Can Nigeria Leapfrog into the Information Age?

by PHILIP EMEAGWALI

World Igbo Congress, New York.

Since delivered in August 1997, the central ideas of this 40-page speech were widely debated and discussed and finally gave birth to the new:

1. African Institute of Science and Technology,
2. Nelson Mandela Institution, and

Abuja Technology Village was first conceived and proposed by Philip Emeagwali as Africa's Silicon Valley specializing in offshore outsourcing.

I thank the organizers of this convention for inviting me to share my thoughts with you. On a personal note, I appreciate the invitation to
be speaker and guest of honour. But more importantly, I believe that inviting a scientist to speak at this convention is a recognition of the potential role of technology in improving the standard of living in Nigeria and Africa. I would like to share with you my thoughts on how to formulate a strategic plan to launch Nigeria and other African countries into the Information Age, in order to achieve economic development and prosperity. I am particularly interested in the Nigerian Vision 2010 which I believe should have been used as a blueprint for leapfrogging our nation from the Agricultural Age into the Information Age. Later, I will propose a three-track approach that will enable Nigeria to invest evenly in agricultural, industrial and information sectors.

For a better understanding of where we are going, we need to retrace our steps. About 10,000 years ago, Africans in the valley of the River Nile entered the Agricultural Age when they discovered that cultivating the soil for crops and shepherding herds of animals would provide more food than just hunting animals and gathering fruits. This leap into the Agricultural Age motivated Africans to develop mathematics, chemistry, astronomy and medicine as tools for the new age. Our advanced technological knowledge enabled us to build majestic pyramids, the tallest buildings in the world for 3,700 years. These pyramids withstood all types of desert storms and still stand today, like the Rock of Gibraltar.
The flagship AIT [African Institute of Technology] was first conceived and proposed by Philip Emeagwali to compete with MIT [Massachussetts], IIT [India] and AIT [Asia]. Eight years later, the World Bank initiated the implementation of AIT.

Europeans learned our technology, used it to enter the Industrial Age and became more prosperous than we are. They learned to put capital together and mass-produce consumer goods. Unless Africa leapfrogs into the Information Age, the economic gap between Europe and Africa would widen because Europe is about to enter the age. In other words, to catch up, Africa must take two steps for every step Europe takes.

Many Nigerians believe that our country takes one step backward when other countries such as South Korea, Malaysia, and South Africa take one step forward. This belief is substantiated by the World Bank which now ranks our oil-producing nation as the 13th poorest country in the world; and has declared that the standard of living in pre-independence Nigeria was higher than what exists today. We have indeed, taken several steps backward. While acknowledging
that we squandered and mismanaged our petroleum revenues and that we are no longer the "Giant of Africa," we must accept that now is the time for a new Nigeria.

Already we have a master plan --- "Vision 2010," to work with. If we succeed, that will create a better society for our children and future generations.

The Nigerian Vision 2010 was inspired by the six-year-old Malaysian Vision 2020 plan. Shortly after her independence in 1957, Malaysia sent people to Nigeria to learn how to grow palm trees. Today, Malaysia employs Nigerian oil palm experts, produces and exports more than half of the world’s palm oil, and sells palm oil to Nigeria. This is one example of how the best Nigerian minds are helping other countries achieve significant economic growth.
The Abuja Technology Village was personally conceived by Philip Emeagwali in August 1997 in a 40-page speech. Ten years later, the Nigerian government approved its funding. [Photo: CABLE STAYED BRIDGE FROM AIRPORT EXPRESSWAY of Abuja Technology Village]

In fact, Malaysia has become so prosperous that its prime minister has projected that the Malaysian Vision 2020 could enable his country to become a developed nation by quadrupling its $9,000 per-capita income by the year 2020.

How did Malaysia, a multiracial nation of about 20 million people, become so prosperous? What lessons can Nigeria learn from Malaysia? What does Malaysia have that Nigeria does not?
Malaysia invested in manpower development through education, while Nigeria invested in a strong military, a new capital city of Abuja, and continues to maintain unprofitable state-run enterprises such as the Nigerian Electricity Power Authority (NEPA), the Nigerian Telecommunications (NITEL), the Nigerian National Petroleum Corporation (NNPC), the ill-conceived $6 billion Ajaokuta steel complex, and oil refineries that have not solved the problem of fuel scarcity even inside of Nigeria.

Malaysia was thinking long-term while Nigeria was thinking short-term. After comparing the Malaysian Vision 2020 to the Nigerian Vision 2010, I have come to the conclusion that Malaysia is still thinking long-term whereas Nigeria is still thinking short-term.

The Malaysian Vision 2020 includes the development of a $40 billion Multimedia Super Corridor, a 750 square-kilometre (468-square-mile) technological city that will replace its vast oil palm plantations. The Nigerian Vision 2010 yet has no plan to build its technological city. Put differently, Malaysia plans to enter the Information Age by the year 2020 while Nigeria plans to remain in the Agricultural or Industrial Age.

The Malaysians have recognized the emerging Information Age and are poised to enter it based on a strategy that is similar to the one used to send astronauts to the moon. Because the moon is constantly revolving around the Earth at a speed faster than a bullet, astronauts select their flight path so that their spaceship and the moon will arrive at the same location at the same time. Like astronauts, Malaysians have calculated that the Information Age will arrive by the year 2020 and their goal is to bypass the Industrial Age and leapfrog directly into the Information Age by the year 2020.

Similarly, the flight plan for Nigeria should be to land us in the Information Age in the least amount of time. This is important because 60 percent of the wealth of many countries is presently derived from knowledge-based goods and services. In contrast, Vision 2010’s goal is for Nigeria to derive its entire wealth from
agriculture and industry. Vision 2010 will make Nigerians the hewers of wood and fetchers of water for those nations that have arrived in the Information Age. My recommendation is that we should not put all our eggs in two baskets, namely agriculture and industry. Since, it is not necessary to become fully industrialized before entering the Information Age, Nigeria should use a multi-pronged attack strategy to enter the Information Age. Therefore, I propose a Vision 2020 for Nigeria in which a greater emphasis is placed on education and technology. Vision 2020 should be a supplement to Vision 2010 and should: (1) be formulated by the year 2000 to help improve the standard of living of Nigerians by the year 2020; (2) enable Nigeria to catch up with Taiwan, Malaysia and South Africa in 50 years; and (3) enable Nigeria to catch up with European countries in 100 years.

Night view of the Abuja Technology Village conceived by Philip Emeagwali

How can Nigeria take a quantum leap into the Information Age and catch up with the four Asian tigers (Hong Kong, Singapore, South Korea, and Taiwan)? We must realize that we do not have the
resources to do everything we desire. Therefore, we must specialize and focus on doing a few things well.

The 1996 defence budget of Nigeria was greater than its education budget. Fifteen billion naira was spent to maintain an 80,000-man army. Less than fifteen billion naira was spent to educate 60 million Nigerian school children. Money can be saved and military coups discouraged by replacing our career soldiers with an all-volunteer citizen-soldiers or elite part-time National Guards. We should direct 40 percent of our budget to education and 10 percent to technology development.

After the United States defeated Japan in the Second World War, it forced Japan to redirect its resources to non-military areas. The result: Japan became one of the wealthiest nations on earth. Nigeria should never have built a massive army after its independence in 1960 and should have reduced its military strength, as soon as possible, at the end of the Nigerian Civil War (1967-70). Germany, Costa Rica and many other nations have done well without a sizable army. Imagine where Nigeria will be today if all the military budgets since independence had been spent to educate our children.

Our students are taught how to read and write by uninspired teachers who are poorly paid. Nigeria’s one million unemployed graduates should be retrained and offered attractive salaries to become primary- and secondary-school teachers.
Education at the primary school level may be considered more important than university education for the simple reason that “Learning Builds on Learning” or “One Thing Leads to Another.” A child who did not learn much in primary school cannot learn much in secondary school or at the university level. This is why the developed nations invest heavily in their children’s primary school education.

Since it is unquestionably a better investment to educate a great number of young students rather than a few elite university students, Nigeria should invest more in pre-university education. Adopting a compulsory period of 12 years of formal education will reduce the internal education gap between northern and southern Nigeria and make each one of us more useful and productive to our society.
Where can we find the good leaders for tomorrow? Where can we find the medical doctors to care for us tomorrow? Where can we find the civil engineers to repair our roads?

