

Africa Communicating: Digital Technologies, Representation, and Power

Gado Alzouma, Monica Chibita, Wisdom Tettey, and Allan Thompson

What follows is an edited transcript of a panel that took place during the 2013 conference of the Canadian Association of African Studies (CAAS), held at Carleton University. This panel, chaired by Professor Allan Thompson, of Carleton, was called: "Africa Communicating: Digital Technologies, Representation, and Power."

Allan Thompson

I teach journalism here at Carleton and also direct something called the Centre for Media and Transitional Societies, which right now has 22 journalism and communications students heading to Africa for eight-week media internships. Most of them will be working with news organizations but some will also be working with media development organizations.

I also have an interest in digital media because of my involvement with a project called Radio Convergence and Development in Africa, which was looking at the nexus between ICTs – information and communication technologies – and conventional radio.

In a sense, everyone has heard the cliché of *the digital media revolution*, this burgeoning thing that's happening in Africa. We all seem to talk about it, we all seem to hear about it and it is indeed a cliché. But the fact that something has become a cliché doesn't mean that it's not true. It just means that people often use the expression so casually that we can't always be sure what they're actually talking about.

What we're here to do today is to try to give this issue some thought and put a bit of flesh on the bones of the cliché by looking at it more closely, particularly by examining some evidence about what this digital media revolution means in Africa.

We have three excellent panellists to take us through that discussion.

We have Gado Alzouma from the American University of Nigeria. The title of his presentation is "The Rhetoric of ICT4D in Africa." So he will be dealing head on with the cliché, the rhetoric. Gado is an associate professor of Anthropology at the School of Arts and Sciences, American University of Nigeria. He did his undergraduate and graduate studies in France in sociology and his PhD in anthropology at Southern Illinois University.

In addition to his teaching and research he's done evaluation work with such organizations as Care International and the World Bank. In the early 1990s he was a social advisor to Niger's Prime Minister at the time. He also did consulting work for UNICEF and later for the IDRC's regional office in Dakar, Senegal.

He is widely published – as are all of our speakers – in the field of Information and Communication Technologies for Development, or ICT4D, his primary area of research and the subject of his paper today.

Monica Chibita is from Uganda Christian University. The title of her paper is "New Media, New Representations? Assessing Medial Literacy in Eastern and Northern Uganda."

After nearly 20 years with the Mass Communication Department at Makerere University, in Kampala, Monica took a position last year as Head of the Mass Communication Department at Uganda Christian University. Monica studied at Makerere, holds an M.A. in Journalism from the University of Iowa and earned her PhD in Communication at the University of South Africa.

She joined Makerere in 1994 and was instrumental in the school's research program on top of a heavy teaching role. She's a member of the editorial boards of the African Journal for Communication Theory and Research, and Ecquid Novi: African Journalism Studies; and associate editor of the Journal of African Media Studies, JAMS.

Our third speaker is Wisdom Tettey, from the University of British Columbia. The title of his presentation is "Mobile Phones, Democratic Citizenship, and the Changing Ecology of Political Communication in Ghana." Wisdom is currently the Dean of the Faculty of Creative and Critical Studies and a professor of Cultural Studies at UBC – the University of British Columbia.

He studied Political Science, Russian, and Communication Studies at the University of Ghana; completed a Masters degree in Political Science at UBC; and a PhD in Political Science at Queen's University.

He has a keen interest in the new information and communications technologies and their impact on society, particularly in Africa. He's also engaged in research on mass media in Africa and their relevance for democratization, hence his involvement as co-editor of the recent volume African Media and the Digital Sphere.

His paper today is on mobile phones, democratic citizenship, and a change in ecology of political communication in Ghana.

We will begin with Gado Alzouma.

Gado Alzouma

What I'm going to talk about is this cliché mentioned in the introduction. I would like to first say that there is a discourse, a rhetoric that is clouding the whole issue of ICTs in Africa. Unless we know the facts, unless we go beyond that discourse, beyond that rhetoric, we would not know how it is actually, because what people are telling us right now is that there are changes that are happening in Africa. It's not just that everybody has a cell phone, they have access to internet and so on.

But the real situation is far more complex than that and not so different from what we're used to. It's just that we have this discourse in our mind and we've begun to think that there is something new that is happening.

So the first thing to know is that most of the issues that we actually discuss in our conferences, they are concerned with the preoccupations that are the preoccupations of Western countries. The issues we are discussing actually find their origins in Western countries.

It seems that every ten years, we have presented to us the latest technology that is key for the development of Africa. We had the era of radio, the era of television and then the era of computers.

In the last two decades, it has been thought that computers and internet are transforming Africa, that they are having a revolutionary effect on the economic situation and so on. Now, we see that the focus is shifting to mobile phones. People are no longer talking solely about the internet and about computers, they are now talking about the mobile phone.

