

The Information and Communication Technology Revolution: Are We Facing a New Development Era For and In Africa?

Mirjam de Bruijn (ASC/LU)
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Abstract

In NGO circles today there is a great deal of hope about economic growth in developing countries and the development of an information society as a result of the growing presence of technological possibilities in communication. At first sight, African cities (and the countryside now too) seem to be flooded with different ICT possibilities that are expected to bring 'development'. Studies in ICT development have indeed shown some social change: economic development is visible in local markets, youth are increasingly being connected and there are possibilities for social relating that were never there before. Societies in Africa that were very mobile of old are now integrating these changes in specific ways. This may result in these societies joining the world at large but it might also lead to Africans becoming part of the so-called Fourth World (Castells), a world disconnected from others and experiencing new inequalities but without a specific geographical location. The changes in communication technology are transforming societies both in the North and in the South and are blurring the divisions between the two. Thinking on technology and society has gone far beyond the technological determinism that often informs discourses in development circles. The mobile phone has become a symbol of the new communication era and is challenging societies and creating new forms of relating between the North and the South. This paper uses the mobile phone and its introduction in Africa as an example of how the new wave of ICT is leading to cultural, social and economic dynamics that could take societies in unexpected directions that may not, as such, open up society but instead close part of it off.

Introduction

What I am going to tell you today is based on my experiences in Africa. I have lived and worked in Central Mali, in Chad, and in Cameroon (1. show slide of a map) since 1985; and the inspiration and ideas for this talk are the tremendous changes that have unrolled before my eyes in these areas. These are regions where economic insecurity, climate variability and political instability inform people's everyday lives. These are the areas that are depicted today as being most prone to climate change, to the economic crisis and to new political instabilities. These are the areas where our world's new insecurities dominate daily life; a daily life that is by any standards a poor life. Child mortality is high in these regions, the mean income is very low and services like hospitals are not accessible for everybody.

I am going to give you some reflections on what development means in these remote areas. (2. slide of women under advertisement in Sudan) I'll do this by situating these areas in our globalized world. In our world today, the North and the South are interwoven into a global world, one world. But this development of a new global world has not removed past inequalities. On the contrary, the differences seem to have become bigger and more visible, although they may have changed in nature. Our discussion about development and development aid has certainly changed. Today 'partnerships' with the South and listening to voices from the South are central issues in discussions on development aid. We have come to the end of the development aid period where aid can be justified by questions and programmes that have been thought out in the North. In this conference it is important that we ask what the new

challenges are but it may be even more important to question whose challenges we are talking about. Are the remote areas also included?

My main entry point for the discussion of development in the global world is the recent introduction of wireless communication in these remote areas. (3. picture Kidal and wireless communication) This is part of what is being called the ICT revolution, and expectations for development are high. But what happens when these regions are invaded by this new technology? Does this demand a reorganization of the areas in political and social terms? These regions were never the centre of the world and people could manage their own lives here even though they were living in poverty. What are the consequences of the new technological revolution, such as wireless technology, for these areas?

To answer these questions, we should understand the structural relations that form the basis of the region's social dynamics. Without this historical and contextual knowledge, we won't be able to understand what the effects of the new challenges in our global world are for the so-called underdeveloped areas, the South.

The ICT revolution is being hailed for the important role it is playing in the development of the South in this new globalized era. (5. slide of a development project and phones) I want to discuss the various effects the ICT revolution and the globalized world are having on the discussion about the direction of development. I'll challenge the notion of the locality of the South, the notion of poverty and the idea that we know who needs development. However I'll first discuss the intrinsic hierarchies that dominate our world, especially those that are present in the South, and the new meaning of these in the global world. Then I'll elaborate on the discussion about ICT and its divides, another hierarchy that is dominating our world today. And finally I'll go into a discussion about the ICT revolution and its effects on development – firstly for the definition of development and secondly for its effects. To understand the relationship between ICT and development, I have made a link between governability and ICT. How do ICTs influence power structures and create new or reinforce old relations of power?

