Reference

1. Althusser, Louis 1969 *For Marx*. London: Allenlane the Penguin Press.
2. Althusser, Louis and Etienne Balibar. 1970. *Reading Capital*. London: New Left Books.
3. Badiou, Alain. 1983 "Le Theoreme de Godel." *Le Perroquet*. No. 31, 10–30 November. pp 1, 9–11.
4. ––– 1988 *L'Être et l'Evenement*. Paris: Editions due Seuil.
5. ––– 1989. *Manifeste pour la Philosophie*. Paris: Editions du Seuil.
6. ––– 1982. *Theorie due Sujet*. Paris: Editions due Seuil.
7. Bateson, Gregory. 1979. *Mind and nature*. New York: E.P. Dutton.
8. ––– 1972. *Steps to An Ecology of Mind*. New York: Ballantine Books.
9. Bochenski, I.M. 1970. *A History of Formal Logic*. Notre Dame: University of Notre Dame Press.
10. Davis, Philip J. and Reuben Hersh. 1986. *Descartes' Dream: The World According to Mathematics*. New york: Haircourt Brace Jovanorich Publishers.
11. ––– 1981. *The Mathematical Experience*. Boston. Birkhauser.
12. Dumitriu, Anton. 1977. *History of Logic* 4 vols. Turnbridge wells Kent: Abacus Press.
13. Gerstein, Ira. 1988a. *(Re) structuring Structural Marxism* unpublished ms.
14. ––– 1988b. *Variant Forms of the Capitalist Mode of Production* unpublished ms.
15. Gaukroger, Stephen 1978. *Explanatory Structures*. Hassocks, Sussex: The Harvester Press Ltd.
16. Haack, Susan. 1979. *Philosophy of Logics*. Cambridge: Cambridge Press.
17. Hofstadter, Douglas R. 1979. *Godel, Esher, Bach: An Eternal golden Braid*. New York: Basic Books, Inc. Publishers.
18. Lloyd, Christopher. 1986. *Explanation in Social History*. Oxford Basil Blackwell Ltd.
19. Lovejoy, Arthur O. 1961. *The Great Chain of Being*. Cambridge. Mass: Harvard University Press.
20. Wang, Hao 1987. *Reflections on Kurt Godel* Cambridge, Mass: The MIT Press.
21. Welden, Anthony. 1987a. *The Rules are No game: The strategy of communication*. London and New York: R.K.P.
22. ––– 1987b. *Man and Woman, War and Peace: The strategist's Companion* London and New York: R.K.P
23. –––1972. *System and Sturucture*. London: Tavistock Publications Ltd.

Vocational Tranining of Our Fore–fathers – Its Lessons Today

*O. Njoku**

Introduction.

In accounting for The Wealth and The Poverty of Nations, development experts accord priority to technology. Technology has enabled man to master his environment more effectively than would have been possible. The more advanced the technology available to a people, the more capable they are of managing and exploiting their environment. In other words, the level of a people's mastery of their environment is directly related to the level of their technological attainment.

Thus with the exception of some mineral rich countries, the richest countries of the world tend also to be the most technologically advanced. Again, some mineral rich countries excepted, the poorest countries of the world tend to be among the technologically least advanced countries.

It is not surprising then that Third World countries, for instance Nigeria, attach considerable importance to technology as a means to economic progress. In this regard, as in the Nigerian case, the tendency, has been to attempt to borrow technology from the western industrial nations and to imitate their system of industrial and vocational organisation and training. This is usually done without reference to existing indigenous systems. Indeed, the usual attitude is to dub indigenous technology and systems of vocational training as an anachronism, too primitive to contribute to the industrial progress of the nation.[1]

Using the example of traditional Igbo iron working, this article dissents from this established stereotype. The focus is the traditional vocational and technical training of the Igbo based on apprenticeship. Whether it was in the male–dominated industries such as blacksmithing and carving or in the female – dominated industries such as pottery and textile, trainees learned on the job under the guidance of craftsmen or crafts–women. It was through this means that skills were transmitted from one generation to the succeeding one.

In no other traditional industry was vocational training so well organised and regulated as in iron working. This was so probably because the industry was the most important of the traditional craft industries. It serviced directly or indirectly virtually all other occupations of the people such as farming, hunting, carving and so forth.

In examining the apprenticeship system, specific attention will be paid to the system of recruitment, training, graduation, and professional ethics. The discussion will be rounded off with some thought on the lessons which the traditional system holds out to vocational training and organisation in Nigeria today. It will be suggested that though the tools employed by precolonial Igbo metalcraftsmen were simple and crude, in terms of the exacting training standard, master–apprentice relationship, professional discipline and ethics, the traditional system has important contributions

* Lecturer, Department of History, University of Nigeria.

to make to vocational training and organisation in Nigeria today. Although this paper focuses on the Igbo case, there is however, evidence to suggest that close parallels exist in other Nigerian groups such as the Edo, the Nupe and the Yoruba.[2]

Preparing for Apprenticeship.