And why are they talking about the mobile phone? Because the reality when it comes to the introduction of computers and internet, even though the discourse would let us believe that it is fabulous and amazing, actually, the penetration of the computer and the internet in Africa is still very, very, very low. However, when it comes to the mobile phones, 60 percent of the African population has access to the mobile phone today.

In my view this mobile phone thing is clouding the whole issue of the development of Africa and the information society. And what I want to talk about is to show that, even when it comes to the mobile phone, the situation is not really what it is said to be. Having access to the mobile phone does not mean that people really use mobile phones the way, for example, they do in most Western countries. So I want to talk about what I call the mobile divide. In the same way that there was a digital divide, today there is a mobile divide.

What do people tell us when it comes to the internet, computers and mobile phones? They say that they have the ability to provoke economic and social development. That's what we call informing development, and these technical objectives are presented as having some qualities and potential that are different from all other technologies that have been introduced in Africa before.

There is no doubt that there are changes that are happening in Africa right now, and those changes are very important. For example, the average economic growth rate was around 5.5 percent between 2001 and 2010. The expected growth rate is 6.2 percent in 2013, and the six countries out of the ten that have the highest growth rate in the world are African countries. For example, countries such as Angola, 11 percent, Nigeria 8.9 percent and so on.

So six African countries will be among the world's ten fastest growing countries before 2016. And over the next five years, the growth rate of the African economy will outpace Asia. (All growth figures I'm presenting are from the International Monetary Fund, Regional Economic Outlook: sub-Saharan Africa, 2012.)

So there is a lot happening in Africa and there is no doubt that the changes are positive. For example, there are more African children in school than ever before, there are more democratic elections, and while war still exists, it is not so prevalent, is less deadly than it used to be and there are fewer countries affected than there used to be in the past.

And there is no doubt that ICTs have greatly contributed to this change. For example, more than 600 million Africans have a mobile phone today. So no other technology has been so rapidly and so widely made available to Africans in history. A 2004 study the International Telecommunication Union noted that "Africa is the fastest growing mobile phone market today in the world."

Providing ICTs is one of the sectors where the difference between developed and developing countries is the most reduced today. And in some sectors, such as, for example, mobile banking, Africa appears to be more advanced than most developed countries in the world. People are using mobile phones in very innovative ways, things that we don't find, for example, in countries such as the United States or Canada.

And there is no doubt that ICTs have greatly contributed. Many studies have shown that there is a link between the development of ICTs and the GDP growth in Africa. And there is also a link between the development of ICTs and income generating activities. Millions of Africans are today employed in the sector of ICTs in Africa.

So I'm not going to have some kind of dystopian discourse, I'm not going to tell you that ICTs are not useful, that technology is not useful. Of course, technologies are useful and the computers, the internet and cell phones also are a positive change that we have to support.

But once we have said that, does that mean that we have correctly assessed the situation? Is the introduction or the physical availability of mobile phones, for example, the whole story?

Shouldn't we go beyond that? Some of the questions we have asked ourselves are the following: Did Africa really enter the information society as has been said? What other opportunities and solutions to development problems are we missing by focusing solely or mainly on ICTs, because this is today the trend or the tendency in development projects. In United Nations development agencies, in NGOs, everywhere the focus is today on ICTs.

But what are we missing by focusing mostly or solely on ICTs? In what ways are ICTs reinforcing or weakening existing inequalities? Because some of the things that are never talked about are, for example, inequalities in Africa.

When we think about Africa, we tend to think that it is some kind of uniform world where everybody is the same. But actually there are class differences in Africa, and when it comes to access to ICTs there are also inequalities, even when it comes to access to mobile phones.

It is difficult to think that such a tiny object as a mobile phone could be the object of some kind of socioeconomic differentiation between people, but actually there are differences, when it comes to the appropriation and the use of mobile phones in Africa. There are differences between people and that's what I'm going to talk about.

What I want to say is that we should go beyond the fact of equipping people with the technology. We should see beyond that, what is actually happening in societies, between people, in their relationships, between groups, for example, between men and women, poor and rich and so on. What is actually happening when it comes to technology and the introduction of technology.

So my main arguments are the following: The first one is that the rationale behind the rhetoric of ICT4D is to equip people with technologies, not to empower them. The emphasis is on technologies, always on technologies, not people. What I mean is that the whole human dimension of the relationship between technology and people is most of the time forgotten in that discourse, and when faced with a development problem, the reflex is to seek a technological solution. For example, in countries such as Canada and the United States, of course, the more developed countries, the question of illiteracy does not exist, but actually in our countries, in countries such as Niger, think about this, more than 60 percent of people cannot read and write in Niger, more than 60 percent, and 80 percent of women cannot read and write.

So the question of illiteracy is the fundamental question when it comes to the appropriation of ICTs in Africa. But in this rhetoric, the rhetoric of ICT4D, it's like there is only one side of development, the lack of technology. People always tend to see the problems in the prism of technology and only technology, mostly ignoring the many other sides of development, for example, lack of education, a lack of basic amenities and so on.

