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Humanitarianism 2.0

Bazerli, G; Bean T; Crandall, A; Coutin, M; Kasindi, L; Procter, R;
Rodger, S; Saber, D; Slachmuijlder, L; Trewinnard, T;
Edited by: Daniel, R; Soria-Donlan, I; Thompson, J

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Biographies

- Inés Soria-Donlan is a cultural manager and creative practitioner based in Manchester, UK. Brought up in a bilingual English/Spanish speaking family, she gained a BA(Hons) in French & Linguistics from University of Manchester in 2008, an MA in French Cultural Studies from University of Nottingham in 2010 and returned to Manchester to complete a PGDip in Arts Management, Policy & Practice in 2012. Prior to working at In Place of War, Inés worked with a range of cultural and creative organisations as a project and events manager and research assistant including New Art Exchange (Nottingham, UK), Contact (Manchester, UK) and the British Council, as well as managing a number of projects as a freelance creative practitioner. She is currently Digital Manager of In Place of War and Training and Research Coordinator at immersive space company 4D creative. Her wider work focuses on creative learning, cultural activism and international collaboration.
  Contact: ines@inplaceofwar.net

- James Thompson is Professor of Applied and Social Theatre and Associate Vice President for Social Responsibility at the University of Manchester. He is founder and co-director of In Place of War - a project researching and developing arts projects in conflict zones. He has written widely on the field of 'applied theatre' and is author of Drama Workshops for Anger Management and Offending Behaviour (1999), Applied Theatre (2003), Digging Up Stories (2005), Performance Affects (2009), Humanitarian Performance (2014) and with Jenny Hughes and Michael Balfour, Performance In Place of War (2009).

- Rob Procter is Professor of Social Informatics in the Department of Computer Science, University of Warwick and research director of the Warwick Institute for the Science of Cities (WISC). His broad research interests lie in the inter-disciplinary study of factors that shape the adoption and use of digital innovations. One focus of his current work is the study of how people use social media. Robled a multidisciplinary team working with the Guardian/LSE on the 'Reading the Riots' project, analysing tweets sent during the August 2011 riots. This won the Data Visualization and Storytelling category of the 2012 Data Journalism Awards and the 2012 Online Media Award for the 'Best use of Social Media'.

- Samuel Rodger is a writer and researcher based in Manchester, UK, working primarily with charities and research projects. Sam gained a BA (Hons) in English Literature with a focus on post-colonial literature and diasporic narratives. He went on to complete an MA in Humanitarianism and Conflict Response at the University of Manchester with a focus on the interplay between humanitarianism and international politics. Since finishing this degree, Sam has been working with In Place of War as a researcher, identifying and applying for funding opportunities as well as researching potential partners. He also works with an independent charity, Born to Thrive, raising funds to help children in Rwanda and Kenya receive an education. In the future, Sam looks to work with refugee communities in attempting to understand the effect of statelessness on culture.

- Rhoda Omenya's work pulls from extensive research experience in the field of community development. She focuses on spurring citizen participation in the tech scene, specifically, local tech solutions that empower communities. Rhoda was the lead of the monitoring and evaluation of Uchaguzi Kenya 2013. She currently manages Operations at iHub Research where the key function of her role is ensuring financial sustenance to all research projects. She also oversees the creation of research outputs including policy briefs and tailored outputs for start-ups to consume. Rhoda studied Environmental Studies (Community Development) at Kenyatta University (Nairobi, Kenya).

- Angela C. Okune studies cross-cultural identity and power structures. She is especially interested in ICTD researchers an unanticipated outcomes on the 'researched'. As Research Lead at iHub, Nairobi's innovation hub for the tech community, Angela provides strategic guidance for growth of tech research in the region and supports the team to surface information useful for the technology ecosystem. Prior to moving to Kenya in 2010 on a Fulbright Fellowship, Angela was involved in corporate outreach to engage businesses in dialogue on sustainability at the World Wildlife Fund (Washington, DC, USA). She has experience working with infoDev (World Bank), the US State Department, and the Environmental Law Institute (ELI).

- Theresa Bean is a social researcher for Agencia/ In Place of War. She is currently involved in the development of the IPOW educational programme, a university certificated course specifically designed for creative practitioners in sites of conflict, social upheaval or post conflict. Her research interests include arts as a form of social mobilization, digital and cultural policy and hip hop movements in Latin America. She holds a BA in Spanish and Politics from Goldsmiths, University of London and a Masters of Arts by Research from the University of Leeds.   Prior to joining Agencia/In Place of War, she was a project manager for the grassroots music event, Un-Convention in Latin America. https://leeds.academia.edu/TheresaBean

- Lena Slachmuijlder is Vice President of Programs for Search for Common Ground. She led SFCG's media strategy in the DRC between 2001 and 2011. Lena has 25 years of experience using media, arts and culture and other creative approaches for peace building and social change.

- Laurent Kasindi is Director of Programs for SFCG in the DRC, where he has worked since 2006 engaging with journalists, producers and radio stations across the country. Laurent has wide experience in media and arts and culture as a practitioner, trainer and facilitator.

- Dr. Dima Saber is a Senior Researcher in Media for Social Change at the Birmingham Centre for Media and Cultural Research at Birmingham City University. She is responsible for leading and delivering projects in citizen journalism in the Arab region, with a focus on the role of digital media in fostering social change and in altering the work of political activists in post-revolution countries such as Egypt, Tunisia and Syria. She is also co-founder of AltCity.me, building the first media/tech start-up support space in Beirut, Lebanon.

- Ruth Daniel is a cultural producer, activist and entrepreneur. She has worked across the world making change through music and creativity. She founded Un-Convention in 2008, a global grassroots music event and community with a presence in 25 countries delivering 60 music infrastructure development events in 5 years. Ruth is Co-Director of In Place of War based at The University of Manchester, that works with creativity in sites of armed conflict. Ruth is the Director of multifaceted creative organisation AGENCIA, which has offices in UK and Africa, working internationally to harness creativity to make change. Most recently Ruth has been creating cultural spaces in some of the most challenged and under resourced communities in the world.

- iHub, Nairobi's Innovation Hub for the technology community, is an open space for technologists, investors, tech companies and hackers in the area. The research arm of the *iHub_ focuses on technology and its uses in East Africa and facilitates local knowledge creation towards improved decision making by technology stakeholders in the region. Past clients include the World Bank, Google, Refugees United, Internews, Hivos, International Development Research Centre (IDRC), USAID, Indigo Trust, and Squad Digital. We strive to change the technology research landscape in Africa by bringing together researchers from around the continent to collaborate and build greater African scholarship.

Care for the future introduction – Global Policy by Sam Rodger

It is difficult to overstate the importance of trust in a world where global networks facilitate the constant flow of contradictory information. The search for verifiable leads and trusted sources is a central facet of daily communication and is becoming more so as our connections with one another become more decontextualised, geographically distant and, increasingly entirely virtual. The swell of internet connection rates across the world has meant an explosion of interaction and allowed new opportunities for global collective action. Whilst countless words have been written exploring the dangers of this global network and the threats that "new media" represents to social structures and moral fabrics, this collection seeks to explore the role that new social technologies are having in the world of humanitarianism and conflict response.

The marriage of new media and humanitarianism is one loaded with challenges, restricted by physical and logistical shortcomings, and open to manipulation, but an era has arrived where user-generated responses to crises and conflict are becoming increasingly viable. An additional asset comes in the form of massive swathes of data left in the wake of this new generation of social movements. The projects explored in this collection have, in addition to their various humanitarian goals, unearthed great archives of data, the potential of which are only just being tapped as we learn how to make sense of them.

Furthermore, the essays in this collection variously unpack the power of public and private institutions in tackling a variety of social and economic challenges. Whilst focussing each on a specific geographical location, the collection as a whole shows some of the ways in which new social media is being used to respond to risk and political unrest in often different, but sometimes worrying similar, socio-political contexts. The reports make recommendations on local and international policies that can harness the power of people through social media for common good.

The five reports that make up this collection are variously concerned with humanitarian aid, social and cultural evolution, crisis response, the mitigation of cultural divides, and political unrest. The themes that bind them are an international movement towards public safety; a trust-based relationship between states and citizens; community led social development; and the capacity of social media and big data to make use of, and amplify, the thoughts and voices of under-represented elements of society.

Importantly, the reports also begin to question the influence these violent contexts are having on the development of social media, where communities in crises utilise and shape these new technologies though real-time engagement. The potential of these media is being maximised to such an extent that these platforms are under strain, and developers are increasingly learning how to adapt to the needs of a variety of audiences in volatile contexts.

Humanitarianism 2.0

The project that spawned this collection of reports, Humanitarianism 2.0, explores the role that digital resources and massively networked communities can play in social and political interactions. In particular, it looked to explore the relationships between state powers and citizenry; between mainstream media and citizen journalism; between traditional means of information dispersal and the new user-generated, organically verified world of social media. Perhaps most importantly, the project sought to understand the role that interactive, user-led technologies were playing, and would come to play, in the world of humanitarianism and social reform. Taking as a starting point MB Anderson's (1999) idea that aid does harm, the project was devised to take a magnifying glass to the interaction between the 'users' and 'suppliers' of humanitarian aid, and to find what change, if any, had been enacted by the internet and its role in bridging this overwhelming gap.

Named for the advent of Web 2.0, the project focused on user-generated content, peer to peer sharing and the building of social networks. It is this potential for contemporaneous, user-generated response that makes these technologies so relevant to modern day practices of humanitarian relief and assessments of global risk. Finally, the project explores Luc Boltanski's conception of humanitarianism as the politics of the present (1999) in deciphering the role that new media can play in revolutionising responses to crises and conflict. The reports assembled here seek to show, among other things, the ways in which technological opportunities could have profound impact on the shape of action in the present, and preparation for future response, building into a wider debate around global digital policy.

New media and public good

Among the common strands that bind these case studies together is the use of new media for a public good, either to renovate existing social structures or to build a brand new infrastructure of citizen communication. The latter is especially true of the work carried out by Search For Common Ground (SFCG) in the Democratic Republic of Congo. Launched in 2001, SFCG existed to fill the communication gulf keeping Congolese citizens in the dark during peace talks. In a country with no truly national television broadcaster or mobile telephone network, ordinary people found it difficult to find accurate information on the convoluted peace negotiations. Existing initially to produce daily bulletins and printed leaflets to keep people abreast of peace process developments, the organisation quickly diversified into radio broadcasts, creating joint east-west productions, shows targeted at the demobilization of child soldiers, and a number of radio dramas geared towards exploring difficult and unspoken social issues.

The report on SFCG, Bridging the Digital Deficit in the Democratic Republic of Congo (Traore et al, 2013), explores the mission of its founders to promote dialogue between the people on the ground by creating shows that aligned themselves not politically but pan-culturally, in order to undercut existing divisions. The aim of the dramas, as the report explores, is to 'offer people a way to deal peacefully with the conflicts that they face in their daily lives', through both allegorical and explicit situational drama (Traore et al, 2013). The project pioneered a means of communicating with the people of the DRC en masse, using SMS to allow listeners the opportunity to interact with the characters in the dramas, and take part in debates surrounding social and political grievances. The technology created an unprecedented dialogue for the country, and allowed a step to be made towards SFCG's aim of strengthening inter-community understanding in DRC.

This ambition, to communicate with a population by means of cultural and creative activity, can also be found in South America, informing a new wave of Colombian cultural policy. In the city of Medellin, a state sponsored initiative looks to support culture in order to fortify communities and maintain social and political stability. In Theresa Bean's Cultural and Digital Strategies in Post Conflict Urban Transformation (2013), a line is drawn between the efforts of the state to enliven cultural and digital development in the city, and move towards government transparency. Having identified the fact that 'limited life chances are often triggers for involvement in illicit activities', the report assesses both formal and informal cultural initiatives, looking at those driven by the government as part of the urban redevelopment process, and the grassroots projects built from the community upwards. This dual focus serves to highlight the importance of interaction between state and community led institutions.

