

ICTs for Inclusive Communities: A Critical Discourse Analysis

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Abstract

This paper will explore the meanings and roles of information and communication technology (ICT) for communities in underserved areas, and how these discourses affect the use of available technology artefacts. Since a certain degree of “technological determinism” is still rife in the field of information and communication technology for development (ICT4D), there is a need to operationalise more inclusive, contextual and socially responsive technologies for societal development. It becomes critical in this regard for academics and practitioners to uncover the discourses and concepts that emerge from grounded research when designing, implementing and evaluating projects. Through an empirical case study in Cape Town, South Africa, the authors will explore and discuss some ‘collective implications’ of ICT for urban poor communities. From this study, a series of meanings around ICT was identified from discussions with community groups as performative, survival, modernity and unspoken discourses. From these, specific collective capabilities, possibilities and risks emerged and revealed the relative knowledge about material and motivational accessibility, as well as the knowledge around usage, costs, and skills.

Keywords

Critical discourse analysis, ICT4D, inclusive communities, empowerment.

Introduction, aim and significance

South Africa has one of the highest rates of inequality in the world (World Bank 2014), where social exclusion is coupled with insufficient service delivery, especially in rural areas, townships, and informal settlements. Pertinent development issues here include lacking and inaccessible public services (health, education and infrastructure, inter alia) as well as high unemployment and crime (Marais 2011). With the advent of information and communication technology for development (ICT4D), digital technology has been employed to address global development priorities (or “mega-problems” as per Heeks 2008) connected with income generation, access to services, and socio-economic equality (Duncombe 2007). This has concerned, at least idealistically, the improvement of conditions of underserved groups. Yet, a reading of the initial ICT4D literature indicates a worrisome trend of exclusion. Here, grassroots development beneficiaries are not formally involved in the development process, be it in conceptualisation or implementation (Andrade & Urquhart 2010). In South Africa, particularly in the Western Cape Province, ‘digital exclusion’ is recognised as a significant obstacle in addressing issues of social, economic and cultural equality (Western Cape Government 2014). The main concerns here include the level of access to ICT, the widespread lack of e-skills, and the effective use and adoption of technology for purposes of empowerment (ibid.).

In response to this context, this study describes the collective discourses around ICT that emerged through qualitative exploration, and in particular interviews, focus groups and participant observation. Moreover, it seeks to explore the uses, meanings and roles of ICT in cultivating empowerment, if and however possible, for underserved groups in the urban areas of Cape Town, South Africa. We frame this issue critically, and explore the perceptions that undergird the adoption and use of ICT in marginalised settings. Shifting the focus from the individual to the collective, we seek to understand how respective community groups converse about ICT to evaluate how such conversations affect its use and adoption. This is an initial point of departure for understanding how ICTs cultivate agency and capabilities at group level.

The study addresses the following research question: “What are the discourses associated with ICTs among collective groups in marginalised communities?” Ultimately, this study represents an initial step to contribute to theoretical and empirical discussions of discourse in ICT4D (Bladergroen et al. 2012), collective capability (Ibrahim 2006), ICT-enabled empowerment (Avgerou 2010), and participatory and inclusive development (Fuchs 2010). In light of this, we will uncover the social appropriation of ICTs by communities to build toward more inclusive, contextual and socially responsive technologies and approaches.

Research problem and context

The research and practice of ICT for development (ICT4D) has crystallised around creating the conditions under which the livelihoods of poor and marginalised people can be improved using digital technology (Unwin 2009). Historically, the dominant discourse in the field was that of the “digital divide” (Wresch 1996), where a prevailing argument was that socio-economic exclusion could be resolved through technology access. In particular, the evolution of the field was marked by the many ‘hyperconnected promises’ that ICT could offer. Such technology was ubiquitous, cheaper, more affordable, more efficient, easier to deploy and a means of instant communication (Unwin 2009). Within such a deterministic