Smithing was a greatly respected occupation in precolonial Igboland, as it was in other communities throughout West Africa. Rev. Basden described it as a "sound money making venture"[3] before the influx of European wares during the colonial period. The practitioners were proud of their profession. Thus Udi smiths referred to other people who were not smiths as *oheke,* meaning 'ne' er–do–well'. And christian missionary visitors to the smithing town of Awka in 1878 observed that the people "all carried themselves with dignified air, or perhaps, a swagger, as though all the world belonged to them...[4] The demand for the smith's products was universally high, and the smiths itinerated over considerable distances to meet their customer's need.

For these reasons, most parents, if they had their way, would have had their sons trained as smiths. No mastersmith, even if he had no male children, encountered any difficulty recruiting apprentices. The apprenticeship system is probably as old as smithing profession itself and thus is an integral feature of it, as indeed, of all other professions in traditional Africa. Usually children learned from their peers partly by watching them and partly by rendering such assistance as their knowledge and age permitted. The number of apprentices *(umu uzu or umu eguru)* a smith *(nne uzu)* accepted was determined mainly by the necessity to give them effective training. This is in sharp contrast to the Nigerian experience today when mass production is the vogue.

Because of its profitability and the prestige it attracted, smithing was a jealously guarded profession. From the begining, it was organised on kinship basis. *Uzu di n'obara,* "smithing is inherited by blood" is a common refrain of Igbo smiths todate. And earlier in this century. Talbot observed correctly that "a smith seldom takes an apprentice save among those of his family".[5] The smiths themselves devised strategies to confine the technology within their own ranks only. These included the ritualization of the production process, the transfer of the skill from father to son, a rigid guild system and a compulsory, rigorous and fastidious apprenticeship. Mainly for these reasons and partly because of the high level of technical and artistic competence it required, smithing was a very restricted profession. The restriction of entry into the profession coupled with the wide demand for the smiths' products enhanced the value of the profession as well as the products.

For a boy from a smithing family, informal apprenticeship could start as early as around the age of four years when he began to play in and around his father's smithy. He would fiddle with tools as they caught his fancy, and might run minor errands appropriate to his age. In Nsukka and Udi, the older centres of iron working, tradition insists that a person with no blood relationship with a smith was never apprenticed in pre–British times. But in other centres such as Abiriba, Awka and Nkwere, the rules were less rigid, and boys from non–smithing families could be apprenticed, though sparingly and under strict conditions.

Before a boy from a non–smithing lineage or family, or one who was not a blood relative of the intended master was apprenticed, the parents had to make a formal request to the smith they wished to train their son. The request was made with drinks and other traditional presents or gifts. If the smith accepted the request, the terms of the training were then spelt out by the smith or his lineage elders to the prospective apprentice and his parents. These amounted to a declaration of the obligations and the responsibilities of both parties. The long period of the training, the hardship involved as well as the patience, perseverance and self–discipline it required were stressed to the prospective apprentice.

Usually, a training fee was charged but the methods of payment varied. The apprentice might be required to work for his master without pay after his training for an agreed period of time. It could be agreed that on graduation, the graduand would have to share with his master his annual income for a specified period of time. Sometimes payment was made in cash and in kind such as yams, livestock and, farm labour. On his own part, the smith pledged to bring up the prospective apprentice in the best tradition of the profession.

The arrangement was sealed with a sacrifice at the shrine of the lineage's iron deity. Every smithing lineage had a deity to which it ministered and which was believed to have conferred the enviable profession on their forefathers. It was believed that without the sanction and protection of the iron deity, no smith could safely and successfully practise the craft: iron was "changed" and dangerous to all except those who were so protected.[6] The sacrifice was conducted by the priest of the deity. He solicited the deity to accept the new trainee and protect him from the hazards of the forge and long distance travels. As hinted above, in precolonial times, habitual itineration was a marked behaviour of Igbo smiths. In some instances, a blood pact, Igbo *ndu,* was contrived between the mastersmith and the apprentice's parents. The aim was to make sure that each party kept its own part of the bargain. This act also brought the two families into ritual kinship. In all this arrangement, the senior member of the smith's lineage had to be present. It was they who constituted the governing council of the lineage's guild of smiths. Every smithing lineage had its own guild which was the sole controlling authority in the organisation of the profession. The guild made regulations governing the conduct of member, controlled entry into profession, set the standard of training and regulated the quality of products. It imposed strict sanctions including, in some grievous offences, the excommunication or even the banishment of an offending smith. In the absence of a written tradition, keeping the members together as a well knit unit was perhaps the most viable way of perpetuating the technology. And a close, kin–based group appears to have ideally suited to the training and the transmission of the skill from one generation to the next.

The Training Programme.