The idea that culture can serve as a form of social and political movement is central to the study of Medellin. 'Music is a strong social fabric,' suggests the Colombian Sub-Secretary for Culture, 'an element that brings people together, that allows expression, to construct a reality, a life' (Bean, 2013). In the same way that SFCG radio shows served as a rallying point for discussion and debate, the digital development of Medellin looked to make the government accessible to its citizens. As Bean argues, 'connectivity serves as a tool of participatory citizenship in which individuals and communities, through the uptake of technology, are empowered to transform their lives' (2013). The report does, however, question the extent to which lives are transformed, and suggests that the digital policy equally serves to legitimise and strengthen the role of the government. Increased connectivity means increased transparency, suggesting a government structure open to its citizenry, even if its transparency betrays a system anxious for stability.

Transparency, trust and verification

Across the globe in Kenya, Crandall and Omenya's (2013) research into the work of Ushahidi explores the difficulty that can be encountered in striving for such transparency. The report unpacks the power of crowdsourced technology in spreading news and charting trends during the 2013 elections. In the DRC, SFCG used the data pulled from SMS surveys to direct their programming and respond first hand to the concerns of its listeners. In Kenya, Ushahidi built upon its crowdsourced disaster intelligence platform to create a geographical and temporal map of the election process, designed to evolve at pace with real world events. Crandall and Omenya write of crowdsourced information as a democratic microcosm, focussing a collective will into a digital hub. They argue that 'if executed well, crowdsourcing can be a great point of democracy and, by extension, social and economic development of a nation and its citizenry' (2013). In this way, the will and behaviour of the digital crowd can have real world policy ramifications.

Born from an informal collective of Kenyan 'technologists and bloggers', and spurred on by post-election violence in 2008, Ushahidi looked to build tools for 'democratizing information, increasing transparency, and lowering the barriers for individuals to share their stories' (Crandall & Omenya, 2013). In this spirit, 2013 saw the creation of Uchaguzi (Swahili for 'decision'), a platform specifically dedicated to collecting, verifying, translating and distributing crowdsourced reports during the Kenyan election. This project, and much of the work done by Ushahidi, suggests two things about the role that technology is increasingly playing in political and social change. The first is the capability of technological innovation to stir the citizenry out of apathy. By enabling such a widespread and inclusive attitude toward information

dissemination, Uchaguzi worked to disrupt the flow of information, and to restate and reinforce the importance of social and political engagement to a generation at risk of becoming disinvested in its own future. Secondly, the report suggests a fundamental need for verification, and stresses the importance of knowing where information is coming from. The complex system of verification and information triangulation enacted in the Uchaguzi process builds upon a trend identified elsewhere in the collection. That is, the utilisation of an ad-hoc fact checking process that exists organically in social media.

In Checkdesk: Sorting, Developing and Disseminating Citizen Reporting in the MENA region (2013), Dima Saber begins by discussing the difficulty faced by journalists when being bombarded by conflicting information, particularly where poor infrastructure and volatile political situations ensure that, if information is at all forthcoming, it is sporadic and contradictory. Checkdesk is a system developed by Birmingham City University and US/Egyptian non-profit company, Meedan, to digitally and collaboratively ascertain the veracity and validity of news reports in the MENA region. In partnership with six Arab media outlets across the region, the Checkdesk project sought to build a verification system, 'designed to encourage questions and to replicate the common ad hoc fact-checking activities taking place on Twitter and Facebook' (Saber, 2013).

The project exists as an answer to two separate problems. Firstly, it made a step towards stemming the rise of polemic and misinformation being spread through social media outlets. Secondly, it looked to answer the question: 'how do you draw a coherent narrative from such a rich but fragmented stream of information?' (Saber, 2013). By allowing the onslaught of social media output to be categorised, verified and thus, in part, controlled, the Checkdesk system allowed those most severely affected by post-Arab Revolt violence to access information that, even if mediated, was mediated through a transparent and user-led system.

The project, and the findings of this report are telling of the profound importance of a robust fact-checking process during conflict situations. The importance of verifiable fact is never so great as during periods of widespread uncertainty. At times of civil or sectarian conflict, or where citizens find themselves in opposition to the state, the resolution of disputed facts and the identification of reliable sources become matters of great urgency and it is at these moments that the potential benefits – and great dangers – of social media are thrown into sharp relief. What's more, lessons learned in a localised crisis, can be extrapolated and applied to wider contexts and policies in distant corners of the world.

Exploring the nature of social media's inherent fact-checking capabilities, Rob Procter's report, Twitter and the Riots in UK, follows on from his previous work on the subject, questioning how people interact with and learn from information found on social media, and the effect this power has on collective behaviours. With the 2011 UK

riots as his focus, Procter highlights the same system of self-correction identified in the Checkdesk study in the MENA area. The report creates a taxonomy of rumour and, from here, focuses on the manner in which rumours rise to prominence and are then, just as quickly, dispelled through referral to logic, counter-claims and, eventually, to the mainstream media. Procter's recommendations follow in a similar spirit to the Checkdesk project, arguing that a case exists for looking to amplify this self-correcting system in a way that eradicates misinformation before it has time to do damage.

The report questions the existence of 'a new public sphere, where citizens can crowdsource information and news, express opinions, organise, hold politicians, public institutions and services to account in ways that were previously impossible' (Procter, 2013). Whilst a shift in power structures remains a potentiality of this technology, Procter is careful to interrogate the nature of these online communities. Whilst ostensibly open, he argues, the structure of Facebook and Twitter, with their respective friend and follower structures, tend to create 'distinct and bounded audiences which may be difficult to break out of' (Procter, 2013). The twitter 'hivemind' of mainstream media portrayal, can only ever look to serve one perspective at a time. A perspective verified by dozens of separate ad-hoc fact-checking processes, but a single perspective still, bounded culturally to like-minded networks of followers.

Big data

The idea of bounded audiences is just one of the challenges that these reports identify and stumble upon in examining the use of Web 2.0 technologies in engaging with humanitarian crises, war, political unrest and social development. How, for example, can we hope to sustain the longevity of these initiatives? How can such vast amounts of data ever truly be harnessed or understood? What can we take from this data and apply to informing policy?

Ensuring longevity relies upon using these reports, the projects on which they're based, and the data they produce to inform future attitudes towards information and digital cooperation. The Checkdesk project goes beyond verification software, and seeks, through educational programmes, to 'model a culture of critical inquiry that could benefit both citizen and mainstream journalists […] through supporting them to deploy media literacy and critical thinking skills, and to examine and repair information flows in their countries' (Saber 2013). By empowering future generations, we may look to mitigate the risk of taking for granted the potential of the internet and massively interactive information sources.

Similarly, the work of Search for Common Ground looks to continue work in Sub-Saharan Africa. Among their newest endeavours, the radio show Great Lakes Generation seeks to appeal to youth listeners in Burundi, Rwanda and the DRC to build unity across, and in defiance of, geographical borders. What's more, they have created vast data sets through listener surveys and community interaction, which may hold the key to strengthening the social cohesion of a divided continent, assuming that a strategy can be developed for comprehending and utilising the data.

Rob Procter identifies the risk of the 'data deluge', where an overwhelming amount of big data means that conclusions are difficult to draw in the face of incomprehensible statistical reservoirs (2013). As Procter argues, 'where previously the challenge for the journalist was to find data to underpin their analyses, today the massive availability of different forms of data is challenging their capabilities and capacity to analyse and make sense of them' (2013). Whilst assessing the reliability of new reports remains a major challenge, knowing where to start is a more intermediate barrier.

Community led development

Finally, these reports identify a key challenge in looking to utilise these technologies as a viable and mainstream asset of humanitarian and social reform. Without user investment, the technologies will be, at best, extremely short term. The Ushahidi report identifies the necessity of a 'user buy-in', without which the platform will become redundant. Whilst operating entirely on user content and interaction is essential to the project's outputs, it also makes its existence fragile. The same is true for all five case studies, and this trend demonstrates the need for an ongoing drive towards maximising the potential of digital resources. If applied correctly, the lessons of these reports could inform policy development around the world.

In Medellin, Bean argues, there is pressure on the government to encourage greater levels of participatory citizenship by continuing to develop and enrich their digital and cultural projects in a community 'not accustomed to a culture of state intervention' (2013). The true measure of success for Medellin, the report concludes, will be when organisations encouraging participatory citizenship 'cease to exist as circumstances do not warrant the necessity' (Bean, 2013).

In London too, Procter identifies a gap in the government response to the role Twitter played during the 2011 riots. There is potential, he argues, for the police and the state to use this tool as a means for gathering and disseminating information, but that its structure and utility must first be understood. In the same vein, Crandall and Omenya show that mainstream media has begun to respond to, and emulate, the steps being taken to engage citizens online, but argue that the next step is for governmental institutions to do the same.

The future

The reports collected here are grappling with a versatile beast that is evolving in unpredictable ways, and all seem to accept that its true nature cannot be ascertained through these projects alone. The potential benefits of the technologies laid out here are dizzying, but teeter on the edge of failure in their reliance on user investment. In striving variously towards ideals of verification, transparency, interconnectivity and social unity, these conclusions find their greatest barrier to real change in the same place. There is a need not only to understand the potential benefits of user-generated, real-time responses to humanitarian crises and conflict, but also to fruitfully involve those best placed to champion its development and uptake.

This relationship is not merely beneficial for the victims of conflict and humanitarian crises. Questions are answered in these reports – and many more asked – about the influence that war and social upheaval can have on the way we conceive of new media and its ongoing development. The issues encountered in these case studies - the unpredictability of riots, the disconnections of communities affected by violence in Medellin, the threat of violence in Kenya, the untrusted traditional media in many Middle Eastern countries – all benefit from different aspects of Web 2.0 technology. These technologies are selected in moments of desperation by their ability to fulfil an urgent need and, as such, come away from these engagements irreversibly altered in the eyes of their users. Much more can be learnt therefore, not only about how humanitarian initiatives can benefit from technology, but also how violence and war shape technological development and the potential of digital communities.

Crandall and Omenya make reference in their report to the ideal of 'participatory democracy', a term that, on the surface, seems paradoxical in its necessity. The research here looks towards a world where participation in democratic processes is not an exceptional circumstance, and identifies the growth of social media and technological innovation as a possible means to this end, while being conscious that technologies, in and of themselves, cannot bring about social change. Only time will tell if citizens will succeed in harnessing the opportunities currently afforded social media. Just as with participatory citizenship in Medellin, perhaps true progress will be measured when the paradox of participatory democracy no longer warrants utterance.

Bridging the digital deficit in the

Democratic Republic of Congo

Search for Common Ground's
media for peace building
programming

By Search for Common Ground

(contributors: Lena Slachmuijlder, Laurent Kasindi, Marie Coutin and Guillaume BAZERLI)

Introduction

It was 11.30 pm when Destin rubbed his eyes and groggily answered his phone. On the other end was an enthusiastic, yet slightly frantic voice. "Hello, Mopila? Is that you? When are you going to come to our town? We need your help here too!" Destin sat up, turned on the light, and searched for his notebook. But there were two problems here: firstly, Destin was not Mopila, and secondly, Mopila was not a real person.
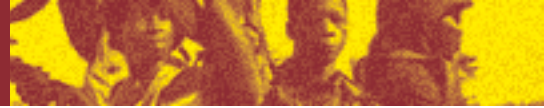
The caller was one of the millions of listeners to the 'Mopila' radio drama program, produced by Search for Common Ground (SFCG) in the Democratic Republic of Congo. Wildly popular, this eight-minute radio drama program revolves around the fictional 'Mopila,' a funny yet insightful taxi driver who gets himself in and out of adventures in each episode. He, like millions of Congolese, tries to navigate through a dangerously fragile transition from war to peace, through a delicate evolution towards democratic governance. Week after week, Mopila comes face to face with stories that resonate with people in towns and villages everywhere: political leaders manipulating young people to take up arms for their party, soldiers extorting market

sellers, civil servants demanding bribes, and university students striking. In each situation, the humble yet wise Mopila finds a way to ask the right questions, dispel the rumors, and remind people that through dialogue and understanding, not more violence, we can build a strong, prosperous and peaceful Congo.

