Intergenerational relations and the power of the cell phone: Perspectives on young people's phone usage in sub-Saharan Africa

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ABSTRACT

Cell phones present new forms of sociality and new possibilities of encounter for young people across the globe. Nowhere is this more evident than in sub-Saharan Africa where the scale of usage, even among the very poor, is remarkable. In this paper we reflect on the inter-generational encounters which are embedded in young people's cell phone interactions, and consider the wider societal implications, not least the potential for associated shifts in the generational balance of power. An intriguing feature of this changing generational nexus is that while many young people's phone-based interactions, from their mid-teens onwards, are shifting away from the older generation towards friendship networks in their own age cohort, at the same time they are repositioning themselves – or becoming repositioned – as family information hubs, as a consequence of their phone expertise. The paper draws on mixed-methods research with young people aged c. 9–25 years and in-depth interviews with older age-groups in 24 sites (ranging from high density poor urban to remote rural) across Ghana, Malawi and South Africa.

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1. Introduction

Cell phones present new forms of sociality and new possibilities of encounter for young people across the globe: nowhere is this more evident than in sub-Saharan Africa, where fixed telephone lines (land lines) are few and mostly restricted to privileged elders (Porter et al., 2012). The scale of cell phone usage among young people in sub-Saharan Africa today is remarkable. Primary school pupils in remote rural locations report calling their peers to consult on homework problems on a daily basis; secret assignations facilitated by pre-meeting calls are a common feature of boy–girl relationships; access to material needs – from school fees to uniform or new shoes – is regularly enabled through 'call-me' to better-resourced family members; if they have access to a smart phone, young people join Facebook and other social networking sites with alacrity. Meanwhile, parents, grandparents, teachers, and others of an older generation in their communities look on

at this enthusiastic consumption of technology, sometimes with fascination, even anticipation, but often mixed with palpable unease and apprehension, especially where girls are concerned (Porter et al., 2012).

Mobility-focused field research in 2006–9 in 24 diverse sites across sub-Saharan Africa first alerted us to possible emerging intergenerational tensions associated with young people's cell phone usage (Porter et al., 2010, 2012). Returning to these sites in 2012, we found that cell phone ownership and usage among this group had expanded massively, even in the most remote rural areas, while in urban areas the smart phone with associated internet and regular access to social network sites is now an essential accoutrement of 'cool youth', often from their early teens. In this paper we reflect further on the inter-generational encounters (particularly those that take place within the family context) which are, increasingly, embedded in cell phone interactions, and consider their wider societal implications, not least the potential for associated shifts in the generational balance of power. Where necessary, we draw attention to important age, gender and site-specific features, but (given space limitations) only insofar as these are vital to understanding the wider picture.

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This study can be located within the growing interest among social scientists in the transforming relationships between younger and older members of contemporary society across the globe, North and South (Hopkins and Paine, 2007; Vanderbeck and Worth, 2015). However, widespread concerns around generational inequalities, clashes and collisions have long been evident in African contexts. In classic anthropological studies they revolved round generational conflict over land and resources (e.g. Fortes, 1984; Meillassoux, 1981), while more recent work by anthropologists and geographers emphasises the impacts of migration, urbanisation and HIV in deepening youth frustrations with the generational bargain (Christiansen et al., 2006; Evans, 2014; Ngwane, 2003; Whyte et al., 2008; Young and Ansell, 2003). Now the diffusion of cell phones appears to be bringing a significant new factor to bear in this generational nexus and requires careful scrutiny. For the most part, recent discussions have focused on the cell phone's emerging role in influencing social relations and social navigation *among* youth, and especially in the specific context of negotiating intimate, sexualised relations in Africa, albeit these may have wider generational impact (Archambault, 2013; Stark, 2013).

Emerging findings (outside Africa) suggest significant generational differences in phone practice which have potential relevance to African contexts. An early study by Pain et al. (2005), for instance, emphasises the different ways that young people and their parents in the UK may use mobile phones in managing and negotiating safety, raising questions as to whether phones are technologies of surveillance or empowerment. In Jamaica, youth's 'natural expertise' is contrasted with many elders' comparatively limited technical facility (Horst and Miller, 2006: 59), while in the UK, it has been observed that such factors as changes in health, capability and/or social circumstances may erode the capacity of the over-50s to use cell phones (Hardill and Olphert, 2012). Hardill and Olphert (2012) distinguish three different type of older user (most of whom will, additionally, have access to a landline): pervasive (part of everyday life), episodic (may not keep the phone constantly switched on) and fossilised (virtual cessation, often linked to declining health and limited movement beyond the home). Kneidinger (2014), focusing on generational differences in internet usage in Austria and Germany, suggests that while many older people use social network sites (from phone or PC) and feel their relations with young people have consequently intensified, youth mostly do not observe any intensification. She notes a contrast between youth, who have older Facebook 'friends', but whose social network site interactions appear to be focused on same-age people, and older people's contacts (albeit much more diverse in age), which are largely comprised of passive observation (reading youth posts, etc.). Turkle (2011) is particularly critical of our growing digital dependency in the Global North, associating the intensive use of mobile technologies with a decline in genuine human connections, including across generations. It is useful to bear these findings in mind in reviewing the evidence from sub-Saharan Africa which follows.

