TO JOIN OR NOT TO JOIN: AFRICA'S DILEMMA IN THE AGE OF TECHNOLOGY

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Abstract: To the people of Africa, the new information and communication technologies (ICTs) present more than a moral dilemma. If the new technologies are good for the West, will the same hold true for the developing world? For Africa, the question is a difficult one: will the new information and communication technologies launch Africa on the path of socioeconomic development or will they subject Africa to a new form of dependence, a new form of western imperialism? This essay argues that the communication technology which will be adopted by Africans, irrespective of the choice made by the West and the rest of the world, will be one that is easily accessible and which poses no challenge to African sociocultural practices. In the view of this author, that communication technology of the future will be the telephone.

Introduction

The emergence of new communication technologies signals a new age of communication of all kinds. But arguments abound as to whether the new technologies such as computers, telecommunications, satellites, home video systems, interactive multimedia systems, the Internet and others can shape the future of developed and developing countries. Advocates are hopeful that the new technologies would provide urgent solutions to present and future problems. Pessimists disagree, pointing to the dangers and pitfalls of the new communication technologies, such as the marketing of pornographic products in the Internet, the perpetration of organised, corporate crimes and the likelihood that they may widen the existing gap between the information rich and information poor. Other issues raised in the debate include: are the new technologies appropriate? Do they fit the local African culture? In essence, will the new information and communication technologies launch Africa on the path of socioeconomic development or will they subject Africa to further dependence, a new form of Western imperialism?

Communication in Africa: A general picture

Communication in Africa can be categorised in two ways: urban and rural forms of communication. Urban mode of communication in Africa reflects the kind of communication largely associated with Western societies. This involves marked presence and use of the mass media of radio, television (including cable channels), newspapers, magazines, and telephones (mobile and so on) and, to a limited extent, electronic mail. Much of these modern media such as cellular mobile telephones and cable television are now perceived as status symbols in African cities because of their high cost and restricted use by the affluent.

In the rural areas however, most of the communication is carried out through the traditional channels. Examples include the gongman, community leaders, socio-political meetings, marketplace, town unions, circulars, churches, drinking spots, friends/neighbours. These traditional channels are widely used and effective because they are considered to be truthful, authentic, reliable, and dependable. Furthermore, the traditional channels are largely respected because they enable the local people to discuss their problems on a face-to-face basis and also offer opportunities for immediate feedback. Take, for example, a communication channel such as the marketplace. It serves as a venue for buying and selling and also as a venue for official and unofficial information. It is also a venue to catch tax evaders, to see a woman to marry, to see the latest fashion and to punish a criminal.ⁱ

Equally significant is the communication role of the gongman. Simply defined, a gongman is a man appointed by community leaders to disseminate information to members of a community. In many parts of Africa and Nigeria in particular, the gongman uses wooden or metal gong to disseminate information. The rhythm of the instrument conveys the message and indicates the

group/clan to whom the message is directed. However, the gongman must be strong physically because he not only traverses the villages on foot but also broadcasts messages directly to community members. The rhythm of the gong first attracts the attention of the community before the message of the gongman is deciphered. Often, the rhythm of the gong also indicates the nature of the message (serious as against unserious news/information).

As Frank Ugboajah explained, one of the reasons why the gongman and other traditional media are significant in rural communities of Africa is that they communicate to the people in their language and idiom and they also deal directly with issues of relevance to rural people.ⁱⁱ Based on the active role of the gongman in rural communication processes in Nigeria, Ugboajah concluded that:

the gongman occupies an important position in the diffusion of messages within the belief systems of the rural audiences of Nigeria. He is not only respected and revered but is perceived as authoritative and credible, and it is important that his role in the communication of rural change be recognized by those in charge of reaching the village audiences by more `modern' means.ⁱⁱⁱ

When examined as a viable communication channel in rural areas, socio-political meetings take on added importance. Robert Armstrong^{iv} has argued, for instance, that meetings offer avenues for popular participation in decision-making and other community activities in Africa. "African societies are intensely active systems, and public and private meetings of various kinds are principal channels for the expression of the interaction of the groups, subgroups and personalities that make them up."^v Observing that the emphasis attached to social meetings derived from the oral form of communication in Africa, Armstrong said:

The emphasis on meetings means that the art of rhetoric is highly developed in a great many African societies and languages: the art and practice of speaking in public to persuade, to organize support for a political group, to make a complaint, to make a defence, to make peace, to present a group interest in a larger body ... to express a group's feelings of joy or sorrow or fervour or sociability, to invoke ancestral spirits, to pray.^{vi}

African conception of communication

Seen in these perspectives, African conception of communication differs from the mainstream Western definitions. To an African, communication implies much more than the mere process of transmission or exchange of messages or information. In this perspective, communication is understood to be beyond the narrow confines of a message and includes also (but not limited to) the messenger, that is, the channel(s) through which the message is received and also the credibility of the channel(s). Therefore, the African conception of communication incorporates social networks, fabrics or relationships and the roles of members of the networks. In this regard, it is generally believed that the message or information, s/he wants to know the source of the information and the position of certain respected and trusted individuals within the network with regard to that message.