Destin, a SFCG staffer responsible for carrying the SFCG cell phone containing the telephone number cited at the end of SFCG's radio and television programs, politely explained that he wasn't Mopila (but he would convey the caller's request to Mopila), and jotted down the caller's point of view. He knew that listening to this, and thousands of other listeners, was important to our mission of promoting dialogue.

This paper shares the experience of Search for Common Ground in tackling the digital deficit in the Democratic Republic of Congo, by using a combination of media and communications tools to raise awareness, encourage dialogue, and support peaceful ways of responding to violent conflict. It explores how SFCG designed its initial communications programming in the DRC in 2001, and how the use of radio, text messaging and internet-based approaches provide a platform for engagement and interaction with the Congolese audiences.

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Context

The Democratic Republic of Congo, formerly Zaire, has been the theatre of centuries of genocide, war and instability. Since 1996, the country has not known peace, starting with the First Congo War in 1996, when Ugandan and Rwandan forces united with Laurent Désiré Kabila, becoming the Alliance des Forces Démocratiques pour la Libération du Congo-Zaïre (AFDL). In 1997, the AFDL topped long standing dictator Mobutu Sese Seko, and Kabila declared himself President.

Less than 18 months later, Kabila's coalition with Rwanda and Uganda turned sour. Uganda and Rwanda each backed rebel movements, dividing the country into three, and sparking the intervention of a total of nine African armies on Congolese soil. Known as the Second Congo War, this violent conflict raged until the assassination of Laurent Desire Kabila in 2001. Peace talks eventually put in place a transitional government with Kabila's 29-year old son, Joseph, named President, with four Vice Presidents from the various rebel and political opposition camps.

The UN peacekeeping mission for Congo (MONUC) began in April 2001, and by June 2003 all foreign armies, except that of Rwanda, had pulled out of Congo.

A transitional government was set up until the election was over. A constitution was approved by voters, and on 30 July 2006 DRC held its first multi-party elections, with Joseph Kabila as the victor. This was repeated in 2011 when Congo's second democratic elections were held, with Kabila claiming victory in a much disputed but finally accepted election.
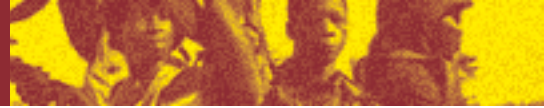
The toll of these wars on the Congolese population has been devastating. More people have died from violence, disease and starvation in Congo than anywhere on the planet since World War II. Reports in 2010 cited more than 5.4 million deaths, with millions more displaced internally as well as seeking refuge in neighboring countries.[2]

Yet two democratic elections have not brought peace, particularly in the eastern provinces, with violent clashes between the Congolese army and several rebel groups. Violence against civilians by armed groups, bandits as well as members of the army and police remain a daily occurrence. Although the UN peace keeping mission strengthened its mandate to use force against the Congolese rebel groups, this has not translated into peace or security, particularly in the eastern provinces.

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"The UN peacekeeping mission for Congo (MONUC) began in April 2001, and by June 2003 all foreign armies, except that of Rwanda, had pulled out of Congo"

Methodology

This case study was compiled through interviews with several SFCG staff members who managed the media program during these years, complemented by information from documents and reports of its media programs, and monthly feedback reports from its media audiences. Additional fieldwork was conducted in July 2013 through interviews with radio station directors, and interviews and focus groups with audience members who listened to the programs and engaged with SFCG through calls and text messages.

Designing a media strategy for Congo

Search for Common Ground's work in the DRC was launched in 2001, a time when the country's sovereignty was at risk, with more than half of the country controlled by rebel forces opposing the Kinshasa-based government. There was no national radio or television broadcaster reaching all parts of the country. Neither was there any cellular telephone company with 'national' coverage. In meetings with civil society or government officials, an array of bulky cell phones would line their desks, each with network coverage from the neighboring countries' cellular phone providers.

By necessity, SFCG began its work in DRC with two offices, one in Kinshasa and one in the eastern city of Bukavu. Travel between the two cities was possible only through a United Nations flight, or by travelling via Kenya or other neighboring countries.

The Inter-Congolese Dialogue peace negotiations were underway, but were happening outside of the DRC. Congolese living in the DRC struggled to get accurate information about the discussions, the agenda, and the decisions as they dragged on for months on end. Yet it became immediately evident that not only were

the Congolese not in dialogue with their various peace process representatives in South Africa and later Ethiopia, but they were also disconnected from each other.

The challenge faced by SFCG was to use media and communications tools to bridge these divides. This was done with a series of initiatives during the first year:

1. *Production of a daily bulletin on the peace talks.*
   By sending a SFCG journalist to cover the peace talks, SFCG was able to record audio reports to share with Congolese radio stations around the country. These were recorded by telephone and then sent out on CD to SFCG's partner radio stations, with direct phone-in reports to some partner radio stations. Longer reports were then edited upon the return of the journalist.

2. *Production of regular print updates on the peace process.*
   SFCG compiled information from the SFCG journalists as well as other reporters and news outlets, printed them out, photocopied them and distributed them to dozens of radio stations, newspapers and civil society networks with informal information distribution channels. In some instances, these packets of print materials were taken by bicycle, motorbike and even on foot to reach more distant locations. Enabling people, including armed groups camped out in remote locations, to have access to information about the peace talks was a critical part of enabling the peace process to gather credibility.

3. *Production of joint east-west radio programs.*
   Having set up a radio production studio in its Kinshasa and Bukavu offices, equipped with telephone inserts, SFCG produced audio round table discussions on issues of common concern with participants from the east and the west. These programs were edited and distributed by SFCG to radio stations in the east and the west, enabling Congolese to hear perspectives on national issues despite the fact that their country was not united under the control of one government.

4. *Production of a children-led radio program, Sisi Watoto (We the Children).*
   This program was aimed at encouraging the demobilization of child soldiers. By training a group of youth reporters, all under the age of 18 and including a former child soldier, this SFCG program was able to highlight information about the efforts to demobilize and reintegrate children. Dozens of children, having heard the radio programs, managed to escape or seek assistance from the United Nations and local non-governmental organizations, with many coming first to SFCG's Bukavu studios to seek guidance of how to access the demobilization and reintegration support.

5. *Production of a radio drama highlighting ways of addressing everyday conflict without violence.*
   Entitled 'Jirani ni Ndugu' (My Neighbour is my Brother), this radio program was modeled on the hugely successful radio drama with a similar approach produced by SFCG in Burundi since 1996. With a diverse cast of characters, this drama quickly became SFCG's most popular radio program in the east, resonating with people's struggles and daily challenges in navigating violent conflict, lawlessness, injustice and the ingrained prejudice and stereotypes born from the years of war.

6. *Production of a 'Peace Builders' radio program.*
   This programme highlighted cases of ordinary Congolese who were risking their lives and demonstrating extraordinary courage to save lives and mediate violent conflict.

Over the next 12 years, SFCG's menu of radio, print and television productions grew in number and diversity. We introduced innovative formats such as a 'live game show' and Congo's first ever 'reality television' show. As radio drama proved popular, SFCG launched the Mopila radio drama, produced in four Congolese languages and French in 2004.

Its shorter eight-minute format was quickly popular with the partner radio stations, who often broadcast its various language versions several times per week before or after their news bulletins. The drama touched on current events, but sought to translate the larger, often impenetrable, debates into ordinary people's language and situations. Jokes, irony and even satire nourished the Congolese appetite for laughter, whilst offering clarity on weighty issues such as the elections, the constitutional referendum, and the decentralization efforts. Feedback as that described in the opening paragraph, calling on Mopila to 'come to our town too!' led to the SFCG writers creating fictional pretexts for Mopila to leave his Kinshasa taximan beat. Mopila's travels around all provinces of the DRC, taking boats, motorbikes, planes and bicycles as he discovered, enabled his celebrity to grow even larger as the Congolese felt even more attached to this lovable character week after week.

"Over the next 12 years, SFCG's menu of radio, print and television productions grew in number and diversity"

In 2007, SFCG launched a third radio drama, Lobi Mokolo ya Sika (Tomorrow is a New Day) to support the security sector reform process. In 2010 a fourth radio drama was launched, Tuonane Sokoni (Let's meet at the Market), broadcast in Congo, Rwanda and Burundi, aimed at cross-border relationships in particular traders and customs agents.
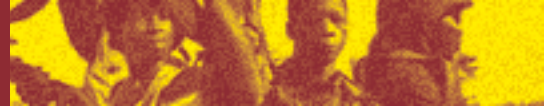
These radio drama productions were supported by complementary outreach activities. Comic books illustrating 'Mopila' began in the run-up to the 2006 elections, and have continued in multiple versions up to 2013. The Tomorrow is a New Day program also included comic books illustrating the notorious army, police and civilian characters from the radio drama, distributed specifically into the hands of policemen and women and soldiers.

In addition, in 2005 SFCG launched its Participatory Theatre for Conflict Transformation under the auspices of Jirani ni Ndugu (My Neighbour is my Brother). This offered the millions of listeners to this highly popular radio drama an opportunity to engage with live theatre in a way which reflected even more closely their lived conflicts. The participatory theatre took the power of the dramatic format, but localized it to resonate even more powerfully with people's lived conflicts. Through the participatory theatre methodology, audience members were offered the opportunity to seek collaborative, non-violent solutions to the conflicts in their daily lives.

Equally important was SFCG's identification of radio station partners across the country. It was clear that with the ruined infrastructure and lack of permanent electricity in many semi-urban and rural areas, that radio was the most pervasive and effective channel through which to reach the population. From an initial partnership pool of 24 radio station partners, SFCG's partnerships grew to more than 100 before being honed down to 85, with radio stations in all provinces, in all provincial capitals. In 2008, a mapping of SFCG's radio partners found that 65 per cent of all Congolese lived within 150 kilometers of a SFCG partner radio station. Since beginning television programming in 2007, SFCG has also partnered with more than 20 television stations in most of the provincial capital cities.

Connecting with our audience

Aiming to learn more about the viewpoints of our audience, SFCG included a telephone number in the announcements before and after its radio programs since the productions began in 2001. Initially, SFCG staffers in Kinshasa and Bukavu held onto the phone with the telephone number, responded to callers, and shared anecdotally the questions, feedback and suggestions. In 2004, SFCG recognized the opportunity to more effectively learn from and adapt to this feedback, and began to improve its system of capturing this feedback by text message (SMS).