2. Background

2.1. Methods and context

Our original child mobility study in 2006–10 [www.dur.ac.uk/child.mobility/] focused principally on the physical mobility of 9–18 year-olds, in Ghana, Malawi and South Africa, but included questions about the virtual mobility afforded by mobile phones. In each country we worked in eight locations: poor, high density urban; peri-urban; rural with services; and remote rural (with few or no services), in two agro-ecological zones. The current interdisciplinary study covers the same 24 sites, but with an extended age group, c. 9–25[1] years, in order to capture changing phone usage and its impact as our initial cohort move into their 20s. We have followed the same mixed-methods approach, this time with c. 50–80 qualitative interviews per site and c. 1500 questionnaire surveys per country[2] (1000 aged c. 9–18 years inclusive, to match our 2007/8 survey, 500 aged 19–25 years). The 2013/14 survey delves more deeply into phone usage, including questions about family and generational linkages. The qualitative component with young people incorporates thematic story-based interviews; call-register interviews to cover contact lists and recent phone-based interactions (such as calls, texts, chat on social network sites); also focus groups and essays written by school pupils. Some life histories were conducted with youth in their late 20s to mid/late 30s, while interviews with parents and focus group discussions with older men and women provided information for those over 40. This approach has allowed us to obtain in-depth ethnographic information for each site, but also to undertake extensive comparative studies across sites.

To set the scene regarding the rapidity of recent phone adoption, Table 1 compares phone ownership and usage of c. 9–18 year olds with our earlier study. These figures reflect national wealth differentials: fairly low adoption to date in Malawi, middle-level adoption in Ghana, and high adoption in South Africa. Both ownership and use, unsurprisingly, are more heavily concentrated in urban areas in all countries, in both survey periods.

2.2. Generational variations in phone ownership and usage: issues of style and substance

Our questionnaire survey was administered only to those aged 25 years and under, but field observation and qualitative research with older people indicates that phone ownership and use has expanded across all age groups. However, adoption in those over 40 years does not appear to match the scale or, in particular, the style of youth, as encapsulated in the statement of a 17-year-old senior high school boy in urban Ghana: *young people use flashy phones. . .the older generation don't mind having old phone or that with limited facilities. They only need phones to make and receive calls. Internet and camera and video facilities are not their priority. But these are the real functions we the going generation needs. In fact, imagine that I am using Nokia 3310, which most elderly still use; my friends will laugh at me till I change!*

Differences in generational usage were demonstrated widely across our research sites. Essentially, many young people of both genders can be characterised (and often see themselves) as 'experts'; they may learn initially how to use a phone from older people but quickly overtake their elders in skills and knowledge; they become info-mediaries:

My mum is not that conversant with the phone . . .I am the one that even makes her calls for her (rural Ghana, girl 16y).

I always make calls for grandmother because she can't read or write. . .and when the person answers the phone. . .I give [to] my grandmother (rural South Africa, girl 11y).

By contrast, their elders are often passive, episodic users, whose only recourse to the cell phone – especially if they are illiterate, as many are – is for voice calls (mirroring Hardill and Olphert's, 2012 UK observations). In urban and rural sites alike, both elders and young people widely reported that older people regularly ask young people to make calls for them, to save numbers, and

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[1] A few children aged under nine years who were able to respond to the questionnaire and keen to do so were included in the survey.

[2] With quota sampling to achieve a balance across gender and age groups.

Table 1
Phone ownership and usage (all types), c. 9–18y; country comparison 2007/8 and 2013/14.

	Own phone 2007/8 (%) N = 2967	Own phone 2013/14 (%) N = 3084	Usage of cell phone in week prior to survey 2007/8 (%)	Usage of cell phone in week prior to survey 2013/14 (%)
Malawi	0.6	8.4	9.3	34.7
Ghana	2.4	16.2	16.7	41.6
South Africa	21.0	50.8	55.8	77.2

sometimes to read texts (in addition to their requests for young people to undertake tasks such as taking the phone to be charged, for those living in homes without electricity, or buying airtime units):

We just know the basics of a phone . . . if they [youth] use the phone in some ways I cannot tell. . .I only ask for their help in putting units (Malawi, woman 52y).

My mother has one but she scarcely uses it. Hers is always off. . . .. She does not know how to use it very well (Ghana, man 21y).

My father [who gave me the phone] does not text. He calls if he wants to speak to you, I think because of his age. Old people do not usually text (South Africa, boy 16y).

When survey respondents were asked which cell phone-based communication mode they used most frequently, 90.6% in Ghana, 75.7% in Malawi and 47.7% in South Africa said it was voice-calling. In South Africa, 23% gave mobile messaging using MXit, WhatsApp, etc. as their most frequently used mode (but only 1.2% in Ghana and 0.4% in Malawi). Texting/SMS is less popular throughout: only 0.9% in Ghana, 7.9% in Malawi and 4.1% in South Africa reported texting as their most frequent mode. Given many elders' inability to read text messages and high levels of cross-generational phone communication (Table 3), preference for voice calls over other modes is unsurprising. Additionally, many young people stated in qualitative interviews that their preference is for voice calling with *all age groups*, since this assures an immediate response. Consequently, most interactions discussed in this paper could be conducted with basic (2G) phones.

3. Incorporating the cell phone as a generational bridging tool

The majority of discussion which follows concerns *intra-familial* relations, because this was the main focus of discourse about intergenerational relations in qualitative interviews. Despite common youth frustrations with the ineptness of phone usage among older generations in their family, both survey and qualitative data indicate the intensity of cross-generational phone interactions in all three countries (though, unsurprisingly, this does not extend to interactions on social network sites, where the emphasis is overwhelmingly on non-family connections and age of contact is often unknown).

Tables 2 and 3, presenting data from the survey of 9–25 year olds, give some indication of the scale of young people's intergenerational and family linkages. They show patterns of cell phone communication (sent and received) in the week prior to survey, firstly regarding contacts with relations, secondly the age-focus of communication. Both indicate the significance of family and generational linkages. However, the breakdown into two age groups also helps to pick out an important distinction between communication patterns of younger children and those in their mid-teens and beyond. For the younger age-group, contact with family networks and to different age-groups dominates massively. For the age-group 16–25y, it is considerably lower, as might be expected, since peer networks will tend to expand with age, education and length of time the respondent's and other age-cohorts have had access to a cell phone. Even so, the figures for the older age-group (16–25y) remain sufficiently substantial to merit examination within our intergenerational purview. One student teacher in Ghana made a particularly careful distinction: 80% of his contacts are friends of the same age, but his '*treasured*' numbers are those of his relatives.