Are ICTs or mobile phones all encompassing? I would like to give you some figures: According to the Internet World Statistics' website (2012), Africa has only 7 percent of the internet users in the world today. We are bringing together a whole conference with hundreds of people here, talking about ICTs, how they are important in Africa but actually who are the users of the internet in Africa? Seven percent of the population; that's it. That's it, 7 percent.

And some countries such as Burundi have only 1.7 percent users, Chad 1.9 percent, et cetera; it's a very, very low use of the internet.

So when people talk about the ICT revolution in Africa, what they are actually talking about is the mobile phone. So this discourse is not really about ICTs, because ICTs are not only the mobile phone, but also the internet, computers and so on. So this is not only about the introduction of the physical availability, it is about

how to use computers. Digital literacy for example is something very, very important.

Actually, when it comes to landline phones, the internet, computers and all other technologies, Africa is lagging very far behind the rest of the world.

So are ICTs all encompassing? It is worth glancing at some of the research about mobile phones. All kinds of problems are said to be being solved. It is as if there is some kind of magic effect of the mobile phone, just because they introduced the mobile phone it will improve access to education and foster democratic election campaigns. That's how things are often presented today.

So let's look at the actual effects of mobile phones. One of the authors, for example, has this to say in a study titled "Sociology of the Mobile Phone", Geser wrote: "By being adopted, irrespective of education and family background, the cell phone bridges at least some gaps between different social classes" (p. 6). Meaning that the differences between social classes can be erased through the use of cell phones.

And because the poor and the rich, all of them equally have access to mobile phones, the differences are erased? Is that true? No. If you look more closely, you see that people without a university education use mobile phones less often and differently than those with a higher level of education. This group of users also spends more of their net worth on their mobile phone than the others.

Having a mobile phone does not mean that people are using it, and having a mobile phone does not mean that people equally use it, and that they have access to all the functionalities of mobile phones.

According to a survey of the Institut National de la Statistique (2009), in Niger the expenditure in mobile telephony is higher in urban areas than in rural areas. Mobile phone expenses also account for a larger share of rural household budget meaning that it weighs

more on the rural and poor people than it does, for example, for city dwellers and people who are better off.

So something also that is said is this: yes it's true that Africans may not have access to the internet and computers, but because they have a smartphone now, it will be possible for them to have access to the internet thanks to smartphones. But who has a smartphone, and who can use a smartphone?

Think about sending an SMS. If you are illiterate, how would you write or send an SMS?

What do illiterate people do with the cell phone? They don't do what people who are educated do with the cell phone, they just call and receive calls, and sometimes they don't even call.

Don't think that because they have a cell phone that they are calling. They're not calling because they don't even have the money to call. They usually beep. Beeping is when they call people and they wait to be called back.

Think about this: According to a study by Aker and Mbiti, "the price of the cheapest mobile phone in Niger is equivalent to 12.5 kilograms of millet, enough to feed a household of five for five days" (2010, p.5). That's the price of a mobile phone.

So what would people do in that case?

I read a paper by somebody from Burkina Faso about the socalled innovative uses of mobile phone. It tells us about a person who is working in a village in a rural area. Every day he has to climb a tree to make calls, and this is presented as a positive innovative use of the cell phone. Or using the phone as a radio is presented as innovative and positive.

But the question we have to ask ourselves is the following: Who are those people who have to invent "innovative uses" of cell phones? They are, essentially, those people who are poor because they don't have the means—they don't have the means to pay for the technology.

These are the people who are having those "innovative uses" that are being currently celebrated in the literature. Yes! Africans are using mobile phones in "innovative ways", but who are those people who are using the mobile phones in "innovative ways", climbing trees, and using second-hand cell phones, et cetera?

Actually, they are making virtue out of necessity—just because they cannot do otherwise. Poverty explains the innovation. The innovative solutions are actually a mark of inequality and differentiated use of mobile phones.

So my conclusion is the following: The rhetoric of ICT4D tends to obscure the above-mentioned problems. I call for integrated development projects.

What are integrated development projects? Not just giving cell phones and computers to people, but also educating them because somebody who's educated better benefits from the use of ICTs than somebody who is uneducated.

And think about the social network of somebody who has a higher education and all of the things that somebody who has a higher education can do with cell phones and computers.

And on the other side, think about somebody who is illiterate. What can he do with a cell phone? He can just call out and receive calls: not more than that.

So we have to educate people in order for them to benefit more from the use of technologies. We have to educate people in order for them to better benefit from the use of technology, meaning augmenting their social capital.

This is what I have to say. Thank you.

Monica Chibita

My presentation will be in two parts. I will first share some general thoughts on what has been said for and against ICTs and their worth in African society and then I'll go to data from a study that we conducted recently that dealt with issues related to this. At the end I'll spend a little more time on the mobile phone and the internet.

For a long time, the research focus in Africa has been on the traditional media, particularly radio and TV, and their democratic and developmental potential.