school of thought, researchers and implementers had similar idealistic assumptions about how users will respond and interact with technology (Van Dijk 2006). Not least in the South African context, deterministic and technocentric assumptions negate the complexity of social and cultural dynamics, and have prompted both failure and unsustainable techno enthusiasm (see Roode et al. 2004; Oyedemi 2009). Repeated failures of ICT4D projects motioned renewed efforts toward monitoring and evaluation, with the purpose to identify the critical factors underpinning failure (Heeks 2008). Several issues common to local and international ICT4D projects have been identified as critical to address, both theoretically and empirically: participatory processes in the identification of problems and development of research proposals; the mutual negotiation and framing of sustainability; the relevance of local and indigenous knowledges; the symbolic narratives that underpin technology adoption, and the cultural values and norms of the groups involved in the process, *inter alia* (see Sabiescu et al. 2014).

Ultimately, as ICT extends in reach through hyperconnectivity and digitisation, it enters new domains and territories of development. This is not deny the threats of determinism, or of technocentrism, as engendered in many ICT4D projects. In this regard, it becomes necessary to consider how digital technologies are perceived, negotiated, and utilised (Van Zyl 2013). Following these common issues, a critical analysis of discourses from community groups will allow for the emergence of unspoken and under-explored factors and dynamics to be addressed in employing ICTs for inclusive communities in South Africa.

A critical discourse analysis of collectives

Critical discourse analysis (CDA) is employed in this study as an analytic approach to give voice to the discourses that emerged from the field. CDA is a form of critical social research and views “discourse – language use in speech and writing – as a form of ‘social practice’” where “discourse is socially constitutive as well as socially conditioned” (Fairclough & Wodak 1997:258). Despite the different schools of CDA, researchers share the perspective that discursive practices contribute to the creation of the social world (Pennycook 2001). In this regard, CDA offers not only an explanation of words and their contexts, but also examines the implications thereof and, possibly, seeks to change reality (Myers & Avison 2002:15; Gee 2014:9).

CDA has its roots in critical social theory, which addresses ethical and moral questions by seeking emancipation for all the involved persons (Wodak & Meyer 2001): researchers (with their assumptions), beneficiaries of social interventions, as well as involved organisations (public, non-governmental, and academic bodies). Critical social theory attempts to unpack the meanings behind social activities as rooted in the contexts and life worlds of actors. People in disadvantaged positions are not passive recipients targeted by development campaigns, but active agents, able to pursue their goals and act towards effecting beneficial change in their lives (Sen 1999; Samman & Santos 2009). Regarding the freedom to choose and act, critical social theory underscores the importance of contextual forces, observing that “an actor cannot simply exercise complete free will in how she chooses to act” (Ngwenyama & Lee 1997).

This study engages the views and visions of community members in urban poor areas, and will explore the discourses around ICTs, its development prospects, and the collective

capabilities that converge around technology adoption. Much of the ICT4D literature approaches agency and empowerment in their *individual* dimensions (see Kleine 2010; Ratan & Bailur 2007). Nonetheless, attention to the *collective* dimension of these concepts is important to capture the complexity of factors that characterise group action (Ibrahim 2006) or patterns of relatedness among members of a community (Foster & Handy 2008). Foster and Handy (2008) observe the importance of social relationships in the development of capabilities and advance the concept of “external capabilities”. The notions of “collective capabilities” (Ibrahim 2006) and “group capabilities” (Stewart 2005) refer to capabilities that emerge and manifest as a result of being involved and acting within/with a collectivity, e.g. through participating in a self-help group. In this regard, groups can have more empowering or emancipatory impact than individuals when they act as lobbyists and pressure groups, therefore as a “society engaged in critical public debate” (Habermas 1989:52). Discourse in its collective manifestations will be explored as a result.