Although for the child born in a smithing family informal training started quite early in life, formal training for other apprentices started at eight to ten years of age. These were minimum ages at which they were considered reasonably strong to operate the bellows effectively and to participate in not too distant travels, at least.

The duration of apprenticeship training varied according to different factors, such as the age of an apprentice, his aptitude, comportment and the range of products he was training to produce. An apprentice who began training at an early age was likely to spend a longer time on the job than one who began at an older age. Training to produce simple items such as hoe blades, knives, matchets and razors took less time, perhaps not more than three years, than learning to produce the more complex ones, such as leg coils, traps and guns. In Abiriba, apprentices from non–smithing communities or lineages could only be taught to produce the simple items. The more complex ones were reserved for apprentices from smithing lineages.

It seems that, in much earlier times, there was little specialisation among the smiths. However, by the nineteenth century, an advanced degree of specialisation had emerged in the industry at centres such as Abririba, Awka, Nkwere, Agulu Umana and Agulu Uwani. At these centres, some smiths concentrated on the production of iron implements, and were known as *uzu ike;* some in gun–making and were known as *uzu egbe,* and others in producing brass and bronze objects, and were referred to as *uzu ola.* Whatever the type of production an apprentice was learning, devotion to duty, obedience and good manners were continnually emphasised. A stubborn or lazy apprentice was doomed to remain a trainee much longer than his colleagues, irrespective of his technical mastery of the skill.

The entire training programme was so designed as to pass the apprentice through a circuit of a well graduated experience. He was expected to acquire in the process not only the technical competence required for the job but also the requisite professional ethos and *esprit de corps.* For how to conduct oneself as a member of the dignified profession was an imporant objective of the programme. A well trained smith was expected to behave like a worthy public relations agent of the profession to the wider public. To this end, the apprentice was taught to be nice, courteous and truthful to customers. There was no question of faking products to customers or of a crash training programme, a tendency which has become almost normative in Nigerian government's technical training schemes in recent times. Thus the mastersmith would constantly remind the over–zealous apprentice that the training could not be rushed: *adiga akuta ya n'ogbon,* says Beke Melue of Nkwere.[7]

The apprenctice must start with the humble funtions of keeping the forge and its surrounding clean, laying out the work tools before each day's work, and operating the bellows. He had to accompany his master in preparing charcoal used as fuel, and ran various errands for him and his wife/wives. In time, he would carry his master's products to nearby markets to sell.

While working the bellows, the apprentice at the same time watched his master carefully to see how he forged diferent items. The working tools were few, simple and home–made. These were basically an anvil, a hammer and pincers. The work place was arranged with logistical economy and this facilitated the importing and acquisition of knowledge and skill by the master and the apprentice, respectively. The apprentice sat behind the bellows which he operated, and from that position, he watched his master forge unfabricated metals into tools and ornaments. The charcoal was close by the side of the apprentice and so he easily fed the hearth with it at appropriate intervals. The smith himself squatted behind the anvil, the hearth in front but sligtly to his left. Thus with a pair of pincers in his left hand, he stoked the fire and removed pieces of heated iron from there for hammering out on the anvil.

The smith on his part explained patiently to his apprentice all the stages in the forging of implements, stressing points as he thought it necessary. As the apprentice developed in experience and basic skills, he was permitted, under the watchful eyes of his master, to try his hand at the production of the simplest articles such as needles, razors and arrow heads. Every mistake he made was painstakingly corrected by the master. And he was made to repeat each process as many times as the master thought necessary, until he mastered it. It was indeed, a thorough training scheme disigned to ensure high standard production.

From the simple manufactures, the apprentice moved on to the less simple such as hoe blades, matchets and knives. The process continued step by step, until he got to the end of the training ladder, and this could take up to ten years or more. For the *uzu ola,* the most delicate item to produce was the leg coil. For the smiths concentrating on iron implements, the sword was perhaps the most ambitious product. And until the early part of the eighteenth century, the training ladder might have terminated with the production of either leg coils, multiple gongs or swords. However, by c. 1745–1775, a new rung had been added to the existing schemes, namely, the repair and production of iron animal traps and guns. This matter has been treated elsewhere and does not need to be rehearsed here.[8]

When the apprentice had successfully completed his training programme, his master organised a passing out ceremony for him. This was known as *ima otutu,* "the blessing of the hammer". Successful completion meant that the master was satisfied that his apprentice had acquired reasonable competence in the craft and had imbibed the rules of the profession, that is, its ethics. All the smiths in the master's lineage and others from neighbouring communities were invited to the occasion. It was marked with lavish entertainment which lasted for up to four days. While the merriment was on, some of the invited smiths were deployed to produce the essential tools with which the graduand would start off on his own. These were an anvil, a hammer and some pincers. Smiths' taboos forbade buying the items in the market.