New information and communications technologies

Beyond the role of traditional channels of communication in Africa, the emergence of new information and communication technologies (ICTs) poses a new challenge to African leaders. Caught in the ongoing debate, should Africa and other developing countries acquire the new ICTs?

In Africa and elsewhere, arguments as to whether the continent should acquire the new communication technologies have become more pronounced. The central issues revolve around the question of priorities. Is it appropriate for African leaders to ignore the basic needs of their people and hop onto the bandwagon of the new communication technologies? Will acquisition

of new communication technologies transform African economies, lead to greater food production and improved quality of life, health and housing, overcome poverty and illiteracy, and end internecine civil strifes? Indeed, can Africa thus afford not to adopt new ICTs?

Technologies and development

The link between technological growth and socioeconomic development is based on historical facts. During the industrial revolution, the Western industrialized world experienced the impact of science and technology and found it to be an indispensable tool of development. Thereafter, the belief has been that if technology promoted the socioeconomic development of Western countries, it should do the same in developing countries. Denis McQuail^{vii}, for instance, argues that "One clear promise of the new technologies is an increase in communication of all kinds, between individuals and also between persons...". Nevertheless, this argument overlooks the fact that before increased communication can take place, the communication tools. In a world in which the developed and developing countries pursue different goals and priorities based on the different levels of their technological endowments, the new communication technologies are bound to be viewed with both optimism and suspicion.

Furthermore, the new technologies must be able to address problems of human needs. For instance, while extolling the usefulness of telecommunications technology for giving "some new means of bringing people together", Tony Stevenson^{viii} wonders if the new telecommunications technology, monopolised by the privileged industrialized world, will be "enough to address the world's most serious problems of poverty, hunger and alienation." The implication is that new communication technologies, which do not address immediate human needs, are not quite useful

to human society no matter how effective they may be in increasing communication among people. In a similar argument raised in an analysis of the technological adaptation process of the Maori of New Zealand, William Schaniel explains that new technology may create change in society, and that the direction of change is determined by the nature and function (use) of that technology in the adopting culture.^{ix} Indeed, it was former president Julius Nyerere of Tanzania who reportedly said that while the industrialised world may be travelling to the moon with ease (as a result of their technological advancement), African leaders are still grappling with the problem of how to reach their people in the villages.

Taking the Internet and other emerging electronic networks as an example, Olugbemiro Jegede^x doubts their ability to accelerate Africa's development even as he recognizes the need for Africa to share information and ideas with the rest of the world.

If we had everyone in Africa electronically networked today, it would not necessarily develop Africa. In fact, what it would do, and appears to be doing at the moment, is divert attention from all other problems of development making people believe that getting hooked to the superhighway is the panacea for Africa's problems.^{xi}

Jegede strengthens his case by citing some disturbing statistics about Africa. According to him:

Three quarters of Africa's population is illiterate (so hooking them to the Internet is out of the question); three quarters of Africa is rural without basic facilities of electricity and telephone (so hooking up to the Internet can only be restricted to the urban areas); three quarters of universities in Africa have depleted library resources, have overworked academics and run computer science departments without computers ... and there are currently 200 million personal computers world-wide but less than one percent of them are located in Africa...^{xii}

Although Jegede's views may sound grim or irredeemable, they present an idea of the scale of

problems facing Africa in the area of communication alone.