In the last couple of decades, though, the emphasis has been shifting to the new media. When I first started reading about media and development, one of the first papers I read was from Wisdom Tettey. So in my mind, Wisdom Tettey was this old professor.

The potential of new media technologies in Africa has been hailed by many scholars and development partners. Socha and Eber-Schmid (2012), for instance, argue that new media

...holds out a possibility of on-demand access to content any time, anywhere, on any digital device, as well as interactive user feedback, creative participation, and community formation around the media content.

Another important promise of new media is the 'democratization' of the creation, publishing, distribution, and consumption of media content...

— and the death of the gate-keeper.

Most technologies described as "new media" could be described as digital, to the extent that they can be easily manipulated and networked, and are portable, capable of compressing large volumes of data, and enhancing interactivity.

The internet certainly falls under this category, as do certain types of mobile phones that meet the above criteria of the kinds that Gado was talking about.

Of particular interest in the African context have been the mobile phone and, to a limited extent, the internet. Scholars have attributed improvement of information gathering, processing, distribution, storage, and engagement with communities through the advent of these new technologies.

The technologies have been credited with empowering ordinary people and enabling them to participate in public discourse on such profound subjects as democracy and development.

There have been experiments with, particularly, mobile phones in an attempt to enhance access to and delivery of health, agricultural extension services, education, small and medium enterprise skills and so on.

The impact of the new media on culture, identity, and democracy has also been widely discussed. Particularly Underwood, Maples, Dreyfus, Banda, Mudhai, and Tettey (2009), have talked about these things.

However, there has also been a steady stream of voices – we heard one this afternoon – cautioning against overstating the magic that these technologies are able to work in African contexts.

Fourie (2007), for instance, elaborates some of the key criticisms to dampen the enthusiasm about the potential of the new technologies. Poster (2001) and Castells (2003), though they acknowledge the potential of the new media, caution about what, in a neighbouring country, might be called "irrational exuberance."

Other scholars, including Alzouma (2005), Tumusiime (2007) – and I know that Alzouma has written a few other things – Bornman (2012), Duncan (2013), all caution against getting carried away with the magic of the new technologies without due consideration of the realities within which these technologies are appropriated.

As Banda, Mudhai, and Tettey have argued:

The value of new media lies in the extent to which they mesh with old media to provide multimedia platforms that allow for greater democratic participation, inclusion, and expression.

Discussions of new media often disregard the unusual African terrain, which defies many of the technological innovations said to be reconfiguring the structures and processes of communication globally. This includes

poor telecommunication networks in most parts of Africa, resulting in low levels of Internet usage.

Nevertheless, online communities are emerging across Africa. And, although they are mostly among the elites, they show Africans taking advantage of new technology to advance their own identities and agendas.

I quoted that in total because it's fairly important.

The realities on the ground in many African countries certainly indicate that there's a gap between awareness and access, and in the case, for instance, of mobile phones, awareness and ownership.

There are also critical shortages in the skills to use the technologies even where access is assured. Thus, Fourie (2007) argues further:

Even though one may have access to the new media, it may mean nothing if a person or a group doesn't know how to use it in order to gain from it.

A computer and the internet on the table in an office, study, tele-centre or post office doesn't guarantee food on the table, and should not be presented as capable of doing so.

Burton (2002) observes that for some users the technologies are seen as bestowing status rather than serving as a development tool, so they never really do exploit them for their full democratic or developmental potential.

Wilson (2009) argues that the way technological leapfrogging is discussed gives the impression that there's a clear developmental catch-up formula enabled by adoption of the latest technologies from the developed world.

Alzouma (2005), however, argues that that is not the case:

ICTs cannot leapfrog beyond the ordinary development problems Africans are faced with. Introducing computers in rural areas, for example, does not automatically solve the problem of illiteracy, health-related problems, or poverty. The solutions to these problems reside outside of the realm of technology.

Alzouma adds that it's important to bear in mind the reality of the digital divide as well as inequalities in access. One must note, though, that the problem is not inherent in the technologies, but rather in the structures of inequality within which these technologies have been introduced.

Policy and regulation to enable or disable access could be a greater obstacle than the diffusion of new technologies into African society per se.

A significant proportion of findings from empirical studies of the use of the new media technologies in African contexts highlight lack of access, financial resources, infrastructure, and skills to optimize the use of the new media technologies and, indeed, some of this research has informed recent development interventions using the new media technologies.

And now I'll move to the situation in Uganda.

Uganda, like other African nations, has recently experienced great growth in the numbers of mobile phone subscribers, as well as in access to the internet, especially among the youth and the elite. The assumption would be that this has given rise to new synergies between the old and the new, thus expanding opportunities for participation and representation.

It is, however, as we have heard, not this simple. The percentage of people who own mobile phones or who have access to the internet is still considerably lower than similar figures relating to the traditional media, for instance.

So the Uganda Communications Commission recently commissioned a study to assess the general performance of the media, gauge the adequacy of local content, identify gaps in policy which need to be addressed in the advent of the new media and of the convergence of media technologies.