Methodology

The research design for this study follows from the objective to understand how groups in underserved communities determine particular uses and meanings of ICTs, despite limited access to digital technology. By the nature of the investigation and the approach taken, we argue for the significance of immersive, grounded research by emphasising narrative, personal experience, and meaning. This contributes to what South African scholar Krauss (2012) refers to as the emancipation of ICT4D research, through a deeper engagement with complex local issues. Krauss argues that practitioners should seek mutual respect, engage with local leadership, and establish networks of friendships so to become conversational partners in the development pursuit. These aspects invite the practitioner to reconsider how ICT could address the interests of South African underserved communities according to *shared* local experiences, assumptions, and needs (Van Zyl 2013).

Fieldwork was conducted between February and April 2014 using an inductive, exploratory approach, and the research team employed three data collection methods throughout:

Emergent interviews

Emergent interviews were conducted at the beginning of the fieldwork, to gradually unveil participants’ perspectives around the research topic. Emergent interviews (Glaser 2001) bear similarities to Patton’s (2002:342-343) informal conversational interviews or Carlson and McCaslin’s (2003) meta-inquiry. This approach relies on “the spontaneous generation of questions in the natural flow of an interaction, often as part of ongoing participant observation fieldwork” (Patton 2002:342). Emergent interviews are particularly appropriate for this research, as they are bound to capture participants’ concerns in their own perspectives and terminologies. The design of the emergent interviews was based on some initial framing questions in respect of the constitution of the group, its formation, location and main activities. A second round of questions focused on the main dimensions of the overarching analysis and explored the use of ICT tools by each of the groups. Interviews had been conducted both individually, in particular with group leaders, and in groups, where the interview sometimes evolved naturally into a focus group.

Focus groups

Focus groups is a particularly useful technique for involving members of marginalised groups due to the natural flow of conversation stimulated when people of similar backgrounds are brought together (Morgan 1998:352). Focus groups had developed during the emergent interviews when the entire group was represented and helped us understand how the issues investigated manifested in collective settings. Focus groups followed the design based on Morgan and Scannell's (1998) open-ended approach.

Participant observation

Alongside the aforementioned interview methods, we also employed participant observation throughout the fieldwork process: “[critical social theory] researchers believe that, by their very presence, they influence and are influenced by the social and technological systems they are studying” (Ngwenyama & Lee 1997). Participant observation allows researchers to gain a better understanding of the phenomena from the point of view of the participants, within their social context – the emic perspective. In engaging and interacting with others, the researcher is more than an observer and takes part in the social, routinal and daily activities of interlocutors to try to construct and uncover the explicit but also tacit aspects of culture (DeWalt 2010).

Data analysis

A thematic framework of discourses was studied through content analysis (Krippendorff 1980). This highlighted key issues of relevance for the groups, allowed for the emergence of the role of informal infomediaries in the groups, and helped frame some collective capabilities grounded in the social community context. In-depth interviews with stakeholders working in the same context were utilised to elaborate on some of the themes that emerged from the group discourses and from participant observation. The different topics that emerged in the interviews and observations were assimilated under distinct (yet interrelated) categories that formed discursive themes (Braun & Clarke 2006).

Research setting

Two communities in underserved urban areas of Cape Town – Philippi and Khayelitsha – were selected for this study. Both areas had formed part of new ICT initiatives developed by the City of Cape Town, such as Smart Cape Access, aimed at providing free access to basic information and communication technologies in the broader municipal region. Both communities were selected based on four previous years of research and engagement activities in the region, and on a survey conducted for a development project presented to the European Union. During this time, the then lead researcher mapped a series of groups active in particularly underserved locations. All interviews took place where community members lived and gathered. The lead researcher typically joined the groups during their weekly meetings. Only in exceptional cases did the group have to meet solely for the purposes of the interview.

The biggest informal settlements in Cape Town are still found in the former Black Local Authority areas such as Philippi, which has 23 informal settlements and an official population of 191 025 people (City of Cape Town Census, 2014). 56% of the population

here live in informal dwellings, the unemployment rate is 38% and the poverty rate (population living under the poverty line of R1600 rand per month) is 52%. In Khayelitsha, of 391 749 inhabitants, 54% inhabit informal dwellings; unemployment is 38%, and 49% of the population live under the poverty line (ibid.).