Education is a life-long process and Nigerians must continue their education at the public libraries. Most Nigerian students can only afford to buy books required to pass their examinations. Nigerians who do not read widely will not be politically aware nor concerned about reducing the moral decay, corruption and injustices in the country and in the world. They will not understand that it is a crime for a police officer to request bribes and a crime to offer bribes to a police officer.

Our 21st century vision should plan for every community to have a well-stocked public library so that our children can expand their mental and geographical horizons. Every library should be equipped with computers and have access to the Internet.

Our 21st century vision should recognize that technology is the engine that drives a nation’s economic growth and that science should be compulsory in Nigerian schools.

Although we live in the Information Age, most of our high school graduates do not understand how dinosaurs lived, how atoms are split, how microchips are built, the importance of DNA, and the pros and cons of exploring outer space. How can we compete in an Information Age when our students cannot differentiate between a television and a computer monitor?

Our 21st century vision should call for the increased funding of science education at the post-graduate level. Nigeria should spearhead the formation of a pan-African Institute of Technology comparable to the Asian Institute of Technology in Bangkok, Thailand. This new institute should (1) be operated on a cost-sharing basis by African nations, (2) have campuses in various African
countries, and (3) conduct research relevant to Africa and have research hospitals that make it unnecessary to travel to Europe for medical treatment.

Sponsoring students at the pan-African Institute of Technology would conserve foreign exchange, such as the $40 million a year that was paid by the Nigerian government to American universities in the 1970s. If each African nation were to contribute $40 million a year, we would have $2 billion a year to operate a pan-African Institute of Technology that would be as good as the best universities in the United States, Britain and Canada.

In a 40-page speech delivered in August 1997, Philip Emeagwali proposed the African Institute of Science and Technology to reverse the brain drain.
Thousands of Nigerian scholarship recipients, who could not find employment in Nigeria, are making contributions to the United States economy. In 1979, the United Nations Conference on Trade and Development estimated that each African professional between ages of 25 and 35 contributes $184,000 each year to the United States economy. Based on United Nations’ estimate, 50,000 Nigerian-American professionals are contributing $9 billion a year to the United States’ economy.

At the same time, 100,000 foreign technical experts are working in Africa. These foreign experts are paid higher salaries than their African counterparts. The foreign coach of the Nigerian Super Eagles was paid $100,000 a year while well trained professionals are paid $600 a year. In other words, “monkey dey work, baboon dey chop.” This low salary is one reason many Nigerian engineers and doctors have fled to countries such as Saudi Arabia and Zimbabwe. No nation in the world has been developed by foreigners.

Nigerians are homesick and would like to return home and use our talents, experience, and expertise to develop Nigeria. However, they would like to be offered a salary that reflects their contributions to the nation. Many Nigerians would even relinquish their permanent residency or U.S. citizenship to return home. In Hakeem Olajuwon’s words: "There's no place like home. I will always be from Nigeria."
African Institute of Science and Technology was conceived by Philip Emeagwali in this speech delivered in 1997.
It is morally and politically unacceptable that half of Nigeria’s population will be excluded in the affairs of the nation. Nigeria cannot become as developed as other countries if we continue denying educational and career opportunities to our women. Since Nigeria’s leaders are disproportionately men, it will be difficult for them to build a society that can nurture and utilize the talents of our daughters and sisters.

The contributions of Buchi Emecheta, Onyeka Onwenu and Chioma Ajunwa has proved that when we invest in our daughters’ education we grow as a nation.

Our 21st century vision should plan for Nigeria to compete in the high-tech fields. China launched satellites into space. India is the second leading exporter of computer software in the world. Yet, the average Indian is no more educated than the average Nigerian. Nigeria must get rid of its complex and realize that we can accomplish as much as China or India, if we set our focus in the right direction.

When and how did India get ahead of Nigeria in technology?
During the past 50 years, India invested heavily in technical education, introduced lots of computer courses and produced 250,000 scientists and engineers a year. The large pool of skilled computer programmers attracted many foreign companies, which would rather pay a $15,000-a-year salary to an Indian than pay a $60,000-a-year to an American. Today, India has its own Silicon Valley.

There are still opportunities in contract programming. Over 50,000 computer-related jobs with average salary of over $50,000 a year were created in Manhattan, a borough of the city of New York. That is over $2 billion a year pumped into the economy of Manhattan alone. Similarly, billions of dollars will be pumped into the economies of many cities.
We can pump $2 billion a year into the economy of Nigeria when we start selling our computer expertise the way we now export our soccer players to Europe. The reason is simple. Unlike natural resources, the high-technology industry is man-made and can be located in those countries that had the foresight to produce the best scientists and engineers. Information and knowledge are more valuable than money, automobiles, or petroleum. Brain-power, not natural resources, will be the basis for the economy of the 21st century.

Computers and the Internet will increase the productivity of African workers and therefore create wealth for the society. Why travel to Taiwan to purchase goods that can also be purchased over the Internet? Better still, why import from Taiwan what we can manufacture in Nigeria?
The deck of the proposed cable stayed bridge of the Abuja Technology Village which is adjacent to AIST [African Institute of Science and Technology].

Computers and the Internet have already enabled Nigerians living abroad to form a virtual community called naijanet whose one thousand members live in the United States, Australia, Japan, Finland, United Kingdom, South Africa, Namibia, and even Nigeria. At naijanet, we hold daily discussions on Nigerian-related topics. In the latter instance, the e-mail effectively removes national boundaries. In fact, ideas generated within naijanet are now published in Nigerian newspapers.

In terms of future employment, the implication is that a Nigerian contract programmer will not need an immigration work permit to work in the United States. Conversely, Nigerians living abroad who are not yet ready to return home can lend their expertise to Nigerian communities, without being there.
The Abuja Technology Village was first conceived by Philip Emeagwali in a speech delivered in August 1997 in New York City. [Photo: PHARMACEUTICAL ESTABLISHMENT of Abuja Technology Village]

You might wonder “Why have an Internet in a continent where telephone and electricity services are unreliable?” First, the $1.3 billion Africa ONE project will directly connect Lagos to Europe with ultra fast fiber optic cables buried underneath the Atlantic ocean. The copper wire used in the Nigerian telephone system can transmit 48 conversations simultaneously. A fiber optic cable can transmit 10 million conversations simultaneously. When this project is completed, it will be unnecessary to use Nigeria’s unreliable telephone system to access the Internet. Nigerians can use the Internet by making a local telephone call.

Second, communicating by Internet is less expensive than communicating by telephone. It is sometimes faster and cheaper to travel by road, in spite of our bad roads, than to make a telephone call between two Nigerian cities. Thus, sending e-mail messages would reduce the need to make frequent trips and telephone calls.
An e-mail message is 20 times cheaper than a fax message and 100 times cheaper than a telephone conversation. The low cost of e-mail can put it within the reach of many Nigerian families, business, and government.

Subscribers pay a flat monthly rate of $5 (and free from some providers) for an unlimited amount of e-mail to any country. In contrast, telephone owners pay 250 naira, about $3, naira a minute to call the United States.

It is even much faster to send an e-mail message than mail a letter. The e-mail arrives a few seconds later. A letter from Nigeria takes up to two months to arrive, if it arrives at all.

The Internet can be used for other things besides e-mail. I receive Japanese radio broadcasts from the Internet. I read Zambian newspapers on the Internet. I spoke to a friend in England on the Internet. I read books on the Internet. The list of things that can be done on the Internet is a very long one.

The Internet contains more information than the world’s largest libraries. Therefore, Nigerians with access to the Internet can retrieve information from the world’s largest information database. Since it is cheaper to get connected to the Internet than to buy a television, Nigerians cannot afford to be left out.
African cities that will be fully connected to the Internet when the Africa ONE project is completed in 1999.

Why should Nigeria invest in the software industry? Because that is where the development, empowerment and money is. Computer industry is a trillion-dollar (yes, that is a “T”) market. Today, the richest companies in the world are in the computer industry.

Half of the ten richest men in the United States made their money from computer related-industries. Bill Gates, a 42-year-old computer entrepreneur, is worth $40 billion. In fact, Mr. Gates has enough money to cover 1996 Nigeria’s national budget twenty times over!