The anvil was forged from pieces of iron which were heated and consolidated into a solid nail–shaped block. It was the most difficult and energy–sapping item to produce. Usually about for pairs of bellows operating simultaneously were applied in the production. The purpose was to generate enough heat to make the iron block workable. Generally, the work was done in the cool of the night in order to mitigate the intensity of the heat produced by the working bellows.

The graduand could be required to demonstrate his competence to the invitees by producing one of the popular products of the forge such as a knife or a hoe blade. This offered the invitees an opportunity to judge for themselves the competence of the graduand. It was a sort of accreditation exercise. If he was found wanting, the preparations would be stopped and the apprentice would be made to put in extra time to get himself fully ready. If he was found competent, the preparations proceeded.

The tools produced for the graduand were presented to the smithing deity for its blessing once the invitees had satisfied themselves of the graduand's competence. All the

rules of the profession and the graduand's rights and obligations were rehearsed to him. The graduand then promised to work according to the rules and to uphold the dignity of the profession. He was then presented to the priest of the iron deity for final blessing. The tools were handed over to the apprentice after that. He had become a fully fledged smith 'worthy in learning and in character'. He could thence practise on his own.

On the other hand, an indolent apprentice had to be made to buckle up. "Smithing is not for the lazy and the feeble" is a popular rhyme of Igbo smiths. This is not arrogant and egocentric claim. Smithing demanded a lot of hard work, endurance and expenditure of considerable physical energy. It also called for a lot of imagination and artistic and technical skill. These are some of the qualities the apprenticeship training were designed to inculcate. The smiths had no fixed hours of work, though a normal day's work began at about 5 a.m. and ended at about 5 p.m. Two snappy breaks provided some respite to the hardworking smith, and a hush to the reverberating din of anvil.

If there was pressure to complete a job on schedule, work could commence around mid-night continue till day break. During the peak of the farming season, there was invariably a high demand for farming implements. The smiths needed to work extra hours to meet the rush. The apprentice had to get up from bed early in the morning before his master to sweep the forge, lay out the work tools and prepare the forge fire. Dick Achonwa of Umuko lineage, Nkwere, recalled that during his apprenticehip, if and whenever their master got up before him and his other colleagues, he usually roused them from sleep by pouring cold water on their naked bodies.[9]

Forging an item involved continual striking of heated metal on an anvil with a hammer weighing between seven and ten pounds – by no means a light job. From ancient times, the smith had never been a robust looking man because the weight of the hammer sapped his strength just as the heat from the hearth "wasteth his flesh".[10] Nor did hammering involve merely striking the object on the anvil. As an experienced Agulu Amokwe ex-smith indicated, the hammer is a dynamic tool and it is of crucial importance how it behaves when it is being struck.[11] When lifted, it must descend along the required path without turning and must land on the object at the right spot. Such precision could only be achieved through well tutored apprenticeship. After watching a smith produce a leg coil, Rev. Basden concluded that the process required considerable artistic verve, technical competence and patience.[12]

The meticulous and rigorous training the smiths underwent was manifested in the quality of their products. These products were of two broad end-use categories: (i) those serving essentially socio-cultural ends such as wristlets, anklets, leg coils, pendants and title emblems and regalia, and (ii) those serving utilitarian purposes such as needles, hoes, door hinges, staples, traps and guns.

Although the tools used by the smiths were few and somewhat unrefined and their manufactory a make-shift, the quality of their products was high. This was so particularly with specific reference to the socio-cultural products. The Igbo-Ukwu archaeological recoveries dated to the 9th century A.D. provide the earliest evidence of the verve and artistic virtuosity of metalcraftmen in the Igbo area.[13] Denis Williams, a well known art historian, has described the Igbo-Ukwu bronzes as "remark-

ably and justly famous, for a fragile jewel-like aesthetic of delicacy to be comp
in Africa only with Roman pieces imported at the Nobataean capital at Faras...[1
finesse with which the Ezira bronze artefacts dated to the 15th century were exec
suggest that the tradition of high quality and aesthetic production demonstrated
Igbo-Ukwu finds continued.[15] Furthermore, seventeenth century illustratio
swords made in Igboland confirms the continuation of the tradition. According to
report, the sword could be bent nearly over.[16]

From about 1830, Europeans began to venture beyond the coastal periphery of
Niger delta into the hinterland which the Igbo inhabit. Thence, more explicit
dence of the high quality of Igbo metal products started to appear in their repo
For instance, in 1854, B.W. Baikie, in his journey to Lokoja, commented on I
metal products, saying he could "testify to their being very neatly finished".[1
1859, Rev. J.C. Taylor of the Niger Mission commented thus on brass keys produ
by an Awka smith:

> The workmanship and curious embellishment he had wrought on them and the dex
> ous composition that he had used reflect great credit on him.[18]

Regarding locally produced guns, Rev. Basden remarked that "the stocking and f
tings were so well executed that one could scarcely distinguish the result from Engli
made articles".[19] The smiths referred to such works of art as *uzu nka* – metal wo
requiring considerable skill – as distinct from others which perhaps required mo
brawn than brain and art. It is germane to point out that smiths the acquired the ski
first of repairing imported firearms and later of producing the complete implemer
through self-teaching or 'trial-and-error'.[20]