Concerning ICT access in South Africa, official data from the International Telecommunications Union (2012) reveal a remarkable mobile penetration of 130,6%. Individual use of the internet is 41%, with 23,6% of households having access to a personal computer, and 25,5% of households with access to an internet connection (World Bank, 2014:191).

Participant groups

Research participants were selected based on their involvement in various community initiatives and on their general residency of the communities in question. In the case of the former, participants are often engaged through local contact points and community facilitators, who are sometimes sponsored by local and international NGOs.

The overall study population relevant to this study consists of more than seventy groups of 'Mamas' (Xhosa mothers) that gather to discuss everyday community problems. These particularly concern gender issues related to the elevated rate of violence against women in the region (Dunkle et al. 2004). Some of these groups also gather to discuss and develop local initiatives like soup kitchens and informal crèches. Other groups are also involved with income-generating activities, like creating and selling traditional crafts and beads. Females between the ages of 25 and 55 typically represent the Mama groups. The majority of these groups are based in informal settlements. Aside from the Mama groups, around thirty Youth groups, between the ages of 16 and 25, were also encountered in the different townships of Philippi and Khayelitsha. For this study, interviews were only conducted with youth that were a minimum of 18 years old. A specific survey on group activities and constituency was already conducted in August 2011, involving 161 youth belonging to 17 groups.

As this study is an initial step to uncover critical discourses, the lead researcher interviewed six groups of Mamas (49 members in total) and five groups of Youth (25 members in total). To triangulate data emerging from these discussions, researchers interviewed some representatives of NGOs active in the regional vicinity. The purpose here was to contextualise the information given by the groups concerning their activities in the communities, their continuity in the time, and their affiliations to social networks. Due to space limitations, these interviews are not presented in this paper.

Findings

In what follows, we present the lead 'findings' as they emerged from the interviews and from participant observation. These are mostly descriptive in nature (in terms of literacy, use, challenges and opportunities); discursive findings (in terms of meaning and adoption) will be subsequently discussed. Findings are also tabulated for purposes of a general overview.

Mamas Groups

None of the members of any of the Mamas groups own a computer although the majority of them have basic mobile phones. These are standard feature phones or, in their terms, “hello phones”, which allow basic telephone calls and text messages. Few of them have smartphones; usually the youngest members of the group. At least one member in every group knows how to operate a computer because of former training on computer literacy. However, these Mamas tend to forget what was taught during the training. Furthermore, the members do not exhibit much experience with the internet, email and online services like electronic banking, including those who formerly attended training.

We don't have computers. Only one member knows how to operate a PC but she may have forgotten as she last used a PC when she was working on a project in 2009 for 2 weeks. The rest of the members do not know how to operate one. (Masimanyane group, Site C, Khayelitsha)

Smartphones are however used to access social media like Facebook and WhatsApp. In a few cases, Mamas use the internet for researching a particular topic, or for finding personal information.

The youngest members of the groups (25 to 35 years old), in the minority, have a Facebook profile and use WhatsApp on their smartphones, and use the latter for its cost efficiency. Elder members of the group are generally unaware of the differences in terms of cost between WhatsApp and standard text messages, and simply think that the former is an application for the younger generation, similar to Facebook. Coupled with this, members exhibit limited knowledge of the costs connected with ICT and the internet. In general, Mamas are ready to invest some of their income in technology but do not have sufficient information about the possibilities to negate these costs (for example, by freely accessing the internet at Smart Cape libraries in the vicinity).

When needing to do research or to print documents for personal or group purposes, members sometimes visit internet cafes in the area. Here it is possible to pay someone to do the required task (to type, print, copy, and the like), while this is not an available option at the library. Group members are aware of the costs associated with using internet cafes. Interestingly, in each group an “infomediary” seems to possess the necessary knowledge and skills to accomplish computer or technological tasks. Typically, this role is naturally assumed by a technically literate individual, and subsequently exploited by the group members. In each group, there is often one person who completed computer training for job or related purposes. These persons possess the basic knowledge to accomplish required tasks like creating a new text document or typing a CV.