The United States has hundreds of unknown computer programmers who are wealthier than Moshood Abiola. Sanjiv Sidhu, a 39-year-old Indian immigrant computer entrepreneur, is worth $716 million and employs many Indian computer programmers earning a $65,000-a-year salary.
How can Nigerians at home and abroad make a living in the computer field? We must make 20-, 50-, and even 100-year-plans. It is impossible to get rich overnight in this field.

First, since we do not have the money to properly educate our children to compete in a modern high-technology world, we must implement a disciplined family planning that advocates and encourages each family to have only one child. An only child will receive far better education than a child with five brothers and sisters.

The Abuja Technology Village was first conceived by Philip Emeagwali in a 40-page speech delivered in August 1997 in New York City. Emeagwali originally named it a "Cyber Corridor" and envisioned it as the African Silicon Valley.

[Image: Masterplan of ATV]
Second, we must overhaul our universities and polytechnics to enable them to produce 200,000 well-trained scientists and engineers each year. These engineers should be hired by NEPA to bring us constant electricity, NITEL to bring us reliable telephone services, and NNPC to discover and recover more oil.

Third, the computer industry rewards creativity and penalizes conformity. We must encourage creativity and produce an entrepreneurial work force. Nigerian culture encourages conformity, deference and respect for elders, teachers, and leaders. Outspoken journalists have been imprisoned for expressing their political beliefs. As a result, Nigerian editors are afraid to write the truth for the people. Nigerian politicians lack the courage and conviction of Nelson Mandela and are afraid to probe military officers for corruption. Fela Anikulapo-Kuti sang: “Awa people dey fear too much. We dey fear for dey thin we no see.”

Fourth, we must have a technological Cyber Corridor, an approximately 300-square-mile region allocated for information industry workers such as computer programmers, video-games designers, and Web-site developers. Nigeria should collaborate with OAU and Economic Community of West African States (ECOWAS) in developing the proposed Cyber Corridor.

We should entice the big multinational infotech companies such as Microsoft, Netscape, IBM, Sun Microsystems, British Telecom, Motorola and Sony to Cyber Corridor by developing the infrastructure such as fiber-optic cables, good roads, safe water, constant electricity, reliable telephones, good schools, modern hospitals, quality housing, leisure and entertainment facilities. In addition, we should permit foreign information technology companies to operate tax-free, bring in highly trained foreign workers, liberalize our laws to allow foreign investors to repatriate some of their profits with less protocol, assure the personal safety of
both indigenes and foreigners, rectify our image as the most corrupt
nation on earth, ensure political stability by eliminating coups d’etat,
and train the workforce for the new Information Age.

The Cyber Corridor could become the Hollywood of Africa, where
information technology is used to produce educational and
entertainment shows. Today, most movies, television game shows,
documentaries and dramas shown in Africa are produced in
Hollywood or Beverly Hills. They do not reflect African tastes, values
and culture. Information technology will enable African producers to
enrich our lives by weaving our glorious history, legend and folklore
into movies.

The African Cyber Corridor could be the technological capital of the
continent, the regional headquarters of major infotech companies,
and a source of cheap labor that could draw jobs away from
California’s Silicon Valley. Other nations want to want to build their
technological city. India has built its Information Technology Park.
Egypt is building its Pyramid Technology Park. Israel, Taiwan and
many other nations are planning to build their technology cities.
The Abuja Technology Village was first conceived by Philip Emeagwali in a 40-page speech delivered in August 1997 to "become the Hollywood of Africa." The latter is now called "Nollywood." [Photo: MUNICIPALITY BUILDING of Abuja Technology Village]

We must connect major cities to the Internet with at least a 10-gigabyte digital optical fiber backbone which would simultaneously allow us to place more reliable telephone calls and avoid Nigeria’s unreliable telephone system. Ten gigabytes would allow us to e-mail a copy of the Nigerian national anthem to every African by the time you say “Arise, O compatriots.”

The list of things to do is actually longer. I have discussed a few that Vision 2010 did not address adequately. These should be included in the proposed Vision 2020.
Again, we Africans were the first to enter the Agricultural Age. The first to build in stones. The first to pioneer in technology. The Greeks learned our technology and taught it to the western world. Two thousand years later, the West is leaving us behind as it prepares to enter the Information Age and the third millenium. We must hurry to enter the Information Age.

Let us not be the last country to live in the Agricultural Age and poverty. We must soar with the wind of good fortune, like the eagle, to where the real wealth of nations is. We must adopt a quantum-leap strategy to catch up with Europe.

Vision 2010 should be more than an economic blueprint. The lesson we learned from the 1970s and the 1980s is that a massive inflow of petrodollars will not bring an economic prosperity that will spread and permeate to all levels of our society. Vision 2020 should include those intangible but precious elements that will enable a Nigerian to live a satisfying life. Thus, we must grow along several dimensions.

One, we must grow politically by eliminating the army and coups d’etat while empowering the people to choose their leaders.

Two, we must grow democratically by creating a society in which the emphasis will not be on individuals or leaders but on building and developing our communities.

Three, we must grow psychologically by restoring the faith and confidence of the Nigerian people in our leaders.

Four, we must grow spiritually by having a society in which African traditionalists, Christians and Moslems can practise their religions with mutual respect for each other’s.

Five, we must grow socially by reducing crime and corruption, creating a new Nigeria in which government officials do not demand bribes from citizens.
Six, we must grow morally by encouraging honesty and not singing praises to embezzlers.

Seven, we must grow artistically by leaving a legacy comparable to the carvings from the Benin Empire, the terra cotta sculptures of the Nok culture, and the bronze vessels of the Igbo-Ukwu civilization.

Eight, we must grow culturally by creating a less repressive society in which women are encouraged and empowered in all areas of education and society.

Ladies and gentlemen, we must ensure that Nigerian children are properly educated. When we invest in our children, we will find that our standard of living grows, too. We should invest in education and technology not because it is easy, but because our children will be the beneficiaries tomorrow of the decisions, we adults, make today. Investing in education and technology will be our legacy to our children; because it will bring the best out of them as well as all Nigerians and enable us to reach our potential as individuals, as communities, as a nation.

Thank you very much.
Philip Emeagwali introduced the novel concept of Africa leapfrogging into the Information Age via offshore outsourcing. [Photo taken in the Washington, DC metropolitan area in October 2006.]
Gospel ...
So relevant it's almost a gospel. This speech is going to be referred for a very long time.

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Crying ...
Honestly, I got touched and was almost driven to the point of crying while reading the presentation. It is WELL WRITTEN; and I cannot imagine any person who TRULY loves Nigeria crossing swords with you on the ideas espoused.
I do hope that those with the powers to make things happen in Nigeria will read, reread, and read this presentation again and again to understand and assimilate the core issues you've brought to the fore as the ingredients necessary for the development of our well-endowed but currently directionless country.

Ebiamadon Andi Brisibe, Ph.D., JAPAN.

Concrete...
CONCRETE OBSERVATION AND A VERY GOOD ANALYSIS OF WHAT NEEDS TO BE DONE TO PUT
NIGERIANS IN THE DRIVER'S SEAT. ONE VERY IMPORTANT POINT MADE IS THAT OF THE SHORT-SIGHTEDNESS OUR LEADERS HAVE HAD IN PLANNING FOR OUR FUTURE. IT IS A SYNDROME THAT THE SOUTH-EAST ASIANS SEEMS TO BE CURING WHILE WE STILL WALLOW IN OUR SELF DELUSION. THE SAD REALIZATION THAT WE HAVE THE POTENTIAL TO WIELD ECONOMIC CLOUT HERE, BUT ARE NO CLOSER TO USING IT THAN WE ARE TO SOLVING OUR PROBLEMS AT HOME, DOESN'T ESCAPE ME.

JEzike@aol.com, Omera Ezike

**Brilliant...**

Essential points on the specific issues were brilliantly captured. The future Vision for Nigeria and all the ideas behind it are well thought-out, properly articulated, well packaged and also straight to the point. The idea of a Pan African Institute of Tech is simply terrific - made me feel like going back to school. Very Good comparative analysis b/w Nigeria and Malaysia.

