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Panel 150: Information and Communication Technologies: Meanings, Uses, Imagination in Africa

The power of the networks, networks of power.
Civil society, mobile communication and post-electoral violence in the slum of Kibera, Kenya.

Abstract
Between December 2007 and March 2008, a contested result at the presidential elections in Kenya unleashed a wave of ethnic violence that killed 1200 people and displaced 350.000 others. During the crisis, the vacuum of power was filled by a multitude of civil society and community-based actors, which provided basic assistance to the Kenyans affected by the violence. Mobile communication, increasingly diffused in sub-Saharian Africa and particularly in Kenya, played a critical role, helping individuals and communities to cope with the widespread insecurity. This article examines usage patterns of mobile phones in the slum of Kibera during the crisis. Its central analytical focus is on the interplay between two entities which used mobile technology to build a grassroots response to the conflict: PeaceNet, a Kenyan umbrella organization of civil society actors which set an SMS-based network of monitors to track the campaign, the elections and the crisis; and the Kamukunji, a pressure group made by Kibera's community leaders. The paper analyzes the concepts of power, knowledge and trust as they emerge from the networks interwoven by PeaceNet and the Kamukunji, focusing on three sets of mobile-mediated relations: PeaceNet-monitors; Kamukunji-the community; PeaceNet-community leaders. In the course of an ethnographic investigation, the author met with PeaceNet officers and monitors, members of the Kamukunji, opinion-leaders and Kibera dwellers from different ethnic backgrounds and international development workers. Actor-network theory provided the analytical framework for grasping features of networks formed and maintained by both human and not-human actors. This study describes how social and mobile networks intertwine and in which manner this process informs the agency of civil society actors in situations of conflict. An argument is made that people's appropriation of mobile technology, which is embedded in their normal pattern of action, should be identified and then considered in the design and the implementation of projects aimed at empowering local civil society organizations through ICTs.

Introduction

In recent years, a view which posits the relevance of ICTs for governance in developing countries has became dominant among policy-makers and international donors. Seen mostly through the prism of civil society studies, this assumption is based on normative arguments about both the nature of civil society and its relationship with democracy and has shaped a number of initiatives aimed at buttressing civil society organizations (CSOs) and enhancing citizen participation (UNDP 2011). Mobile telephony has gradually emerged as the technical innovation which can better cater to this vision. The decreasing costs of cell phones

and services have boosted the penetration of mobile networks throughout developing countries, bringing unprecedented possibilities of communicating, acquiring information and coordinating to individuals, communities and organizations (Castells 2006). Africa is leading this "mobile revolution", drawing international and CSOs into exploring the potential of mobile communication for development and social change (Vodafone 2005). Mobile-based projects are being designed to help networks of citizens hold political institutions to accountability and human rights and pro-democracy activists in their advocacy work, with initiatives like electoral monitoring or violence tracking.

A rich anecdotal evidence of the applications of mobile telephony to development and governance is available with respect to Africa (Ekine 2010). Nevertheless, this literature is mostly limited to organizations which fit the mainstream definition of civil society. Less scrutinized is the appropriation of mobile telephony by grassroots organizations featuring values and practices which mismatch the ones recognized by Western donors.

The purpose of this paper is to understand how local meanings associated with the use of mobile phones shape forms of political engagement. To achieve this goal, I describe how social and mobile networks have intertwined to inform the agency of civil society actors during the 2007-2008 Kenyan crisis, when a contested electoral result unleashed a wave of ethnic violence.

This paper is based on an ethnographic research conducted between March and June 2010 in the informal settlement of Kibera, Nairobi, an epicentre of the unrests. Its analytical focus is on the interplay between two entities which used mobile technology to restore governance during the crisis: PeaceNet, a Kenyan umbrella organization of civil society actors, and the Kamukunji, a pressure group made by Kibera's community leaders.

My research draws from civil society studies, with specific reference to Africa, and Information Systems in Developing Countries (ISDC) studies, in particular to what Avgerou (2007) identifies as "social embeddedness" and transformative discourses, and aims to contribute to the growing ethnographic literature concerned with local interpretations of the social changes induced by mobile phone use (de Bruijn et al. 2009; Horst and Miller 2006).

The paper is structured as follows. In the first section, I will set the theoretical ground for the analysis of my case study drawing from two converging debates: one on the salience of civil society for democracy and the challenge to translate this relationship to non-Western, particularly African, contexts; the other on the way mobile telephony, as a socially appropriated innovation, is shaping forms of political action.

Then I introduce my theoretical framework, Actor-Network theory (ANT), and explain ethnography as methodology of choice. In the empirical part, I describe the setting of my investigation and identify two specific mobile-based monitoring patterns: one developed by PeaceNet to monitor the elections and then track the ensuing violence, recognized by

institutional actors; and another emerged within the community and revolving around the local *kamukunji*, a pressure group, mobilized to support the opposition candidate and then to steer the community when violence erupted. Subsequently, I focus on three distinct sets of relations: PeaceNet-monitors; kamukunji-the community; PeaceNet-community leaders. Eventually, I discuss my findings in the light of the concepts of power, trust and knowledge.

Civil society and or in Africa?

Reviewing the political literature on civil society, Kaldor (2001) identifies two interpretations of the concept traceable to different traditions of thought: a liberal and an activist version. The former postulates a mutual strenghtening of democratic institutions and civil society, recognizing in the presence of networks of voluntary associations a necessary condition for a healthy democracy. The latter revolves around the notions of power, struggle and dissent (Lewis 2002) and conceives civil society as an arena of contestation where the hegemonic ideology is challenged by a cluster of cultural institutions (Kaldor 2003, 193), in a perennial "war of position" with the dominant power (Anheier, Glasius, Kaldor 2001).

The liberal version of civil society has been mainstreamed by international donors and development agencies in the implementation of programs aimed at strengthen NGOs and advocacy organizations in developing countries to advance a liberal democratic agenda. Putnam's concept of social capital (1993), embodied in networks of civic engagement as a community resource, has provided a strong theoretical backbone to this perspective. These networks "foster sturdy norms of generalized reciprocity, […] facilitate coordination and communication and amplify information about the trustworthiness of other individuals (ib.)." It is a self-reinforcing mechanism relying on trust, intended as the *glue* which holds together individuals and networks and as a *social lubricant* (ib.), rooted in the preservation of one's reputation. According to this vision, social capital is the expedient of democracy and the civil society from which it emerges is characterized by the refusal of violence, of ethnic and religious exclusivism and, in general, of those features which would commonly make a society 'uncivil' (Glasius 2010). Nevertheless, many authors have stressed the Western-centric idea of civility encapsulated into this definition, which marks out as uncivil all social manifestations which defies liberal values of pluralism and democracy (Chabal and Daloz 1999). Picking up on this line of criticism, the activist interpretation of civil society blurs the conceptual boundary between civil and uncivil society as it encompasses social movements and grassroots organizations which do not exclude a priori violence. The post-modern version of the concept combines both definitions, acknowledging the possibility of uncivil tendencies within the

same civil society, which is thus considered "an arena of pluralism and contestation, a source of uncivility as well as civility" (Kaldor 2003: 9).