Of course, not all of the products of the forge were executed with artistic flair nor di
they have a 'polished' finish. This was generally true of some utilitarian articles such
as hoes, matchets, staples and hinges. But what such articles lacked in artistic finish
ing, they made up in practical utility and durability. During the colonial period, fo
instance, the administration imported European and Indian – type hoes into
Nigeria. But the farmers for whom they were intended found them functionally
unsuitable. The effort fizzled out. It was thumps up for locally made hoes. It was also
a well known fact that some implements, the hoe blade, for instance, made with loc-
ally produced iron were much more durable than those made with imported iron.
Until massive import of iron mongery from Europe demolished local smelting, Igbo
farmers preferred tools made with locally smelted iron. This preference was, indeed
general throughout West Africa.[21]

Question of Relevance

The question now is: does traditional vocational training, as discussed in the preced-
ing pages have any relevance to modern day Nigerian needs? It is submitted here that
there is a lot that modern Nigeria can learn from the traditional system.

During the colonial period, the administration, by a series of fiats, deregulated entry
into the traditional craft industries. This was a good move on the face of it as
monopoly may have impeded healthy competition and stunted the spirit of innova-
tion. However, deregulation turned out to be more effective on paper than in prac-
tice, at least initially; intending trainees still

them. In time, though, the colonial reality eased entry into most restrictive traditional professions. One result of this was that these professions started to lose their kinship anchorage. For instance, today some blacksmiths and most tinkers or welders do not come from traditional iron working families.

In the 1930s, the colonial administration tinkered with the idea of reforming traditional apprenticeship system. This was sequel to the report of K.C. Murray and A. Hunt–Cooke on minor Industries in Oyo and Abeokuta Provinces.[22] But a close study of the situation in Awka district convinced J.O. Field, Acting District Officer, that the system was functioning effectively well and there was no pressing need to reform it.[23]

Today apprenticeship is still an important feature of vocational training in Nigeria, especially in the non–formal sector of the economy, traditional or modern. It remains, therefore, an important vehicle by which skill is transmitted from person to person. In such modern professions as tailoring, motor mechanic and carpentry, or the traditional ones such as blacksmithing, pottery and cotton weaving, trainees learn on the job without necessarily going through formal schooling. In fact, the preponderant number of the practitioners of these professions possess very little formal education.

The apprenticeship system in present day Nigeria is therefore an inheritance from our fore–fathers. Its persistence reflects both its resilience and its practical utility in man–power training and labour organisation.[24] It is instructive in this regard that in the last few years, both the state and the Federal governments of Nigeria seem to have come round to recognising the place of apprenticeship in the economy. Hence the birth of the National Open Apprenticeship Scheme (NOAS) by which young men and women in rormal vocational schools are sponsored by government to go through a period of apprenticeship in different vocations under recognised 'masters' in the informal sector. As Kenneth King puts it, such as scheme is a recognition of the fact that "school and skill appear to have drifted apart".[25]

The "Open Apprenticeship Scheme"is not actually a recent innovation. The experiment goes back to the colonial period. For instance, part–time apprenticeship was introduced in some Badagri schools in 1930. By this, pupils attended school from 9–12 a.m. doing normal studies and spent the remaining part of their school day with their master. The Headmaster of the pupils paid periodic visits to them at work. Reporting on the scheme in 1936, the Acting Director of Education said it had proved a huge success. The leading mechanic in Badagri then was a product of the scheme.[26]

In Igboland today, the apprenticeship system of vocational/industrial training in the informal sector has retained some of the virtues of pre–colonial times such as hard work, improvisation and perseverance. It is for this reason that the informal sector of the national economy has demonstrated a degree of resilience and stability hardly known in the formal sector. All the same, the system as operated today has lost some of the precolonial strengths and virtues, as is demonstrated below. In this regard, therefore, the present system as well as the formal or modern sector of the economy has important lessons to learn from the past.

As noted earlier, precolonial mastercraftsmen usually limited their apprenticeship intake to the number they could effectively supervise and train. Four was usually the upper limit. There was no question of "mass production" or of producing half–baked practitioners. These days, craftsmen or artisans tend to apprentice as many trainees as apply. Some keep as many as ten or even more. The primary aims are to derive as much revenue as possible from apprentices' fees and to exploit their labour.

Governments have even succumbed to this cavalier attitude to the training of technical or industrial labour. In the last decade or so, Nigeria goverments and parastatals have undertaken a number of "crash training programmes" for workers some carried out within the country, some overseas. The intention has been to produce within the shortest possible time various grades of technical man–power arguably to meet pressing needs. Whatever may be the justification for and the merits of "crash programmes" in the short–run, they have the tendency to short–circuit otherwise well graduated training programmes. And this is a far cry from the coherent and well integrated training programmes of our fore–fathers described earlier in this paper.