Table 3
Contact with different age-cohorts: Percentage of respondents for whom communication with those of different age-cohorts represents a majority (over half) of all cell phone communication (made and received) in seven days prior to survey. (Data only covers respondents who had used a cell phone for communication purposes in the previous four weeks.)

	Respondents c. 9–15y (%) N = 773			Respondents 16–25y (%) N = 1739		
	Total	Male	Female	Total	Male	Female
Ghana	79.5	77.8	82.4	39.3	33.0	47.5
Malawi	77.2	77.1	77.2	46.3	44.7	48.1
South Africa	63.5	60.8	65.9	34.7	30.3	39.0

9–15y Contact with age-group × gender: not significant for any country.
16–25y Contact with age-group × gender: $P(x2) < 0.0005$ for Ghana; not significant for Malawi or South Africa.

Table 2
Contact with relatives: Percentage of respondents for whom communication with relatives represents a majority (over half) of all cell phone communication (made and received) in seven days prior to survey. (Data only covers respondents who had used a cell phone for communication purposes in the previous four weeks.)

	Respondents c. 9–15y (%) N = 776			Respondents 16–25y (%) N = 1738		
	Total	Male	Female	Total	Male	Female
Ghana	77.9	76.4	80.3	31.2	24.3	40.2
Malawi	66.4	61.9	71.2	29.8	26.2	34.2
South Africa	50.9	49.8	51.8	20.5	17.3	23.6

9–15y Contact with relatives × gender: not significant for any country.
16–25y Contact with relatives × gender: $P(x2) < 0.0005$ for Ghana, $P(x2) < 0.05$ for South Africa. Not significant for Malawi.

Table 4
Contact with relatives by settlement type: Percentage of respondents for whom communication with relatives represents a majority (over half) of all cell phone communication (made and received) in seven days prior to survey. (Data only covers respondents who had used a cell phone for communication purposes in the previous four weeks.)

	Respondents c. 9–15y (%) N = 776				Respondents 16–25y (%) N = 1738			
	Remote rural (%)	Rural with services (%)	Peri-urban (%)	Urban (%)	Remote rural (%)	Rural with services (%)	Peri-urban (%)	Urban (%)
Ghana	91.9	82.1	77.4	67.3	49.0	42.2	26.9	18.5
Malawi	57.1	72.0	63.0	69.2	61.7	50.0	28.7	15.5
South Africa	45.1	47.1	57.2	54.0	25.2	21.5	18.5	18.3

9–15y contact with relations × settlement type: not significant for any country.
16–25y Contact with relations × settlement type: P ($x2$) < 0.0005 for Ghana and Malawi. Not significant for South Africa.

Table 5
Contact with different age-cohorts by settlement type: Percentage of respondents for whom communication with those of different age-cohorts represents a majority (over half) of all cell phone communication (made and received) in seven days prior to survey. (Data only covers respondents who had used a cell phone for communication purposes in the previous four weeks.)

	Respondents c. 9–15y (%) N = 773				Respondents 16–25y (%) N = 1739			
	Remote rural (%)	Rural with services (%)	Peri-urban (%)	Urban (%)	Remote rural (%)	Rural with services (%)	Peri-urban (%)	Urban (%)
Ghana	86.5	84.6	80.0	73.0	47.0	46.1	38.3	31.6
Malawi	86.7	95.9	69.5	72.6	55.4	56.1	48.5	38.9
South Africa	69.6	69.3	60.2	55.8	30.0	28.1	29.9	43.9

9–15y Contact with age-group × settlement type: not significant for any country.
16–25y Contact with age-group × settlement type: P ($x2$) ⩽ 0.005 for all countries.

The gender pattern of contact shown in Tables 2 and 3 is also of interest. While female contact within family networks and to different age-groups is higher than for males, in both age-groups and in all three countries, the gender difference is not statistically significant, for any country, so far as the 9–15 age-group is concerned. However, it is strongly significant in the case of Ghana for the 16+ age-group (and, if the data set is taken as a whole, the difference between men and women, in terms of both age- and family contacts, is statistically significant). The general tendency for more women to connect by cell phone with family than their male counterparts mirrors conditions reported elsewhere (e.g. Wei and Lo, 2006 for Taiwan; Horst and Miller, 2006:91 for Jamaica).

Regarding country variation, the data in Tables 2 and 3 suggest that relatives and people of a different age cohort are a stronger focus of interaction for young people in Ghana and Malawi than South Africa. This probably principally reflects the longer, more established use of cell phones and higher levels of ownership among young people in South Africa, but possibly also the particular generational cleavage that has been apparent since apartheid days in that country (Comaroff and Comaroff, 2005).

A breakdown of country data by settlement-type indicates that, for Ghana and Malawi's 16+ age-group (but not under-16s), communication intensity with relatives among urban-based respondents is significantly lower than among rural residents (Table 4). They have presumably developed a wider circle of extra-family contacts than those in rural areas, mirroring the situation across (urban and rural) South Africa. (With future expansion of rural phone ownership in Ghana and Malawi, similar trends towards expanded extra-family connectivity may possibly emerge there too.)

Breakdown of the age-focus data by settlement-type (Table 5) shows a significant variation between urban and rural sites in all three countries in the 16–25y group (but no variation for under-16s). The reduction in contact with different age-groups between rural and urban sites in Ghana and Malawi is what one might anticipate (mirroring the decline in contact with relatives), as urban youth develop a wider circle of extra-family contacts. The relatively high percentage for urban (compared to rural) South Africa is more difficult to explain, but may relate to relatively high levels of requests there to family members for money (Section 4.1).