Among international donors, though, a normative approach has prevailed, framing the type of civil society to cultivate and often producing what Ishkanian (2007) defines a "genetically-engineered civil society", made of professionalized NGOs, which has rapidly replaced local organizations to advance a liberal Western agenda. The challenge of this specific donor-defined model of civil society is particularly evident in many African countries, where democratic institutions have been translated only in terms of elections, failing to create efficient checks and balances to hold the political elite accountable (Collier 2009). The lack of a robust counterweight to predatory and inefficient leaders across the continent has been imputed to an insubstantial civil society (Comaroff and Comaroff 1999: 17), not based on civic norms (Callaghy 1994), fragmented in a myriad of mutually exclusive projects (Fatton 1995) and lacking a "trans-ethnic public arena grounded in universalistic norms and civic trust governing both political and economic transitions" (Berman 1997: 19). According to this view, the emergence of a national citizenship impinges on a largely perceived "ethnic citizenship" (Mamdani 1998; Ndegwa 1997). Although the idea of civil society, a historical product firmly rooted in the Western liberal tradition, seems little helpful to understand this phenomenon, an adaptive prescriptive discourse has taken shape among the positions related to the significance of civil society for Africa (Lewis 2001), suggesting to mold the concept on the empirical realm in order to include self-help groups organized for personal and economic ends and, in general, to look at civil society "in terms of process, negotiation and as a contested domain" (Edwards 1998). A notion of civil society which is adapted, broadened and purged of the normative element can thus provide a valid conceptual tool to analyze mechanisms of participation and accountability (Kasfir 1998; Orvis 2001). Those mechanisms are situated at the intersection of what Lonsdale (1994) calls political tribalism and moral ethnicity, referring, with the former, to the competition for political power among leaders claiming to speak for ethnic communities and, with the latter, to the sense of the individual obligation to the own ethnic community. African civil society can therefore materialize in patron-clients networks, ethnic associations, self-help and cooperative groups and "traditional" authorities (Orvis 2001)[1]. The bonds inscribed into these social networks challenge that "public good nature of social capital" which was assumed by Putnam (Harriss and De Renzio 1997). Instead, they are informed by an instrumental role which rather resonates Bordieu's

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[1] Patron-clients networks are based on a reciprocal obligation between the political referent and his constituency, most of the time his tribe, and demand that the patron provides resources to his clients in exchange for loyalty and support. Self help groups are mainly based on ethnic or community allegiance but developed horizontally rather than hierarchically. They are formally autonomous from the political power although their leaders, which can be elected or nominated among the seniors, may seek political connections and eventually establish a patron-clients relationship. The main goal of self help groups is to support local initiatives or ensure funds for members in need.

view (1986) of social capital as a strategic resource in the class struggle. The network of relationship is a *product*, the outcome of "investment strategies, individual or collective, consciously or unconsciously aimed at establishing or reproducing social relationship" (ib.: 249). As an instrument of power, this network of relationship is "directly usable in the short or long term" (ib.) for achieving particular goals.

The emergence of mobile activism

The view which posits the mutual strengthening of civil society and democracy has informed the designing and the implementation of ICT-based governance initiatives in developing countries. The rationale lays in the assumption that ICTs are the key to organizational changes which, facilitating a shared access to "relevant, socially explicit knowledge" (Huysman and Wulf 2004), reinforce the trust bonds among the members of the community. Through a periodical interaction in the long term, ICTs can therefore foster the principles of trust, acceptance and alignment on which cooperation relies (Syrjänen and Kuutti 2004). Some authors suggest looking at the shaping of ICTs and social structure in terms of local interpretation of the organizational changes induced in specific settings by the adoption of an ICT innovation. This is what Avgerou (2007) defines social embeddedness discourse in Information Systems in Developing Countries (ISDC) studies, and is concerned with the understanding of how local actors make sense of these changes, assuming an ongoing negotiation between culture, "constantly being maintained and changing" (Westrup in Avgerou 2007), and ICTs, "seen as a hybrid network of artifacts, people, and institutions" (ib.). The social embeddedness discourse warns against any determinism that would reduce the actors to mere recipients of the IS innovation: the beneficiaries are instead actively engaged in shaping the sense that ICTs assume within the social structure in which they are implemented.

In the light of the dramatic diffusion of mobile telephony in developing countries (ITU 2009; Economist 2007), this concern is translated in a growing body of literature devoted to explore the impact of mobile communication in people's lives, not only in terms of economic empowerment (Economist 2009; Kwaku Kyem and Kweku LeMaire 2006) but also in informing political identities and practices (Castells, 2008). The expectations in the transformational power of mobile technology have been cultivated by development agencies and telecom corporations, which are developing mobile platforms featuring specific applications designed for a population previously excluded by a wide array of service. The huge success of mobile banking in East Africa is a clear example of the opportunities that mobile networks are disclosing, to both people and entrepreneurs: the case of M-Pesa, an application launched in Kenya by Safaricom and funded by the UK's Department for

International Development (DID) to facilitate branchless banking via mobile phones, is unanimously considered a best practice (Morawczynski and Miscione 2010). Its relevance relies mainly in having given access to different financial services, such as balance checking and money withdrawal and transfer to a large segment of unbanked population (ib.).

Furthermore, facilitating the coordination and the spreading of information among a loose and heterogeneous assembly, mobile communication is shaping new forms of socio-political mobilization, characterized by a highly interactive and fluid rhizomatic structure which is expressed, for instance, through *smart mobs* (Rheingold 2002) and practices of *sousveillance,* as opposed to surveillance, meaning the bottom-up monitoring of the power. Mobile networks are viewed as the tenet of the architecture of a "networked public sphere" (Benkler 2006), where many-to-many communications are possible at almost zero cost. Evoking Habermas' concept of public sphere, Benkler highlights the possibilities offered by digital technologies in allowing individuals "to monitor and disrupt the use of mass-media power, as well as organize for political action" and also "to report, comment, and generally play the role traditionally assigned to the press in observing, analyzing, and creating political salience for matters of public interest."(220) This potential to overcome logistical challenges has became evident in recent years in initiatives such as electoral monitoring in conflict-prone contexts, where mobile communication have increasingly helped CSOs organize volunteers and respond instantly to an evolving election environment (Schuler 2008).