In terms of available services in the region, none of the group members have ever utilised the Smart Cape facility at the library. This is generally because of a lack of knowledge of the project itself and due to misinformation about the project. It is believed that the computers here are only accessible to school pupils. Moreover, it is believed that a person should utilise the library of their district, even if it is not the closest one. It is also believed that there is a need to provide proof of residence to obtain a library card. Youth members were also unaware of this facility:

We don't use internet for free. Only if the school took us to the library and then use internet and then that is the only time that we use internet for free. (Youth from LOF group, The League, Philippi)

Overall, ICT is not a tangible reality in the lives of Mamas and they are generally unable to evaluate its benefits, opportunities, disadvantages or risks. There is a common belief that it is something for the youngsters and there is not a full understanding of what is available, how it can be used, and what its implications are. In terms of the latter, none of the Mamas expressed any concerns related to their children's digital social life. The Mamas know or have heard about Facebook but have never experimented with it and are not aware of its associated risks. None of the Mamas expressed any preoccupation about the risks of online searching for school pupils or their own children.

In these groups, a generation gap in the use of ICTs is still observed (see Van Biljon et al. 2013). Furthermore, there is little awareness of the physical and personal risks associated with the possession of expensive ICT tools. Only one library user expressed fear connected with the possession of a laptop as it can attract thieves and create insecurity. For this reason, he avoids going to the library with his laptop, despite the possibility to access the free Wi-Fi there:

We have fear of...I can be robbed because this is a crime situation. [...] most of the time it is a fear effect that you feel that if I have a good thing or a decent gadget it can be snatched away from my hands. ... I cannot carry the laptop around... There is gangster in our communities. (Library user, Harare, Khayelitsha)

None of the Mamas expressed any concern for the increased risks of crime or aggression that youth may face due to the new smartphones they possess. The Mamas also seem unaware of the costs that being connected entail. Possessing a smartphone and using it for social activities or school research implies costs that the youth are ready to afford, no matter how. The Mamas are not worried about how their children find money for airtime or what they are ready to do in order to be online.

Ultimately, when asked about the needs of their group, Mamas do not associate this in any way with technology or technological opportunity.

They would like to have after care because there is lot of children here that come from school and their parents are maybe still at work so they got that fear that children can get raped. [...]To add on that, the after care, they would like to have the home based care because there are community members that are infected by HIV and other diseases and they have no one to take care of them [...] and they would like to have training on the home based care. (Masakubuswe group, Philippi)

But if this is questioned directly, for example in connection with the possibility to attend computer literacy training, the Mamas perceive a need for the youth to have more technologies available as an opportunity for their future, in particular to access employment opportunities and to keep them occupied:

She would like to have some trainings for the youth so that they can stay away from the shebeen (local bar in the townships) and other troubles [...], just to keep them busy. (Samora Machel group, Philippi)

Youth groups

Youth groups gather for different purposes than the Mamas, who generally assemble to discuss community matters. The five groups interviewed have rather been created for artistic or sportive purposes. This includes practicing for dance routines, writing poems and songs, or to play soccer or netball. Some activities involve the use of specific ICTs. In

particular, one group utilises computers to create and digitise hip hop songs written by the members, another utilises digital audio equipment to record their traditional marimba performances on CDs, while another group collects technical equipment to create a community radio station in Samora Machel (a settlement in Philippi). Usually only one member of each group has specific knowledge and skills necessary to pursue technological tasks, thus assuming an “infomediary” role.

When group members are asked about their use of mobile phones or personal computers, they do not particularly engage in the conversation. Our impression is that for some members, the need and use of the internet is obvious (or axiomatic) in terms of staying in contact, communicating, sharing information, and doing research. Youths that have more to say about the subject do not generally possess mobile phones or computers. Despite the penetration of mobile and smartphones here, members rely on group leaders to access information for the group (thus, another type of infomediary is demonstrated).