In the qualitative interviews, both with young people of all ages and older generations, the importance of intra-familial, inter-generational phone linkages was clearly apparent across urban and rural sites. Parents frequently purchase phones for their older school-age children, in all three countries, precisely in order to keep in close touch with them and ensure they are safe and well and their needs such as school fees can be responded to. This happens especially if children are living away from home, as when secondary school attendance requires formal or informal boarding. But with children living at home too, there is often a need to communicate about daily affairs: *I own a Nokia cell phone…my mother bought me the cell phone last year…The reason why she bought me the phone was so she could communicate with me while at work, so that she can tell me what chores to perform* (peri-urban South Africa, girl 13y). In the survey, 20% of respondents in Ghana, 18% in Malawi and a massive 47% in South Africa had received their current phone as a gift from one of their parents (with no clear gender or in-country site variation in gifting patterns).

An additional 24% of respondents in Ghana, 14% in Malawi and 26% in South Africa, had obtained their phone from a relative other than a parent (again with little gender or site variation). This wider gifting often links to the prevalence of *stretched families* in all our research sites and the long distances which may separate family members. In order to keep in touch with the family at home, wealthier uncles and aunts, older brothers and sisters, especially those resident in urban centres (in some cases in another country), may not only give a handset, but also regularly gift airtime. Significantly, since older people are widely perceived to be relatively incompetent regarding phone usage, it tends to be young people in the family who are specifically targeted as recipients of such gifts. This intra-familial, inter-generational interaction in stretched households can clearly bring both practical and emotional benefits to all concerned. At the same time, however, it is important to bear in mind that a gift, made in expectation of extended obligations to serve the family, will also enable much wider connections within, as well as across, generations.

4. Requesting and receiving: resources, advice, emotional support

4.1. Material resources

While young people's phone interactions with family members are often ostensibly directed at just keeping in touch with relations and 'linking up' (Horst and Miller, 2006), rather than the pursuit of specific sources of resource, resource implications are at the nub of many of these communications. Our survey gives a clear indication of the widespread recourse of young people to phone contact with family members to request resources. In the previous 12 months, 41% of Ghanaians, 45% of Malawians and 51% of South Africans in the survey had contacted someone by cell phone to ask them to give or lend some money for their personal use: in all cases, the principal focus of requests was a relative other than their mother or father, followed by parents – only a very small proportion of phone requests (well under 20% in all countries) went to people outside their family. Similarly, phone requests for material goods (e.g. clothing, shoes, books, rather than money), were made by 36% of Ghanaians, 39% of Malawians and a particularly substantial 65% of South Africans surveyed: again, in all three countries, the principal focus of requests was a relative other than parents, followed by parents, with just over 5% of phone requests, at most, to people outside the family.[3] There was also significant in-country variation between sites regarding requests for money in Malawi and South Africa, with a substantially higher intensity of requests in urban areas (presumably reflecting the high cost of living in urban sites), but no significant difference between sites with regard to requests for material goods.

The qualitative data indicate that uncles and aunts (also older brothers) are a particularly common focus of funding requests:

we were asked by the teacher to buy science text book. My mother did not have money so I called my uncle. After 2 days he brought me money to buy the book. He actually brought the money. He is in Kumasi. I realized that the phone is valuable (urban Ghana, girl 16y).

I spoke [by phone] to my aunt in Mangochi. I was asking her for school uniform money and she later brought me the money in time (peri-urban Malawi, girl 18y).

I last called [aunt in East London] 2 days ago... I asked for money. She said I must wait until the month end. She uses e-wallet to send me money (urban South Africa, girl 18y).

Many of these requests are seemingly regular, almost routine, but occasionally the request is on a different scale of precarity: *I was with my grandmother and we had to borrow a phone. My grandmother was asking my uncle to bring some food since we were all starving.... I missed to talk to my uncle. I want to tell him that I need school uniform and shoes* (rural Malawi, girl 13y). In these circumstances the phone was clearly a lifeline to material survival.

4.2. Emotional support

Material support is by no means the only currency of phone interaction. The vast majority of young people surveyed (males and females), when questioned about the impacts of using a cell phone, said that it had made them happier (with just 14% of Ghanaians, 23% of Malawians and 9% of South Africans denying any improvement, and no significant variation evident by gender or settlement type). Qualitative data suggests that very often this was, in part, associated with close interactions between parents and children by phone:

When he [son, a secondary school pupil staying alone in town] is in a difficulty he tells me when I call him. [He called recently but the network was poor]...until I was able to call him [back], I was not happy at all (rural Ghana, woman 39y).

I call my mom [in the village] once in a month...I [will make] a call in two weeks' time because I have missed my mom so deeply (urban Malawi, boy 17y).

My mother is not at home [having returned to the village to plant maize]...she frequently calls me [unlike father]... She asks me about the day at school ... She does not help me financially, but rather spiritually and even emotionally (urban Malawi, girl 18y).

Many parents had purchased phones for their children living at a distance, precisely *because* they wish to keep in close contact, even if the child is in their 20s, married with their own children. This was the case with a 25-year old Ghanaian who recalled how he had intended to cut out cell phone usage because of his indebtedness, *but my mother dashed [i.e. gave] me this phone ...[she] wanted to always be in touch with me.* Breakage or loss of a cell phone was often reported as a cause of great distress, not only because of the cost of replacement (if that were feasible), but because of the loss of emotional support or interaction: *Now that [my] cell phone is lost, I don't get chance to communicate with my parents and even grandparents. I miss them but there is nothing that I can do* (urban Malawi, boy 12y).