Ferguson (2006) has described the global world as having "shadow sides". The global world is not accessible for all and people do not have equal chances – these are often based on past relations of power. This is the reason that I want to return to the structure of African societies before we delve into the challenges that the new ICTs are posing for discussions about and the effects for development.

Structural inequalities

What are the structures in which the daily lives of African citizens develop? How do they relate to changes in the globalising world?

(6. slide of Douentza area in central mali)

Let me start with the presentation of the work of a PhD student, Lotte Pelckmans, who is finalizing her work and will publish it soon. We worked together on the structural relations of dependency that exist in Sahelian societies. This research was done in Central Mali, where societies based on slave labour developed in the 19th century and these master-slave relationships persist to this day. These societies are no longer bound to one geographical place but have spread around the globe. This is a

process that started with nomadism, continued with labour migration and recently developed into the diasporic communities that are centred in Europe and the States. (7. slide of nomads) Despite the globalization of these societies, the master-slave relationship still persists as a form of dependency relationship. The history of slavery, embedded in the personal histories of both slaves and masters are still present and inform the structure and all aspects of the daily lives of these people who still live 'together' all over the world. (see Pelckmans fc). (8. slide of modern environment)

Another example is the system of hierarchies in the Grassfields in Cameroon, where chiefdoms have existed for a long time. (9. slide of palace in green environment) They may be less explicit than in the Sahelian societies but dependency relationships are important structures in everyday life. They structure itineraries people can follow. These old hierarchies In the Grassfields are combined with modern hierarchies as they appeared under the churches and colonial regimes. A history of mobility has made these communities global communities. But in the diaspora similar dependency patterns are being reproduced. (10. slide of diaspora: shops in the States, refer to work Richard Akum, fc.)

(11. overgangs dia)

These forms of dependency that are accepted and lived with by the majority of the inhabitants of remote regions even though they are spread all over the world are being reproduced in African states. These states have been labelled failed states, patrimonial states etcetera, as if they were not yet states. But in fact these are states that function according to the 'rules' of dependency that have informed these societies for so long and are as such accepted in their inequalities too. It is therefore not surprising that Chabal and Daloz (1999) conclude that Africa works. Yes, Africa works in a specific way. Chabal and Daloz's message today is almost common sense and has been widely adopted by journalists and in academic circles. We should realize that in today's globalized world these hierarchies and inequalities are being reproduced in international relations and the global shadows too.

This model of the African state has led to discussions about the difficulties facing development in the South. Corruption and inequality are limiting the effects. The state of Cameroon is a much-cited example. Is there no escape from these structural relationships? Is there not a voice for dependents? Is there no way to escape the hierarchies in the world? Would this not be the case if we consider that in a globalized world people are being confronted with new ideas and may develop new ideals for their societies?

New insights into the process of development come from debates centred on actors and on agency (see de Bruijn et al 2007; Olivier de Sardan (2009)). In his recent book on 'Africa: the politics of suffering and smiling' (2009) Chabal has adopted a vision from below and tries to understand how Africans' everyday lives are filled with the top-down politics he described in *Africa Works*. It only works because of the ordinary Africans' flexibility and endless power to negotiate, their never-ending acceptance of the power relations they are part of.

My experience in the areas I have introduced you to is that in Africa (but elsewhere in the world too) ordinary citizens and their lives are subject to these structural patterns of inequality in political and economic fields. The everyday lives of most Africans are

dominated by political systems, where hierarchies and inequalities are part of daily life. These are long-standing historical patterns in which people have to make a living, and which generations before them did as well. It is difficult to ignore these hierarchies when we want to engage in the new challenges the globalizing world has ahead. The example of the people of former slave descent in the foyers of Paris, and the example of the diaspora elites in the States are telling. Neither escapes the hierarchies of their world at home but, at the same time they make a life away from them. However their options are changing when they confront the globalized world.