Given the context presented above, it seemed productive to study the new media alongside the traditional media rather than in isolation I conducted this study along with a colleague, Richard Kibombo, who also happens to be a statistician. Unlike a similar study conducted in 2004 by the same researchers, this study asked some specific questions to gauge whether Ugandans in the eastern and northern regions were aware of the new media technologies, had access to them, whether they understood their potential, and what they used them for. We, of course, asked questions about the traditional media as well.

Underlying these questions was the question of whether Ugandans in the eastern and northern regions – which is what we studied – felt their concerns – political, cultural, religious, et cetera – were better represented in the media with the advent of the new media technologies.

I now move to a little bit of background information before I present the data.

There is at least one FM station in most districts of Uganda, and there are at least 112 districts. TV is less widespread. The sector is dominated by the Uganda Broadcasting Corporation, Nation Television and Wavah Broadcasting Services.

Radio stations tend to broadcast in one dominant regional language, but include slots of some of the minority languages to cast a wider net.

Nationally, English and Luganda are the dominant broadcast languages, with English certainly dominant on television.

So the problem that we were trying to deal with was to gauge if available media are:

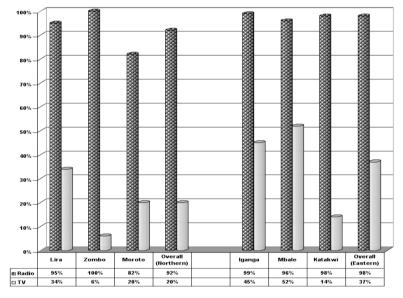
- serving the best interests of the majority of Ugandans;
- enhancing democracy and development;
- respectful of cultural sensitivities;
- · growing evenly and sustainably; and
- most importantly, if the audiences understand and can evaluate these things.

So the study seeks to update the findings of an earlier study, which was done in 2004, and bring on board concerns that have emerged in the last seven years.

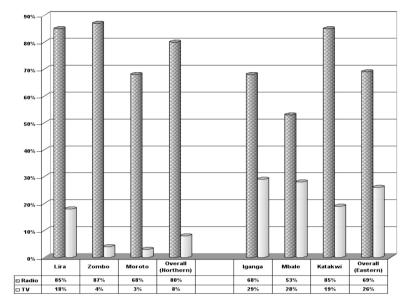
In summary, we had 720 household interviews; we had 79 key informant interviews; and we had 35 focus group discussions in six districts.

The findings, again, in summary.

How did people assess the general performance of the media? And this is the media in general, not just mobile phone or Internet.



These were the findings on radio listenership. The tall bars are for radio listenership in different districts and the short ones are for TV viewership.



The above graph represents the proportion of respondents who rated radio and TV coverage as adequate by district and region. The tall bar is radio in different districts and the short one is TV in different districts, just to reinforce the previous data.

Rural-urban disparities in satisfaction with urban respondents happier with the extent to which they're covered than rural respondents.

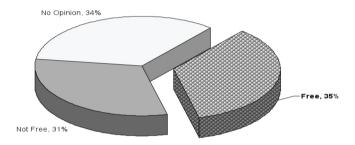
People in the towns feel much happier with what extent they're covered by radio and television for obvious reasons, because stations like to set up more in urban areas.

Satellite TV is filling the TV vacuum. Of course, very few people have access to television – and still fewer people have access to satellite television, but at least they can gather around one TV set at the bar and watch a premiership game.

What about their assessment of the role of the media in promoting diversity? Our study probed perceptions of the role of the media in promoting political, religious, ethnic, and other types of diversity. Overall, the majority rated the media's performance posi-

tively, but there was some hesitation around whether or not, as a whole, the media were free.

And this pie chart just summarizes it for us. Thirty-five percent say they're free; 31 percent said not free; and 34 percent declined comment, they said they had no opinion.



Across the board, the government-owned stations were considered to lack objectivity. The private stations were looked at more positively, although some said that they are more active during election time.

Political and commercial interests and the interests of owners were identified as key influences on the freedom of the media to air diverse political views.

People are free to go on air as long as they can afford it, or as long as the management allows them. And then people are not very keen to comment on this particular issue.

Then representing religious diversity, more than half of those interviewed gave the media a favourable rating on representing religious diversity. Muslims, who are in the minority, said they felt mar-

ginalised, but Christians contested this and said the Muslims were dominating the airwaves in some parts of the country.

Key factors emerging on religious diversity were:

- Who owns the station and what are their inclinations?
- How much power do they wield?
- Who do they employ?
- Who has money to buy the air-time?

And this was as true for religious diversity as for political diversity.

Generally, there was satisfaction with the availability of programming that addresses women's issues. But there was dissatisfaction with the framing of gender issues, both among male and female respondents.

There were complaints about "immoral" content and the media not being sensitive to the culture.

The majority of the respondents said they were happy with the language mix but it's important to note that there's a very, very strong attachment to their local language, which brings into question the issue of the internet and how much of this it can accommodate.