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**Thoughtful...**

A very thoughtful speech. May God give us the ear to hear, heart to understand and the zeal to implement.

Ebube Odunukwe, ebube@erols.com, M.D.

**Informative...**

I know I am not supposed to praise this work, but I just can't. It was well put together, well diverse but with direction and very informative. The country Nigeria just does not realize the talents it is
Great...
It is simply great, and I am not being diplomatic: this is an honest opinion. You should read me: I pack a smoking gun when it comes to Nigeria's present political paralysis. But since you are recommending a recipe for an eye ointment, there is no need to add pepper, is there... They should pay to get a copy. I will be surprised if you do not hear from some heads of state. In fact, I will get the local press here to run the speech, if you approve.
Ogochukwu

Researched...
The speech is well researched and well thought of. In a society that is ruled by honest and honourable men, you ought to be invited by members of the so called vision 2010 for further discussions on how best to launch Nigeria into the information age. The hundred million dollar question is: Do members of the committee even have a vision of better Nigeria?

Akindele Odeshi, akindele.odeshi@mbv.tu-chemnitz.de, Ph.D. candidate, West Germany

Debates...
I THINK IT IS A GOOD SPEECH. I BELIEVE IT IS GOING TO GENERATE A LOT OF DEBATES BOTH FOR AND AGAINST YOUR OPINIONS, AS WELL AS ON YOUR PERSONALITY PARTICULARLY FROM THOSE WHO MAY HOLD THE OPINION THAT EVEN IF THE FUTURE LIES IN THE INFORMATION AGE, PHILIP EMEAGWALI SHOULD NOT BE THE ONE TO TELL THEM -- THE POLITICIANS....OUR LEADERS PREFER THE SHOT-GUN
APPROACH TO ISSUES AND ONE GOOD THING ABOUT YOUR SPEECH IS THAT IT IS TELLING US TO LEARN HOW TO BE LONG DISTANCE RUNNERS.

Adesola Adeyemi, AdeyemiA@drama.unp.ac.za, South Africa.

**Factual...**
IT DOES NOT TAKE A GENIUS TO UNDERSTAND YOUR POINT, I FIND THE SPEECH STRAIGHT TO THE POINT AND BACKED WITH FACTS....TECHNOLOGY IS WEALTH LOOK AT TAIWAN OR SINGAPORE, YOU DO NOT BECOME A REGIONAL POWER BY BUYING OBSOLETE MIG JETS.

Chinedu Ibe

**Suicide...**
Great speech, But you already know that. Yes, I love everything about it. And what don't I like about it? -everything.

These ideas are great, and your plans can be achieved in less than 5 years, under the right circumstance. We already have the manpower. All we have to do is put out the call, and we will return home to help build a better nation. But no one, not you, not I, has the right to ask anyone to commit suicide. Until Nigeria sees everybody as equal, and until the leaders stop screwing up black Africa, and Nigeria in particular, you might as well mothball your plans. Great speech, give it, but since you ask my opinion, tell them this (your speech) is what Nigeria could be if the country includes all citizens. Tell them we as Igbos will only join, if we are considered equal partners.

You say this speech is for Nigerians. I strongly disagree. This speech should be for the Igbos first and Nigerians second. You have to give our people hope. You are an Igbo first and a Nigerian second. For if there is no Igbo, there is no you. I also believe in one Nigeria, but no
longer at any cost. Have we not given Nigeria enough of our blood? It is time for consolidation. It is time we start preaching one Nigeria from a position of strength. So nwanem nwoke the ball is in your court. Do not let our people down. Like it or not, the battle is now ours. Our parents are now old, and look upon us to continue the struggle for equality and a better way of life for our kids; or separation. If there is to be separation, it has to be a peaceful disengagement.

As you said "we should not put all our eggs in the same basket". You as an Igbo leader, has to take your advice. Let us prepare our people both for unity and separation. For if they refuse to meet us as equals, the alternative is separation.

You occupy a very powerful position in the eyes of the world. Use it to help remove the yoke of oppression on your people. *Maka echi di ime. Ndeewu.*

Nnaemeka M Onumonu, bsnmo@uxa.ecn.bgu.edu

**Magnificent...**

Your vision is extremely compelling. And you paint a very vivid picture of the possibilities that we face in the coming years. I think this is a very strong speech, which weaves many threads together into a tapestry that should convince all who hear to sit up and do what it might take to bring us out of current retrogressive slumber.

You mention that your 2nd grade teacher only had a sixth grade education. Obviously, this was not a handicap for you and probably many others too who went on to excel in their respective fields. Secondly, if we convert 1 million unemployed university grads into primary school teachers, what do we do with the current primary school teachers? This group has a union and they will fight such a proposal tooth and nail. I do agree that we need to upgrade the capabilities of our primary school teachers.
You also used the salary paid to Nigeria's foreign soccer staff to illustrate how no nation can be developed by foreigners. The point itself is not really arguable. Nigeria has always had a Nigerian 'coach' the foreigners are deemed 'technical advisers'. I feel that with sports crazy Nigerians, (myself included) we are prepared to pay whatever price will ensure victory. I cannot tell you how much of a national morale boost it was for us to perform so well in the last Olympics. Nigerians are still giddy about our victories. We have gotten greedy and expect nothing less than full victory in France '98. Whatever the monetary cost! Michael Jordan just signed a 36 mil $ contract. No college professor makes that kind of money. C'est La vie. That's the way rewards in the entertainment world are structured.

Another point I loved about your speech, is that even though is meant to be delivered to a primarily Igbo audience, as a non-Igbo, I find no shortage of pegs to hang my hat on. Any Nigerian, indeed, any African can learn a lot from it and be inspired by it. In just that way alone, you have succeeded magnificently.

Tunde M. Giwa, OBG@MSN.COM

SAD...
The points made were very solid, the progression between points as very smooth. The logic, as I stated, behind the statements made are as sound as I've heard and, in all honesty, I would be extremely pleased if I heard on the news that you had been nominated to serve on the board of Vision 2010. I would only pray that others who saw as you do would be signed on too. As a matter of fact, what I liked most about the speech is that it made me sad--it made me feel a longing for Nigeria and generated some kind of resolve to assist in some way or another as dictated by circumstance.

ekeh@fate.eng.buffalo.edu (Gaga Ekeh)

Industries...
You hit on the major points that need to be emphasized. As an
advocate of the Internet, I have always expressed the fact that this is Nigeria's chance at catching up with the rest of the world. The creating of this infrastructure will put us in the right direction. Many nations that have adopted the Internet have obviously started reaping the benefits of hooking up. Even along the West African coast, countries like Ghana, Ivory Coast and Benin are hooked up to the Internet so why not Nigeria? You have made the point about the use of foreign computer experts by some companies in America, even in Britain companies are exporting their jobs to Asia too because of cheap labor and the fact that it gives the companies 24hr office structure taking advantage of the time difference of these countries - can you imagine having a 24hr office. productivity has balloned for these organizations. The advantage for Nigeria would be jobs, especially in a country where there is currently over 80% unemployment. The Internet has a way of spinning cottage industries - Internet service providers, web hosting, Internet telephony/videoconferencing, Internet programmers etc. - these are job avenues for computer graduates and others who are interested in computers.

Nubi Achebo, kitua@radiks.net

**Abacha ...**
The speech is fine. Though difficult to know how to write it to force the hands of our rulers to positively take notice and take action. Other than this speech I even suggest that you write Abacha and his men particularly the Technology Minister (Engr. Momah of Nnewi) to lift the ban or reduce the minimum duties paid to import computers and its bits. My dismay while in Nigeria is that while the telephone connections to the citizens and calls round the world are getting cheaper in every other country, in Nigeria they are getting dearer. Presently it cost 60000 Naira (£462), paid to the government (excluding bribery) for phone connections. A three minutes phone card to Europe costs 1262 Naira (over £9). This is certainly out of this world! In fact, point of correction, your analysis that calls from Nigeria to US is 150 Naira, is when it was CHEAPER. However, I
I don't know what it is dailing from home— but then again how many people can afford the cost of connection plus another large deposit if the phone were to be used to call outside the country. Abacha and his men might listen to people like you. If you can write them directly things might change.