This system represented a further evolution in DR Congo media programming, allowing for closer interaction between shows and their audiences in spite of the many logistical barriers to communication in the war-ravaged DR Congo context. Considering the communication challenges in DR Congo, cellular phones offered a unique platform for engaging with radio listeners. Over the last decade, the use of this technology has grown dramatically, far outstripping internet usage. This system enabled SFCG a critical feedback loop to ensure that their programming was staying relevant and addressing the citizens' main concerns. Thus, the SMS system was used as a practical tool for program quality monitoring, improvement of programming, and addressing key conflict drivers. With the integration of the SMS feedback system, radio content and format also became more responsive to listener needs.
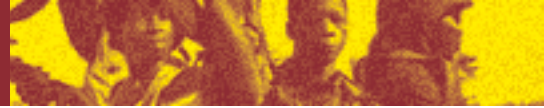
Use of SMS Feedback

At the end of every radio or television program, a telephone number is provided for audiences to register their comments and opinions. This number is monitored by SFCG staff members, who track calls and text messages from listeners. Each month, audiences use this line to send text messages, to call in, or to 'beep' the line. 'Beeping' means that the caller will call the line but hang up immediately in order not to use credit. In other cases, a text message is sent to the number with the text 'call me back', also used when the caller has no telephone credit to call or text the number.

The number of 'beeps' and 'call me back' texts soon reached more than 7,000 per month. In order to more effectively connect with these listeners, SFCG takes a random sampling of between 100 and 150 numbers and calls them back throughout the month. These call-backs entail brief interviews with the callers, so that more in-depth feedback on the media programming can be gathered.

"DR Congo is an enormous country, in which many areas are difficult to access. Even just sending out the radio broadcasts that SFCG produced two times each month was logistically daunting… we saw that having our listeners connect with us by mobile phone was by far the most reliable method for maintaining contact with those who listen to our programs."

Sosthene Nsimba,
Media Manager, SFCG Kinshasa"

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Using Frontline SMS software, this information is organized in a database which enables SFCG to learn key answers to the following questions:

- **Who is calling? (Name, age, gender and profession)**

- **Where do they live?**

- **Which radio station do they listen to?**

- **Which SFCG program were they listening to when they decided to contact SFCG?**

- **Why were they motivated to contact SFCG?**

- **What is their specific feedback about the SFCG program?**

Over time, SFCG was able to refine the data collection and analysis. We categorized the type of audience feedback to better understand the fundamental reasons that were motivating people to contact SFCG as follows:

Encouragement and messages of support:
These listeners contact us to let us know how much they appreciated the program. Very often these listeners tell us that our programs play a key role in educating the Congolese population, giving voice to ordinary citizens, and offering people a way to deal peacefully with the conflicts that they face in their daily lives.

Point of view or opinion on the issue:
These listeners contact us to share their opinion on the issue being addressed in the program. They comment on issues as diverse as the new constitution, the ways in which tribalism was threatening social cohesion, or the role of traditional authorities in managing conflicts.

Question for clarity or more information:
These listeners contact SFCG seeking more specific information about the subject being addressed in the program. This might relate to the listener facing the same problem as was being tackled in the program and seeking redress. In other instances, particularly around the demobilization or elections process, listeners had questions about how to access certain services or enroll effectively for the elections process.

Suggestion for future programming:
Often after offering support, a point of view or asking a question, the listeners offer suggestions for the angle or new issue that they would like to see addressed in

upcoming SFCG programs. This can include focusing on the issue more deeply, differently, or in a different geographic area.

Technical question or suggestion:
These listeners contact SFCG around issues related to the broadcast quality or scheduling of the SFCG programs. For example, listeners often request that the SFCG programs be broadcast according to a regular schedule. This often related to challenges in partner radio station management, electricity problems, or difficulties related to the logistics of sending the CDs to the 85 stations around the country, particularly those in very remote locations.

Below are some examples from the April 2011 monthly report of listeners:

Commentary or opinion:
I've just listened to Live and Love on 'arranging justice' after a rape. Thanks a lot for this information. But how come the law preventing sexual violence doesn't permit this type of agreement? Don't you think that justice is dividing people instead of resolving the problems?

I just listed to Tomorrow is a New Day, the one talking about fighting impunity. You're doing a good job. The military extort the population, because they think they are above the law.

Suggestion and critique:
I just listened to Jirani ni Ndugu, but I didn't like this episode about the '5 chantiers' (slogan of the ruling party). In this program, we appreciate the advice, but please don't turn this into a political program. We know that the 5 chantiers is not advancing. Focus on raising awareness so that we have elections soon.

Support message:
Please continue with this theme, about the love relationship between a young girl and a married man. This is pure rape. Why doesn't this program air more frequently? Thanks for the good work that you're doing.

I am in Tanzania, since 10 years now. I just listened to Jirani ni Ndugu about sexual violence. I send my greetings to all the Jirani actors. I really want to return to my country. Keep up the good work!

I really liked this Mopila episode. Make the episode even longer, because it always leaves us thirsty for more, especially the advice he gives us. Keep it up!
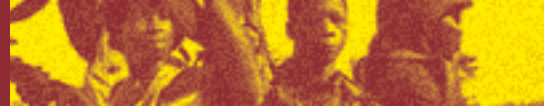
Technical question:

I've listened to 'We all Meet Again'. Why doesn't the UNHCR start with the repatriation of the Rwandans and Burundians who are on Congolese soil? Keep up the good work with your programs.

I just listened to your program on the voter registry. I'm a loyal listener to your programs. My question is about those who did not lose their old voter registration card, what do we need to do to obtain the new one?
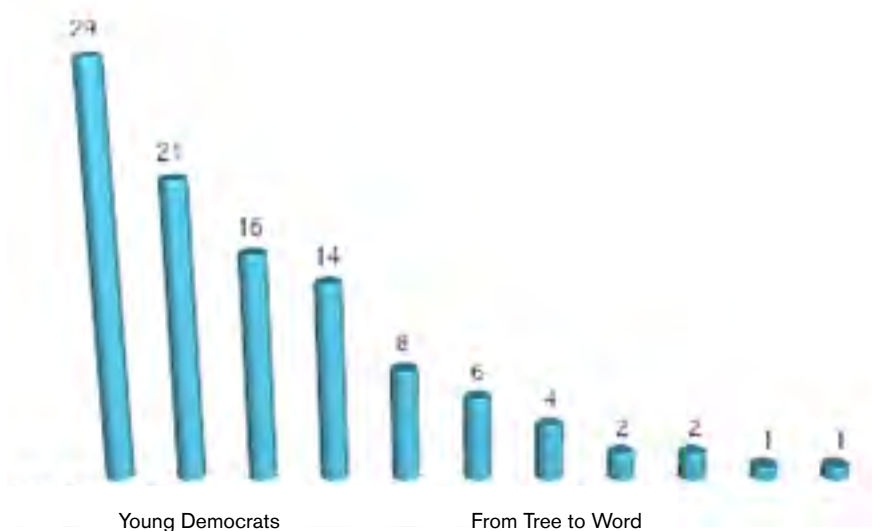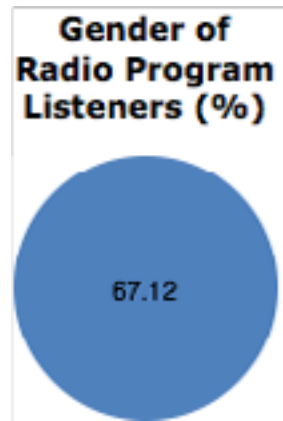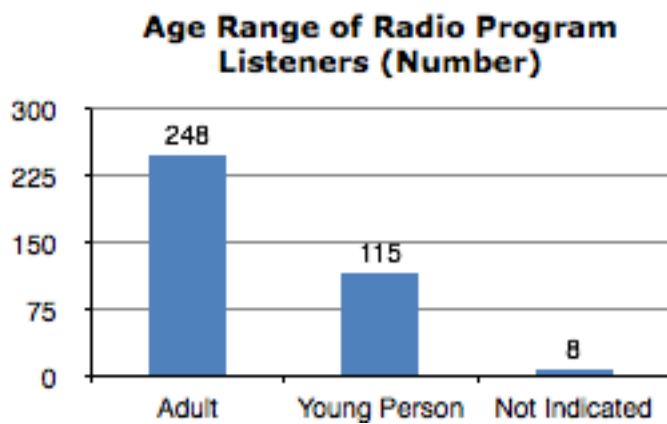
This feedback is a precious and pertinent resource for SFCG's media production teams. With an estimated radio listenership audience as large as 30 million, it can be very challenging for media producers to be 'in tune' with the perspectives and information needs of the audience. This feedback was thus compiled into a monthly report and shared with the journalists, writers and producers during their editorial planning meetings. The listener feedback enabled SFCG to have a good sense of which programs were more successfully resonating with the target audience, which region or province's listeners more strongly identified with certain themes that were being addressed, as well as

identifying issues that required further attention in future programming.

The monthly report was also useful for the management and logistics staff, who would be able to identify cities or towns whose radio station partners had been consistently absent from the database. This often meant that the CDs were not arriving at the station, or that there were internal management challenges preventing them from being broadcast regularly or according to schedule.

When listeners phone in with specific questions, or to seek avenues for redress or assistance, the SFCG staffer responsible for monitoring the feedback will direct the listener or viewer to the appropriate resource, or answer the query himself if it concerns publicly available information. In instances where SFCG is collaborating with specific communication campaigns, or working in partnership with, for example, the national elections commission, SFCG can also highlight the need for more clarity in communication to these bodies to improve their overall outreach.

Below are examples of how SMS data is analyzed:

Age Range of Radio Program Listeners (Number)

Gender of Radio Program Listeners (%)

Young Democrats   From Tree to Word

During the month of July of 2013, SFCG sought to understand more deeply the motivating factors driving listeners to pick up their phone and text or 'beep' the SFCG number. SFCG contacted a sample group of 20 listeners who had already connected with SFCG through sending in text messages. It also reached out to another 10 listeners who, while listening to the programs on the radio, had stopped communicating with SFCG via text message. SFCG also organized a focus group in the eastern city and North Kivu provincial capital of Goma who, while identifying themselves as active listeners of SFCG programming, had not engaged via text message with SFCG.

This closer examination enabled us to understand some of the dynamics around the motivation behind the listeners' participation via text message.

1. It confirmed that the listeners that were more likely to send a text message were men. This is reflected in the monthly reports of feedback since their inception.

2. People more likely to send text messages had at least completed secondary school, with 96 per cent having completed this level of education.

3. Young people were more likely to send in text messages, with 82 per cent of them being under 35 years old.

4. The listeners were more enthusiastic about sending text messages for three programs in particular: the radio drama Jirani ni Ndugu (My Neighbour is my Brother): Duel des Jeunes Democrats (a youth 'game show' about democracy and citizenship) and Uishe na Upende (Live and Love, a magazine program about youth, relationships, and the prevention of sexual and gender based violence between young men and women).
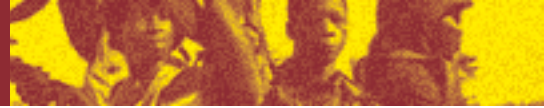
5. The listeners were particularly motivated to share their feedback because the programs were being broadcast on their most favorite local radio station.

6. The following predominant reasons motivating the decision to contact SFCG by text message were
a) The issue was pertinent (100 per cent
b) The issue was similar to what I experience in my daily life (96%)
c) The issue is helpful in our efforts to build peace (96%)
d) The programs of SFCG help to strengthen Congo's moral fabric (96%)

What were the factors dissuading others from also sending in their feedback?

For the most part, those that identified themselves as 'fans' of SFCG programs and yet were not sending in messages identified technical reasons as the main obstacle. In other words, they cited that sometimes they did not have network coverage, nor a working cell phone, nor credit to send the text message or call. While some of them, even though they had not contacted SFCG, had recorded the number in their phones, others recommended that SFCG remind listeners more frequently of the number to contact to offer their feedback. Several suggested that offering incentives, such as quizzes and prizes would encourage people to offer feedback more regularly. That the number does not offer the opportunity for audience members to speak live on the radio is a further factor dissuading some from texting or calling. Others suggested that SFCG seek to broadcast its radio programs on even more radio stations, as well as using social networks (particularly Facebook) to highlight its programming.