4.3. Practical advice

In some cases, emotional support is linked specifically to the provision of practical advice, usually from parents/grandparents. This may range from financial management, educational or health issues to the conduct of romantic and sexual relationships:

My mother sometimes calls me on the phone to advise me especially about issues concerning romantic relations and sex... Also when I get sick I sometimes call her on the phone to tell her what is going on with me. ...just telling her about it on the phone makes me feel better (rural Ghana, boy15y living with grandmother).

My mum called me to find out if I have passed [my exams]...she told me to pull up socks next term...I felt good for her words of encouragement to me and I knew that she loves me as her daughter... (urban Malawi, girl 14y living with married sister–mother and siblings all in distant village).

Even now, when something happens to my children and I don't know what to do, I call my mother and she tells me (peri-urban Ghana, woman 25y).

4.4. Family network cohesion

Many young people spoke about the way these phone interactions, whether involving resource transfers, advice or emotional support, have improved the closeness of family bonds, even where individuals are physically widely dispersed:

I want to hear from my mother (in distant region) very often... so the phone has helped to improve the bond we share together (urban Ghana, woman 24y).

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[3] Thirty-seven percent of Ghanaians, 37% of Malawians and 61% of South Africans who were currently enrolled full-time in school had called someone in the previous year to ask for money specifically towards their school or college expenses. The vast majority of those requests were made to a relation: in Ghana and Malawi this was most commonly to a relative other than the parents [with requests to fathers in second place], while in South Africa, requests were dominantly addressed to the mother.

I also like to call my uncle since he is my favourite uncle. I call to know how he is doing in life and to chat with him stories of our home village...Cell phones have helped me to build better family relations (urban Malawi, woman 25y).

I talked to my grandmother on the phone. It was so exciting... she stays too far from me... I was delighted and felt like she was here with me. The phone united us (urban Malawi, girl 14y).

A number of young people (particularly South African girls) raised the case of fathers estranged from the family home, with whom they had regained contact through phone communication. One 21-year-old urban South African woman, for instance, recalled how her parents had split up before her birth. Her father had recently managed to regain contact through the cell phone, but she has to keep her father's number hidden from her mother. Her father is instructed to call only after she sends a call-me text message.

It appears, thus, that notions of distance and proximity of family members are being redrawn, with potential implications for physical mobility. Many young people report fewer long-distance journeys are made, because these are expensive and can be substituted – at least in part – by phone interaction; however, there is more contact between distantly-located family members, because the phone enables regular communication (Goodman, 2005; Porter et al., 2012; Porter, 2015). In all three countries (but especially Ghana and Malawi), despite continued poor rural connectivity and limited cell phone ownership among young people outside cities, the recognition of the potential that cell phones offer in linking to distant relatives (and their resources) has grown rapidly. Evidence of such improved 'intimacy over distance' (Kneidinger, 2014, citing Rosenmayer and Kockeis, 1965) not only relates to parent and child, or grandparent and grandchild interactions, but also across more extended family networks, for instance between uncle and niece, great aunt and nephew.

All of this is facilitating long-distance exchange of material resources, information, emotional support and practical parenting/grandparenting advice. It suggests an increasingly sophisticated reconfiguration and re-imagining of family networks, in which new types of cohesion exist alongside old continuities – with potentially positive and negative implications, depending on specific circumstances. Of particular interest is the role that young people are increasingly coming to play in the organisation of information distribution, discussed next.

5. Young people as family information hubs: new patterns of coordination

One of the most intriguing features of the changing generational nexus facilitated by improved communications is the way many young people – young women as well as men – are repositioning themselves (or becoming repositioned) as family information hubs. This appears to relate, in considerable part, to young people's greater facility with, and attention to, the phone – the fact that their phone is likely to be switched on, that they will check regularly for messages, and subsequently, that they will respond actively. Thus, a sixteen year old schoolgirl who lives with her parents in remote rural Malawi has been given a cell phone by her sister living some distance away: *[my sister] wanted to hear about every problem that we face here ... I think my sister gave me the cell phone because she wanted easy communication with mother here and I am the only person who is well conversant with cell phone use in my family. ... My parents do not know how to make call on a cell phone. I often dial for them and they just do the talking.* There are many similar stories: a 24-year old woman student teacher in Ghana, for instance observed: *I am the contact person to all our relations.*

Although it is mostly people from their mid-teens onwards who take on the family information hub role, younger ones occasionally also find themselves in this position. This was the case with an 11-year old girl in rural South Africa who, her parents having died, lives with a hearing-impaired grandmother. Her married sister, who has left the family home for a town some miles distant, has purchased her a cell phone: *sometimes our relative phones me if there are family gatherings, weddings and funerals. ... my granny buys airtime in my phone and tells me to phone back and tell whoever might have phoned their response.*

Some, such as the Ewe migrant farmer living in a Ghanaian peri-urban settlement close to his elderly father's village, clearly enjoy their new position: *I am the one whom everybody calls to find out how he is doing. And if there is any information, I deliver it to my father and vice versa. ....Because of that I try to contact my siblings on a regular basis. If I don't hear from any one of them for a day, I would have to call the person to know how she/he is doing. ... having a phone has given me a new role among my siblings. My father expects me to have information from every one of them.*

This hub role not only brings significant responsibilities, but it can also potentially endow significant power. Very occasionally, a suggestion of disquiet emerges from elders who feel they may be being side-lined by youth. This seems to be the case, for instance, in the case of an elderly village head in remote rural Malawi who has never used a phone and is clearly starting to feel somewhat disempowered: *It is my grandson who conveys the messages about family news. ... I would like to talk to my son (in another district) on the phone but it has never happened. ... People don't let others use their phones.... If the matter is important, we can consult the youth to relay the message. ... life has become more individualistic.*

We thus arrive at the potential for intergenerational tensions which can arise in association with cell phone usage, the focus of the next section.