MARTIN UZUEGBUNAM, umu@compuserve.com, Structural Engineer, England

**Galvanise ...**
I consider it a very excellent, informative and challenging speech. It should make the congress and the subsequent readers not only reflective but very keen to set out on a voyage along the path mapped by you. In short it should galvanise US to action.

Adesola Adeyemi

**Masquerade...**
To every man there comes in his lifetime that special moment when he is tapped on the shoulder by his peers and offered the chance to do a very special thing, unique to him and fitted to his talent; what a tragedy if that moment finds him unprepared. Sir, I must say that the articulation of your vision by way of this speech has indeed shown that those who tapped you to make this speech must be proud and should be congratulated. ...Your articulation of how technology has helped other developing countries such as Malaysia, Korea and South Africa and how it will enhance our economic growth was very well reasoned and measured.

How can any intelligent person find fault with this speech?

Sir, I think you covered the bases, however, a reasonable mind will ask such questions as, how do we pay for such a gigantic venture considering the state of our treasury? The answer is not far to seek. Cut expenditures such as Ajaokuta steel complex, reduce the size of
the military and arms importation, privatize our corporations, reduce the size of government and return the country to democracy. The effect of these cut-backs may be draconian and sure will bring with it a lot of hardship but we must not forget that no one likes using iodine on a fresh sore, however, when iodine is applied to an open wound, it facilitates the process of healing. I'd say, let's find out how these countries accomplished these goals. After all, their economies were worst than ours when they embarked on this journey. That is why we must invest in education as you rightly pointed out.

Finally, there is a saying that the reasonable man adapts himself to the world and the unreasonable man persists in trying to adapt the world to himself. Let's hope that the people who are in position to put this plan into reality will take a good look at your speech and hopefully begin the arduous task of implementing the vision imbedded in your speech. You are like a rare masquerade, which comes out only on special occasions, thanks brother, may your ink never run dry.

Ike Igboji

**Inspiring...**

My dear brother, you cannot Imagine the kind of joy I felt when I read that you are going to deliver a speech, on an advisory note to the betterment of our motherland. I have gone through the speech, and I find it very inspiring. Now, would the people that matter find it inspiring too? Because we are too far away from all the action and decision making, I suggest you copy the presidency, finance minister, and vision 2010 committee the speech and its entirety. My brother, I wish I had the means to champion this believe with you but I beleive that proper persuasion on your part and well meaning Nigerians would generate proper funding for your views. HAVE YOU THOUGHT ABOUT SETTING UP A COMMITTEE OF INTELLIGENT AND WELL MEANING NIGERIAN BRAINS ABROAD, THAT WOULD BE FORMIDABLE ENOUGH TO
SOLICITE AUDIENCE WITH THE PRESIDENCY? My brother, faith can take you a long way. I strongly commend your speech. I see you like music too, I can tell from your web site. I recommend you go out and buy GLORIA ESTEFAN'S MI TIERRA (MY HOMELAND) its song in spanish but you would be moved by the english interpretations too. I hope it makes your believe in your motherland stronger. I hope you succeed.

HALLE@webtv.net (TINU DAVIDS)

LIP-SERVICE ...
My foremost reservation in your proposed speech stems from its aim: "skipping the industrial age and vaulting our nation from the agricultural age into the information age". To me it sounds ambitious and simplistic. It is just synonymous with a woman given birth to a grown up child without that child undergoing the necessary biological metamorphosis. Anthropologist will dispute this when they subject this speech to the socio-economic evolution of the hominid-human beings. Sociologically, it is incorrect to jump from pre-industrial to post-industrial without the such passages of hunters and gatherers, horticultural, pastoral, agricultural, industrial and postindustrial societies. All these societies have an in-built learning stages as well as creating historic facts when any society observes them.

Psychologically, skipping such phases of human progressive development is not only unhealthy but is morally wrong and will fail to provide a concrete basis for national policy on technology. This is because the social psychology theory of learning is adamant with geometric progression but tends to ignite its flame with arithematic progression in a serial form, i.e, 1, 2, 3, 4 etcetara, until we reach a final counting point. And to me, learning is a progressive or gradual process. If one skips a process of basic learning it produces anti-knowledge, this is logically against the philosophy of science, it is not capable of providing a proofabale truth and hence it will not be chronicled as a historic moment of Nigeria. I see that kind technology being blighted with cracks and faults due
to its lack of the basic foundation and skills or pure knowledge- a fluid and a manipulable knowledge that can be inferred at from time to time and from generation to generation. For I believe in the great dictum of George Benard Shaw and Zik that "the next great civilisation may come from the black race." This is more than enough prophesy but such prophesy must be progressive and should be properly documented in order to complete a circle of life. I think that it is not plausible for one to just go to the moon without learning the art of space shuttling and that to me is a systematic learning.

What you have underlined with the term skipping is the same mistake governments in Nigeria are making with its series of ad-hoc committees for industrialisation who instead of providing a national blue-print for the Nigerian technology policy and with a broad based comprehensive education for an average citizen, continue to milk the nation dry without anything to show for it. It seems as such great label like the transfer of technology from the core countries to the periphery in the early '80s that never come to fruition except squandermania and scholarship frauds in Nigeria. You don't transfer technology rather you acquire it as a skill and the you perfect in it and hence the crave for the information age today.

In my humble opinion it is practically impossible for an unstable Nigeria to skip its evolution, whether it is leading to industrial or post-industrial era. It is very crucial that a society solidifies the foundation of its socio-cultural prospects before a another leap forward. Nigeria is not that country yet. Abacha appointed those Vision 2010 men and women to appease them and prevent them from being anti his regime. Their project are among those lip-service paying programmes of government to build its image and public relations and when the time comes it will go down the drains. I wish you don't take them serious.

In my conclusion, I suggest you should rethink the skipping thing and settle with industrialisation first before automation, I believe that whatever is done in a hurry is never done well. Moreover, our society
is caught between uncertainty and progress and whichever overhelms each other we rejoice at. I am sorry, if I have sounded naive or harsh but this is my opinion about it. To put this way, concentrate your mind in Igboland such noble intention can never be realised in Nigeria.

PHILIP EMEAGWALI: Where will you recommend that a cybercity be located in Nigeria?
ANSWER: To build technological town will cause a Nigerian problem and wars will be fought over where the site should be located.

PHILIP EMEAGWALI: What do you think about my proposed Vision 2020?

ANSWER: Africa needs more than 2020-even 2040 is enough. Currently we are fighting for the 3rd liberation of Africa. A new Africa that will provide the political culture, or what Zik called economic determinism or toga virilis which will lead us to the information age.

PHILIP EMEAGWALI: What is your opinion of the Vision 2010?

ANSWER: Its members are politically appointed. And the programme itself is another junk thinking whose mission will die like an aids victim. Reasons are not far fetched if we consider more 10 similar programmes initiated by F.M. governments in Nigeria. Most of these programmes were a strategic military ploy to distract people's attension in other to for a certain group of people to keep leadership power in Nigeria. The programmes is an ill-fated child of praetorianism in the country, and though they are good idea but they are never well intended development plans for them to endure in Nigeria.

PHILIP EMEAGWALI: Do you think Nigeria needs a new Vision plan such as the proposed Vision 2020? If so, why?
ANSWER: Yes, in long term, if we can know our direction to the promise land. But if not, no thanks! As long as we have the present bunch of no gooders, who are part and parcel of the political crisis that engulfed Nigeria since the past 9 years. It is only a matter of time for another martial music to encircle and announce its obituary in Nigeria.

PHILIP EMEAGWALI: Should Nigeria invest more in computers and technology?

ANSWER: Yes if they have honest intensions to do so. If this is not going to be a lucrative business for the Alhajis and profitocrats in Nigeria.

Uchenna Opara, tiucop@uta.fi, Finland

*Cultural*

PHILIP EMEAGWALI: What do you dislike about my talk?