Such crash programmes are symptomatic of a Nigerian malaise: absence of long–term planning or inability to pursue plans to their projected ends. In Nigeria, the norm is for every new administration to initiate its own plan. The result is that there seem to be as many plans as there are adminstrations. No country should expect to make real technical–industrial progress without a well articulated and consistently pursued training programme. Graduates of crash programmes can hardly match those who passed through normal well graduated ones.

The large number of apprentices which some masters admit make it difficult for them to give the trainees the sort of close supervision and training their precolonial predecessors received. What is more, some craftsmen rarely spend long enough time in their workshops because of other business commitments and interests. Usually such masters leave their senior trainees who go by the prententious name, 'fore–men', in charge of their workshops.

This situation leads to untoward ramifications such as poor training of apprentices and concomitant inefficient service to customers. For instance, in the case of vehicle mechanics, it is not unusual that when a customer brings his/her car for repairs or servicing, a fore–man and a cohort of apprentices descend on the car, fiddling with various parts of it. It happens to be the unfortunate practice among Nigerian mechanics not to admit inability to diagnose any engine problem brought to them. The same appears true of most other professionals such as doctors and lawyers. And so they do not oftern show the humility of consulting their colleagues or peers in order to detect any problem that defies them. In such a circumstance, instead of solving the problem, they compound it. The customer or client becomes the loser.

Formal sector vocational institutions have also tended to sacrifice quality to quantity by admitting more applicants than their resources can adequately cope with. Where the traditional system emphasised learning by doing, many vocational technical intitutions have been known to accord undue attention to theory. These formal institutions have thus failed to give sufficient vocationalisation or "skill to live by" to their students. Rather they have produced more aspirants than there are salary jobs in the economy, that is more job seekers than self–employment aspirants.

Part of the basic problem has been the assumption that vocational and technical education needs to be communicated in a formal institutional setting. This attitude has resulted in a disinclination to look beyond the bounds of schools. There is a failure to realise that the conditions of technical eduction and training inside the school is substantially affected by the sort of skill acquisition that is available outside.

Indeed, in–school and out–of–school skill training must reciprocally interact. Development and educational planners must grapple with the problem of what skills the school can appropriately provide. The inception of the NOAS may be an indication of reorientation of official attitude.

Again in the traditional apprenticeship system, the relationship between master and apprentice was to some extent akin to that between father and son. The apprentice was treated as a part and parcel of the master's family. He was put under the special care of one of the master's wives who acted as his mother. This arrangement bred an atmosphere of mutual trust and confidence. These days, master–apprentice and master–mistress relationships tends to be mostly contractual and exploitative, and is bereft of mutual interpersonal relationship. Rather there is continuing scheming on either side to get the best out of the bargain, even at the expense of the other.

Not surprisingly, some masters go all out to exploit their apprentices. Some masters for their own selfish interest keep their apprentices much longer than necessary. Some trump up one accusation or the other just on the eve of the disengagement of an apprentice with two primary aims in view. One is to avoid spending money in setting up the apprentice on his own. The other is to prolong his training so as to further exploit his services.

On the part of apprentices, some have exhibited impatience, gross insubordination and outright dishonesty. Some want to become masters literally overnight and get rich quick. While still apprentices, they accumulate capital by any means, legitimate and dubious, including cheating their masters and customers. Some bolt away before the end of their training and proceed to establish their own workshops, claiming to be fully fledged 'masters'. This sort of scenario has led to the proliferation of partially–baked artisans, fakes and cheats in many of the artisan professions. Thus fake as well as shoddy products are presented and sold to unsuspecting buyers as genuine and good quality goods. This applies equally to business in both the formal and non–formal sectors. Indeed, the Nigerian artisan or even business community in general is not known to be the most honest to consumer. Shoddy goods are foisted with impunity on these helpless consumers. This is notwithstanding the existence of official organs such as the Nigerian Standard Organisation to check such practices. The Nigerian market is the producer's market.

All this stands in sharp contrast to the precolonial situation in which the guild system maintained strict professional ethics among craftsmen. In the past, the guilds performed the crucial and purposive function of ensuring that artisans operated within the ambit of their professional regulations and ethics. As we have seen, emphasis was placed on high quality production and honesty to customers. Today, the Nigerian consumer of shoddy and fake manufactured goods must surely be envious of the fuss with which the guilds of his fore–fathers upheld their image and protected the consumers of their products. Those years were The Age of Innocense.

Guilds still exist in the artisan professions. But they have lost the type of strict control over their members which obtained and was possible in precolonial times. In any case, nowdays, the guilds are mostly interested in ensuring a monopoly of the market for their products and services and the foisting of usually high prices on consumers. The professional and ethical responsibility of ensuring good quality products by their members as well as honesty to customers receives scanty if any consideration from them.