...like we have managers, like Phumzile, tell us. [...] he has all the information (LOF group, The League, Philippi)

The use of the phone is typically for personal purposes. The majority of Youth members use social media, but when the group needs access to the web to inform other groups about an activity or simply to share information, one person is assigned the responsibility. This kind of activity is perceived as complex and skills demanding. The more skilled members discuss the ease of learning how to operate a computer:

I just learnt from my brother [...] he used to sit on the computer and do some stuff. I was watching him each and every time telling me ‘I will do this’. [...] One day he was not there. I sit on the computer and started from there”. A friend added: “we are fast learners. Press there press there...” (Heads n Raps group, Philippi)

None of the youths expressed any concerns related to the use of ICTs, even among those who expressed their choice not to be constantly connected. In such conversations regarding the use and challenges of ICTs, we perceive a certain naïveté. Youth members tend to view the use of technology as a natural, self-evident part of their lives, without questioning the tools utilised, the cost implications or the risks associated with possible inappropriate use of the web.

The aforementioned findings are tabulated for summary purposes below:

Group	Access and literacy	Use and adoption	Challenges and risks
<i>Mamas</i>	No PC ownership and low computer literacy. High mobile penetration (“hello phones”), low smartphone use.	Smartphones are used for social and personal purposes, not for work purposes. Internet cafes are used for personal and professional purposes (printing, copying, etc.).	Sparse knowledge about costs and opportunities. Limited knowledge and misinformation of available City projects and services. Little or no awareness of risks associated with the cost of being connected, having expensive personal artefacts, and accessing social media and online services.
<i>Youth</i>	Not all members possess the required computer skills (one member typically	Utilise ICTs for specific (creative, sportive) purposes. The importance	None of the youths expressed any concerns related to the use of ICTs,

	assumes role of infomediary). Group members rely on leaders or infomediaries to accomplish technical tasks.	of the internet is deemed self-evident for engaging socially. Smartphones are used for personal purposes and are not regarded as a potential resource for income generating activities, or to support the group.	even among those who expressed their choice not to be constantly connected. The value of ICT is considered self-evident, without much consideration for its risks.
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Table 1: Summary of lead findings.

Discussion

In this study, we employ critical social theory in general and critical discourse analysis in particular to explore the themes and concepts connected to the empirical findings. This single theoretical lens may not be entirely adequate in interpreting and grounding findings that have thus far emerged. Rather, the existing literature in ICT4D and studies from other traditions in critical theory and beyond can help to contextualise the findings and unpack their implications for ICT4D. Ultimately, in the analysis of our interviews and observations, we identified four sets of discourse as evident in the responses from participants: performative, survival, modernity and unspoken discourse. In what follows, we will discuss each of these as distinct but interrelated discourses, respectively.

Performative Discourse

The Youth groups mobilise around arts or sport and can seemingly be viewed as types of creative communities with performative purposes. In this regard, it does appear that ICT is used in some instances as a *performative* tool (e.g. making music or establishing a community radio station). This is different (but interrelated) to using ICT as a purely *instrumental* tool (e.g. to print, copy, type, gather information) or even as a purely *social* tool (e.g. to communicate and socialise with friends).

Much of such a performative discourse, especially in its collective sense, relates to the historical concept of 'community media' (Berrigan 1979) in which groups utilise combinations of old and new media for political, creative and cultural purposes. In Jankowski et al.'s (2005) examination of community communication and digital community networks, individual characteristics, community structure, communication landscape and digital community networks interrelate to contribute to the development of the communities in which they are based. Community and locally oriented media create communication systems in a specific context (geographically situated or for topics of interest) that go beyond the transmission of information and become a form of 'sharing' (Carey 2008). Within this context, the creative use of analogue community-based radio in an under-served urban context is perceived as being more accessible and as having more value for local residents.