© UN Photo/; Martine Perret

Evolution of the interaction with listeners

Over the last two years, SFCG has undertaken several new initiatives to more actively engage its audience. As part of the outreach around the television episodic drama 'The Team", SFCG introduced an "SMS quiz" system, designed to help audiences interact more closely with its media programming. Using Frontline SMS software, SFCG regularly sent out quiz questions to its database of more than 3,500 contacts based on themes raised in radio shows, TV series and comic books. Listeners submitted their answers by SMS, and winners were eligible to receive prizes.

The SMS quiz format serves a variety of functions. First, it motivates audiences to participate and engage directly with SFCG broadcasts.

In addition, by reviewing how audiences respond to particular questions, SFCG is able to better understand whether programs are being received in the intended manner.

SMS quizzes are another important component of SFCG's program monitoring system, allowing the organization to see how listeners use and apply the themes of its media programming to a variety of situations.

In October 2012, SFCG began piloting SMS marketing for one of its most popular radio shows, "Uishi na Upende (Live and Love)". With its existing database of SMS contacts, SFCG created groups based on listener location and preferred radio station. Then, it sent text messages to hundreds of listeners reminding them to tune in and send feedback after the program. This effort produced immediate results; in the two weeks following the launch of the marketing campaign, SFCG received almost 200 audience messages related to Uishi na Upende, compared to approximately 40 messages received during a two week period the previous month. Further analysis of the messages revealed that the feedback came from an expanded range of listeners, rather than repeated SMS senders.

Thus, SMS marketing has not only helped increase the volume of audience feedback, but it has also expanded the scope of listeners interacting with SFCG media.

"I've made huge strides with FrontlineSMS! Congo is a huge country, with more than 60 million people… Tracking our audience is thus a hugely difficult but necessary task! When it is time to report on our activities and results software programs really helps us to monitor audiences, evaluate whether we are responding to population expectations, and provide reliable and trustworthy information…Finally, we try to keep our use of technology user-friendly, taking into account the general population's ICT capacities. Our marketing and quiz campaigns using SMS and calls are very accessible."

David Keeka,
DME Assistant, SFCG-DRC

Great Lakes Generation:

Combining radio, telephone and internet for a regional dialogue

In 2006, SFCG launched an innovative new radio program aimed at bridging the dividing lines between youth from Rwanda, Burundi and the DRC. Having grown up in a decade of war, saturated with prejudice and stereotypes degenerating into fear and mistrust, SFCG with radio station partners from the three countries sought to create one common media space for the youth from the three countries to engage with each other.

The program is called the Generation Great Lakes (GGL), symbolizing the possibility of a new, common, positive identity for the youth of DRC, Rwanda and Burundi. By equipping each of the radio station partners with sufficient internet bandwidth and connection to be able to stream their signal, and receive the streaming of the other partner radio stations, we were able to create a new channel for the collective listenership of all five radio stations across the three countries. One radio station hosts the program, including the live phone-in part, streaming the entire program, which is picked up by the other four stations and then broadcast live. The next week, another of the partner radio stations hosts the program and streams the signal for live simulcast via webstreaming onto their FM signals. For the first time, listeners from Rwanda, Burundi and Congo listen to the same program and phone in for a discussion, hosted by themselves, as opposed to by the BBC Africa Service or Radio France International.

Each week, the hosts are two journalists, each from different countries from two different radio stations. The program includes diverse prerecorded formats before going to the live phone-in part. Subjects over the last six years have touched on nearly every sensitive and controversial subject, but with an angle of supporting positive youth engagement.
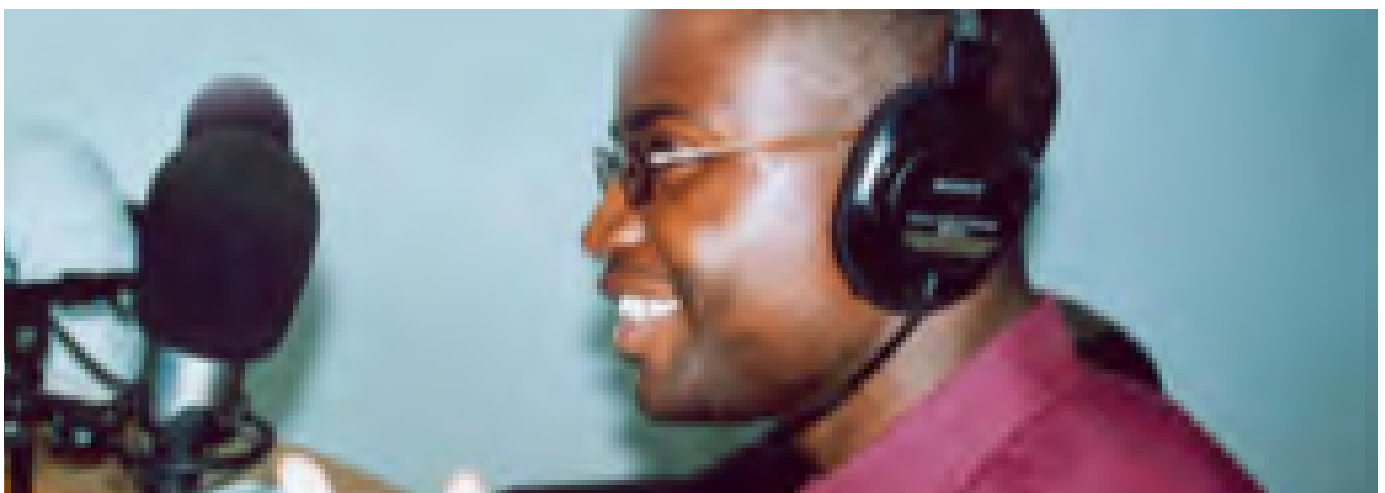
Research has shown that regular GGL listeners are developing more constructive attitudes toward dealing with conflict and managing misinformation, and they are letting go of their prejudices in favor of a spirit of regional collaboration. In a survey in mid-2007, between 63 and 80 percent of university students listened to GGL in Kigali, Bujumbura and Bukavu. An analysis of impact on attitudes found that those who listen to GGL are 16 per cent more likely than those who never listen to think that they have something in common with youth from the neighboring countries. Listeners to GGL also have a stronger belief in the potential for youth to play a constructive role, and choose dialogue rather than violence in response to a conflict. GGL has also established its own Facebook page, where program topics are discussed and from which comments from listeners are read out on the program.

How does it work technically?
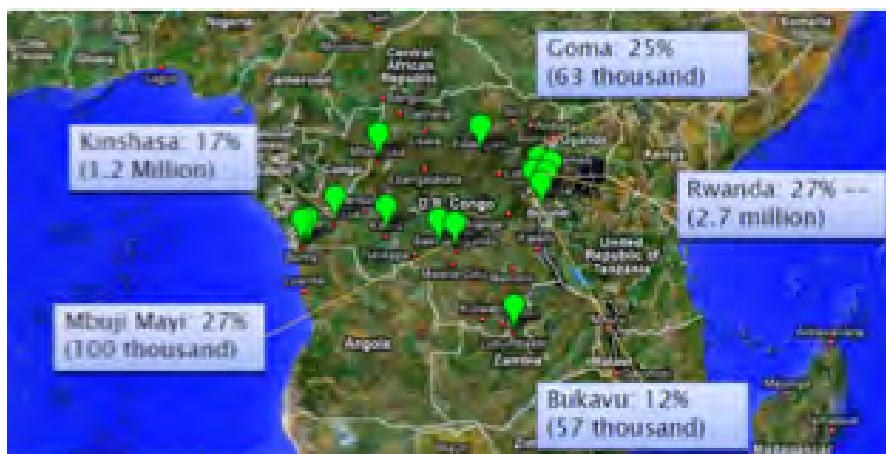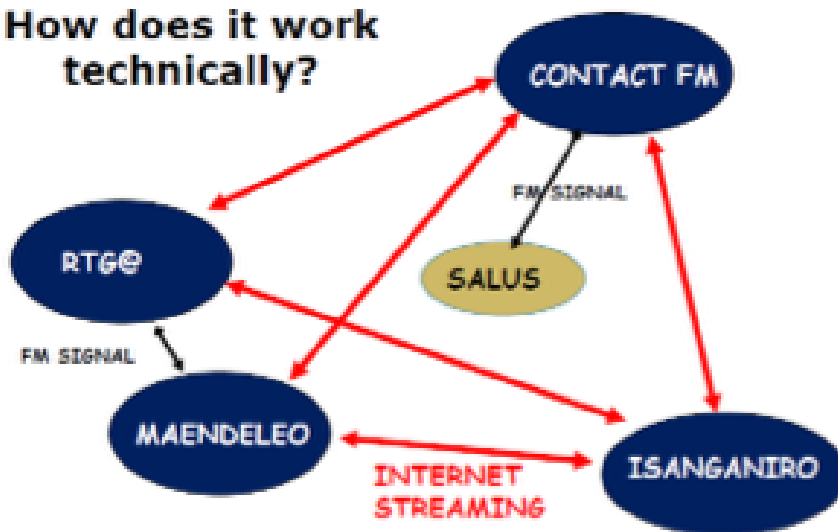
GGL Estimated Listenership in Selected Markets

Sources: Experts Surveying, 2007, 2008, 2009 in DRC; SFCG surveying in Rwanda 2009, MONUC and CIA Factbook Population Est
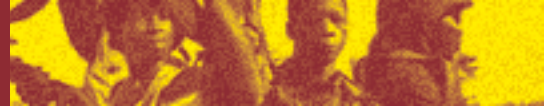
Challenges and future perspectives

While SFCG managed to bridge the digital divide during the first phase of its media for peace building work, SFCG has identified several shortcomings with its current system of collecting and utilizing feedback. Additionally, with the rising access of Congolese to the internet, particularly social media platforms such as Facebook, SFCG in DRC needs to reinforce its strategy of interaction with its audience.

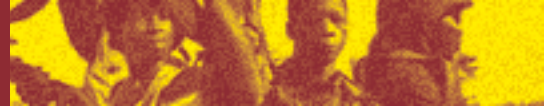**The following challenges have been identified:**

1) Insufficient quantity of feedback to render the feedback data credible to project trends in listenership across the multitude of broadcasters. During 2013, SFCG has been sending out approximately 2,000 text messages per month, but only receiving back approximately 400 responses. This sample is not statistically significant enough to reflect the perception and the comprehension by the audience of the programs.

2) Difficulty to disaggregate audience feedback by SMS by location, due to the lack of geographical area codes with cell phone numbers in DRC.

3) Uneven audience penetration rates, due to irregular respect of the broadcast schedule of SFCG programs by the partner radio and television stations.

4) Inadequate marketing and promotion of the broadcast of our programs on radio and television through SMS campaigns, partially due to reasons cited in points 2 and 3.

5) Poverty and a resultant low level of telephone credit by SFCG listeners, who hesitate in sending in a text, or phoning, particularly when the SFCG program is not live and interactive.

6) Challenges in dispatching 14 radio programs and three television programs to 85 radio stations and 12 television stations throughout the DRC. Challenges in ensuring that the programs are received, and then that they are broadcast at the agreed-upon times.

The following recommendations are currently being pursued based to respond to these challenges:

1) Do more consistent and regular outreach via text message to promote the broadcast hours of the radio and television programming. This will entail a better filtering of the existing database to enable the recipients to be classified according to location and relevant media outlet.

2) Create toll-free feedback numbers for each of the major cellular phone networks in order to make the feedback more affordable for the audience. These numbers should be announced in each of our radio and television programs, with an accent on 'free text message'.