ANSWER: WRONG ARGUMENT. YOU DO NOT ENTER THE INFORMATION AGE BY BUILDING THE HARDWARE. WHAT YOU FIRST NEED IS THE SOFTWARE. THEN YOU CHOOSE THE MOST ADEQUATE HARDWARE. NIGERIA'S PROBLEM IS NOT MONETARY, IT IS PSYCHOLOGICAL. OUR PROBLEM, LUCKILY, HAS NEVER BEEN THE LACK OF FUNDS TO BE USED TO BUILD INFRASTRUCTURE. NO. ON THE CONTRARY, OUR PROBLEM HAS ALWAYS BEEN: 1) CHOOSING THE RIGHT INFRASTRUCTURE TO BUILD AND 2) ADEQUATE USE OF THAT INFRASTRUCTURE. AND FOR ADEQUATE USE TO BE MADE, WE HAVE TO HAVE THE MENTAL/PSYCHOLOGICAL BASE. LET ME EXPLAIN, IF WE DO NOT HAVE A STRONG INDUSTRIAL BASE NOR A STRONG INDUSTRIAL MENTALITY, IT DOES NOT MATTER HOW MANY TRADE FAIR SITES YOU BUILD
NOR HOW MANY INDUSTRIAL ESTATES YOU SET UP, THEY WILL ALWAYS REMAIN BARREN OR BE PUT TO THE WRONG USES. BUT THEY DEFINITELY WILL NOT STIMULATE INDUSTRIAL GROWTH. EXAMPLE: REMEMBER FESTAC TOWN AND THE TRADE FAIR COMPLEX IN LAGOS. BUILDING A TECHNOLOGICAL CITY WILL JUST BE ANOTHER WHITE ELEPHANT, A BIG PROJECT THAT WOULD ACT AS A VEHICLE FOR A FEW PEOPLE TO GET RICH. IT MIGHT NEVER EVEN BE FINISHED (SEE AJAOKUTA) OR IF IT EVER GETS FINISHED, IT WILL LIE FALLOW FOR LACK OF ADEQUATE COMPANIES TO POPULATE IT OR LACK OF IDEAS OF HOW BEST TO USE IT. THE "SOFTWARE" IS LACKING. IT WILL FINALLY END UP AFTER SOME YEARS LIKE DELTA STEEL (A BIG COMPLEX GONE AWRY) OR THE REFINERIES (NECESSARY PROJECTS THAT HAVE NOT BE MAINTAINED NOR DEVELOPED TO MOVE WITH THE TIMES). LATER-ON IN YOUR SPEECH, YOU HIT THE NAIL IN THE HEAD: EDUCATION IS THE KEY. MASS EDUCATION FOR THE MASSES. BUILD UP THAT CRITICAL MASS OF EDUCATED PEOPLE. PEOPLE WHO CAN READ. PEOPLE WHO CAN THINK. PEOPLE WHO WILL NOT JUST SWALLOW ANY PROPAGANDA OR PROPOSAL WITHOUT QUESTIONING IT INTELLIGENTLY. PEOPLE WHO CAN STUDY OTHER RACES, OTHER CULTURES, OTHER COUNTRIES AND DISCOVER WHAT MAKES THEM TICK. PEOPLE WHO ARE WILLING (BECAUSE THEY HAVE READ ABOUT AND ADMIRE HEROES ELSEWHERE) TO MAKE SACRIFICES SO THAT THEIR COUNTRY PROGRESSES. PEOPLE WHO ARE WILLING TO DIE FOR CONCEPTS. PEOPLE WHO WILL, IF THEY EVER BECOME LEADERS, NOT THINK ONLY OF THEIR POCKETS BUT RATHER THEY WOULD THINK ABOUT THE BENEFIT OF THE COMMUNITY. PEOPLE WHO ARE ABOVE BRIBERY. THAT IS THE KEY. EDUCATION IS THE "SOFTWARE". ONCE YOU HAVE THIS FIRMLY IN PLACE, THE PEOPLE
WILL BUILD OR EVOLVE THE MOST SUITABLE "HARDWARE" FOR OUR ENVIRONMENT. AND THEY WILL ENSURE THAT THIS "HARDWARE" IS ADEQUATELY MAINTAINED AND SUITABLY UPDATED WITH THE TIMES.

PHILIP EMEAGWALI: What did you like about the talk?

ANSWER: YOU WENT STRAIGHT TO THE POINT. MANY OF US NIGERIAN FEEL THAT THE ONLY WAY TO SHOW THEIR PATRIOTISM IS BY NEVER CRITICIZING NIGERIA. THEY ALWAYS SAY THINGS LIKE "WITH GOD'S HELP, WE SHALL OVERCOME". I DISAGREE. WE HAVE TO BE REALISTIC. WE HAVE TO LOOK INWARDS AND DISCOVER WHAT IS WRONG WITH OUR COUNTRY. WHAT IS IT THAT WE DO WRONG? AND WE SHOULD BE READY TO SAY IT OUR CLEARLY IN ANY FORUM.

PHILIP EMEAGWALI: Do you believe that Nigerian society is repressive to women? And why?

ANSWER: YES, OUR SOCIETY IS REPRESIVE TO WOMEN. AGAIN THE REASON IS LACK OF EDUCATION. WITH EDUCATION, WE COME TO LEARN THAT WE CAN ALL GAIN FROM BOTH MEN AND WOMEN. THE WORLD HAS CHANGED, WE ARE NO LONGER IN A PREHISTORIC CONTEXT WHERE MAN HUNTED AND THE WOMAN STAYED BACK HOME. NOR ARE WE IN THE AGRICULTURAL AGE WHERE THE MAN TILLED THE SOIL WHILE THE WOMAN LOOKED AFTER THE HOME. IN THIS AGE, WE CAN ALL CONTRIBUTE. BRAIN POWER AND NOT MUSCLE POWER IS THE KEY AND BOTH MEN AND WOMEN HAVE BRAIN POWER.

PHILIP EMEAGWALI: Should the Nigerian military budget be reduced/eliminated and redirected towards education and
technology?

ANSWER: I WOULD ELIMINATE THE MILITARY 100 PERCENT. THEN RETRAIN AND REEQUIP THE POLICE TO DEAL PROPERLY WITH THE PROBLEM OF INTERNAL/DOMESTIC LAW/ORDER. THE MONEY SAVED WOULD, AS YOU SAY, BE REDIRECTED INTO EDUCATION ..AND MAYBE SOME OF THE MANY OTHER NEEDS WE HAVE: HEALTH, TELECOM SERVICES, ROADS, MAINTENANCE OF INFRASTRUCTURE, ETC.

PHILIP EMEAGWALI: If you are the author of this speech, what ideas will you include?

ANSWER: I WOULD INCLUDE A CRITIQUE OF NIGERIANS ABROAD: MANY NIGERIANS ARE SO CHAUUVANISTIC (OR MAYBE SO INSECURE) THAT THEY MIX ONLY WITH NIGERIANS. RESULT = NO MATTER HOW LONG THEY LIVE ABROAD, THEY NEVER LEARN THE "RULES OF THE GAME". THEY NEVER REALIZE HOW THE CARDS ARE STACKED. THEY NEVER REALIZE WHAT MAKES THE DEVELOPED COUNTRIES TICK. THEY MAY LIVE IN LONDON FOR 10 YEARS, BUT ITS AS IF THEY"VE BEEN LIVING IN AJEGUNLE OR ENU-ONITSHA. THEY EAT ONLY NIGERIAN FOOD, GO ONLY TO NIGERIAN PARTIES, HAVE ONLY NIGERIAN FRIENDS, ETC. WE MUST LEARN TO MIX MORE. WE MUST MAKE FRIENDS WITH THE LOCALS, VISIT THEIR HOMES, GO TO THEIR WEDDINGS, THEIR PARTIES, THEIR ORGIES, MIX THOROUGHLY, EAT THEIR FOOD, GET DRUNK WITH THEM HAVE GOOD FRIENDS, AND EVEN HAVE BAD ENEMIES. THAT IS THE ONLY WAY TO REALLY LEARN. THAT WAY, WE GET A REAL TRANSFER OF TECHNOLOGY AND NOT A "PERCEIVED TRANSFER OF TECHNOLOGY". SOME PEOPLE MIGHT SAY: BUT THE ITALIANS LIVE IN GROUPS (THE BRONX), THE
ORIENTALS LIVE IN CHINATOWN. BUT THAT'S NOT A GOOD EXAMPLE. THEY CAN AFFORD TO. THEY IMMIGRATED WHILE THEY HAD A SOLID CULTURAL HERITAGE. THEY HAVE THEIR OWN WAY OF DOING THINGS THAT HAVE BEEN HANDED OVER FROM GENERATION TO GENERATION. BUT WE AFRICANS ARE DIFFERENT. WE HAVE BEEN VERY UNFORTUNATE IN HAVING HAD 2 GREAT DISASTERS IMMEDIATELY ONE AFTER THE OTHER: THE SLAVE TRADE AND COLONISATION. BOTH BROKE OUR CULTURAL CHAIN. WE ARE NEARLY ROOTLESS. WE ARE DRIFTERS. WE HAVE NO VERY SOLID CULTURAL ROOTS AND THEREFORE WE CANNOT INBREED. WE HAVE TO GRAFT FROM OTHERS IN ORDER TO BUILDUP FASTER WHAT WE HAVE LOST IN 4 CENTURIES OF HAPHAZARD DOMINATION.