It is clear that we can no longer discuss the world in terms of the South that needs development, or the North that develops. These worlds are intertwined, as are the systems of inequality as well. In the globalized world, the North and the South are intermingled and the hierarchies of the South are being reproduced in the North and vice versa. Africa is no longer only present in the geographically located Africa. Africa and African relationships are everywhere in our world. (12. slide that shows a map in which these new worlds are made visible)

Global shadows

Ferguson (2006) depicts a world in which many people live in the shadows. These are reproductions of old relationships of dependency between the West and the Rest; or between the North and the South. These relations are often depicted in terms of hegemony or divides. The hierarchies and dependencies that I sketched for African societies and that are being reproduced in the diaspora nowadays run parallel to the old dependency relations between the North and the South. These divisions are often related to histories of colonialism, and to the technological supremacy of the West/North. They are also related to definitions of marginality in our world. Marginality is of course a political concept and those who have been marginalized are kept in such a position because of national and international politics (see de Bruijn 2008). As I have shown, marginality and inequality are embedded in African societies and are part of the divisions in our world as well. These old and new inequalities are coming together and the shadows of our world are to be found everywhere even though they are not easy to detect. The complexity of dependencies has increased and it is increasingly difficult to control and develop strategies to eliminate these. Divides in our world are no longer geographically located, nor are they easy to delineate. The political projects to which they belong are no longer situated in national states but at all governance levels from the local to the international.

What is the modern definition of poverty?

(13. slide of a person doing an informal job)

Scholars have introduced the concept of the network society (Castells 2006) to indicate that the world is networked today. Structures of relating are multiple. The network society goes together with the development of the Information society that is present in the increasing presence of Information and Communication Technology. Knowledge flows are important. And knowledge about each other is increasingly possible. However those who live in the world's shadows or those who do not have access to the information society are destined to become the new poor. Knowledge flows and networks do not escape the structural inequalities described above.

The definition of poverty needs to be revised. In a globalized world where information flows define our position, where the worlds of the poor and the rich come together, it is becoming increasingly important to be able to express oneself, to defend

one's position. To be able to do so, one needs to belong to a society that can defend its rights. Then it is no longer material poverty that counts but it is increasingly important to have knowledge about the world, about one's rights and to be in charge of oneself. Those who do not have this kind of knowledge can be labelled culturally poor (Nyamnjoh 2004). Cultural poverty is increasingly put on the agenda of development organizations like UNESCO and the World Bank, and it has received a short paragraph in the Millennium Development Goals as well.

Those who live in the shadows of our global world tend to lack the means to define their own cultural rights. This is in addition to the fact that they often live on the edges of the economy and are thus part of the economically poor. However as I have shown, these positions are interwoven in the inequalities of their own cultures and of the world and it is not easy to eradicate these.

Notions of empowerment and human rights have become very central in development debates and refer to the social transformations I sketched. Often however we only take the message of the global world very partially. I hope that we can develop notions of a network society and global shadows further and integrate them in the policies of development agencies that should increasingly be situated in the Global South.

(14. slide streetchild in Chad)

The crucial questions are who we empower and why? Education is a crucial element in these discussions as people need to know their rights. However the media and ICT must play their role. It must be transparent and open to criticism and it has to reach out to the poor. It is well known that both sectors are not that particularly developed and are not that open in the global shadows of our world. The information society has not yet reached everywhere. The question that should be central in the future is: Are we reaching out to those who live in the global shadows and those who are living daily with relations of dependency in their own societies but increasingly in the North? What should the approach be to eradicating economic and cultural poverty if it is even possible to do so?

I started this discussion by questioning the role of ICT in development in remote areas. Indeed new ICTs, like the Internet and mobile telephony, in principle have the power to drive a society towards a knowledge and information society. However they can also become tools to control that same society and thus reduce liberty and reinforce structural inequalities. In the next part of my talk we will try to understand these dynamics.

Globality: Communication technology and the structural divide

(16. show picture right to communicate/MTN)

Information and Communication Technologies have developed tremendously over the last few decades. The most recent development has been wireless technology and the mobile phone. This revolution in technology has been hailed as the solution for the information society. It could open up the possibility of extending the information society to include all corners of the world. The technological possibilities are endless and information could reach the most remote corners of our world; into the global shadows as well.