Theoretical framework

The theoretical framework used for my study is actor-network theory (ANT). My choice stems mainly from the fact that this theory focuses on mechanisms of power and the concept of knowledge as they emerge from the interactions between human beings and artifacts (Law 1992). Power is intended as the product of the interactions among elements of networks made by heterogeneous entities: human and no-human, people and machine. In ANT, no difference stands because the relevance rests on the relations among the actors of the network rather than in their nature (Tatnall and Gilding 1999).

ANT scholars claim that this theoretical perspective is particularly useful to analyze "situations where interactions of the social, technological and political are regarded as particularly important" (ib.), assuming that the social order is maintained by social and technical networks, intended as a continuum. ANT appears as a valid framework to answer to 'how' questions, notably when they revolve around the social dimension of the technology. It suggests that "we should be exploring social effects, whatever their material form" (Law 1992), and this explains why, according to Avgerou (2007), most studies about the social

embeddedness of IS innovation adopt ANT as theoretical framework. The purpose of ANT is eventually to explain the emergence, the stability or the failure of social systems, intended as networks. Taking into account all the elements that compose these networks, ANT authors aim at analyzing the mechanisms that produce knowledge through 'social engineering processes'. Knowledge is built through the 'translation' of social, technical, conceptual and textual bits. The concept of translation dictates the modality according to which the engagement of all elements occurs (Law 1992). Power refers to the capacity to enroll other elements of the network in the production of knowledge. This is done, according to Latour (1986), "by 'interesting' others and then getting them to follow our interests, so becoming indispensable to them". The interest is elicited by bestowing qualities, desires, visions and motivations to the newly enlisted actors (ib.). These alliances are volatile and shifting but they prompt all actors, whether human or not-human, to translate their resources into 'black-boxes', in which are recorded all the negotiations that have led to the creation of the network. Every actor is a network in itself – or, to quote Law, is "a patterned network of heterogeneous relations, or an effect produced by such a network" (Law 1992).

Methodology

To investigate the contribution of mobile telephony to governance in conflict-prone settings, I selected, as case study, the 2007-2008 Kenyan crisis in the slum of Kibera. This case is relevant to the purpose of my study for two main reasons: it is paradigmatic (Flyvbjerg 2001) of a reality of ethnically diverse turbulent urban settings where wireless technologies are becoming increasingly significant within the communicative environment; it allowed me to test the hypothesis that, given the abundance of mobile phone-empowered CSOs in Kibera, the entire community would have been more resilient to crisis and less prone to violence. I used ethnographic research methods to gather information in order to address "how" issues: in particular, how mobile technology contributed to the civil society response in Kibera during Kenya 2007-2008 post-electoral violence.

This issue was at the center of my 40-day long fieldwork in Kibera. I focused on the accounts of the actors which had a role in the facts of the period stretching from December 2007 to March 2008. Analyzing their answers to my questions, I tried to interpret their own way to make sense of the role of mobile communication during the unfolding of the crisis in Kibera. My interviewees' first order interpretations provided the data on which I built my account. As I selected my informants, a crucial criterion to consider was ethnicity, which determined the social and political allegiance of my informants, defined their position during the post-electoral violence and often framed their accounts.

I relied on PeaceNet to get physically access to Kibera and to the monitors' network. The sample to which I submitted semi-structured interviews included PeaceNet officers, five inhabitants of Kibera and coordinators of community-based organizations (CBOs) which served as electoral monitors and then peace workers back in 2007-2008, three high profile members of the Kamukunji from the Luo tribe, a Nubian and a Kikuyo opinion-leaders and 18 Kibera residents from Kikuyo, Luo, Gusi, Kamba and Meshimoni tribes. Furthermore, I had informal talks with international development workers, which helped me understand how foreign practitioners drew from and contributed to the local knowledge.

2007-2008 Kenya political crisis

On the 30 of December 2007, the Electoral Commission of Kenya declared the incumbent president Mwai Kibaki, leader of the Party of National Unity (PNU), the winner of the country's election, held three days earlier following a campaign marred by intimidation and violence and despite allegations of vote rigging. Immediately after Kibaki was sworn in, turmoil erupted in Nairobi and quickly spread across the country, concentrating mainly in the slums of the capital and in the Rift Valley. The ensuing violence plunged Kenya, until then considered a beacon of stability in otherwise troubled East Africa, in the worst crisis since Independence. The epicentres of the violence were in Nairobi's Lang'ata-Kibera constituency and in the Rift Valley, strongholds of the main opposition leader Raila Odinga, the son a Luo chief, and of his party, the Orange Democratic Movement (ODM), which since the beginning rejected the official ballot result (ICG 2008).

Many studies have corroborated the strong ethnic identification between constituencies and political representatives, configuring the December 2007 vote an ethnic census (Bratton and Kimenyi 2008; Gutiérrez-Romero 2008). The alleged rigging was therefore just the trigger of decades of economic frustration associated with ethnic rivalry, never disappeared in a country, such as Kenya, which has always boosted with pride its ethnic diversity, made by over 70 tribes. Both PNU and ODM had strongly ethnically-rooted constituencies. As for Kibaki's party, it was supported especially by Kikuyos, the main ethnic group of the country accounting for 20% of Kenya's population, and by Embus and Merus. Kikuyos are largely perceived as the elite since, after independence, Kenya's first president Jomo Kenyatta, a Kikuyo himself, favored members of his tribe in the redistribution of the lands expropriated from the British colonialists in the Rift Valley, the most fertile area of the country. This fostered grievances among tribes which claimed their rights over the Valley and the Western provinces, specifically Luos, Luhyas and Kalenjin, which form ODM's ethnic constituencies.

Odinga's followers started seeking revenge over ethnic groups considered loyal to Kibaki and the situation rapidly escalated, fuelled also by hate messages diffused by vernacular radio and SMS (BBC 2008). Security forces intervened with brutality and curfews and restrictions of movement were imposed on the most turbulent areas. The intervention of a group of illustrious African personalities led by former UN General Secretary Kofi Annan was a decisive move to restore civil rights and solve the crisis. In April 2008, a power-sharing agreement between Kibaki and Odinga was announced. The final toll of the violence was of over 1,200 dead and 350,000 IDP's (Irin 2008).