Anthony ONOCHIE, anthony@jet.es, Spain

**Grammar...**

I COMMEND YOU FOR KEEPING IT VERY SIMPLE AND EASY TO READ. MOST NIGERIANS OF PHD STATUS WILL USE "BIB BIB ENGLISH TO DABARU US TO THE POINT THAT WE MISS THE MESSAGE WHILE TRYING TO FIGURE OUT THE GRAMMAR" ...I BELIEVE THAT WE SHOULD HAVE TWO OR THREE "CYBER CORRIDORS" THAT ARE INTERCONNECTED (AT LEAST THIS IS WHAT INTERNET IS ALL ABOUT). THESE "CYBER CORRIDORS" SHOULD DEVELOP FROM THE BASIC FOUNDATION ON THEIR OWN MERIT AND POTENTIAL. KNOWING NIGERIA, THERE WILL BE ARGUEMENT FOR THE LOCATION. BUT THE GOVERNMENT SHOULD BE ABLE TO FUND AT LEAST TWO AND ENCOURAGE BUSINESSES, SCIENTISTS, ETC., TO TAKE IT FROM THERE.
Tears...
I have read this article at least 3 good times and have nothing to add or subtract...You have said it all, Philip! And this article brought tears to my ears...Why CANNOT Nigerian leaders do these obvious things which will facilitate national development? It is shameful that access to the internet taken for granted in many countries of the world today remains a luxury for the haves and have mores in Nigeria. The military junta has continue to run the country like a headless chicken. Until they leave and accountable and responsible citizens take over, there is no hope. However, I hope your article will get published in Nigeria. Who knows what impact this exceptionally well-written article could bring about?

Emeka

Speechless...
The write-up, to say the least, is articulate. It is not short of the much-desired solutions we want in the Nigerian economy. The practical and straight-forward proposal about the "Cybermarketing" kept me speechless.

I urge you to present a copy of this document to the vision 2010 committee and the Presidency. Our leaders should start thinking not only of their immediate families, but also generations of Nigerians yet unborn. I find no real answer, when a Finn asks me when I will finally return to Nigeria.

Who knows!! Mays GOD give us more men of vision and achievers like Philip Emeagwali.

F.O.T. Akenami, PhD Fellow, Finland
Thanks...
Thank you. Your speech is God send.

My only comment is: HE WHO HAS EARS TO HEAR WITH, LET HIM HEAR.
You've done your part. You "found the cure and prescribed the medication." One question remains: Is their a good "pharmacist" to fill the "prescription"?

Thanks for a job well done.

IKE MUONEKWU, muonekwu@sj.bigger.net, Ph.D.

Highlighting...
THE SPEECH IS WELL WRITTEN. I THINK YOU ARE HIGHLIGHTING AN AREA OF DEVELOPMENT WHICH THE MILITARY IS AFRAID TO ADDRESS. MAY BE YOU SHOULD HAVE TRIED TO TIE UP COMPUTER TECHNOLOGY WITH INDUSTRIAL TECHNOLOGICAL GROWTH. AS IT STANDS NOW THE ONLY WAY FOR TO CATCH UP TECHNOLOGICALLY IS USE THE COMPUTER TECHNOLOGY AS A SHORT CUT TO INDUSTRIAL GROWTH. ...

FOR THE FIRST TIME, ONE IS MAKING A CASE FOR COMPUTER TECHNOLOGY TO BE ACQUIRED BY NIGERIA. IT IS GOING TO BE TAKEN SERIOUSLY BY POWERS THAT BE IN NIGERIA.

George Mbata, gmbata@oz.oznet.ksu.edu

Feudalist...
Your speech assumes that Nigeria is a well ordered, peaceful,
culturally homogeneous and stable environment where meaningful suggestions will be welcome. However, you know that the structural reality of that entity is highly deformed. Such situation in which the existence of a total disregard for the involvement of most of the citizenry of Nigeria in the leadership, military and civil service of a country, coupled with unrealistic myopic and inequitable distribution of amenities in a large country as Nigeria is counter productive.

For instance Igbo in particular are no where as active players in the Nigerian situation. As you know, such situations create a physical mathematical condition in which the Nigerian function becomes quite obviously non-integrable within the limits we are operating. Therefore reacting to the pathetic situation by using a nationalist view of events may be quite erroneous. Doing so gives these operatives wrong signals of accepting the structural reality. We must therefore be courageous at times like this to venture to offer alternatives rather than to aggravate the situation by even contributing any suggestions.

Why?

I'm quite aware that before pipelines were constructed to places like Kaduna, Minna and even the construction of Oil refineries in those locations some credible economists who happened to be Igbo gave solid, academic honest opinions. Some of these opinions were such that the amount of energy it will take to pump uphill from the oil fields to the north would be enough to put certain industries around those localities. What happened? These were exercises in futility. The entrenched interests are not bound to listen. A situation where the biggest commercial center in Africa which happens to be your hometown Onitsha has no international feeder airport nor good seaport is a good example of the structural reality of Nigeria.

In a nutshell we (Igbos) must begin to think about the practicable alternatives to the geographical reality. Where are we now? We have no airports, no railways, no telecommunications, no seaports and yet we are the most hardworking self improving members of the Nigerian population.
If you were contributing only to Igbos because of their drive for improvement your speech will be songs in their ears. However, that is not the situation. Nigeria is under a strong feudalist group. Take it or leave it they have their own agenda. It is quite obvious. What we can do like europeans did or the jews is to find a way or peaceful disengagement of the entity Nigeria. We should be tired for pretending to be the smartest. While in reality we are the dummest. So my brother, we have along way to go. Until we begin to address the structural reality where import/export, exclusionary policies are in effect; our efforts will surely send the wrong message.

So, the so called vision may be decoy in the making.

PHILIP EMEAGWALI: What will you recommend I remove from the speech?

ANSWER: I shall suggest that you remove the statement of education gap between the south and the North. That is non-existent.

You should also remove the paragraph dealing with population growth. This is because any natural system strives for continuity and this is even more required in situation like nigeria where infant mortality is high and health care delivery is non existent. The poor is obviously not the cause of nigeria's inadequacy.

On the whole we should start focusing on Igbos to see how we can help. We must endeavour to have a localized order (Eastern Nigeria) before we diverge. Remember it was a group of Igbos that paid in cash and kind for us to exist thus far.

I hope to talk to you in the near future. Bye for now.

Kanayo Akujieze
Scholastic...
I want to commend your scholastic and honest write-up. Due to my very tight schedule, I was not able to read it with a view to digesting the information therein. However, one of the questions you asked for suggestions attracted my attention. That is: "Should the Nigerian military budget be reduced/redirected towards technological advancement?". To my opinion, if Nigeria is to move forward technologically or otherwise, the answer to that question is in the affirmative. The Nigerian economy currently is in the hand of the military. Moreover, the size of the Nigerian army will soon overtake the size of the remaining population. Some of the students we graduated recently who were commissioned lieutenants in the army a year after had their starting salaries more than four times mine. This does not include other incentives. If the salary of a lieutenant could be more than three times the salary of a professor, and considering the size of the army how can you expect such a nation to develop technologically? The work of the army in this present time is not even defined?

Your write-up is in the right direction. I have not much time to continue on my comments. Thank you and God bless.