6. The cell phone in intergenerational family conflict

While the emphasis so far in this paper has mostly been towards the positive aspects of cell phone usage in inter-generational and intra-family relations, there is also considerable evidence of diverse phone-associated tensions, ranging from arguments around basic allocation of resources, to more complex issues concerning trust, surveillance and respect. This evidence substantially extends early indications of inter-generational tensions associated with phone usage identified in our 2006–09 research, around borrowing restrictions imposed by older family members, the use of phones to avoid surveillance and organise clandestine meetings, and suspicions regarding girls' acquisition of handsets and airtime as payment for sex (Porter et al., 2010, 2012).

6.1. Permissions, batteries, airtime

Although there is now much wider ownership of phones among young people, borrowing (and sometimes sharing) phones remains extremely widespread (James and Versteeg, 2007). Even when young people own their own phone, there will be times when it is not available for use, perhaps because it has broken, the battery is dead, or there is no airtime left on it. Borrowing a handset from a parent, grandparent, or other family member, is particularly common in such circumstances: 26% of young people in Ghana, 19% in Malawi and 30% in South Africa reported using their mother's phone in the previous year (though with significantly higher proportions in urban than rural areas of Ghana and Malawi), while 16% in Ghana, 18% in Malawi and 9% in South Africa had used their father's phone (with significantly higher proportions in urban than

rural Malawi). In poor rural areas with few phones (i.e. especially Malawi), parents may well be especially reluctant to share.

Associated inter-generational, intra-family arguments are widespread and focus around four key areas: permissions, battery use, airtime use and time wastage (associated with educational impacts). Younger girls, in particular, face problems around getting permissions to use an elder's phone, and may occasionally revolt:

When permission is not granted to use the phone I get angry and do not do the household chores on that particular day (rural Malawi, girl 12y).

I argue with my grandmother. She bought the phone so she says I can't take it…[but] she doesn't know [how to use] the phone. I store numbers for her (rural Ghana, girl 16y).

Battery usage of borrowed phones (often for listening to music), appears to be one of the biggest cause of use-related arguments. Parental frustrations are especially great in locations without electricity, as in much of rural Ghana and Malawi, where they may retrieve their phone from a young family member and find it dead when they need to make an urgent call, and the nearest charging point (at a cost) is some miles distant:

I used to hide [my phone from my son]…Because I make a lot of calls I don't want even a bar of my phone battery to be off (rural Ghana, man 62y farmer/lotto business).

My grandmum would not allow me to play games with her phone because she complains I will kill the battery or spoil the phone…because she is old and doesn't know so much about phones (peri-urban Ghana, girl 13y).

Airtime is sometimes another cause of strained relations between young people and their parents, whether this is simply a matter of its depletion or (as was admitted by a number of young respondents) involves stealing money from family members, in some cases by a variety of devious means:

[my father] only uses the phone to receive calls. . . . always there are spare credit vouchers at home. So at times I steal the voucher to load the credit… he never realises it…. He is old…. at times too I take some from the phone. If he loads say 5 cedis I share with him by sending it to my phone. Anytime I realised his credit was getting finished I pretended to do a favour by calling for him with my phone. . . .. There are also instances where I will put my sim in his phone, so if he loads the credits it goes into my sim directly. I will allow him for a while and make calls for him, then I will remove it and replace his which will not have any credit (rural Ghana, man 21y, farmer living with parents).

Yes, I do steal [mother's] money but there is nothing that I can be doing to get money for airtime…She does not know that I get commission out of the money she sent me to buy relish (peri-urban Malawi, girl 17y).

Despite a perception in many cases that parents are too old and ignorant to understand the scams that are being perpetrated, this is not necessarily the case. One 17-year old girl in rural Malawi recounted how her grandfather had removed the phone she had acquired, not only because he said it would lead to prostitution, but his anger had been *aggravated when he realised that the money I asked for to buy small things like soap was used to buy phone units*. A group of older women concurred that, *If you send your child to buy something from the grocery shop he/she doesn't give back change.* However, many parents and grandparents seemingly prefer to avoid confrontation and accept their losses, so long as these are not too large or frequent.

6.2. Surveillance

The latent potential for sexualised relationships among young people (with particular reference to pubescent young girls still at school) is an ever-present concern for many parents and elders. They are concerned that their daughters become too vulnerable to the requests of boys and men for intimate relationships, at too young an age. There are numerous sorry stories recounted across the research sites of young girls who fall pregnant, and where blame is apportioned principally to the cell phone. Secret, sexualised relations were certainly feasible before the cell phone, but subterfuge was then more time-consuming and risky (Stark, 2013). The cell phone offers enormous potential for the 'connected' management of relations beneath the radar of adult surveillance (Licoppe, 2004).

In this context the cell phone is now widely recognised by elders, not merely as an object of conspicuous youth display, but also a potent tool for disguise, concealment and evasion. The potential for the cell phone to facilitate obfuscation of sexual relationships was already starting to emerge when we conducted our mobility studies in 2006–9, especially in urban areas (Porter et al., 2010). More recently, in a Mozambican town, Archambault (2013: 94) finds most parents she spoke with 'felt they had little control over their children… Girls go around having sex with any men who will give them money'. Archambault links this rupture to the post-war context in which she is working, but we have picked up echoes of this view across our research sites, even though specific stories are sparse:

Girls nowadays are material lovers. They want men who have money. . . . I have personally seen an old man going out with very young girls because he attracts them with cell phone gifts (rural Malawi, man 59y).

Men are buying phones for young girls in order to solicit sex from them (peri-urban Ghana, woman 30y).

Most girls own expensive phones and always have airtime which comes from sugar daddies….. They buy them expensive phones, clothes and jewellery. But now there are sugar mammas [too] (urban South Africa, girl 19y).