The empirical setting: Kibera

Home to 170,070 people according to 2009 Kenya Population and Housing Census (Daily Nation 2010), Kibera is the country's biggest informal settlement. It is located 7 km far from the centre of Nairobi, at the core of the Lang'ata-Kibera constituency. It extends on 256 hectares and it is bisected by the railway to Uganda. According to the figures available, only 17% of the adult population is permanently employed (Morawczynsky and Miscione 2010); the rest are casual workers and migrants, mainly employed in Nairobi's industrial area. The slum is formed by 13 villages, mainly divided along ethnic lines. Almost all Kenyan tribes are represented in Kibera but Luos are the main ethnic group. Although the slum is located on state owned land, most shacks have landlords, which are mainly Nubians and Kikuyos, and this was a main cause of grievance during the post-electoral violence. The majority of Kibera's residents lack access to basic service, including paved roads, electricity and running water, and the open sewage system running through the slum is a major health issue. Among Kenyans, Kibera has a sinister reputation because of petty crime but many inhabitants consider it exaggerated and unfair and boast a sort of pride to live in a world-known slum.

Kibera is a big recipient of international aid. There are an estimate 100 NGOs and over 400 community based organizations (CBOs) in the slum, engaged in medical, advocacy and training activities. These CBOs include also self-help groups, mainly women organizations which keep a fund and loan small amounts of money to members in need. Every new organization must be registered at the Ministry of Gender and Social Service to accede national and international funding. Ethnically-defined organizations are forbidden by law but inevitably every organization is dominated by a tribe.

PeaceNet

PeaceNet Network Trust is a Kenyan umbrella organization of NGOs, CBOs, confessional groups and individuals engaged in peace building and conflict resolution at

national and community level. According to the mission stated in its website, "PeaceNet-Kenya exists to sustain a broad-based coalition of peace workers largely at the grassroots level, who strive to foster peace in their local communities and in the nation at large."

PeaceNet is funded by five European NGOs – Oxfam GB, MS Kenya (Denmark), Cordaid (The Netherlands), Safeworld (UK), GTZ (Germany) – and collaborates with other twenty national partners involved in peace-building, reconciliation and community mediation. It is based in Nairobi and its staff includes 20 national Kenyans from different ethnic background. Its network of NGOs and CBOs spans across the country, divided in eleven regions for better planning and implementation of activities. Each region has an executive committee headed by a chairman who sits on the PeaceNet board of trustees, and a coordinator who participates in the implementation of all activities.

Since it was founded, in the early 90's, PeaceNet has established relations with national authorities and international agencies and NGOs, promoting networking and cooperation. Accruing social capital and putting it at the disposal of its network's members, PeaceNet has thus enhanced its political leverage, becoming a privileged civil society interlocutor for Kenyan authorities, which recognized PeaceNet's role in monitoring the 2005 constitutional referendum and the 2007 political elections.

PeaceNet has both a range and a brokerage function (Anheier and Katz 2005): it bridges previously unconnected networks (for instance, networks of women self-help groups and networks of gender-advocacy organizations) and brokers between several groups of actors. Borrowing an ANT expression, we can say that it cultivates the interessement (Callon, 1986) of new members, which are allowed to draw from the network insofar they contributes to it. Special attention is given to local capacity-buildings. The trainings are directed at both grassroots organizations and individuals picked or elected by their communities to act as mediators. PeaceNet attributes to the trainings of the members of its network a crucial role in forging a common identity based on shared values, methods (revolving around non-violence and dialogue) and goals; nevertheless, it stresses decentralization as one of the main tenets of its philosophy. On the one hand, trainings are finalized to endow local partners with mediation skills and to help them reframe the grievances embedded in conflictive situations involving their own ethnic communities. On the other, the rationale of decentralization rests on the assumption that local knowledge is a resource to be valorised. Local knowledge is intended in terms of practice and contacts: a properly trained native mediator is expected to understand how his fellows make sense of a situation, to master the mechanisms of the social interaction and to know which people to address in case of need. This familiarity with a given context can prove critical for early warning, to craft a mediation strategy or to collect information. PeaceNet's task is to translate this local knowledge at policy level. Mobile phones have emerged as critical tools to support this goal. After testing the use of mobile telephony for

tracking cattle-rustling related violence in the North of the country, PeaceNet, in partnership with UNDP, established a network of mobile monitors, recognized by the state but independent from it, to track the campaign and the voting procedure. In the first phase, the mandate of PeaceNet's electoral mission was limited to observe and reports the facts on the ground. In the second phase, following the outbreak of the post-electoral violence, the mandate was broadened to fit the purpose of the Electoral Violence Response Initiative (EVRI), a forum consisting of international and local CSOs and institutional and private sectors actors, aiming at supporting rapid peacebuilding initiatives at community level.

The Kamukunji

There is little media and no academic information at all in English on the Kamukunji[2]. Nevertheless, this name kept on emerging during my interviews with PeaceNet officers and Kibera dwellers. From the accounts I collected, the Kamukunji was mostly portrayed as a group of vigilantes entrusted of protecting Luos and their allies. Many Kibera residents stressed the fact that the Kamukunji, even at the peak of the violence when moving across the slum was very dangerous, had "eyes and ears everywhere" and was the only reliable source of information in a state of lawlessness. According to a Kenyan blogger[3] and to my sources, the expression kamukunji was originally used to indicate a ground; then, by extension, the act of gathering that usually occurs there and, in particular, an informal political gathering. The word refers to a Luo-dominated pressure group entrusted with holding the political representatives to accountability and to monitor at district level the municipal funding allocation for Kibera. Its council is composed by almost 1000 leaders, two-thirds of which are elected every five years in all the 13 villages of the slum. The others are so-called opinion leaders, authorities which are widely viewed as very influential within the community. Out of this council are elected the members of the kamukunji steering committee. Most leaders are also in the boards of local NGOs or CBOs, through which many create their electoral basis. Kibera's kamukunji is a physical place as well, a specific ground in the mostly Luo village of Katokoera, near the Olympic bus terminal, which is generally considered the main entrance to Kibera. Here, every Sunday morning, people gather around a stage, from where virtually anyone has the opportunity to address the audience, discuss the 'talk of the town', raise money for the funeral of a member or other community-oriented initiatives.