This idea is acknowledged today as being too simplistic. It is based on the critique formulated as 'technological determinism'. Technology is not leading to the

progressive development that it might have had in a neutral world. As Yu'a (2004) and many others have shown, technology and development are embedded in political structures and the simple introduction of a new technology may, instead of aiding development, lead to increasing divides. These divides are developing along divisions of power in society. The promise of the end of the divide between the West and the Third World has been replaced by discussions on the digital divide. This is being reproduced along the lines of power and dependency relations as they were known in the past.

Let us consider the example of Africa and this divide. The Internet revolution has not happened. Internet has the potential to develop information flows and to make people world citizens but it has not yet reached into the areas in Africa that are probably most in need. The regions I have introduced to you are still not well connected. In 2005 some smaller towns in Central Mali got Internet but this was because the NGO world based there needed to be connected to be able to do their work effectively. They have become globalized but the people with whom they are working have not. In Cameroon the situation is different. There, small towns do indeed have Internet.(17. show picture of an internet café) but connections are slow and downloading information takes ages. Their compatriots living in the States have good and affordable Internet connection on their side of the world. This is why new (Cameroonian) political movements are being set up there and news about Cameroon is nowadays more widely available in the diaspora than at home.(18. show a picture of a web site) We experienced this too when Chad again entered a period of violence and friends asked us to send them information about the situation there. We, in Europe, knew more than they did and all our information came from the Internet.

Technology is not only developing within the divides of our world. How technologies are used depends as well on the way people embrace them. (19. show the picture of the phone doctor) Hackers and Internet scams have emerged in Cameroon and Nigeria and have global networks that we would label as criminal. Another example is the youth who are now spending a lot of time in Internet cafes in big cities in Africa in order to be part of dating networks and to link up with possible routes to Europe and the State. The information they find on the Internet fuels their desire to migrate to the other side of the world where life seems to be so much better (cf. Burrell 2009). The grass is always greener....

Recent studies (Bar 2009, Donner 2009) have shown that development initiatives, like setting up Internet cafes in remote areas of Latin America and Africa, in which so much has been invested have not yet had the effects that were hoped for. The results have not been so much technological improvements but the sociality that has come with the creation of these cafés and the new discussions that are going on. These may in fact finally lead to empowerment and to more cultural competences. Development initiatives always have unforeseen side-effects.

Is this what we mean by empowerment? Is this what develops a cultural identity? Are these technologies entering the shadows of our global world? And if so, in what way? Maybe technology is just increasing the divides in that world (see Brinkman et al 2010, fc.).

On the other hand: these new technological developments are leading to innovative ideas that could work in a world that is open to innovation. Ideas about e-learning and collaboration between hospitals in the South and the North are well advanced in the plans of big companies like Nokia and Ericsson. But the question is will it ever work? And who will benefit from it? Unless we consider the complexities of the inequalities

in the global shadows, we will remain far from the point where these technologies could reach out to those who are labelled the 'poor' and contribute to the eradication of economic and cultural poverty.

New era; mobile phones

(19. show slide with remarks on it) These are two comments made by informants in Cameroon and they indicate that something is indeed happening:

Tita Nswi, A town quarter head from Babungo in Cameroon said:

'When my phone is not with me, it seems like the world is completely cut off from me ... If they want to say that the white man has done something for us, it should be that cell phone'

And a retired teacher in Babungo in Bamenda claimed that:

'There is no going back, we cannot go back where we came from. We are instead going forward'

The newest development in the so-called technological revolution is the wireless network, i.e. mobile phones. As these quotes show, everybody is very positive about this new development. It is clear that it is making a difference, but how and for who?

The mobile phone and wireless technology are considered as tools that can reach out to the poor quite easily. They are ascribed action in the sense that they can democratize societies, democratize access to information and with advances in the technology many other things will be possible too. Recently we have heard discussions about e-banking that has the potential to revolutionize rural areas of Africa. The mobile phone is the tool that should allow access for the poorest of the poor to information flows and open up the world for them. This is the tool that has the possibility to give people the rights they need, or at least to inform them about their rights. The mobile phone's SMS function is being hailed as having that possibility. It could even lead to a new form of literacy, but literacy is required. Remote areas in the world will be reached and the poorest of the poor who live in the global shadows will in the end know what their rights are.