3) Work with cellular phone companies to send out bulk text messages to specific subscribers (filtered from the SFCG database housed in the excel sheet generated by SMS Frontline). These messages would target locations where SFCG seeks to know more about its audience, and where it seeks to learn more about the reactions to its radio and television programs.

4) Enter into a contract with cellular phone companies to 'buy' up to 20,000 numbers, to whom SFCG would be able to send messages to stimulate listenership and viewership to SFCG programs.

5) Insert questions at the end of each program, in order to incite listeners and viewers to respond by text message and offer their feedback. These questions also will serve to better measure the degree of comprehension by the audiences of the programs.

6) Set an automatic reply for each incoming text message, to encourage the listeners to feel as though their contribution is valued by SFCG. Do this in local languages. Explore this possibility with SMS Frontline as well as the potential costs.

7) Use Facebook to promote the broadcast information of the programs, as well as seeking to engage more effectively with listeners and viewers across the country and in the diaspora. While this is currently being used in GGL, it is not used in other programs in a systematic manner. It may be necessary to have a Facebook page for each of SFCG's radio programs to best facilitate this discussion. This would require staff attention to the facilitation of the discussion around these programs and the relevant themes under discussion.

8) Seek out strategies to distribute the SFCG radio programs via internet, equipping radio stations with internet connections on smart phones.

9) Seek out opportunities to engage with listeners through direct phone-in programs, such as GGL. Listeners are more motivated to use their phone credit if they feel that their voice will be heard on air.

10) Do more consistent follow-up with SFCG's broadcast partners to ensure that they respect the broadcast schedule for SFCG programs. Negotiate broadcast time for the promotion of SFCG programs, through integrating spots and publicity into the station's program schedule.

11) Offer incentives for the feedback, including comic books. Strategies to encourage more interaction with female listeners are particularly needed.

12) Explore opportunities to offer SFCG programs as podcasts for download to cell phones and computers via internet.

13) Pilot an initiative whereby a more rigorous methodology would be used to receive, disaggregate and analyze the feedback from listeners to derive an estimated listenership rate. This would entail recording the quantity of text messages or 'beeps' received, and then phoning back a significant sample size in order to capture qualitative data as per the categories of the database.

14) Pilot the use of text message interaction to do snap polling with SFCG's database of listeners, coding the responses in a way to measure the responses of the audience on key questions related to the various themes and issues raised in the programs.

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Conclusion

In 2001, SFCG in the DRC managed to address the digital deficit by crafting a media for peace building strategy composed of diverse technologies. From its initial years of distributing photocopied bulletins from the peace talks, to identifying radio program broadcasting as the most powerful channel to integrating texting and now social media, SFCG's approaches continue to evolve.

Not being an actual broadcaster, SFCG's link with the audience is one step removed, and thus in many ways a greater challenge. However, the power of its dramatic, engaging and interactive media formats have captured millions of Congolese viewers and listeners. Its radio drama characters are legendary, and the credibility of the advice that these characters bring into the homes and lives of millions of Congolese is invaluable.

Over the next five years, it is crucial for SFCG in DRC to understand the opportunities and limitations of social media as a platform for engagement. However, the penetration of internet will likely remain more limited than access to cellular networks, thus SMS engagement must remain a priority. Seeking out arrangements for toll-free numbers and sponsorship deals with private companies may be another way to engage with SFCG's audience and overcome the technical and resource-driven constraint faced by many viewers and listeners.

Finally, SFCG in DRC is challenged to find the right combination of technologies to reach the widest possible audience for its programming, and encourage the widest and most accessible platforms for dialogue with its audience. More than ever before, media is no longer produced in one place and consumed in another. SFCG in DRC and around the world continues to use technology as an ally in building bridges of understanding, trust, and dialogue.

1. This article was compiled with input by Issaka Traore, Guillaume Bazerli, Lena Slachmuijlder and Marie Coutin.

2. http://www.rescue.org/special-reports/special-report-congo-y

3. http://www.itu.int/ITU-D/ict/statistics/explorer/index.html

4. https://www.facebook.com/pages/G%C3%A9n%C3%A9ration-Grands-Lacs/153661361387457

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Care for the future

Cultural and digital strategies as a response to ongoing urban conflict: The case of Medellín, Colombia.

By Theresa Bean,

Postgraduate student, School of Modern Languages and Cultures, University of Leeds.

Acknowledgements

"...It works because art changed me. I was part of the conflict and after art gave me the opportunity to do positive things that contribute." Maurizio Cortez, artist, Comuna 13, Medellín.

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Introduction

In recent years Medellín has been recognised internationally for its successful urban development and social transformation. In the past two decades the city has evolved from once being known as the most violent city in the world, to being awarded the title of the innovative city by the Urban Land Institute. Given this, its public policies have become a test case for politicians, academics and commentators alike. Culture and digital policy has been one of the most important features in the evolution of urban development in the poorer areas of the city.

Firstly, this paper will seek to understand the role art and digital technologies play in the context of the transformation of Medellín as a city emerging from sustained periods of violence and still experiencing armed conflict. Through a series of interviews with a wide range of local actors, this paper will explore how art and digital initiatives have emerged. Secondly, it will assess these policies as a vehicle for addressing issues of inequality and poverty with an understanding that limited life chances are often triggers for involvement in illicit activity. By assessing these themes, it will suggest that this policy trajectory is the state's attempts to reassert its legitimacy as it endeavours to evade a legacy of corruption, political violence and withdrawal. Thus adopting this premise begs the question – to what extent this can be considered genuine policy or political rhetoric.

To compliment this, the paper also deals with community cultural and digital responses to armed conflict. Particular attention will be paid to the emergence of grassroots initiatives, stressing the importance of context and the interaction between the state and the community. The themes of resistance, prevention, historical memory, and human rights abuses, common amongst communities emerging from and still experiencing conflict, will be examined.

In examining both formal and informal cultural and digital initiatives, the paper will conclude that these policies serve to facilitate social and civic stability with a view to repair the state´s authority. Furthermore, it will illustrate that this is an uncomfortable convergence between local government policy and grassroots community projects. The continuing presence and apparent necessity of cultural and digital community organisations dealing with effects of conflict demonstrate the sustained failing of the state to effectively perform its most vital functions.

Methodology

As part of this project, semi-structured interviews were undertaken during a research visit to the city of Medellín in July 2013. Interviews were conducted with a variety of arts organisations covering music, audio visual art, literature plastic art, new social media/citizen journalism, radio and broadcasting. In terms of geographical reach, the interviews were conducted with community arts organisations and individual artists operating in Comunas 4, 5, 6, 8, 13 and 15 (see figure 2). Research involved interviews with local government agencies and formal stakeholders in the city, including representatives of the Ministry of Culture for the Mayor's Office, Medellín Digital, Ruta N, the EPM (Public companies Medellín) and the Association for Cooperation and Investment (ACI).

Concurrently, an examination of primary and secondary data has also been undertaken to support the interviews. Data such as literature, websites and social media, music and photographs have been studied to facilitate a greater understanding of the role of digital and art in Medellín.

Political and social context: Medellín's legacy

The study will focus on the geographical region of the metropolitan area of Medellín, capital of the province of Antioquia, Colombia. According to 2011 census data, Medellín has a population of 2,933,094. Medellín is Colombia's second city, both in terms of population and economic activity, with the city contributing 8% of the country's GDP in 2012. Medellín is divided into 16 Comunas or boroughs and within the Comunas are barrios or districts. Henceforth, the term Comuna and barrio will be used in the document when referring to parts of the city.

Figure 1 Map of Colombia

Figure 2 Map of Medellín by Comunas. Source Alcaldía de Medellín

It would be impossible to explore the role of digital and art in Medellín without understanding the city's turbulent past. For over 60 years Colombia has been plighted by a series of enmeshed conflicts characterised by civil war, and on-going Guerrilla conflicts and drug cartel violence. Throughout these conflicts the city of Medellín has been a protagonist; a battle ground for drug cartels and paramilitaries or as a host receiving rural communities fleeing from the fighting. The levels and nature of conflict that Colombia has experienced clearly demonstrate the weakness and instability of state apparatus and the absence of normalised democratic processes.

The complex development of many creative initiatives can be best understood as a product of the city's troubled and violent history, alongside local government policy, and, most significantly, local community activism over the last 30 years.

In the mid-twentieth century Medellín had a thriving textile, food and chemical sectors and, as such, was referred to as "Colombia's industrial city". This period (1950-1970s) in Colombia was characterised by political stability under the Liberal/Conservative coalition "Frente National" and the city enjoyed a period of economic growth evident in the construction of new buildings and an airport (Alcaldía de Medellín, 2011, P37).

However, the 1980s sharply contrasted with the previous decades' prosperity due to political instability, industrial decline and the rising dominance of drug cartels, criminal and paramilitary groups. The surge of drug gangs, and right wing paramilitaries coupled with political corruption and clientelism in the city resulted in the weakening of state authority, especially in terms of justice and law and order. The resulting withdrawal of the state meant that the state apparatus was almost non-existent in the poorer barrios on the outskirts of the city. These boroughs were controlled by drug cartels and other illegal actors who fought turf wars and imposed their authority by force (Rozema, 2007).

As Pilar Riaño Alcala remarks during this period, Medellín: "*…was transformed by the infiltration of nacrotrafficking into all areas of its social and institutional life"* (Riaño 2010, P3). As a result, since the early 1990s more than 40,000 young people (aged 14-26) have been murdered in Medellín, peaking in 1991 with 6349 deaths, making the city one of the most violent in the world (Yarce, 2007).

Constitutional reforms in 1991 sought to strengthen balances and checks on political power and introduce the election of Mayors by popular vote. Mayors had previously been nominated by the President and thus, had little autonomy to effectively govern (Cárdenas, Junguito, & Pachón, 2006). Locally, the fall of the Medellín cartel in 1992 and the shooting of the country's most powerful drug cartel leader, Pablo Escobar, by Colombian forces in 1993 shifted the balance of power. The collapse of the Medellín cartel resulted in the emergence of new conflicts and changed the nature of militia gangs. In 1995 two of the larger militia gangs agreed to a peace deal with the national government and by 1997 the remaining militias' authority had been weakened by rival gangs and the presence of community self-defence organisations that protected the community against the militias. This chain of events helped to initiate Medellín's transition to a degree of political and social stability (Riaño, 2010, P3). Nationally, the Colombian government attempted to end a long-running civil war through peace talks with the left wing FARC guerrilla group during the late 1990s and early 2000s.

Although the talks were ultimately abortive, levels of violence were reduced in this period. In 2000, Plan Colombia, a $7 billion strategy funded by the US government, aimed to improve security, strengthen state institutions and destroy paramilitary organisations and drug cartels. In Medellín this resulted in a large military offensive, coupled with demobilisation, disarmament and reintegration (DDR) programmes for former paramilitary soldiers. It was against this backdrop that Sergio Fajardo, the architect of Medellín's urban and social transformation, came to power.

Implementing the strategy:
Medellín's transformation

Medellín public policies have become something of a test-case for social and urban regeneration strategies. The growth of digitalisation in the city and the support for culture is part of the urban regeneration plan which aims to promote equality, inclusivity, social and political participation; and encourage social prosperity (Alcaldía de Medellín, 2011). This sentiment was echoed by Mayor Salazar who outlined that *"Cultural development is the sustenance of democratic life. Well-educated people, self-controlled, with common values, are the seed of a state and of a society where respect for universal values exists"* (Palmer, 2010). Thus, highlighting the motivation for supporting culture is to ensure social and political stability.