However, there are individuals who do not share Jegede's pessimism. Jean-Yves Djamen *et al* have argued that "Electronic networking will not only enable Africans access global data but will also help the entire world to access information on Africa in Africa. Thus, the present situation in which Africans do not directly control their own data would be reversed."^{xiii}

Beyond the question of data generation and security/protection, Mayuri Odedra-Straub argues that electronic wiring of Africa and the subsequent easy access of Africans to various networks, including the Internet, would not "necessarily mean that the technology and easy access to information will automatically have a positive impact on the development process of Africa."^{xiv} She points out that the adoption of the new technologies in Africa would not be simple and would require "skilled human and financial resources, ... in addition to changes in the social, cultural, managerial, political and organisational `environments'."^{xv}

New direction for Africa

Which way should Africa go? Before attempting an answer, it is necessary to highlight briefly certain aspects of Africa's social system and modes of communication. Franz Shurmann has argued that, far from the view that Africa's problems are insurmountable, "Africans have three strong survival factors rooted in their history: family, villages and markets."^{xvi} All three factors are also instrumental in sustaining communal cohesion in African societies and could play major roles in Africa's transformation. To these three factors I will also add a fourth factor: role of "age grades" (an "age grade" is a formal organization membership of which is based on a predetermined age range; an age grade must not be confused with social clubs or groups) on the development of rural communities in Africa.

But first, let us briefly examine the role of the family in the life of an African. The family as a social unit is highly valued in Africa. Hence, there is a strong sense of obligation to one's family and this entails providing for the upkeep of members of a family. The family in Africa is highly valued because it provides the platform on which members receive or offer assistance, encouragement and advice.^{xvii} The African family unit thus functions as a cushion that helps to shield members from the shocks and uncertainties of life.

Similarly, age grades are useful not only at the local level of development but also at the national level. At the local level, age grade members tackle problems affecting their members and their communities. The phenomenon of age grade is prominent in rural communities of Nigeria, especially the eastern part of the country. Age grades liaise with village leaders to identify areas where they could assist in the development of the village. As there are different age grades based on different age range, age grades thus compete among themselves to provide financial assistance and infrastructural facilities to the villages. In my view, there is no reason why the activities of these age groups cannot be lifted to the national or continental level. Writing about the activities of age groups in Igbo-speaking communities of Nigeria, Uchendu noted:

The executive function of the village is vested in the youth through their agegrade organization. Besides serving as a social indicator which separates the seniors from the juniors, the age-grade association is a means of allocating public duties, guarding public morality through the censorship of members' behavior, and providing companionship and mutual insurance for members.^{xviii}

We note from the preceding passage that age grades contribute to the daily functioning of the village and, above all, also moderate the behaviour and conduct of their members. These are some of the unique qualities, which can be utilized to the benefit of Africa.

From the foregoing, it is clear that African societies have strong and enduring sociocultural practices. These practices mould human relations and they are, in turn, influenced by traditional

forms of communication. Consequently, a change in the pattern of communication such as the introduction of new communications technologies implies further weakening or strengthening of these sociocultrual practices. In this regard, it seems obvious that Africa will opt for that technology which promotes greater interaction and sustains kinship relationships. In other words, the communication technology, which will be adopted by Africans, will be one that is easily accessible, and which poses no challenge to the sociocultural practices. This is the key to understanding how Africans will resolve the dilemma posed by the new information and communications technology that meshes well with local cultural practices has a greater probability of being accepted.

However, the new information and communication technologies, as currently developed, would destroy the age-grades since they nullify or at least reduce the importance of age differentials. In this sense, the new information and communication technologies do not fit; indeed, they can lead to cultural maldevelopment of Africa.

Future role of telecommunications

As interpersonal and kin relationships are highly valued in African societies, the future communication media, which promote and sustain these relationships would impact significantly on the African communication environment. For Africa, that communication technology of the future will be the telephone.

The identification of the telephone as the future channel of communication in Africa is based on the central element of the African mode of communication -- orality. This is the point underlined by Jegede when he stated that "Communication in traditional Africa takes place between human beings rather than the technical components of communication technology."^{xix} In this context, the telephone will promote orality of communication in Africa and also sustain kinship relationships. With the telephone, information will be diffused faster to greater distances and destinations.

However, the introduction of telephones to rural African communities will hold consequences for certain sociocultural practices in the continent. For example, in Africa as in other societies, knowledge is usually associated with power. The greater diffusion of information through the telephone implies that community information will become public knowledge. Local events will be easily diffused and widely reported. The power and influence wielded by the elders, community leaders, and the gongmen will be displaced, in my opinion, by the telephone because the telephone will promote more openness in the dissemination of information. The perception of elders as repositories for knowledge would be untenable, as secret knowledge becomes public knowledge.