In the formal sector of the economy, industrial organisation and labour relations are modelled after the Euro–American system. Worker–management relations in the work place is purely contractual and non–personal. Money is used both as an incentive and as a reward for hard work. The system has worked well in the Euro–American culture to produce some of the richest economies in the world. But there is a certain arrogance in the assumption that system can be applied universally to obtain the same results.

The Japanese example contradicts this assumption, and emphasises the necessity for the industrial organisation and labour relations of any economy to reflect its traditional social relations and organisation.[27] Commenting on the industrial miracle of Japan since World War II, Levine wrote the following:

> Probably the outstanding management practices in Japan's developing industrialism was the incorporation of traditional family behaviour patterns with enterprises technologically similar to their Western counterparts. Japanese traditions of personal loyalty, subservience of subordinates to superiors and close interdependence of individuals within tightly knit social units were transposed readily from the long–established family system of the earlier feudalistic agrarian society.[28]

While the Euro–American system emphasises monetary incentive in labour management, the Japanese adopted "life–time employment" and "payment – by – seniority"[29] The result, Japan avoided most of the social and cultural upheavals which usually accompanied industrialization in other countries. Nigerian technocrafts and development practitioners have a need to heed the Japanese example.

Conclusion

In the traditional Igbo society, guild and apprenticeship systems were two cardinal features in the organisation of vocational training and the transmission of skills from generation to generation. Apprenticeship training was meticulously carried out under the close supervision of guilds. Emphasis was as much on technical competence as on acceptable professinal ethics. Before an apprentice graduated as a craftsman, he must have been found worthy in character and learning.

Apprenticeship is still very much in vogue in the non–formal sector of the Nigerian economy. But the virtues which characterised the traditional system have been greatly eroded by 'modernity'. Impatience and vaulting ambition on the part of apprentices and lack of proper professional ethics on the part of mastercraftsmen have led to the production of partially baked apprentices as well as shoddy goods.

Our labour and industrial organisations today must take cognisance of the traditional system, if it has to be rooted in the fabric of the society. After all, the traditional system is a product of millenn[illegible]a of experimentation and dialogue between the people

and their milieu. Those who draw a sharp divide between tradition and modernity merely portray a profound lack of historical knowledge. For there, is always in all civilizations and developments interpenetration of the traditional and the modern. If the Euro–American system of vocational education and labour organisation is to have lasting positive effects in Nigeria, it has to be integrated into what is good in the traditional system.'[30]

In this respect, there is absolute necessity to imbibe the type of professional ethics which our fore–fathers insisted upon. All too often, in discussing the problem of industrial and economic development of Nigeria, the experts focus on technology, capital, infrastructure and skilled manpower. Rarely is the issue of professional ethics raised and addressed. Yet, it would not be an exaggeration to posit that one of the major obstacles to industrial and economic progress in Nigeria today is the absence or near–absence of proper ethics among professionals.

It is not enough for a country to possess skilled man–power; it is equally important for the skilled man–power to be imbued with the proper ethics of their professions. Indeed, if the available skilled man–power in Nigeria had imbebed the right ethics of their professions, the country would have long made tremendous advance in the fields of technology, and industry. Then we would not have tarred roads requiring urgent repairs no sooner than they have been commissioned; bridges and civil buildings collapsing after only a brief use or even before use. We would not have expired drugs knowingly dispensed to patients by 'qualified' medical practitioners. The ramifications of the decay of ethics among professionals are too damaging to be neglected in discussions of the problems of Nigeria's industrial, technological and economic progress.