While parents often buy their children phones in order to try to pre-empt such predation (as some girls pointed out), they are simultaneously deeply worried about their children's cell phone usage.

Surveillance of young people related to their phone usage commonly takes two forms: firstly, checking on their whereabouts by phone; secondly, eavesdropping on phone conversations, or simply checking the phone to see who has been in contact or is on the address list. Both are potential sources of tension and, in some cases, outright argument. Checking where young people are, by phoning them, can be perceived as a perfectly innocuous, acceptable act: *[Mother] wanted me to call her when I was coming back from school [so bought me a phone]* (urban South Africa, woman 21y); *It's good for parents to monitor us since they fear for us* (rural Malawi, boy 15y). In other cases, parental checks on the veracity of stories are noted and resented: *One Friday after knocking off [from school], I went straight to my aunt's home. I called my mum in the evening to tell her about my whereabouts using my friend's phone but after that call my mum called my aunt to check if I really was there and the time I arrived* (Malawi, girl 10y).

One 18-year-old South African schoolgirl, who went to Mthatha when she was supposed to be visiting her aunt in East London, was caught out when information was relayed to her parents via a neighbour who had seen her going into an expensive restaurant there with boys. Her father immediately phoned her aunt to check

her whereabouts (she didn't realise her aunt had a phone): *my dad was furious and he took his stick behind the wardrobe and beat me.* Parents may even try to keep close control on their children, through the phone, into their 20s: *(if my daughter 23y) goes somewhere and she's not back I call her and find out why. Just yesterday she went to (town) and I asked why she has kept so long. Yes, she gets to know I'm the mother!* (urban Ghana, woman c. 50y).

Such efforts, however, are likely to encourage dissimulation as young people reach their late teens and beyond: *My parents are the ones that usually call me on my cell phone to check my whereabouts and that annoys me (so that) …sometimes I lie about my whereabouts and sometimes I ignore their calls* (peri-urban Malawi, boy 18y).

Apart from investigating the location of their offspring, parents may also vigilantly check their children's phones, browsing call registers and messages on a regular basis as part of their monitoring strategy. Some do this openly, others surreptitiously: *I've given my (15y) daughter a phone. I use that to monitor her. …every morning I check the numbers of calls she's made. …I do it when she goes to take her bath* (peri-urban Ghana, male teacher 48y, living alone with daughter). Some mothers bemoan their inability to make such checks, because of their illiteracy (as in a focus group discussion in Ghana).

Unsurprisingly, many young people of both genders, across all three countries, find this constant surveillance, whether open or surreptitious, extremely offensive:

my mother bought me the cell phone last year, it is a smart phone with nice features … [she] monitors my cell phone all the time to check if I am not up to any mischief with boys. She treats me like a kid (peri-urban South Africa, girl 13y).

My parents do check upon my phone frequently and that annoys me very much because I am 18years old, I am not a kid (peri-urban Malawi, boy 18y).

I usually delete all my texts when returning the phone [to mother] because I feel it is an invasion of privacy (rural Malawi, girl 15y).

Major confrontations can ensue, as in the following case of a 19-year-old girl (in a South African urban site). When she asked her mother to let her have a cell phone, she was told she was too young, and that the mother herself had not had a phone when young: *I told her that she must stop comparing our time with their time. Our generation is completely different to theirs. I told her that our generation revolves around technology. … I told her that I wanted to call my classmates… when I did not catch what was said in class.* Her mother eventually gave in, but emphasised that *she would check any time she wanted.* Unfortunately, things came to a head when the girl's boyfriend sent a message: '*my baby, please tell me what to wear at the party… I want to look hot'.* So my mom saw that, *because the phone was charging and I was in the bathroom. … when I came out of the bathroom she was saying she was taking her phone, because it made me a bitch… she switched the phone off and removed my sim card.* The story ultimately ended in break-up with the boyfriend, but ill-feeling clearly persists between mother and daughter. Similar tales are common across all three countries and encourage the widespread practice among young people of saving friends' names with pseudonyms.

It is not only girls whose phones are checked (though they probably form the majority): *my mom usually takes my phone and goes through my messages and conversations on WhatsApp. But there is nothing she can find that is disgusting to her… [my friends] laugh at me and [say] that she is like my security guard. It is embarrassing* (urban South Africa, boy 20y; his mother teaches at his school). Another South African secondary school boy from a peri-urban location, aged 18, is careful not store his girlfriend's number on

his phone, *because I don't want my mother to find out that I am dating. Like she pages my phone anytime she feels like so whenever I receive a message I have to make sure I read it, then I get rid of it immediately.*

All of this monitoring inevitably puts stress on parents and carers too: as one mother in urban Malawi bemoaned, *The phone keeps me busy because every time I have to check up in her phone as to who calls her and texts her.* In some cases, young people have argued directly with parents about these perceived invasions of privacy, presenting this as a rights issue, as in the following: *I am told by my children that they have rights to privacy, so checking or going through their stuff without them permitting it is a serious crime* (urban Malawi, man 42y). A number of elders expressed concerns about what they see as youth's strategic misuse of human rights. Debates along these lines are increasingly evident in other contexts, including across Africa (e.g. Boersch-Supan, 2012).

7. Phones and respect

Complaints of declining respect from youth are a common refrain of elders in diverse African contexts (e.g. Archambault, 2013: 94) and were sometimes raised both by young people and elders with specific reference to cell phone-related behaviour. From elders, comments relate both to content and style of phone interaction:

With using the phones, watching pornography, it has seized respect. You can try to have a conversation with them (young people) and still in the conversation they can pick up a call (rural Malawi, woman 64y).

the way they talk, how they use the language.… these days a young person can just cut a phone in the course of a conversation [with you]. They still wouldn't do it face-to–face but will do it on the phone (peri-urban Ghana, focus group with older men, all agree).

some pupils put on earphones and dance when you are teaching (rural South Africa, woman teacher 46y).