Whilst attempts at urban regeneration had begun in the 1990s with the construction of the Metro and municipal parks, it was the Fajardo administration in 2003 that decisively propelled creative urban regeneration and social transformation. Fajardo, a mathematician and independent candidate with links to the Green party was elected Mayor of Medellín in 2003 obtaining 208,541 votes, the highest number of votes ever for a Mayoral candidate in Medellín (Alcaldía de Medellín, 2008, P17). In 2004, under Fajardo's tenure, the Integrated Urban Project PUI (Proyecto Urbano Intergral) was implemented.

In contrast to most European regeneration projects, such as the case of Bilbao, Salford and Hoxton which have often dealt with social, physical, economic issues in isolation, Medellín's approach was more integrated (Gomez, 1998; Pratt, 2009; URBACT Culture Network, 2006). The initiative took a holistic approach to social and economic problems in the poorest areas of Medellín which had suffered years of state neglect and an absence of infrastructural investment. The plan addressed issues of housing, education, green spaces, health, security, libraries and public spaces. As part of this initiative major architectural projects were initiated, including the Botanical gardens, the Northern park, the Science and Technology park and the Moravia Cultural Centre designed by Colombian architect, Rogelio Salmona, amongst others. Integrated social urbanism and 'creativity' was very much a central theme in this regeneration of Medellín. For example, the Metrocable (cable cars) constructed in 2005, aimed to provide a safe and cheap alternative to travelling through the comunas into the city centre because crossing "invisible borders" can often be dangerous and time consuming.

This apparent holistic nature of the PUI illustrates a new departure in urban regeneration. The PUI sought to address issues of inequality, poverty, security, transport and facilitating transparency and participatory citizenship concurrently. At a glance it is possible to suggest that the PUI has been partially successful in addressing some of these issues, with the transport, libraries, parks and cultural centres being the most obvious examples.

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However, addressing other social issues has been more challenging. Since the implementation of the PUI strategy in 2004 murder rate has fallen significantly. For the period 2004-2012, murder rates averaged 56.6 per 100,000 inhabitants compared to an average of 213 murders per 100,000 inhabitants during the period 1987-2003 (Personería de Medellín, 2013, P16; Medellín como vamos seguridad, 2013). Notwithstanding, in 2009 the murder rate rose to nearly double the rate in 2004, attributed to the extradition of 14 paramilitary leaders in 2008, including the leader of Bloque Cacique Nutibara which disrupted the balance of power and led to the restructuring of criminal gangs Medina, Posso & Tamayo, 2011; Llorente & Guarín, 2013). Although it has continued to decline since 2009, it has not fallen below the levels seen during the period 2004-2008 (Figure 3). Official sources attribute the majority of these murders to a range of illegal armed gangs (bandas y combos) (Personería de Medellín, 2013, P17). It is estimated that there are 200 gangs with 10,000 young people believed to be involved in these gangs (Yarce, 2007; Coalico, d.u). The presence of gangs underscores the continued failure of the state to adequately address issues of law and order.

Gráfica 1. Número y tasa de homicidios por cada cien mil habitantes (h.p.c.m.h.) en Medellín 2004-2012.
Fuente: SISC - Concertación INML. SIJIN. CTI
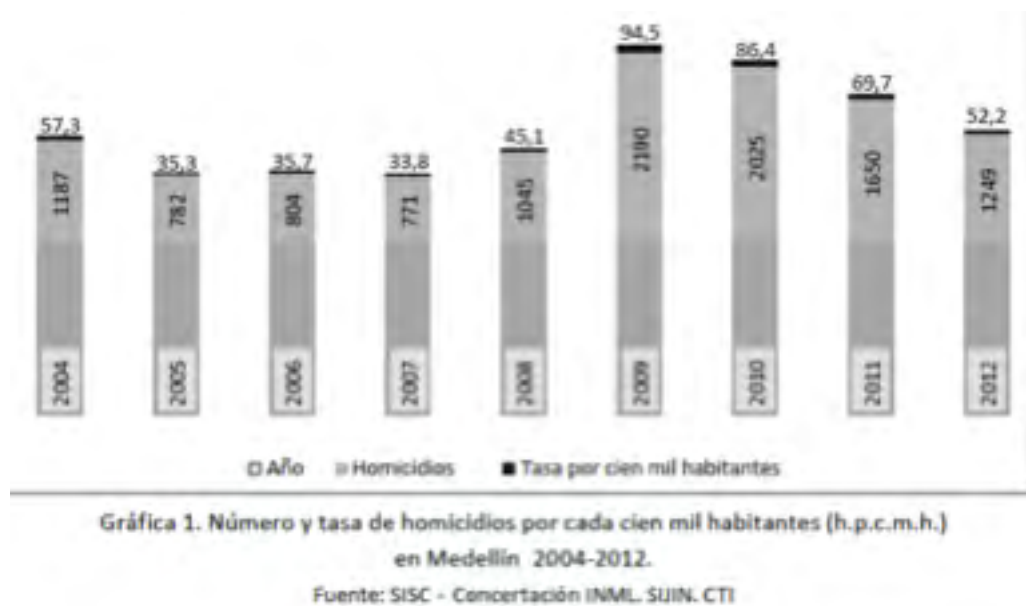
Figure 3 Number and rate of murders per 100,000 habitants (2004-2012) Source SISC

This data presents a challenge in testing a correlation between the PUI and a falling murder rate. Other indicators of success also provide tenuous results. Poverty and extreme poverty, currently at 17.9% and 3.5% respectively, has been falling year on year since 2008 which could be regarded as an indicator for success. Unemployment rates have also fluctuated during this period (2007-2012) and currently stand at 12.4% for the city as a whole (Medellín como vamos: empleo e inflacion, 2013). However, unemployment is significantly higher amongst young people living in the peripheral comunas and murder rates in these comunas are significantly higher. For example the murder rate in Comuna 13 was 21 times higher than in the more affluent areas of the city, such as Comuna 14 (Medellín como vamos: seguridad y convivencia, 2013). Similarly, a UN report concluded that Colombia has the high levels of urban inequality in Latin America, with Medellín heading the list. Since 1990-2010 the gap between rich and poor in Medellín has increased by 15% (Tellez, Oliveros V., 2013). This may suggest that the PUI has not delivered effective results in addressing issues of inequality, poverty and security in some of the most vulnerable comunas. Whilst it would be erroneous to assume causality, this set of statistics does pose some interesting questions regarding the real impact of the PUI on addressing socio-economic and security concerns.

Policy and governance:

"Medellín, the most educated"

Under the umbrella of education and the slogan of "Medellín, the most educated" as outlined in the Medellín development plan (2004-2007), culture is a central theme (Gomez Lopez, 2006). This was reiterated by Carlos Mario Guisao Bustamante, the Sub Secretary for Art and Culture, who explained that 12 years ago the Ministry of Culture was created as a separate entity and is considered one of the most important strands of local government enjoying an annual budget of fifty million dollars.

Referring to the creation of the Ministry of Culture as a department in its own right, Guisao Bustamante stated that:

"...they created a department that joined closely together with the people. I am not only referring to art or culture in the strictest sense, but there is a wider purpose of civic responsibility which is continually present in everything we do..."

This demonstrates an understanding of how culture has emerged in the community and how the state can regain legitimacy by repairing relations with civic society through support for cultural initiatives. The rationale for civic inclusion was the belief that:*"... no public action could facilitate the growth of the city without the development of civic responsibility and citizenship..."*. This illustrates the state's commitment to reasserting its legitimacy through inclusive policies in which citizens adopt the role of a stakeholder. Thus, active and participatory citizenship in all spheres of local and civic life is regarded as vital in ensuring the reestablishment of the state as it recovers from the effects of paramilitary and criminal violence and political corruption in the 90s.

In the same vein, the Sub Secretary for Culture acknowledged the wider social role that music plays in certain areas of the city as he commented that:*"... music is a strong social fabric, especially with what happens in certain parts of the city, music is an element that brings people together, that allows expression, to construct a reality, a life..."*

This sentiment demonstrates that investment in culture is a useful vehicle to facilitate social well-being and stability, diminishing illicit acts that threaten the state's position.

Promoting active democracy: Participatory budgeting and local planning:

The Development Plan also set out polices to improve governance, financial transparency, participation in civic life which led to the introduction of participatory budgeting (Brand and Dávila, 2011; Fukuyama and Colby, 2011; Hylton, 2007). Local communities have been given the opportunity to actively participate in the drafting of local projects and the allocation of funds for local projects. Since 2004, every year 5% of the city's budget has been allocated to the participatory budgeting programme for projects drafted by and elected by the local communities through a voting system. The Mayor's Office in 2007 describe the function of participatory budgeting as *"...the instrument of annual planning, to help on prioritisation of the demands of the city, providing in theory universal access by the population to the decisions of the city. It is a space of "co-management" where the community and the municipality together decide a portion of the investments."* (Alcaldía de Medellín, 2010).

Local neighbourhood assemblies were established to determine local planning policies, working collaboratively with the local government, NGOs and other community organisations. In 2010, 3574 people (usually from local community organisations) across 21 neighbourhoods were elected to the neighbourhood assemblies of which 29% were comprised of young delegates (Consejo de Medellín, d. u.). In 2011, 109 667 votes were cast to elect members for the local neighbourhood consultant council which allocates resources to local projects as part of the participatory budget programme. These projects are approved by Medellín's Municipal council which allocates funds and contracts to the community organisations (Samper, 2010, P.14-15).

However, it is worth noting that research undertaken by Carolina Gomez in 2007 revealed that the process of securing funds through the participatory budgeting scheme was complex for most local community

organisations. Although the process facilitated relations between local communities and the Mayor's Office, she argued that the application process was too technical for many local organisations and the conditions attached required specific knowledge resulting in few local organisations benefitting from the process.

This view was supported by several cultural leaders in Comuna 6 and 13 whom during interviews stated that it was difficult to assess funding due to the strict due diligence processes, limited confidence in community organisations and competition.

Notwithstanding, having spoken to various cultural leaders in Comuna 6 and 8, informal cultural organisations have been awarded funding from the participatory budgeting scheme for activities such as printing newspapers and festivals.

Moreover, the co-management nature of the project is questionable considering the power differentials between the state and communities in this process. Despite a community led process, the Mayor's Office ultimately approves projects and allocates funds. The community is therefore constrained in this process by the rules of engagement defined by the state. References could be made here to Steven Lukes' theory of power which deals with decision-making in a political arena and control over the agenda (Lukes, 2004). In this context the role of the local community could be regarded as one of the "non-decision maker", being coerced covertly or overtly to make decisions within a restrictive framework as set by the state's agenda.

Facilitating change: The Smart City initiative

Continuing under the slogan "Medellín the most educated" Medellín Digital, the government's technology agency, began to implement a programme to bring free internet access to communities, initially focusing on schools and libraries and later on other public spaces such as parks and squares. To date there are 321 free connectivity spaces ranging from free internet access to free computer access. The tenet of this programme was to facilitate the discovery of opportunities, empowerment through knowledge and connections with others. Initially the programme focused on the areas of education, culture and entrepreneurship and can be considered as a part of a wider package of initiatives to facilitate social and economic prosperity.

However, Medellín Digital has identified other areas of citizens and communities' lives that could benefit from technology and therefore are delivering "Medellín Ciudad Inteligente" (Medellín Smart City). Medellín Ciudad Inteligente will build upon the strategy of connectivity to expand into other public services, such as health, policing and safety. In this context, the role of technology is to promote transparency in government by sharing and making government information available to people. In the same vein, connectivity functions as a tool for participatory citizenship in which individuals and communities, through the uptake of technology, are empowered to transform their lives.