Sylvanua Jude Aneke, syaneke@sas.upenn.edu

Excellent...
Very relevant, of course. At the end of the day, the basic and foundational difference between developed and developing (or is it RETROGRESSING) nations is the difference in their level of scientific culture. This scientific culture, in our own age, is essentially cyber culture. Don't mind all the superficial talk about the correctness of political ideologies. That our own Vision 2010 has no program for the information age pinpoints the precise direction in which we are currently headed. The assholes do not even realise WHAT THE PROBLEM IS. They don't know what is at stake. Why should they? What do traditional rulers know about computers? Do you think
Abacha uses a PC or laptop? Does he even have an e-mail address? Not likely at all, so, like father, like son. That is why the planners of our visionless vision waste more than 5000 naira a day, when a professor receives just about the same amount as MONTHLY salary. Stupid! Absolutely stupid! To hell with Abacha and his vision crooks! ...

The emphasis on education and the development of our human resources. Your discussion of this matter was excellent. I especially liked the way you highlighted the importance of PRIMARY education. This is something our people do not yet realise, and what would be our greatest handicap in the long run. How can a nation with inefficient primary schools become a first-class nation? It is impossible! Absolutely impossible!

Igboland, especially, is not taking this matter serious at all. They are busy frying groundnuts, taking chieftancy titles, celebrating "igban kwu nwanyi", blaming the "Northern oligarchy" for everything, and waiting for the same oligarchy, alias "government," to pay the salary of the school teachers owed by Igbo Local Governments. How long shall we wait? We, Igbo people, ought to start from OURSELVES. "A na-esi n'ulo mara mma puwa ama". If the federal government fails us, that is no reason for us to fail ourselves. Not at all. Indeed, that's the more reason why we should work hard to improve ourselves and our people. By so-doing, we may even inspire the rest of the nation to follow up, even if in competition.

And, still talking of education, the situation at the secondary level is just as bad. At Aba and Onitsha, people attend "commercial schools" i.e, schools designed to frustrate the ambitions of potential engineers, doctors, physicists, programmers, etc. Not that they even receive the professed education on accounting or typewriting (sigh). Abeg, make we kukuma forget this jaree! ...

I don't know if Naija has enough money to pay EACH AND EVERYONE of its numerous professionals as much as it pays those white kids whom it currently hires. From my own perspective, the real
problem is not primarily about salaries. The nation has no visible
direction. It lacks competent, visioned, knowledgeable and earnest
leadership. Its leaders do not inspire hope, loyalty, confidence, or
commitment from the people. Therefore, professionals feel
frustrated, especially when they realise that nothing they do is going
to change anything, and that the salary they don't receive is actually
used to address the perfume needs of the president's concubines. If we
get a visioned, focused, competent, knowledgeable and patriotic
leadership, most technical professionals won't mind receiving 100
naira per month if that's what Nigeria can honestly afford to pay
them at the moment, - as long as the president himself receives the
same, and everybody, or at least most people, are working very hard,
honestly, and committedly to create a better future for the children.
... The issue at stake is a critical one involving the lives and future of
millions of our children. Abacha and his cohorts should go to hell. So
should political correctness/diplomacy, when it stands on the way.

BTW, I am really happy that you are not into all those tribalistic
mumbo jumbo. People ought grow up, not distract themselves by
focusing on irrelevant Tuwo-Amala differences.

PHILIP EMEAGWALI: What is your opinion on my proposed
African Cyber Corridor?

ANSWER: Excellent! excellent! Not just excellent, but absolutely
NECESSARY. How shall we DO it? How get into ACTION? That's
the real problem. The computer Science dept in one Naija University I
know is a proud owner of a few 286 computers!! And that's not its
only pride: its (computer science) students do not even get to see
those blessed and mysterious computers until their third year! kai! In
fact, at graduation, the students would have to learn how to use
Windows!!!! Would have probably never heard of Netscape, not to
talk of Java. Computer science indeed!

PHILIP EMEAGWALI: In two weeks, I will be speaking to the
Congressional Black Caucus. How should I reword this speech for
this African-American audience?
ANSWER: I wonder. I've never been to the US, nor met many African Americans, so I don't know much about their particular needs. Those guys play a lot of pop, and basketball, which is really nice, but not sufficient at all. More of them should engage in science, really. Encourage them to join the information age. we need more Emeagwalis. They are good - and important - for our pride. Perhaps, a specific project should be undertaken to breed black American programmers.

PHILIP EMEAGWALI: Can you suggest a catchier title that begs to be quoted?

ANSWER: Hmm, I'm tempted to be mischievous here but, quite frankly, the following, or something much like them, ought to be considered:

1. Is Vision 2010 visionless?
2. 2010: Visioning the PAST?
4. How far does Vision 2010 go?

Well, I suppose you would have to choose something more civil, especially if you want Abacha and co to listen to what you are saying (assuming he would understand this talk about an African "Cyber corridor". Does he ever listen? I wonder! Rumour claims that he spends his time playing draft, not computer games!)

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Impolite...
Could I simply say that personally I did not like what I read and since we do not know each other I thought that it would be impolite to say anything more.
Nobody...
I AM A NOBODY. NOBODY KNOWS ME. NOBODY HAS HEARD OF ME. SO, IN MY CLOAK OF ANONYMITY I CAN SPEAK WITHOUT THE THREAT OF RETALIATION; PHYSICALLY OR VERBALLY. Mr. Emeagwali, YOUR SPEECH IS ELLIGENT, VIBRANT, INSIGHTFUL, AND INSPIRING. YOUR VISION OF A NIGERIA IN THE NEXT MILINIMUM SHOULD BE COPIED AND POSTED AT EVERY GATHERING PLACE THRUOGHOUT YOUR COUNTRY. OR IS IT YOUR COUNTRY? ACCORDING TO Nnaemeka M. Onumonu, THE IGBO PEOPLE ARE NOT CONSIDERED "TRUE" NIGERIANS AND ARE TREATED AS 2nd CLASS CITIZENS. YET YOU DON'T MENTION THEM IN YOUR SPEECH OR INCLUDE YOURSELF AS ONE OF THEM. YOU HAVE MADE A SUCESS OF YOURSELF, BUT DON'T EVER FORGET WHO YOU ARE OR WHERE YOU CAME FROM. THAT HAS BEEN THE DOWNFALL OF THE AFRICAN-AMERICAN IN THIS COUNTRY. WE STRUGGLE AGAINST OURSELVES AS WELL AS THE WHITES SO OUR JOURNEY IS TOWARD OBLIVION, WHILE YOURS CAN BE TOWARD PROSPERITY. BUT ALL MUST BE INCLUDED IF YOUR PLAN IS TO WORK OR THE FOUNDATION WILL CRUMBLE WHEN YOU TRY TO BUILD ON IT. I HAD A DREAM OF VISITING MY HOMELAND AND SEEING THE WONDERS OF THE FIRST NATION OF THE WORLD. I DREAMED OF GOING TO KENYA TO SEE THE WILDLIFE ROAMING FREE; OF SEEING SOUTH AFRICA IN ITS AWAKENED STATE, PREPARING ITSELF FOR THE NEW CENTURY; THE STRUGGLING NATION OF RWANDA IN AN ATTEMPT TO HELP AN OVERWHELMING SITUATION; EGYPT, WITH HER VAST CULTURE AND HISTORY. BUT IT WAS NIGERIA THAT CAPTURED MY HEART. THE
CAPITAL COUNTRY OF AFRICA HAD BEEN DESCRIBED AS THE MOSTProsperous OF ALL THE NATIONS OUTSIDE OF SOUTH AFRICA; THE INFRA-STRUCTURE WAS SOUND, ITS PEOPLE FRIENDLY AND WELL EDUCATED. WHAT A NIGHTMARE TO FIND OUT THAT NIGERIA WAS CONSIDERED A 3rd RATE BANANA REPUBLIC. MY FAITH IN MANKIND HAS BEEN FURTHER ERODED TO THE POINT THAT I TRUST ALMOST NO ONE ANYMORE. Philip, CONSIDER YOUR TASK, SWALLOW SOME OF YOUR PRIDE, COME TOGETHER WITH all THE PEOPLES OF YOUR ONCE GREAT NATION AND THEN SALLY FORTH WITH ALL THE STRENGTH YOU AND THOSE WITH YOU CAN MUSTER. MY ANONYMOUS SPIRIT WILL BE WITH YOU. PLEASE HELP TO RESTORE MY FAITH IN HUMANITY.

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