A number of young people made similar references to declining respect for elders (occasionally accompanied by a certain righteousness about their own conduct):

There is no respect for elders. Many of them who have phones are always with 'earphones' or playing music wherever they go. If they meet an elder person, they do not offer to greet them (rural Malawi, woman 20y).

Today's youth they no longer want information from parents. Instead they believe everything they get from cell phones (peri-urban South Africa, woman 21y).

All my friends who use phones have now stopped schooling because they don't respect their mothers anymore.… and could even shout on the mother. Two of them are now pregnant (urban Ghana, girl 15y).

A few young urbanites also referred specifically to the edge that using a smart phone gives them over their elders: *When you have an expensive phone and your parents have a ZTE [the cheapest] phone, you look down on them in disrespect because you regard yourself as wealthier* (peri-urban Malawi, boy 17y).

It is important not to overstate the respect issue, however. In urban and rural locations alike, many young people are clearly concerned to maintain good relations across the generations. A 19-year-old man in urban Ghana working in the microfinance sector, for instance, stressed that he is careful not to beep older people, although he beeps colleagues: *they deserve some respect. It is*

out of place to flash or beep elderly people. On their part, many older people, when questioned, especially in Ghana and Malawi, observed the assistance young people provide with respect to cell phones, for instance making calls on their behalf and acting as phone hubs. Indeed, as a woman (50y) trenchantly opined in rural Malawi, if there is no respect, *then it is basically because of his character, not because of the phones*. Similar sentiments were echoed elsewhere.

8. Conclusion: power, phones and intergenerational relations

Cole (2004), writing about the importance of considering Malagasy young people within the intergenerational matrix of which they are part (and drawing on Mannheim, 1972), emphasises that "youths' structural liminality – the fact that they are less embedded than adults in older networks of patronage and exchange – makes them uniquely poised to take advantage of new social and economic conditions" (pp. 575–6). In the context of rapid cell phone expansion and the evidence presented above, this observation can be specifically extended to incorporate new *technological* conditions. In Africa (as globally), young people are evidently far more willing than their elders to invest time and energy in building skills around cell phone technology: the vision of modernity with which it is bound and the associated potential it offers for accessing hitherto remote worlds is, for many, compelling. By the time they reach their mid-teens, many – perhaps most – have moved into positions of technological pre-eminence over their less technologically-savvy elders, whether they own a phone or merely borrow one. There are thus many resonances with findings from outside Africa, noted earlier.

The implications for intergenerational relations and distribution of power are complex, and the evidence presented in this paper suggests that, in Africa (as elsewhere), much is contingent on individual and family circumstances and personality. However, circumstances and personalities are inextricably intertwined with wider factors too, not least the precarity of incomes and consequently of life in these poor settlements, for people of all ages. The evidence presented suggests a widespread commonality of themes such as surveillance, across rural and urban sites, in all three countries (albeit their precise form may be affected by variations in access to phone technology). The phone is intensively used for reassurance about the safety and well-being of loved ones (both within and between rural and urban sites, reflecting a common feature of phone use in Africa; see James, 2015), but it has also become an active actor in the transformation of social relationships. The phone interposes new practices, new expectations – and potential wild cards – everywhere: a starting point perhaps for secret intimate connections, infidelity, pregnancy, marriage, a new job, renewed contact with an estranged father or distant uncle – all of which may trace back to a certain phone call, text or – (mostly in urban contexts) – interaction on a social network site. All also have the potential to make or break relationships within a family and repercussions – positive and negative – may spill out more widely.

Over time, young people of both genders appear to gravitate more towards friendship networks in their own age-cohort (as in Western contexts). Across urban and rural South Africa this is seemingly promoted by high levels of phone ownership, adoption of low-cost phone practices such as messaging on WhatsApp or MXit, and an associated usage of youth slang (which has much potential as an age-exclusionary device; see McIntosh, 2010). In Ghana and Malawi, the significantly higher proportion of same-age, extra-family phone interactions among the 16+ age-group in urban (as opposed to rural) areas also looks indicative of this trend. At least for the moment, however, older family members remain a remarkably significant component of young people's phone-based interaction (especially that of girls' and young women in rural Ghana and Malawi). Particularly in conditions of resource scarcity, assistance from older, wealthier kin is a significant element of phone communication, regularly sought (and often forthcoming) in all sites. Nonetheless, while such resource transfers from older family members facilitate some degree of control, at the same time older people are becoming increasingly dependent on younger family members for the connections which facilitate their personal affairs, especially when this requires communication to distant kin.

Goodman's (2005) work on phones and social networks suggested that sharing phones – sending/receiving calls on behalf of others – could encourage social contact (presumably including across generations). While this remains the case, it looks as if the power in such interactions will inevitably shift towards youth with phone expertise, unless elders can keep control of the funds which support handset purchase and maintenance, airtime and battery charging. Our evidence suggests that a generational power-struggle is being played out on a daily basis in many urban and rural homes across the continent: recourse to subterfuge is, on both sides, an inevitable response. With increasingly cheap, imported Chinese handsets and rapid reduction in phone-related costs, however, parental control is probably slipping, especially when young people (by virtue of their phone skills) take on – or are bestowed with – a hub role in family networks. There is limited evidence, for instance, of successful surveillance by elders, since young people's phone competency increasingly contains surveillance efforts and associated supervision. As Ling and Horst (2011: 370) observe, the cell phone is changing the rules regarding who interacts with whom (and how). Cell phone diffusion thus arguably marks a significant step in the intergenerational power shift in Africa from disproportionately gerontocratic and patrimonial systems towards a new, increasingly technologically-shaped era where young people – of both genders – play a much more proactive role in society.

Acknowledgements

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