Then on representing identities, what came out is that the media are doing more to promote local identities than a national identity. Just the way the social set-up is, and so on, the stations concentrate a lot more on insular issues than national issues and people are aware of this.

There were concerns expressed about lies in the media and general concerns about the lack of professionalism.

There were concerns expressed about the cost of TV sets. The majority have no access to the internet at all or do not know how to use their phones to access it.

And now for the new media: Eight out of ten respondents reported using a mobile phone, though fewer said they owned one. And you know how this is – because everybody is often sharing one phone.

Significant disparities in ownership of mobile phones emerged by district with reported access increasing with "urbanness" – the more urban the district was, the more people owned mobile phones.

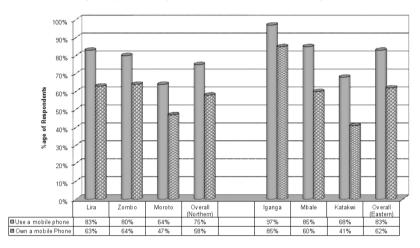


Fig 8: Proportion of Respondents Who Own or Use Mobile Phones by District

The tall towers there, the red ones, represent use of mobile phones and the shorter ones are ownership of mobile phones. So use was 83 percent and ownership was 63 percent.

So what do they use the mobile phones for?

Phones were mostly used for networking and business or mobile money transfer.

Many do not know that they can access email on the phone or do not have data-enabled phones.

Also, many do not know that they can access the news or join in discussions on radio and TV. Only 37 percent reported using a mobile phone to participate in radio or TV programmes. However, the focus group discussions, particularly with the youth, showed an appreciation for the synergies between the mobile phones and the traditional media among younger people.

This is just a quote from the study. Again, I think you can read it faster than I can.

Initially people bought phones for communication but now people express their views and feelings, especially on political issues, for example, when their leader goes on radio they are able to comment or commend, express what is happening in their communities; people can easily tell their leaders what they feel on radio over phone in that direct expression (FGD participant, Youth Lira).

So among the youth there is a general feeling that they understand convergence and how they can optimize this.

So who knows about the internet and who uses it?

Over half of all respondents across the regions — well, half of the respondents who agreed to answer the question on the internet — of course, many of them did not – said they had heard of the internet but only 12 percent said they had used it.

Of those who did use it, 35 percent said they usually access the Internet from an internet café. Other means of access were mobile phones, mobile Internet/dongle or flash, the workplace and "other".

What do they use the Internet for?

The majority of respondents said they use the internet mostly for networking and research. I wasn't too sure about this. But most of these were students.

Other uses included recreation and business – and this, again, mobile money transfer and striking deals.

Only a small proportion of the youth seemed to link their access to the internet to increased access opportunities to the traditional media, and therefore increased opportunities for representation of their views and experiences. To most respondents the connection between the internet and the traditional media was beyond the scope of discussion.

The democratising role of the media in general was appreciated, but people complained about increasing owner influence, commercial interests, and government influence—government influence directly on the government-owned station, but indirectly through ownership by conditions.

In conclusion, there are relatively few Ugandans who know about the internet and the communication and networking opportunities it offers, and even fewer who use it. These are mostly people 25 years and younger who are educated and urban. There's a limited appreciation of the potential synergies accruing from the convergence of the media.

The uses that people who have access to the new media put them to are more likely to be uses that satisfy personal or social needs or confer status, rather than those aimed at loftier goals.

Structural factors are still significant for access, and the majority will only benefit from the technologies in an indirect way.

Literacy in the new media is perhaps best assessed alongside literacy in the old media because many developing societies are still grappling with the magic, even, of TV.

The value of the new media lies in how their users optimize synergies with the traditional media to expand democratic, developmental, and other spaces.

Policy may have a contribution to make when dealing with the underlying problem and access issues.

The realities of the proliferation and use of the new media in contexts such as Uganda are far from the magical stage envisioned by "techno-optimism" or "techno-utopianism."

Policy must not neglect the need to continue opening up access to and capacity for optimizing the traditional media in the excitement of the new media, as this risks leaving out the majority of the population.

Wisdom Tettey

I would like to share with you a discussion that focuses on mobile telephony in particular, so I'm not going to be as all-encompassing as my colleagues were. But I think they do set the context for my discussion in a number of ways.

I would like to start off with a discussion about the relationship between ICTs and development and to interrogate what some of the theoretical and technological concerns have been about the use of ICTs and development, particularly with regard to politics and democratization. I'll focus on mobile telephony within the Ghanaian context, exploring issues that deal with the changing dynamics of telephony in general and zeroing in on mobile telephony in particular, and try to understand what some of the current dynamics are in terms of how they shape political engagement.

Then I'll address citizen journalism and the idea of civic intelligence and the voicing of political views by different categories of citizens and try to look at some of the mundane, seemingly routine conversations that happen via these technologies and the extent to which they shape the political landscape.