Are these developments happening?

Let me give a few examples from the areas where I have worked. First of all I have embraced the idea of the mobile phone as the ultimate communication tool for the poor. Mobile phone technology only became available where I worked in Mali and Chad in 2005 and then only in the small towns. It gradually spread over the whole area. In Cameroon small towns were connected at the end of the 20th century but there as well connections with more remote areas are still being worked on. There are many areas that are not yet covered (20. show map of coverage 2008). It is a question of economic interest as to whether they will be connected. With economic liberalization, network development is being left to the successful commercial companies with the most financial power. They have a business strategy and not a development strategy, and state influence on these companies is limited. However some of them were funded by western donors when they started their work in Africa (example of Celtel and the Dutch government, 21. show a slide of Celtel office in Chad). Since the networks in Africa were set up, some of these companies have grown and their founding members are now among the richest people in the world, for example Moh Ibrahim, who founded the Moh Ibrahim Prize for the most democratic African leader

of the year. It is not without reason that a CEO in the Zain telephone company in Sudan compared the telephone industry to the oil industry. But who benefits the most? Here we see the continuation of the technological divide. The technology itself comes from outside Africa and the know-how was all invented in the West.

People in Africa have been very inventive in using this new communication technology since it was first available in their vicinity. One of the remarkable developments that I encountered was that people tried to link up with family and friends who had migrated abroad and did indeed manage to contact those who had left years ago. (22. show a picture of Boni in 2006) That is how a nomadic woman from central Mali reconnected with her husband who had left her and her child long ago. He was apparently living in Paris where he was successful, remarried and had three kids. He started to send money to his wife and daughter in Mali when she began calling him every two months. And to do so, she had to travel to the nearby town to access the mobile phone network. (23. picture of Douentza and network) Forgotten linkages are being re-established in a form that, for those who migrated, is not always very pleasant. They are being forced to send money using wireless technology with Western Union and Moneygram. They are literally being followed by their compatriots to the other side of the world (Nyamnjoh 2005, Cheneau Locquay 2004). Today the place where this woman and her daughter live has a wireless mast itself (24. show picture of Boni and mast anno 2008).

Another example is the Fon of Mankon who rules his kingdom in the Grassfields but whose subordinates live all over the world. When we asked him about the advantages of the phone, the first things he mentioned were: (25. show picture of the Fon with his remarks) that he could talk to all his children in Europe and America in an hour. 'It is a means of communication that the poor can have' ...
(Fon Angwafo III, S.A.N., Fon of Mankon)

Another development and one that has already been well described (Waverman 2005) is the economic effect of this new technology on local economies. A whole new sector of economic growth has emerged thanks to the mobile phone. And this is one in which young people in particular are participating (26. slide of a call box in Cameroon). The organization of this new economy is in itself all totally new with the phone cards and the selling of airtime. The companies involved, for example, Celtel/Zain in Chad, Orange Malitel in Mali and MTN in Cameroon, have introduced a layered system for the sale of airtime and phone cards. We discovered that the people who man the companies' phone booths are often dependent of the owners of the booths that are often the wealthier people, or the elder brother or an uncle, thus following the lines of 'traditional' power relations in society. In that sense the arrival of the mobile phone has created employment and possibilities for people who would normally not have an income, but it has also reinforced relations of dependence (cf. Nkwi 2009).

(27. credit hiba) Let us now look at some examples of empowerment: Earlier research that we did in Sudan showed that women in this Muslim society had embraced the mobile phone as a tool that allowed them the chance to connect to the world outside their houses, for instance to order tea, to organize parties or to contact their loved ones abroad (de Bruijn *et al.* 2008); Increasingly the use of SMS technology is showing an interesting way of influencing public opinion by sending messages to large groups of

people, for example the HIV/AIDS campaigns in Botswana. This is a method that is also being used by religious groups who want to reach out to large numbers of people.