Most people won't understand online or internet radio so I think we consider the physical one. [...] we didn't even consider, we didn't even go to that option because we know people won't be able to listen to that radio because the main purpose and the main important part is our listenership than us. We can broadcast, we can present but if what we deliver to the people is not worth it, we won't get that listenership we are looking for to get us outside

there. So we have to deliver what's the best for the community and ask the best for our listeners if listeners have to receive concrete and worthy something from the radio station (Youth, Samora Machel).

In the same way, the radio-disseminated organisation of weekly events to perform new songs or poems is perceived as the best means to convey creative arts to the community. Radio is regarded as a pervasive and flexible medium.

In the analysis of performative discourse, another key element that emerges is the role assumed by local infomediaries, often the leaders of the Youth groups. They are usually responsible for information access and dissemination because of their acquired digital skills. This role of information mediation is generally informal (see Gould & Gomez 2011), not performed by librarians or technical professionals. Infomediary skills are usually specifically connected with the activities of their groups, and they demonstrate limited competencies of other technical domains.

Survival discourse

The Mamas groups do not seem to (want or need to) embrace ICT due to a combination of lacking information, possible fear/misunderstanding, its non-presence, or because of other, more important priorities. The question of whether technology is useful or empowering is irrelevant, or moot, as technology is not a real-life, present phenomenon. There are other, more important tools and resources to worry about that relate more to dealing with poverty and survival. This fact usually surfaced at the beginning of the focus groups, when members introduced themselves and discussed their daily activities, and at the end of discussions, when members express their wishes and desires for the improvement of living conditions both personally and for the group.

It may therefore appear as if ICT and its 'inherent opportunities' are not axiomatic as in the case of Youth groups: for Mamas, economic survival is deemed more important than social survival, and this is evidenced in their non-use and relative non-interest. From this we can induce a survivalist discourse, framing the issue of technological engagement as irrelevant in the context of instability, economic and otherwise. In the broader ICT4D literature, a number of 'reasons' behind such non-use or non-motivation have been advanced. These do support some of the elements that emerged from our interviews with Mamas: a lack of confidence in the ability of technologies to meet collective needs (Sixsmith & Sixsmith 2000); limited relevance of new technologies in day-to-day, routinal activities (Selwyn 2004); the role played by material resources and economic capacity (high costs and specifications) (Murdock et al. 1996; Murdock 2002); and a range of cognitive and affective factors that determine individuals' engagement with technology (Sabiescu et al. 2013). Another theory which can support the reason why Mamas do not diverge from basic technologies (for example the sustained use of "hello phones"), is the role played by infomediaries. As in the case of Youth groups, we observe a recognised infomediary (internal expert) who assumes this role inherently because s/he has (or is perceived to have) the necessary skills. S/he is naturally socialised into this role. In the case of the Mamas group, s/he is not usually the leader because the reasons behind the group's existence are not connected with a particular need to use ICTs. Yet the internal infomediary is ultimately trusted more than an external person: "The poor tend to believe people they trust rather than perhaps more informed contacts with which they do not have close ties" (Gould & Gomez 2011:24).

In light of these perspectives, and despite useful depictions concerning ‘core’, ‘peripheral’ and ‘excluded’ users (Murdock 2002), the understanding of people or groups who make little or even non-use of digital technologies is relative and situated (Selwyn 2004). Moreover, following Orlikowski (1992:411), “human agency is always needed to use technology and this implies the possibility of ‘choosing to act otherwise’”. (Orlikowski 1992). In light of CDA as analytical framework, we add to this relative and agentic dimension by shifting focus from the individual to the inclusion of the group, to ground the ‘circumstances of collective non-use’ as evidenced by the Mamas discourses.

Modernity discourse

The youth is identified by the Mamas as the main user or beneficiary of techno artefacts and is in a way thought of as “the savvy other”. In this way, the Mamas themselves reinforce the generational disconnect between them and the Youth. The Mamas seem to relegate themselves to the ‘digital immigrants’ notion of Prensky (2001) with their use of technology limited to the basic mobile phone. Concerning the youth, they are relegated – not always of their own accord – to the modernist ‘digital native’ category. But this is in itself a fallacious and idealistic notion, and is not representative of the actual and heterogeneous groups of Khayelitsha and Philippi, where youths barely grew up with digital technology. Youth groups are better represented by the idea of ‘digital strangers’ (Brown & Czerniewicz 2010) in which users lack experience in the use and opportunities to access ICTs, but not interest, ability and enthusiasm.