Finally, I'll conclude with some discussion about trans-nationalism and how that gets implicated in the politics of home and how mobile telephony becomes an avenue through which these kinds of interactions take place.

There is an important debate about the relationship between ICTs and politics, particularly regarding the impact of innovations on democratic governance. Many futurists and technologists and democratic theorists have said that the internet and modern technologies are enabling a realization of direct democracy.

Of course, you've got the critics who claim that they are at best automating existing democratic processes and structures. On the other end you've got techno-sceptics who argue that no fundamental changes happen as a result of the injection of these technologies because the basic structures that shape political organizations or relationships have not been significantly affected by the infusion of these technologies.

These debates have tended to centre mostly on the technologies that my two colleagues talked about, which have to do with computing and the internet. We are just beginning to see some incursion into the area of mobile telephony. This shift to mobile telephony is not surprising because we did pass the 6 billion mark in 2011 in terms of number of people using mobile phones in the world. So it's not surprising that this has become a significant part of the discourse around technologies.

These devices are becoming in some way the very essence of convergence. You can listen to your radio, you can surf the net, you can do all these kinds of things, all on these hi-tech devices. So there's significance for both theoreticians of this global dynamic between technology and development, as well as for people who engage in the commercial business, as the level of enthusiasm is going through the roof by and large. So for academics there's a significant new kid on the block that is worth exploring further. For business people in the commercial area of telephony, there's a huge increase in the market share for their technology.

So in some ways, these two converging enthusiasms have elevated the importance of talking about this technology and what it means for people in different parts of the world.

For Africa, mobile telephony is particularly important for a variety of reasons, in terms of its relative salience compared to other kinds of ICTs.

These include the fact that it is more preponderant, the fact that it traverses some of the constraints of language and distance and so on, particularly if you're talking relative to fixed lines and the fact that it is by and large relatively cheaper and increasingly becoming so.

I know that my two colleagues did talk about the financial constraints on access, but the reality is that in terms of the various kinds of technologies, mobile telephony is, in fact, relatively cheap. And in the Ghanaian context, you find that the reach is far more significant than it is in some of the other areas that we are talking about, so it would be interesting to figure out what the specific dynamics are in these different areas.

Africa is, in fact, a global leader now in terms of adoption of mobile telephony and that the language that is being used to describe this revolution is in terms of superlatives, and when you look at the rate of growth over the last half-decade it is quite mind boggling. It's probably the fastest adoption of technology anywhere, in terms of the speed with which it has been adopted right across the continent. Africa is becoming a leader in some of the functionalities that come out of mobile telephony. Two examples come to mind where Africans are in the forefront, in terms of innovation and leapfrogging.

One is mobile banking, with M-Pesa and other similar things that happen on the continent. The second area is crowd mapping and crowd sourcing, developed by Ushahidi, which started in the context of Kenya and was used extensively in the Haiti disaster. So it is not without reason that there's a significant focus on Africa and mobile telephony and some of the things that can come out of there.

But we haven't seen a lot of work on the political impact of mobile telephony, perhaps because some people are less enamoured of the rhetoric.

It's important to look at some of the critiques in terms of this impact being overly deterministic. There is also concern about the kind of theoretical naïveté that seems to surround some of these discussions, as though mobile telephony by itself can be that magic bullet, without understanding the broader system within which it functions

I think that technologically, many tend to be preoccupied with narrow, empirical questions, such as how many Web sites are there, how many people have mobile phones, what are the number of phones and so on.

But there has not been a lot of work done about the impact of mobile phones on politics and political behaviour. Much of it has centered around cultural and social aspects of technology, social networking and so on, and we did hear a little bit about the youth and how they use these technologies.

What I want to do is to try to address some of these critiques, as I try to explore the question of mobile telephony in the Ghanaian context. I specifically want to look at the extent to which the optimism about the democracy/mobile telephony nexus is borne out in reality in the Ghanaian context.

For example, we will look at the relationship between citizen utilization and political engagement and explore questions around how mobile telephony becomes a conduit for interest aggregation, for political mobilization and for civic vigilance, and the extent to which it provides a tool for some alternative forms of resistance.

And of course, we look at the extent to which centres of power incorporate technology for their own political purposes as well.

The telephone has traditionally been a marker of power. For those of you who would have been in African offices a couple of decades ago, you know that you would have had a phone sitting in a particular office and that there was a certain correlation between power and the location of phone.

This has been the case from colonial to post-colonial times, and so it's always been a symbol of power.

For a lot of people, this was also a marker of social differentiation, particularly in the context where getting a fixed line was a huge challenge. But in the last couple of decades, following the liberalization of the telecom industry, we began to see a change in that relationship. For the early adopters cell phones were still very much markers of status and I think you still see that in contexts where mobile use is not as extensive. And the urban/rural divide that we've heard about still reflects some of that paradigm.