As I carried on my interviews, the kamukunji was depicted as a community council, a lobby, a Luo self-help group, a gang of thugs at the service of Odinga. The different views

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[2] A constituency in Nairobi is named Kamukunji, but it is not related to Kibera
[3] http://blog.marsgroupkenya.org/?p=1917

were mainly dependent upon my interlocutors' ethnic backgrounds. From this cacophony of voices, I eventually concluded that the kamukunji was all these things at the same time. Most Luos and members of other allied tribes underlined the role of the kamukunji in protecting the community as a whole and in voicing issues of common concern. Others narrowed the definition of the community under kamukunji's protection to "everybody bar the Kikuyo" or "only the Luos." Some portrayed it in a shady manner. The answers to my enquiries about the role of the Kamukunji in inciting violence against Kikuyos were vague. Some of my Luos and Meshimoni interlocutors admitted that not the Kamukunji as such, but few of its members, were involved in looting and torching properties. One Kikuyo and one Nubian leaders and an ethnically Gusi journalist depicted the Kamukunji as a crime syndicate, with strong political connections.

The influence of the kamukunji over Kibera seems pervasive though discreet, to the extent that nothing, not even development projects, could take place in the slum without its approval, usually entailing that it get a stake in it. The kamukunji exerts its power providing jobs, connecting, linking up. It presents some similarity with a trade union: its members pay a fee to be registered (every year the total amount is divided among the leaders) in exchange for protection, advocacy and the opportunity to tap into the kamukunji's network.

The kamukunji is unanimously considered the 'grassroots arm' of the ODM, or, more precisely, of Raila Odinga. This bond is traceable to 1992, when multiparty system was introduced in Kenya. Raila, the offspring of a powerful politician and Luo chief, stood up as a prominent democracy and human rights champion, speaking to Kenyans as a whole but blinking to his Luo fellows. He is credited with having saved the kamukunji many times, when former president Daniel Arap Moi and then Kibaki decided to seize control of the slum starting with its physical heart, the ground of Katokoera, where people used to meet to discuss politics and social issues. Every time troops were dispatched to establish a garrison, Odinga rushed to back his people in the clashes that inevitably ensued. Since he first ran for Parliament, he has always secured the Lang'ata-Kibera seat. Over the time, he has consolidated a typical patron-clients relationship. Thus, despite his claim of representing the entire constituency, Odinga is widely perceived as the Luo *mutuatu* or the big man of the kamukunji. As a political leader, he has cultivated the habit to deliver at the kamukunji his campaign keynote speeches and in general address first his people in Kibera for every crucial issue. According to one kamukunji leader, doing so Raila shows that "he respects the community", bestowing legitimacy to the kamukunji, which is not only the host but a real 'kingmaker' by virtue of its unique capacity to mobilize a large mass of supporters. The leader appears in front of his people to renovate in public, putting his face on it, the pact with his clients. This deal, though, has a value as far as it is also crafted in private. According to many kamunji leaders, their trust in Raila rests less on him being a Luo than on the fact that

he put at disposal his cell number, making himself traceable. Even as Prime Minister, Raila can be held accountable because he is reachable at any moment and he can "link you up with whoever you need, whenever you want". Kibaki, on the contrary, is considered "too private", and "this is no good for a leader"; he is also a Kikuyo, therefore willing to share his resources only with his fellows. The bond that has been established with Raila goes beyond parliamentary representativeness and implies a degree of intimacy that passes through mobile communication, which is a form of interaction, as many points out, 'extremely personal.' This privileged access to one of the main asset of the network, the political top dog, confers a halo of prestige upon the kamukunji. In a political reality in which the state is made by a delicate balance of power between ethnic communities, the kamukunji appears as the social and physical locus at the intersection of two axes: an horizontal one in which alliances among clans are discussed and explored through exchange of opinions, and a vertical one in which this collective reflection is communicated at the top level in order for the alliances to be ratified by the mutuatu. The endorsement of the political referent includes the mandate for negotiating power with the other big men in the political arena, but it is not a blank check. The terms of the negotiation are pondered along the entire axes through feedbacks to the action of the mutuatu, whose appraisal by his constituency is not limited to the electoral consultation: it is indeed a constant monitoring pursued through channels kept opened by the kamukunji. The concept of democracy reflected in this practice, and which is expanded on both the horizontal and the vertical axes by mobile communication, is far from the one championed by Western donors through their democracy promotion programmes but it appears to fill the lack of mechanisms of checks and balances that were neglected with the implementation of formal democracy, shaping the kamukunji as a space of accountability.

To explore the role of mobile communication in strengthening this mobilizing capacity during the 2008 political crisis, I will thus focus on three sets of mobile mediated relations: PeaceNet-monitors; Kamukunji-community; PeaceNet-community leaders.

PeaceNet-monitors

As presidential elections drew near, PeaceNet designed an electoral mission revolving around a SMS 'nerve' centre and a network of local monitors. Thanks to Oxfam-GB, PeaceNet was able to enrol a main economic stakeholder like Celtel, the second largest mobile phone network in Kenya, which agreed to halve its ordinary rates for all SMS sent or received through the nerve centre. The mandate of the mission, endorsed by international and national civil society actors and recognized by the state, was to ensure a peaceful campaign and fair elections. The nerve centre consisted in a ICT platform to manage communication and

warnings coming from the monitors, which were picked out of the network of CSOs, CBOs and self-help groups with which PeaceNet had already worked in several community initiatives. Kibera was considered a hotspot since the beginning. PeaceNet tapped into the local civil society and entrusted one close collaborator to recruited nine people from different ethnic communities. Their task was to detect signs of impending violence and attempts of vote rigging. The main requisites were their local knowledge, intended as the capacity to draw a sense from a thick fabric of beliefs and assumptions embedded in the social reality, and their reliability, guaranteed by someone already enrolled into the network.

The monitors were briefed and endowed with airtime. They periodically reported to the nerve centre incidents that could elicit politically motivated violence in the slum during the electoral campaign, but they were forbidden to intervene. The communication was strictly unidirectional: only the nerve centre managers were authorized to forward the request of intervention. In this first phase, the nerve centre acted as a transmission belt between the grassroots level and the institutions, which were alerted in case of 'provocations.' According to all the interviewees, the acquaintance with the context was crucial to detect potentially inflammatory acts that, with foreign monitors, would have gone unnoticed. These included, for instance, wearing a PNU t-shirt in the middle of an ODM-dominated village. Local monitors were able to identify the likeliness that an apparently trivial dispute among neighbours would turn political and gave warning. They were also in the condition of collecting directly or through relatives and friends hate SMS that were spread around with increasing intensity, inciting to violence against specific ethnic groups. Once the monitors had notified them to the nerve centre, it was PeaceNet's task to relay the messages to district officers for response. The promptness of the response was considered a critical factor, since it could strengthen or weaken the popular perception of the presence of the state.