How do these images relate to other findings? This is a new field of study and there are not yet many publications on the subject. The effects of wireless technology are not yet well known, especially not for the rural areas in Africa (cf. Donner 2008a). In a recent overview of the effects of the mobile phone in the South, Donner (2008 a&b) questions the real effects of the mobile technology. He confirms again that the potential is there but wants to know who exactly is participating, and whether the technological possibilities are reaching the poor who do not have the money to buy phones or airtime and who often live in a world without electricity. But on the other hand, the creativity that is found in some areas and the advantages that farmers, for example, say they have are promising. However such anecdotal evidence needs to be scrutinized carefully. In India for instance, Athar Osama claims that there is no proof that ICTs are the major drivers for development (Osama 2006), which is certainly confirmed in the articles by Donner that I just mentioned.

Here it is interesting to remind ourselves of another remark made by the Fon of Mankon in Cameroon. After his first positive remarks about the phone, he said that they in fact keep people apart, and are breaking up society. And in Sudan there are important discussions about the disappearance of morality. The mobile phone is also being seen by local people as being 'dangerous', as destroying norms and values that have always been present.

(27. governance and the mobile phone....; office and phones)

So far the emphasis has been on how the tool, namely the mobile phone, and its possibilities can change society. It is clear that the potential is there, depending on how people use it and on the development of the technology as well. However we have not yet mentioned the other side of the coin. The mobile phone is part of a regime that will also control people. Literally, people's everyday lives. The example of the economic niche it is filling has this aspect too. The phone can be a controller of local relations of dependence. States can use it too and areas where people lived without government interference are nowadays largely controlled and have become part of the globalized world. They are suddenly visible. That mobile telephony has positive and negative sides cannot be disputed. The people we interviewed in Cameroon were not always happy with developments.

(28. slide: person and this quote)

But as the retired school teacher said, there is no going back. We will only move forward.

The new era of mobile telephony and the eradication of 'modern' poverty

What kind of society is developing as a result of this technology? And how can we relate this to the divides discussed in the first half of this talk?

(29.slide with cartoon: I phone therefore I am)

In today's globalizing world where information and networks are the driving force, the first question we should ask is whether the deprived and those who are at the

bottom of the social and economic hierarchy are being allowed access to the new technologies. And, if so, to what extent? Is there a difference in economic deprivation among those who have access to the new ICTs? And is there a difference in cultural marginality between those who have access to the new ICTs? And can we in fact even talk about an information society in Africa today?

The mobile phone can be an important tool in development and the examples I have given today indicate this. And the use of new technologies in Africa is certainly a development to follow closely. The enthusiasm for this ICT revolution as the tool to help the poor out of poverty and deprivation may still prove to be valid. A lot depends on the development of the technology itself and how possibilities will open up and reach out to the poor. There is still a long way to go.

This technology is not only a tool to be used. It could also become an active agent itself and steer processes of governance. The phone *is* controlling life, not only in the sense of it being in control of a person. People may well be addicted to mobile phones but the phone itself becomes as well a tool for decision making. A very simple example could be nomadic people who choose to camp close to a town with electricity. A more political example would be how phones are being used to trace people from the past for financial or legal reasons. And there are numerous other examples.

Being connected by phone and Internet really does unite people. It may however have a negative effect as well. This is what is meant in the network theory by the dominance of strong ties. People communicate with people they feel closer to and forget about weak ties, their neighbours or acquaintances faraway. This is indeed a process that can be seen with both the Internet and mobile-phone communication. Ties over distance but within the same community become stronger and more frequent. The divisions between social groups are now in the world space and are no longer geographically situated. Divides along social, class or ethnic lines are becoming defined in the international space which is leading to a compartmentalization of the complex divides in the world. The global shadows are becoming worlds in themselves. Mobile communities in the margins....

We should of course realize that these same divides will exclude people from being connected. Or exclusions will be defined by commercial interests. This may lead to what Castells (2007) has referred to as the Fourth World where those who are not connected will unite. They will have the least access to information and thus to jobs too.

The ICT revolution is a fact, in the sense that the technology is spreading rapidly. It is a development we should follow closely and critically, and it certainly deserves a place on the list of challenges for development in the 21st century.

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