But in the Ghanaian case, it's significant to point out that mobile telephony now accounts for about ninety-nine percent of telephone access in the country, and the latest figures I have are from February of 2013, which suggest that the penetration rate is about 102 percent, compared to about one percent for fixed lines.

In terms of subscriptions, the figures are over 26 million for a population of 25 million. And it's no longer unusual in most Ghanaian rural communities to see phones. There is the question about how many people use a single phone, how many people have more than one or two or three, but the reality is that it's quite extensive in terms of penetration.

Quality of service is a different matter that we can talk about. But in terms of penetration, this is significant.

This compares to broadband penetration (and so I am not talking about fixed lines), wireless broadband access for internet, which is about 23 percent in Ghana, which is considered to be the leader on the African continent in terms of penetration of broadband. The figure is also favourably comparable to what it is in the developed world.

So there's no question about the extent of mobile telephony's spread. But what is the impact on politics?

I look at it in terms of the extent to which it has enabled articulation of voices by citizens who otherwise wouldn't have that. And this is where I think we have to look at it in terms of the convergence of radio, television, and mobile telephony.

This was clearly brought up in the context of call-in programs which are not only very common in all places in the country but also on the continent. And what talk radio has allowed is citizens being able to inject their voices into political discussions.

I'm cognizant of the fact that the particular breed of individual who does this is different, so that has to be borne in mind. But for the politically active citizen the mobile phone has created a new venue within which to express himself or herself.

It allows ordinary citizens to have their voices in the political, public discourses, which are no longer exclusive preserves of particular individuals or elites. And it further allows for some contestation

of what is the received wisdom, which tends to be the elite discourse, and so now you are able to have people challenge that.

If a Minister says, "We've constructed the road in this community," you have members of the community who are able to call in and say 'I'm standing right in front of the location and I don't see what you're talking about.' There is an instantaneity in terms of the discourse and the response that comes with this.

The other dimension I want to touch on is that mobile telephony is not always an exemplar of what it is touted to be. The argument is that it becomes this venue for deliberative political discourse. But in some areas it changes the threshold for political conflict. There is no longer a chance to be deliberative; people are able to respond immediately to things, which can raise the political temperature in a lot of places. It allows quick mobilization of supporters of political forces.

So in Ghana, for example, there have been instances where two members of two different political parties are having a discussion at a radio station, it gets very heated, phone calls are made, supporters gravitate toward a venue, police have to be called in, and so on. So as much as it allows for that kind of deliberative, public space to happen, you also have these other dimensions that I think we need to look at.

One of the biggest areas is citizen journalism and civic vigilance. For example, during elections, various media organizations were tabulating their own results and releasing them at the same time as officials of the Electoral Commission were doing theirs, allowing for some kind of cross checking of the evidence. You see situations where people are able to instantaneously verify and challenge the results in ways that weren't the case before.

I think the vigilance part is important. A couple of examples: One had to do with a judge, a magistrate of the Ghanaian system, who was accused of bribery by some citizens. He vehemently denied it. Now in the old system, the authoritative voice of the magistrate would have held sway. But what happened was that citizens had recorded the conversation: they recorded the magistrate asking, and they recorded the receipt of the funds on their cell phone.

There are a lot of places now in Ghana where you are asked to turn off your cell phone or take your cell phone off before you enter into conversations with people in certain positions and so the private-public divide has been assailed as a result of these devices.

The technology also has video capture capabilities, it has photographical abilities that allow people, as in one case now going on, to claim that they were slapped by military personnel. The military is denying it, but there are videos of the incidents. And depending on how you interpret it, the hand just touched the cheek, it was a slap!

But citizens obviously have the potential to be able to determine who is speaking the truth.

Finally, I want to touch on trans-nationalism. There is now discussion of the fact that people leave their home but they don't leave their politics behind. And with a lot of Ghanaians, wherever they meet, the conversation will probably start with food and end up with politics.

And so people are very much involved in the politics of home and this is something that I've seen in the last two election cycles, where you've had the crafters of political strategies who are located abroad who were very much engaged in discussions about how to deal with things at home.

And the reason is because somebody on the campaign trail could still phone somebody outside Ghana and people can engage with them in ways that would not otherwise be possible.

Let me conclude by saying that mobile phones actually have a form and format in Ghana's political ecology. The depth of engagement, through mobile phones, is very much based on the level of structural limitations faced by different categories of citizens, and that is absolutely important to keep in mind.

I think that the impact varies across the different dimensions of the political landscape and so, in terms of being able to call in and talk about things, in terms of being able to report misdemeanours and malfeasance and so on, you are able to do those kinds of things.

What I think has yet to fundamentally change is the very structure of political power in the country, in that these structures have not been assailed to the point where the citizens are, in fact, able to control the centres of power.

Technology-driven changes to political relationships and the legal structures have not been as extensive or as deep, and so it's important that we don't look at the technology per se, but at how much social forces are able to rupture those relationships.

Until we're able to rupture the existing structures and relationships that define centres of power, the technology will not be able to provide that force for radical political change.