Notes

1. O.N. Njoku, "Traditional Technology and Nigeria's Industrial Future: Reflections from the Field and History, *Humanitas* 1, 1 (forthcoming).
2. S.F.Nadel, *A Black Byzantium* (London, 1972); Olu Ogbebor, "The Benin Bronze Casting Industry, 1800 – 1900", B.A. Project essay (U.N.N. 1983); P.C. Lloyd, "Craft Organisation in Yoruba Towns", *Africa* 23, 1 (1953), pp. 30 – 44.
3. G.T. Basden, *Niger Ibos* (London, 1938), p. 318.
4. E. Warner, "Onitsha to Oka", *Niger and Yoruba Notes* v, LIX (May 1899) 83–88.
5. P.A. Talbot, *Tribes of the Niger Delta* (London, 1930), p. 277.
6. For a comprehensive survey of the Phenomenon in Africa see Walter Cline, *Mining and Metallurgy in Negro Africa* (Wisconsin, 1937).
7. Maduagwu Nwolisa of Umunobo, Nkwere, 25 February, 1985.
8. Njoku, "Traditional Technology".
9. Dick Achonwa of Umoko, Nkwere, 20 February, 1985.
10. R. J. Forbes, *Studies in Ancient Technology* vol. 8 (Leiden, 1964), p. 85.
11. Okafor Okoli of Agulu Uwani, Amokwe Udi, 5 Nov. 1984.
12. Basden, *Among the Ibos of Nigeria* (London, 1921), p. 173.
13. For the full report and analysis see T. Shaw, *Igbo–Ukwu: An Account of Archaeological Discoveries in Eastern Nigeria,* 2 vols (London, 1970).
14. Denis Williams, *Icon and Image,* (London, 1974), p. 118.
15. D. D. Hartle, "Bronze Objects From the Ifeka Garden Site, Ezira, *West African Archaeology Newsletter,* 4 (1966), pp. 25 – 28.
16. See E. Isichei, *A History of the Igbo People* (London, 1970) plate 3 for 17th century Igbo–made swords.
17. B. W. Baikie, *Narrative of Exploring Voyage up the Rivers Kwora and Binue in 1954* (London, 1966 impression), pp. 310 – 311.
18. S. Crowther and J. C. Taylor, *The Gospel on the Banks of the Niger* (London, 1968 imp.), p. 299.
19. Basden, *Among the Ibos of Nigeria,* (London, 1921), p. 78.
20. O. N. Njoku "Magic, Religion and Iron Technology in Precolonial Northwestern Igboland", *Journal of Religion in Africa* (forthcoming).
21. C. L. Goucher, "Iron is Iron til 'it is rust: Trade and Ecology in the Decline of West African Iron–smelting", *JAH* 22 (1981), pp. 179 – 189.
22. K. C. Murray and A. Hunt–Cooke, "Native Minor Industries in Abeokuta and Oyo Provinces", National Archives Enugu, (NAE), ONDIST 12/1/1224.
23. J. O. Field "Report on the Development of Arts and Crafts in Awka Division", N. A. E. ONDIST 12/1/1224.
24. Archibald Callaway, "From Traditional Crafts to Modern Industries" *Odu,* 2, 1 (1965), pp. 28 – 51.
25. Kenneth King, *The African Artisan: Education and the Informal Sector in Kenya* (Nairobi, 1977) vii.
26. K. C. Murray and A. Hunt–Cooke, National Archives, Enugu, Native Minor Industries in Abeokuta and Oyo Provinces, ONDIST 12/1/1224.

27. Takafusa Nakamura, *The Postwar Japanese Economy: Its Development and Structure* (University of Tokyo Press, 1981); Koji Taira, *Economic Devt. and Labour Market in Japan* (Columbia University Press, 1970.

28. Levin B. Solomon, *Industrial Relations in Postwar Japan* (University of Illinois Press, 1958), p. 32.

29. Nakamura, *op. cit.*, 151 – 167.

30. For the American experience see Elting E. Morison, *From Know–How to Nowhere: The Devt. of American Technology,* (Oxford, 1974).

Self–Determination and Humanitarian Intervention: the Case of Economic Commission of West African States (ECOWAS) Intervention in the Liberian Civil War

*A.M. Honero**

Introduction

International events as they unfold today seem to sugget that debates about self–determination, intervention on humanitarian grounds and the consequent challenges to the time–honored norms of international law, like national sovereignty and territorial integrity will attract attention of many African academicians and politicians in the post–Cold War era. This situation is due to two main reasons. First is the absence of unanimity regarding the meaning and application of those concepts in the post–Cold War era a phenomenon emanating from cultural difference and conflicting national interests (Ajami, 1972; Donnely, 1984). The second reason relates to the vigor with which the advocates of the "new world order" want to challenge the existing international norms and rules of the inter–state relations (see Nafzinger, 1991; Held, 1991; Lopez, 1991; Young, 1991; Heraclides, 1992; Ravenhill, 1988; Wright, 1989; Cass, 1992; Wess & Chopra, 1992; Jacobson, 1992; Berkey, 1992; Bruilly,. 1982).

This paper is about the application of the concepts of self–detemination and humanitarian intervention as they relate to the Liberian Civil War. It is neither a theoretical nor a critical study. Its modest objective is to evaluate the extent to which the ECOWAS intervention in the Liberian Civil War legally acceptable by the international community. The evaluation will be made in the context of the United Nations set standards on intervention and the criteria proposed by Verwey (1986:70). It is hoped that the ECOWAS experience will provide a useful lesson for both academic and non–academic circles.

The paper is divided into four main sections. The first section will briefly trace the historical origins of self–determination, intervention and humanitarian intervention. A review of the literature relevant to the debate on humanitarian intervention will be given. Our aim here is to provide the background necessary for comprehension of issues related to the study. In the second section, the case study will be presented, focusing on the background information to the Civil War, and the breakdown of the civil and political order, which led to widespread human rights abuses. The aim here is to see whether or not there existed sufficient grounds for intervention. The third section will focus on the ECOWAS intervention and the controversies surrounding the action. The last section will constitute the concluding remarks.

* Lecturer, Department of Political Science and Public Administration, University of Dar es Salaam.