Despite the social disadvantages because of limited access to ICT (Helsper 2008), the majority of Youth groups do access the internet fervently and for multitudinous social activities, as already observed. The presence of technology, and the internet specifically, is here acknowledged to be self-evident, despite the lack of access and limited computer literacy. Moreover, these specific groups utilise ICTs for creative, performative and community communication purposes. For the majority of the members ultimately, the use of the (mobile) internet for self-expression becomes of more value than any instrumental purpose (see Donner & Gitau 2009). This ascribes to a discourse in which digital technology “wields more power as a symbol of modernity, progress, and cultural ambition than any utilitarian value” (Van Zyl 2013:8).

Unspoken discourse

Mamas and Youth group members share a general belief around the opportunities offered and created by ICTs. The Mamas wish that local youths should have increased access to technology so to exploit more and better opportunities. For Youth members, ICT is an everyday, routinal and self-evident phenomenon, despite not always being accessible. Government rhetoric (Thompson 2004; Western Cape Government 2014) builds on these perceptions, and is quick to promote the ‘remarkable opportunities’ that ICTs will generate for underserved communities (Oyedemi 2009). There is little substantive awareness of the risks and idealistic framings of ICT, including the increased risk of assault and violence, the ‘empty promises’ of technology for development (Van Zyl, 2013), and the more latent challenges of material and sexual favours due to the necessity for youths to obtain smartphones and to be online (in particular, as experienced by females – see Bosch 2008).

These types of discourses are rarely explicitly mentioned by any of the groups. We can therefore only speculate as to their eventual significance in the broader ICT4D discourse, to be unpacked in future analyses. The Mamas might sincerely be unaware of the associated risks of ICT or might also be conscious and rationally decide not to talk about it for fear of being perceived as ignorant or backwards (see Bladergroen et al. 2012). Or, again, they choose to focus on the benefits that ICTs can bring instead of worrying about the risks. In the case of the Youth, the modernity discourse seems to justify the need to be connected and to be ready to pay a price for it.

Concluding thoughts

Groups in this study have a “social technology” capacity to collect and exchange information, to communicate, to learn, and to lobby and advocate for their rights. For ICT to support the achievement of such aims, the collective meaning making of technology and its social engagement become critical considerations for the theory and practice of ICT4D. From the interviews and focus groups, it emerges that ICTs are predominantly used for personal aims and in some cases for collective benefit, as in the performative discourse examples. The limited uses of technology can be partially attributed to the lack of skills and the lack of knowledge about existing opportunities. This is confirmed by the groups’ sparse knowledge of city projects (Smart Cape, Wi-Fi), and the limited information about the costs of online services, and the risks connected with digital social activities.

Future projects oriented towards the social inclusion of urban poor communities in the technological landscape should consider the aforementioned discourses and in particular support the role of infomediaries. The particular and critical attention to issues of use, adoption, meaning and social appropriation (Gurstein 2007) might support the thinking about a way forward for development, emancipation and inclusion of communities through ICTs. ICT4D practitioners should not nourish expectations around easy and idealistic solutions and consider the personal and collective relations and values that are expressed in groups.

Ultimately, considering the question of operationalising more inclusive, participatory and collective approaches to ICT4D, it becomes critical to uncover ways in which people *can* participate – therefore, designing projects *for* participation. During the initial phase described in this paper, we attempted to uncover some of the foremost (and unspoken) discourses around ICT engagement to allow for the steady emergence of narrative and meaning. The contribution for practice here concerns empirical observations that can deepen our understanding of designing interventions and operationalising approaches that are more inclusive. Our future research will explore the value and role of such narratives in the mutual and inclusive design of technology for development.

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