana: the Public Anthropology of Kalanga Elites* (Indiana University Press: Bloomington and Indianapolis).

Onalenna Doo Selolwane,
Department of Sociology,
University of Botswana.

The first thing that struck me as I was reading through Dick Werbner's very engaging book, was just how much he does in fact engage with local scholarship in Botswana. There are very few western scholars who recognize local scholarship to the extent that this author does in terms of meaningful debate and substantive citations of work produced by Botswana scholars. In this regard he stands in a class of his own.

The significance of the book is that it comes at a very timely moment when debate on identity and citizenship has been taken to the public arena as citizens engage in renegotiating terms of co-existence and the meaning of development and nation building. Werbner captures this when he observes that in Botswana such debate happens in the realm of 'peaceful politics where the accent is on negotiation. In that sense the book provides a much sunnier exposition of the ethnic identity debate than is the conventional wisdom where such debates are associated with violence and tend to indicate disenchantment with state formation rather than an affirmation of its legitimacy.

Werbner's book therefore departs from the norm by demonstrating the positive contribution of Botswana's elites in renegotiating state–society and interethnic relations for the common will. He notes for instance the role these mainly former public servants have played in checking corruption by founding a local branch of Transparency International and participating in commissions probing malpractice in the public service. He also highlights their role in attempts, through the discourse on ethnicity and cultural rights, to move the terms of state guarantee of human rights from exclusive focus on individuals to inclusion of group rights. But above all Werbner sets out to demonstrate very convincingly how ethnic identity formation among the elites he has chosen to focus on, is both inward-looking and outward-looking.

That is he argues that it reflects the nurturing of Kalanga identity among an inner circle of friends and associates which also extends to developing cosmopolitan associations with non-Kalanga in terms of family and marriage as well as business and professional relations.

The only contention I have with this book is that even where there is opportunity to do so, it does not make the slightest concession to any positive contribution from non Kalanga elites, particularly the contemporaries of the notables who are the main subject of discussion here. Werbner indicates from the outset that his position is informed by his own circumstances as well as his professional experience which derives from more than four decades of studying the Kalanga. But that not withstanding, one stills feels that there are one or two areas in the book where he could have acknowledged the 'other' a bit more positively.

For instance in Chapter 3 of the book, only the extreme in the 'majoritarian position' is highlighted and this is captured as suggesting that Tswana see their own collectivity and its distinctive needs and interests as equal to the soul of the nation. What is missing here is a recognition that the source of some of the disquiet against minority demands a) is very specifically identified with Kalanga identity and b) with the simple statistic that while Kalanga account for an estimated 11 percent of the population they have historically accounted for up to 30 percent of the top decision-making positions in the public bureaucracy (including the administration of justice) as formerly expatriate held positions became localised. This is one factor that brings nuance to the inter-ethnic debate and often puts wind in the sails of the 'reactionary backlash' from the Tswana majority, including members of other minorities. Secondly, the book tends to position Tswana ethnicity as a given, and does not problematise its historical invention and rise to the status of a national language.

Otherwise this book is vintage anthropology and lives up to the post-colonial wisdom it promises and from which it derives its depth and breadth as well as great sense of humour. It is divided in two parts: the first charts the role of citizen elites, minorities and bureaucrats in negotiating power; while the second part traces the rise of one particular individual, Gobe Matenge from humble beginnings to public man and 'reasonable radical'.

Uta Wehn de Montalvo, 2003, *Mapping the Determinants of Spatial Data Sharing*, Aldershot: Ashgate.

Yoichi Mine,
Chubu University,
Japan.

According to the specialists of cerebral physiology and developmental psychology, the development of spatial cognition of a small child tends to be much faster than the development of cognition of time sequence. A pre-school child can draw a sort of map of the place where he or she lives, however deformed it may be. But it is futile to cram children of this age with a chronological table of the history of their own village or town, let alone their country or continent, which would be more or less familiar to a ten-year-old child. This feature of the infantile development of our species may explain the reason why many public policy documents with serious intentions abound with visual maps and effective figures, which hold intuitive appeal to the general audience. Any logical causation presupposes linear time sequence, but the frontier of the ways of our logical understanding of the outer world should be much wider than sequential causation.

The book under review is all about the art of spatial mapping of information, the art of enlisting various stakeholders in public and private sectors as well as NGOs for effective data sharing across organizational boundaries. Successful combination in a computer system of spatial and socio-economic data amassed from numerous sources is expected to contribute to effective policy design, development planning and resource management. While data sharing is a key to the effective presentation of our collective ideas, importance should also be attached to the process of data sharing, as long as we wish the outcome of our research to be of really democratic nature.

The practice of spatial data sharing is important for industrialized and developing countries alike, so that the author chose South Africa, an emerging African nation with relatively well-developed information infrastructure, as the locus of her quantitative and qualitative inquiry. Although most pieces of preceding research in this field have tended to put focus exclusively on the technical bottlenecks of data sharing, the author sheds light on human, behavioural aspects of the data sharing management. What seems to be most interesting in this regard is that the author attributes the key determinant of successful data sharing to favourable configuration of power relations within organizations, and the failure to the contrary. Her major finding from extensive

interviews is that organizations tend to show reluctance to data sharing especially when decision-makers suspect that they may lose control over the spatial data possessed by their own organizations.

An obvious merit of this seminal work lies in its abstract reasoning based on social psychology, which detracts from dangers of being trapped in idiosyncratic details of the actors' institutional surroundings. However, any reader who knows the South African modus vivendi would feel as if one were reading a book about a no-man's-land. Since the end of apartheid, in reality, the South African government sector is gradually becoming a world dominated by the so-called black middle class, leaving the traditional white power to opt for the business world. Even though the new elites, both black and white, seem to share a certain degree of nationhood and even xenophobia, it is impossible to deny the primacy of racial and ethnic politics within and between organizations, sometimes of quite subtle nature, especially when one tries to trace behavioural determinants of resistance and adaptation in regard to decisions to share, or not to share the assets of each organization. The author's field research seems to have missed what is really functioning in South Africa in this point.

Despite this failing, the author's approach of understanding the attitudinal dynamics inside organizations still stands out. As the unit of analysis can go beyond the boundaries of nation states, we may well try to apply the frame of discussion to the arena of regional and international cooperation. One good field of exploration would be the joint efforts against natural disasters; for example, the development in the Indian Ocean Rim countries of an integrated set of geographic, seismological data and those of human habitation and poverty, as well as the successful presentation of the data set to international organizations and the governments concerned, would have been immensely useful to cope with a catastrophe such as the mammoth tsunami wave that devastated coastal areas of the region at the end of 2004.

Although research institutions of a similar sort in different countries are supposed to share a certain degree of common interest and ideal, it is neither easy nor appropriate to compel them to share their own research possessions. That is why the author emphasizes the significance of the 'culture' of sharing, which we recognize at least as a common starting point. Our next step should be not only to devise a system of sensible incentives but also to foster the culture of sharing, taking into account the unequal power distribution within and between organizations, and yet being united in the awareness of the gravity of global challenges.