Most monitors were undercover lest intimidations or retaliation, but others admitted to work public, strong of their closeness with the kamukunji, (at the same time, one can wonder whether and how this closeness affected their reporting). At the polling stations, it was made a large use of ICTs by all electoral missions to report in real time the voting procedures, but there was no contact to share information and analysis. According to some monitor, the lack of coordination among the different monitoring groups was perceived by the voters and hindered the trust-building process that was supposed to be one of the core goals of the mission.

Following the eruption of the violence, neither reporters nor foreign observers (except, at one point, few international aid workers) were allowed in the slum. Ethnically motivated attacks fuelled a climate of fear and distrust. Setting the EVRI, PeaceNet redefined the mandate of its mission and its monitors' task shifted to feeding information via SMS to the

nerve centre, which became crucial after government banned live broadcasting of the ongoing mayhem.

Kamukunji-community

Describing the role of the kamukunji during the electoral campaign and then the post-electoral violence, many interviewees expressed two widespread and entwined beliefs: "The kamukunji had ears and eyes everywhere" and "violence would not have erupted if only they wanted it." As the client organization of Raila, the main task of the kamukunji was to secure his victory in Kibera. Yet, this was presented, according to the interviewee's slant, as "protecting the will of the community" or "intimidating whoever was known as a PNU supporter." PeaceNet's presence in the slum was a fact for local civil society organizations; the kamukunji's presence was a fact for anyone. Its community monitoring engaged virtually every resident of Kibera, or at least every Luo. According to many accounts, the awareness that the kamukunji was carefully watching the unfolding of the electoral campaign was the main single factor which defused the risk of major incidents in the months preceding Election Day. Communicating through mobile phones, kamunkunji's affiliates or sympathizers were able to identify any newcomer in the slum and assess the potential threat. Mobile communication accelerated the speed and reach of word of mouth, turning the human-technological network revolving around the kamukunji in a sort of hybrid database engaged in solving queries. The profiles of the visitors were therefore collectively traced through a quick networked consultation. The opinions stemming from the observation of different details were exchanged through SMS and if a member of the community would have guaranteed for the newcomer, the kamukunji would have remained in the shadow. Otherwise, it would have materialized to question the stranger and get more data to verify his identity. This capacity to disappear behind the community, or, better, behind the alibi of being just an expression of the community, was intrinsic in the elusive nature of the kamukunji. When describing this collective monitoring, all the leaders I interviewed used interchangeably the word kamukunji and community, an expedient which allowed, on the one hand, to present the monitoring as a sort of crowdsourcing involving the entire population of Kibera; on the other, to relieve the kamukunji of any responsibility when, following the announce of the victory of Kibaky, violence erupted. In that case, a senior leader told me, "the protest of the community was like a volcanic eruption that nobody could stop."

Following the outburst of violence, troops were deployed to Kibera, sealing the entrances of the slum and occupying the ground of Katokoera. Facing the impossibility of meeting physically, the kamukunji leaders were holding distant meetings in small groups, connected via mobile phone, to discuss the crisis. When the government enforced a blockade and gangs from other slum (allegedly let in by the same police) were harassing people,

telephone numbers of the kamukunji leaders, or of their acquaintances, became vital resources to obtain information on unsafe routes and to rescue relatives in other villages of the slum. Black market flourished. Once again, there are diverging opinions on the role of the kamukunji in the smuggling. Some interviewees pointed that the kamukunji leaders used their wealth, in terms of knowledge and contacts, to support the population of Kibera. Others portrayed the leaders as jackals eager to exploit the sufferance of the residents. I think that there is some truth in both interpretations. In fact, the very influence of the kamukunji relies on its contribution to the welfare of the community. The richest in social capital (intended in Bordieu's terms, as an instrument of power) among the leaders turned the black market into a space in which they could broker alliances and expand their social network. It is particularly interesting, for the purpose of my research, the mechanisms through which, in the black market, the overlapping of human and mobile networks underscored relations of power. During the siege, in fact, the most requested goods were food, drinking water and scratch cards for phone credit. Scratch cards were on sale at black market prices, but not everybody could afford them. An alternative way to purchase phone credit was through a Safaricom application called Sambaza (Ki-Swahili for 'I give you'), an airtime sharing service. Kibera's residents could not always rely on relatives outside the slum. Three patterns emerged from the interviews: buying a scratch card at black market price; negotiating the price for a scratch card or a Sambaza transfer with a kamukunji leader, a solution which implied trading also private information, especially personal phone numbers; ringing – or "flashing" – a kamukunji leader to be called back and submit a request of information at zero cost. The leader was thus entrusted of 'connecting' the residents to the kamukunji networked database, provided that the former accepted to enter the latter's sphere of influence.

The siege on Kibera offered its leaders the opportunity to accrue their social capital. The kamukunji provided protection, information and material resources, and, expanding its network, it increased its externalities to the point that even two well-known international NGOs, the Red Cross and Doctors without Borders, had to contact some kamukunji's leaders to deliver and organize the distribution of consumer staples.

PeaceNet-community leaders

The restrictions of movement imposed on Kibera's population posed a main challenge to the verification of all information coming from the slum. Only when the siege was lifted, PeaceNet could address this problem and open communication channels with authoritative members of the community. Weekly meetings were convened at Peacenet's headquarter in order to define a shared narrative based on the information received via SMS. PeaceNet

individuated opinion leaders from different tribes and churches willing to meet to discuss how to defuse the escalation of violence.

Through the network of its monitors, PeaceNet obtained the telephone numbers of some individuals who were well known for their extensive networks and their influence over the community. They were contacted at a personal level and this, according to many people, made the difference. The first meeting was summoned by PeaceNet's monitors who, as Kibera's residents, were able to identify the most reliable kamukunji leaders, the ones with whom it was possible to cooperate.

Many PeaceNet's monitors confirmed that it was difficult to work with the kamukunji as a group because they were "at the same time the source and the solution of the problem." Furthermore, PeaceNet avoided being too closely associated with the kamukunji as this would have compromised the possibility to work with Kikuyus and other tribes.

Involving the leaders in private meetings was a crucial step to start re-building the dialogue among the different tribes of Kibera. The meetings were opportunities for the local leaders to share with each other and with PeaceNet issues raised by their own communities and to agree on a common narrative. PeaceNet's efforts were on a double track: lobbying for an agreement at political level; keeping channels of communication open among the senior leaders of the tribes in conflict, notably Luos and Kikuyos. These forums involved at one point also local police officers, known personally to Kibera's residents, and the UNDP, which recruited some leaders in its UN volunteer programme. Borrowing a definition from conflict studies, these leaders fitted Lederach's idea of "strategic yeast" (2005), which refers to "few strategically connected people" (which) "have greater potential for creating the social growth of an idea or process than large numbers of people who think alike."(ib., 92) In one case, the alert of an imminent attack of one community against another reached a monitor, which quickly forwarded the warning to an acquaintance working in Kibera's community radio. The radio station broadcasted an appeal to the leaders to intervene and eventually the threat was defused.