The new sophisticated communications technologies will remain status symbols in Africa and will be limited to urban centres and the affluent members of society for obvious reasons -- cost and access problems. And until there is a marked improvement in the living standards of the majority of Africans, until basic infrastructural services such as electricity can be supplied on an uninterrupted basis, and until the questions of access and cost have been addressed, there is substantial reason to believe that the future of the new communications technologies in Africa looks still further in the horizon. And this is why the telephone is best positioned to play a future role in Africa.

Installation of accessible and affordable telephones is the challenge of the future for everyone concerned with Africa's development. There is increasing evidence that access to telephones in rural Africa enhances the democratization of information. Widespread communication leads to elimination of ignorance and since poverty is closely tied to ignorance, a decline in the level of ignorance implies a decline in the level of poverty. According to Morris and Stavrou,

increased access to telephones in underdeveloped areas leads to improved levels in the quality of life of those communities..., the value of a telecommunications network to a community is reflected in the ability it affords that community to transmit information both speedily and cost-effectively within and outside the area. Efficient information flows are not only a necessary element for the productive functioning of the economy of an area, but in addition they are crucial for the solution of a number of other social and development issues.^{xx}

Furthermore, Sam Pitroda has argued that "Telecommunications was as critical and fundamental to nation building as water, agriculture, health, and housing...".^{xxi} Using India as an example, Pitroda states that "When telecommunications comes to the Third World, it brings with it new economic activity, new higher-paying jobs for parents, and new technologies that reduce the utility of unskilled child labor."^{xxii}

Going beyond the relationship of telephones and telecommunications to development, it is important to explore other changes brought about by the advent of the telephone. In this connection, the work of Sydney Aronson^{xxiii} is important. The development of the Western world in general and the United States in particular must be linked, Aronson argues, "both as cause and effect, to the availability of the telephone as an easy, efficient and relatively inexpensive means of communication."^{xxiv} How did the telephone transform social and human relations? First, the telephone greatly reduced the need for two or more individuals separated by long distances to be physically present for a meeting.^{xxv} In this way, the telephone reduced the traditional role of information messengers. In traditional African societies where gongmen are

effective in information dissemination, introduction of the telephone will dramatically alter the role of the gongmen.

But even as we highlight the future significance of the telephone for Africa, we must not be reticent about the evils associated with the use of the telephone. These have been summarised by Aronson thus:

The existence of organized, corporate crime as we are afflicted with it today, is just as inconceivable without the telephone as more morally acceptable corporate empires. Gambling of all types..., prostitution... and drug dealing could probably not exist at their present levels of activity and profitability in the absence of the telephone. And if legitimate brokers and salesmen solicit customers over the telephone so do swindlers, 'conmen' and 'boiler-room' operators of all sorts. The telephone as an instrument of communication is morally neutral, though the uses to which it is put are surely not.^{xxvi}

This point is important so that one does not perceive the telephone as a device that is intrinsically devoid of negative uses. However, when compared to the level of crime committed with the new communications technologies such as computers and interactive multimedia systems, for example, the telephone appears to be "morally neutral".

Against the background of the preceding discussion, it is important that we examine the various scenarios open to Africa.

Scenarios

Against the background of the preceding discussion, there are three clear scenarios for Africa. The first scenario is one in which the new technologies are positioned as the key to Africa's development problems, regardless of their consequences. In this scenario, we observe an Africa that is Western oriented in terms of massive investment in and use of communications technologies. The good side of this would be a probable rise in literacy levels and skills as more people receive basic education and training on the use of the new technologies. This point is anchored on the fact that illiterates cannot operate the communications technologies. However, there are drawbacks such as inequity in the provision of basic services. This will probably lead to a return to the "trickle down" philosophy of development as most governments concentrate communication infrastructure in urban centres with the hope that the benefits will spread to the rural areas later. Other negative effects include the widening gap between the rich and the poor; mass migration to urban centres owing to the attraction of city life and perceived job opportunities; low level of agricultural production as rural farmlands are deserted; and increase in hunger and poverty.

In the second scenario, Africa does not totally embrace the new technologies but attempts to match the new technologies to its sociocultural practices. As the usefulness of the new communications technologies are weighed against enduring local practices, those that possess the potential to cause social dislocation will be rejected while those that fit into the culture and indeed promote the sociocultural practices will be adopted. Here, Africa is depicted as a continent not in a hurry to part with its culture, but at the same time is willing to adopt technologies that are useful to its existence, environment and people.

The third scenario is the exact opposite of the first. It is an Africa defiantly anchored on strong ties to cultural roots. This scenario assumes that the benefits of the new communications technologies can never match traditional forms of communication and its ability to strengthen cultural ties.