The critical yeast is thus a resource for the network because he has a "simultaneous understanding of interdependent though different processes."(ib.) Mobile communication contributed to expand the capacity of these key agents of change to move across different networks.

Discussion

Drawing from the findings of my investigation, I identified five main functions fulfilled by mobile communication:

- reporting provocations during the electoral campaign;
- reporting irregularities during registration and voting procedures;
- keeping open spaces of discussion among members of the same tribe and between the grassroots and the political level;
- collecting and disseminating information to facilitate the coordination of aid workers in providing humanitarian assistance and of community members in purchasing staple goods;
- establishing channels of informal diplomacy between leaders from different communities to explore solutions.

Besides these functions, the analysis of three mobile mediated sets of relations seen through ANT theoretical lens allowed me to look at both PeaceNet and the kamukunji as the outcomes of a punctualisation process, that is of a precarious simplification: they are not only actors, but networks in themselves, to which contribute several heterogeneous human and artificial entities. Power relations are embedded in these networks and reflected into communicative practices. During the crisis, PeaceNet's main asset resided in a large pool of contacts of community members endowed with local knowledge and influence and reachable, at some moments, only by mobile phone. The EVRI was fashioned through PeaceNet's networking activity with organizations interested in tapping into its basin of contacts, an effect known to economists as 'network externalities' and exhibited "when a value of a product to one user depends on how many other users there are" (Shapiro and Varian 1998, 13). This concept has been used to explain the success of information technologies such as the mobile phone (which is as much useful as more people have it) but, from an ANT perspective, it helps understand PeaceNet's growing leverage over the stakeholders engaged in crafting the civil society's response to the violence. In Kibera, this network was entangled with the kamunkji's but in a peculiar way, which was made possible specifically by mobile telephony. One element which emerged from the interviews was the private dimension introduced in the crammed and highly communitarian environment of Kibera by mobile phones, which appear as critical entities through which some individuals had the opportunity to cultivate and creatively fashion their social capital, opening a sort of 'backyard'. In this backyard, relations were crafted and power was deployed as the capacity of some actors to interest others because of the resources they were able to offer, mostly in terms of access to information useful to cope with the widespread insecurity. Despite all efforts employed in fashioning a resilient civil society, what I observed was thus the emergence of individuality as a space in which some actors rather than others were able to creatively position themselves in networks which overcome ethnic allegiances. This positioning made possible to add value to information and to turn local knowledge into a strategic asset.

These findings resonate Heeks' speculation (2009) over the "rise of the individual" facilitated by the diffusion of mobile technologies in developing countries. In the backyard opened by mobile communication, some individuals succeeded in maximizing their social capital and enrich their networks. This point was very well illustrated by the way some kamukunji's members used scratch cards for phone credit during the siege of Kibera to expand their sphere of influence. Or, also, by the fact that mobile numbers were socially regarded as gateways to access a separate space of intimacy, to get personal even with the Prime minister and therefore being "linked up". When violence erupted, the apparently vibrant grassroots civil society of the slum collapsed. Only interpersonal relations and kinship ties endured and mobile communication played a critical role in keeping channels of communication open, where mutual trust could be nurtured through the provision of reliable knowledge. These patterns of action, which reflected people's appropriation of mobile technology, were not taken into account in PeaceNet's design and implementation of the electoral monitoring and the violence tracking initiatives but, eventually, they contributed to shape the interplay among the actors, in particular PeaceNet and the kamunji.

Conclusion

This study has made an argument for shifting from a normative to a descriptive approach to both the definition of civil society and the transformative potential of mobile telephony. Applied to the exploration of my case study, this approach lead to a finding that I had not foreseen when designing my research: the emergence of a private dimension carved by mobile telephony in Kibera. This finding helped me shed a light on the way two organizations' networks entwined to fashion power relations, build trust and produce knowledge, eventually contributing to restore governance.

Mobile communication is bound to play an increasingly important role in people's lives in Africa, including in articulating the relationship between institutions and society. Initiatives aimed at enabling CSOs to maximize the strategic value of mobile technology should take into account the way this IS innovation is embedded within the local social milieu. ICTs can help distribute or concentrate power, and it is crucial to understand the social dynamics that determine either the first or the second outcome, particularly to avoid that projects designed to achieve the former goal end up causing the second.

Anheier, H. and Katz, H. (2005) 'Network Approaches to Global Civil Society', in Helmut Anheier, Marlies Glasius & Mary Kaldor, eds, *Global Civil Society 2004/5.* London: Sage (206–221)

Anheier, H. Glasius, M. and Kaldor, M. (2001) "Introducing Global Civil Society". in Anheier, H. Glasius M. and Kaldor M. (eds). Global Civil Society 2001. Oxford: Oxford University Press

Avgerou, C. (2007) "Information systems in developing countries: a critical research review", London School of Economics and Political Sciences, Innovation Group, Working Papers Series, October 2007.

BBC Policy briefing (2008) "The Kenyan 2007 elections and their aftermath: the role of media and communication", April

Benkler, Y. (2006) "Wealth of Networks: How Social Production Transforms Markets and Freedom", New Haven, Yale University Press.

Berman, B. (1997) "Ethnicity, Social Trust and the Democratic Process in Africa." African Studies Association, Columbus, Ohio

Bourdieu, P. (1986) The forms of capital. In J. Richardson (Ed.) Handbook of Theory and Research for the Sociology of Education (New York, Greenwood), 241-258

Bratton, M., and Kimenyi, M. (2008). "Voting in Kenya: Putting Ethnicity in Perspective," Journal of East African Studies, 2 (2): 273-290.

Callon, M. (1986). "Some Elements of a Sociology of Translation: Domestication of the Scallops and the Fishermen of St Brieuc Bay" in: Law, J. (ed.), *Power, Action and Belief: A New Sociology of Knowledge* (London: Routledge & Kegan Paul).