In terms of the futures of communication in Africa, the second scenario seems feasible because culture and technology are dynamic and evolving. However, to adopt the second scenario, Africa must address problems of illiteracy, poverty, and lack of basic needs if it wants to make the right decisions about technologies that fit into its culture. In this connection, African leaders and scholars need strategic foresight to make informed decisions.

If African nations want the new communications technologies regardless of the consequences, the first scenario is the most appropriate. Similarly, if they believe they can carry on without the rest of the world, if they want to isolate themselves from the rest of the world, the third scenario beckons. But Africans must also remember the popular saying that no man or woman is an island. The recommended and realistic scenario is the second scenario because it accepts that some communications technologies are necessary and useful for greater interaction with the rest of the world, even as the drawbacks are obvious.

Conclusion

The conclusion to be drawn here is that, although the new communications technologies may not be sufficient to transform Africa overnight, those aspects that are useful to African societies are still necessary in the process of development.

There is need for a deeper, more sophisticated understanding of the meanings and implications of the new communication technologies especially as they relate to power structures; how the technologies are appropriated in different cultures or epistemologies; and the various concerns and worries about the new technologies. A deconstruction of our understanding of new communication technologies will enable us to understand fully their present and future challenges and impact on Africa.

There is also the urgent need for more public education on the subject to enable decision-makers to make the right choices. This is the only way that we can move the debate forward. It is wrong to perceive the new communication technologies as the magic solution to Africa's problems. There are merits and there are drawbacks. Without this debate, the issue becomes not just Africans choosing appropriate technologies but the multinational manufacturers of communications technologies imposing their commercial interests on Africa.

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NOTES

ii. Ugboajah, op cit.

iii. Ugboajah, *ibid*, p. 167.

iv. Armstrong, R.G., The Public Meeting as a Means of Participation in Political and Social Activities in Africa, Socio-Political Aspects of the Palaver in Some African Countries, UNESCO, Paris, 1979.

v. *ibid*, p. 15.

vi. *ibid*, p. 16.

vii. McQuail, D., Research on new communication technologies: Barren terrain or promising arena? in Hutton, W.D.; Blumler, J.G.; and Kraemer, K.L. (eds.) *Wired cities: Shaping the future* of communications, G.K. Hall & Co., Boston, Massachusetts, 1987.

viii. Stevenson, T., Telecommunications development in Asia-Pacific: The case for a new Australian role, *Telecommunications Policy*, 1991, December, 485-490.

ix. Schaniel, W.C., New Technology and Culture Change in Traditional Societies, *Journal of Economic Issues*, 1988, **XXII** (2), June, 493-498.

x. Jegede, O.J., From talking drums to electronic networking: Africa's snailmobile through the cyberspace, *FID News Bulletin*, 1995, **45** (7/8), July/August, 218-224.

xi. *ibid*, p. 221.

xii. *ibid*, p. 221.

xiii. Djamen, J-Y., Ramazani, D. and Some, S.S., Electronic networking in Africa: Emergence towards the Internet, *FID News Bulletin*, 1995, **45** (7/8), July/August, 228-233.

xiv. Odedra-Straub, M., Contemporary Issues in Electronic Communications in Africa: A Summary of the Addis Ababa Symposium, *FID News Bulletin*, 1995, **45** (7/8), July/August, 225-227.

xv. ibid, p. 227.

xvi. Schurmann, F., Africa is saving itself, *Choices*, 1996, **5** (1), 4-9.

i. See Ugboajah, F.O., `Oramedia' in Africa, in Ugboajah, F.O. (ed.) Mass Communication, Culture and Society in West Africa, Hans Zell Publishers, Munchen, Germany, 1985. See also Uchendu, V.C., The Igbo of Southeast Nigeria, Holt, Rinehart and Winston, New York, 1965.

xvii. See Uchendu, op cit.

xviii. *ibid*, p. 43.

xix. Jegede, op cit., p. 223.

xx. Morris, M.L. and Stavrou, S.E., Telecommunications Needs and Provision to Underdeveloped Black Areas in South Africa, *Telecommunications Policy*, 1993, September/October, 529-539.

xxi. Pitroda, S., Development, Democracy, and the Village Telephone, *Harvard Business Review*, 1993, November-December, 66-79.

xxii. *ibid*, p. 79.

xxiii. Aronson, S.H., The Sociology of the Telephone, International Journal of Comparative Sociology, 1971, XII, 153-167.

xxiv. ibid, p. 154.

xxv. ibid.

xxvi. ibid, p. 158.