Castells, M. et al (2005) "Electronic Communication and Socio-Political Mobilization: A New Form of Civil Society" in: Anheier, H. and Glasius, Marlies and Kaldor, Mary, (eds.) Global civil society 2005/6. Sage Publications, London, UK, pp. 112-131

Castells, M. et al. (2006) "Mobile Communication and Society: A Global Perspective", Cambridge, Massachussets: The MIT Press

Charles-Iyoha, C. (2010) "Mobile telephony: closing the gap" in: Ekine S. (ed) SMS Uprising: Mobile activism in Africa, Pambazuka Press

Collier, P. (2009) "Wars, Guns and Votes; Democracy in Dangerous Places," Harper, New York

Comaroff, J. L. and Comaroff, J. (1999) "Civil Society and the Political Imagination in Africa. Critical perspectives". Chicago and London: The University of Chicago Press

Davenport, E. et al. (2003) "Managing Social Capital as Knowledge Management - Some Specification and Representation Issues." Proceedings of the ASIST Annual Meeting, v40 p101-103

De Bruijn, M., Nyamnjoh, F., & Nyamnjoh, F. (Eds.) (2009). Mobile phones: The new talking drums of everyday Africa. Langaa RPCIG

Economist (2008) "The limits of leapfrogging", February 11

Economist (2007) "The strange allure of the slum", May 3rd

Economist (2009) "Mobile Marvels: A Special Report on Telecoms in Emerging Markets", September 24

Edwards, M.(1998) "Nailing the jelly to the wall: Civil society and international development". British Overseas NGOs for Development

Ekyne S. (2010) "Introduction", in: Ekine S. (ed) SMS Uprising: Mobile activism in Africa, Pambazuka Press

Flyvbjerg, B. (2001), "Making Social Science Matter: why social enquiry fails and how it can succeed again", Cambridge University Press

Glasius, M.(2010) "Uncivil society". International Encyclopedia of Civil Society. New York : Springer

Gutiérrez-Romero, R. (2010) "The role of ethnic identity and economic issues in the 2007 Kenyan Elections", CSAE WPS/2010-06, University of Oxford

Harriss, J. de Renzio, P. (1997) "The Missing Link or 'Analytically Missing': The Concept of Social Capital", Journal of International Development, Nov/Dec

Heeks, R. (2009) "The ICT4D 2.0 Manifesto: Where Next for ICTs and International Development?", Development Informatics Working Paper. Manchester: Centre for Development Informatics;Working Paper No. 42

Horst, H. and Miller, D. (2006) The Cell Phone: An Anthropology of Communication, New York: Berg Publishers

Huysman, M. and Wulf, V. (2004) "Social capital and Information Technology: current debate and research, in Social Capital and Information Technology. Eds. Huysman M & Wulf V, MIT, 3-13

International Crisis Group (2008) "Kenya in Crisis, Africa Report No. 137", 21 February

IRIN (2008) "Kenya: Spreading the Word of Hate", January 22

ITU (2009) "Measuring the Information Society. The ICT Development index", International communication union, Geneve

Kaldor, M. (2003) "Global civil society: an answer to war", Polity Press, Cambridge

Kaldor, M. (2007) "Democracy and globalization", in: Anheier, H. and Glasius, M. and Kaldor, M. (eds.) Global civil society 2007/8: communicative power and democracy. Sage Publications, London, UK, pp. 58-85

Kasfir, N. (1998) "Civil Society, the State and Democracy in Africa." Commonwealth and Comparative Studies 36(2):123-49

Kinkade, S. and Verclas, K. (2008) "Wireless Technology for Social Change", Washington, DC and Berkshire, UK: UN Foundation–Vodafone Group Foundation Partnership

Kwaku Kyem, P. A., Kweku LeMaire, P. (2006) "Transforming Recent Gains in the Digital Divide into Digital Opportunities: Africa and the Boom in Mobile Phone Subscription", Central Connecticut State University, USA, Electronic Journal of Information Systems in Developing Countries, Volume 28

Ishkanian, A. (2007) "Democracy, promotion and civil society". in: Anheier, H. and Glasius, Marlies and Kaldor, Mary, (eds.) Global civil society 2007/8: communicative power and democracy. Sage Publications, London, UK, pp. 58-85

Law (1992) "Notes on the theory of the actor-network: Ordering, strategy, and heterogeneity", Systems Practice Volume 5, Number 4 pp 379-393

Lederach, J.P. (2004) "The Moral Imagination: The Art and Soul of Building Peace", New York: Oxford University Press. 2004

Lewis, D (2002) "Civil Society in African Contexts: Reflections on the usefulness of a concept". Development and Change 33(4), pp. 569-586

Lonsdale, J. (1994) "Moral Ethnicity and Political Tribalism", in: Kaarsholm P. and Hultin, J. (eds.) Inventions and Boundaries: Historical and Anthropological Approaches to the Study of Ethnicity and Nationalism, Institute for Development Studies, Roskilde University

Morawczynski, O. and Miscione, G. (2010) "Trustworthy mobile transactions: a longitudinal study on M - PESA in Kenya", in: Trust and technology in a ubiquitous modern environment : theoretical and methodological perspectives : Chapter 10 eds. Latusek D. and Gerbasi A., pp. 160-173

Orvis, S, (2001) "Civil Society in Africa or African Civil Society?" Journal of Asian and African Studies; 36: 17-38 Lonsdale 1994

Putnam, R. D. (1993) "The prosperous community: social capital and public life" in the American Prospect, 4:13

Rashid, A. T. Elder, L. (2009) "Mobile Phones and Development: An Analysis of DRC-Supported Projects", The Electronic Journal on Information Systems in Developing Countries. p. 16

Rheingold, H. (2002). "Smart mobs: The next social revolution", Cambridge, Mass.: Perseus

Schuler, I. (2008) "SMS As a Tool in Election Observation", Innovations volume 3 issue 2 Spring

Syrjänen A-L & Kuutti K (2004) Trust, acceptance, and alignment: the role of IT in redirecting a community. Social Capital and Information Technology. Eds. Huysman M & Wulf V, MIT, 21-51

Tatnall, A., and Gilding, A. (1999) "Actor-Network Theory and Information Systems Research". Paper presented at the 10th Australasian Conference on Information Systems (ACIS), Wellington, New Zealand

Thompson, M. (2004) "Discourse, 'Development' & the 'Digital Divide': ICT & the World Bank, Review of African Political Economy, Volume 31, Issue 99 March, pages 103 – 123

UNDP/Panos(2011) e-governance and Citizen Participation in West Africa, United Nations Development Programme, downloadable at http://ictdegov.org/e-gov/WA-epart.html

Vodafone (2005). "Socio-economic Impact of Mobile Phones. Impact of Mobile Phones in Africa". Available online: http://www.vodafone.com/start/media_relations/news/group_press_releases/2005/press_release09_03.html