The development of Medellín Ciudad Inteligente has been presented as collaboration between communities led initiatives and government policy. Thus, it is not merely a top down initiative imposed by the government; there is a convergence between the state and the community's needs. As Ana Isabel Palacios, Director of Medellín Ciudad Inteligente explained, the plan emerged in consultation with citizens, going into communities, analysing their experiences as service users and using this information to improve services. Medellín Ciudad Inteligente works with communities, particularly in more marginalised communities (as they enjoy greater levels of government investment), such as Comuna 13, to identify their needs and give them solutions. Ana also highlighted the high levels of community led social entrepreneurship and social innovation initiatives present in Medellín and therefore explained that the Medellín Ciudad Inteligent's role was to enhance and sustain these projects through the appropriation of technological tools.

However, as with the local planning and participatory budgeting scheme, questions could be raised regarding power differentials, decision making and agenda setting. Whilst the government may take a degree of direction from interacting with the community, the state ultimately decides which issues will inform policy. Thus, citizens have no power to dispute the agenda imposed upon them or question he extent to which citizens are empowered in this process. Furthermore, the state controls what government information is disseminated to the public which raises doubts about the transparency of this policy.

Therefore, whilst the development and aims of Medellín Ciudad Inteligente are presented as a partnership between the local government and the local community, it is possible to suggest that this digital policy, as with cultural policy, serves to aid the state's agenda. As with other policies, the language of co-management is employed, whereby citizens, supported by governmental infrastructure, "determine" their personal development and that of their community. Notwithstanding, given the conditions of possibility are set and controlled by the state, the concepts of co-management, transparency and empowerment are questionable.

Given this, digital polices can be regarded as a tool for legitimising the state. Firstly, they promote confidence in the state as they portray the government as transparent, receptive and accountable, therefore facilitating its legitimacy. Secondly, the active (albeit restricted) involvement of citizens in local digital policy aids stability and endorses civic life as people are considered as stakeholders in this process. Thirdly, it serves to diminish some of the causal social issues (low educational attainment, limited prospects, and unemployment) that are factors in partaking in the illicit activities that threaten the state's authority. Facilitating confidence in the state, the role of citizens as stakeholders in policy making and addressing social issues all serve to strengthen the state's position in the community.

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At first glance, participatory budget, consultations and local planning appear to be innovative strategies in which citizens take an active role in shaping civic life. However it is important to remember the context in which these policies are being implemented. Colombia, and Medellín in particular, is recovering from complex, multi-layered internal conflicts that have engulfed the country for more than half a century.

Utilising policies as a means of economic and social prosperity to simultaneously strengthen the state's authority in the context of post war recovery is a tested strategy. For example, comparable strategies to improve social and economic conditions were employed in building peace in Northern Ireland (Dixon, 2009). Likewise, parallels could also be drawn with "the hearts and minds" rationale adopted by the US and British governments as a mechanism to combat insurgency in Iraq and Afghanistan (Berman, 2008; Fukuyama, 2008; El-Aendi, 2005). In the same vein, the local government in Medellín is grappling with current insurgents and concurrently attempting to quell the potential for future insurgency amongst the younger population. Therefore in this context digital and cultural policy is an instrument for countering the threats to political and social stability.

Using creative endeavours to facilitate social and economic well-being is not a novel concept. However, the use of culture as a tool for social transformation in Medellín is not merely a "top down" response led by the government.

Indeed, for decades in the neighbourhoods of Medellín, long before the social and urban transformation plans of Fajardo or his successor Alonso Salazar Jaramillo, creativity has provided a vehicle for social change, a platform against violence and a means of education. Therefore, it is possible to argue that these governmental initiatives, perhaps take some direction from the cultural practices that have operated in the neighbourhoods of Medellín since the late 1980s. The next section of this paper will examine community cultural and digital activities which encompass the themes of prevention of violence, historical memory and human rights.

The role of culture in the barrios of Medellín

"Peace won't be built in Habana; peace will be constructed with the young people and the efforts of the community in Comuna 13 on a daily basis..."

During the 80s and 90s, Medellín gained a notorious reputation as the most violent city in the world due to the presence of rival drug gangs and paramilitary organisations operating within the city (Hylton, 2007; Lamb, 2010). During this period, formal state institutions were largely absent from the most violent areas of the city that were the battle grounds of various rival armed groups. The decomposition of the state naturally had a pejorative effect on the city as a whole. However, the poorer, peripheral comunas, the protagonists in these armed conflicts, who received a high influx of displaced people fleeing from conflict in rural areas, suffered the most. These comunas have been referred to as "the informal city" due to the lack of government investment in infrastructure, formal planning and the absence of essential state functions (Blanco and Kobayashi, 2009; PRIMED, 1996).

Due to the withdrawal of the state in "the informal city", local communities sought their own solutions to the violence and the related socio-economic problems (Riaño, 2010, P160). At the beginning of the 1990s, which bore witness to some of the worst episodes of street violence, massacres and bombings in Medellín, local communities united to confront their bloody reality. Numerous community groups, mainly comprised of young people, diverse in their art form (music, dance, and theatre) but with a cohesive message for the respect for human life and for an end to the violence in their neighbourhood, emerged (Rincon, 1991). Such a response to this situation was not uncommon given that *"arts practices and rituals are central to the ways in which different societies and cultures cope with times of extreme upheaval and transition"* (Kalmanowitz and Lloyd, 2005, P.6.). These groups aimed to provide an alternative to the lifestyle and culture of "easy money" and violence that joining drug cartels could offer young people living in poverty and with limited prospects (Alcaldía de Medellín, 2011, P.41). Young men were, and continued to be, more likely than any other age group to be involved in conflict as a perpetrator or a victim (Coalico, d.u). In 2012, young men (aged 18-32) accounted for 59% of all homicides in Medellín (Personería de Medellín Informe, 2013, P.16).

In 1990, under the direction of Alonso Salazar (who in 2008 was elected Mayor of Medellín), the NGO Corporacion Regional called a 3 day general meeting to discuss the violence in the north-eastern neighbourhoods of Medellín. The meeting was attended by a diverse set of actors, community groups, cultural groups and religious organisations.

Culture became one of the dominant means of resistance and a form of protest against violence. The perpetrators of violence were diverse, ranging from cartels, criminal gangs, paramilitaries to state sponsored violence, such as police and military offensives. A cross sector approach was taken with a variety of partners, including community groups, NGOs and educational institutions co-ordinating artistic activities. Films and television programmes and cultural schemes devised by the School of Popular Art at the Medellín Institute of technology were created. Community cultural projects also received support from a broad spectrum of organisations such as El Colombo-Americano, the Alliance Française, the Diocese of Antioquia, the Medellín Chamber of

commerce and the NGO Paisa Joven amongst others (Alcaldía de Medellín 2011, P.42). Noteworthy is the state's absence from this diverse cohort of formal organisations that supported the development of these community organisations. Since then, artistic organisations have evolved to undertake a variety of functions which deal with the effects and continuing presence of violence.

Whilst endorsing and being supported by governmental initiatives, it is apparent that many community cultural activities have their own agenda determined by the needs of their community. Indeed, the quote on pg.11 from a Comuna 13 resident at a public meeting about peace, demonstrates an attitude and culture of community responsibility and action towards solving problems in the locality. Having emerged as a response to the armed conflict, the function of culture is often multi layered, undertaking a salient role in themes often present in communities experiencing and emerging from conflict. Given this, it is necessary to examine the various themes that culture and digital initiatives address in the barrios of Medellín.

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We fight back with art: Community arts as violence prevention and resistance

Although murder rates have decreased significantly since the early 1990s, the city continues to experience episodes of violence. Comunas 1, 8, 10 and the southern Comuna 13, San Javier, have been particularly affected by this illicit activity (Personería de Medellín Informe, 2013). In Comuna 8 and 13, murder rates are significantly higher than the city average, as is the number of people disappeared. Similarly, forcible displacement due to threats, territorial disputes and recruitment of children to gangs is also significant problem in these areas (Personería de Medellín Informe, 2013, P.23-27).

The continuing presence of illicit actors in these peripheral barrios had led to a constellation of complex socio-economic issues that, to some degree, the state has failed to address. Problems such as high youth unemployment, poverty, inequality, inadequate housing, and an influx of displaced people are common issues in the poorer barrios. Such a synthesis of problems provides a fertile recruitment ground for gangs and militias looking for new young recruits. To this end, the community has attempted to create non-violent alternatives to the lure of instant material wealth obtained by joining these groups.

An example of such an initiative is Culturizzarte. The organisation was set up 3 years ago by Maurizio Cortez, an artist and poet from Comuna 13 who currently works with around 60 children (aged 6-15). He has very limited resources and does not receive any financial support for his projects from formal institutions. The projects range from painting murals, sculpture, literature and poetry and takes place in public spaces, such as the parks in Comuna 13. He explained that the aim of the project is to provide social education through art. The project evolved through "… necessity to get the children involved in an alternative, to get them involved in artistic processes that consumes violence…"

Culturizzarte uses art to educate children, to provide an alternative to the conflict that is present in their community. Maurizio explained how artistic processes can prevent children from becoming involved in violence

"… It works because art changed me. I was part of the conflict and after art gave me the opportunity to do positive things that contribute… the process involves changing one's mentality of being human, to create tools, tools using art, through drawing, through literature, through sculptor, then people mentally prepare themselves with these tools. This results in distancing themselves from violence and things that are not productive for them or society…"

The work of Cortez reveals an important function of art as a tool for violence prevention in one of the most marginalised communities in Medellín. Art in this context serves as a means of providing a counter culture of non-violence to the familiar gang culture (Zelizer, 2003, P65) However, it also seeks to break the cycle of violence by physically removing children from the influence of gangs by providing a safe and neutral space for expression and development. Therefore the artistic practices of Cortez can be viewed as a form of social protest, in which art is an instrument to speak out about violence and raise awareness. (Bartelt, 1997; Freire, 1997; Lederach, 1995)

Figure 4 "Peace Guitar" In remembrance and homage to the artists and innocent victims of the war. Copyright the author.

Creating historical memory and facilitating healing in the community: *Lluvia de Orion*

Medellín has suffered some of the worst episodes of violence in Colombia's long and complex armed conflict. Many victims of the violence have never received justice despite a national museum of historical memory, an agency for human rights and plans to create a national truth and reconciliation committee. Even in cases of human rights abuses perpetrated by the state, such as the Villatina Massacre in 1992, in which 9 people, (including 8 children) were murdered by the police in Comuna 8, the victims are still awaiting justice. Despite the government admitting responsibility, issuing a public apology and compensating the victim´s families, no one has been prosecuted for the massacre.

It is within this framework of a complex enmeshed legacy of drug cartel, paramilitaries and state sponsored violence, individuals have worked collaboratively through the medium of art to remember and heal wounds.

Named after a 2002 military offensive, Operation Orion, in Comuna 13 which led to mass detentions, 3 civilian deaths and 89 disappeared; Lluvia de Orion (Orion's rain) is a community led arts initiative founded by Robinson Usuga, a journalist from Comuna 13 who was displaced due to violence. The organisation emerged three years ago through a series of journalists' stories recounting personal experiences of armed conflict in Comuna 13. Since then the organisation has undertaken a series of projects using arts as a means of constructing historical memory, violence prevention education and healing the victims of armed conflict in Medellín.

Luara Lopez Alzate, communications manager for the organisation explained that the Lluiva de Orion worked with local schools, teams of voluntary psychologists, educationalists and communicators to deliver art and memory workshops. The workshops are aimed at both victims of violence and those who have not been directly affected as a means of facilitating reflexions on the armed conflict. The workshops take various forms with some providing a space for young people to draw their own experiences whilst others are specified pedagogical projects, researched and led by professionals in the organisation.

Figure 5 Muerte bajo la lluvia de Orion (Death under the rain of Orion) by Jeferson Usuga copyright www.lluviadeorion.com

According to Laura, art serves as a suitable medium for reflexion and memory as *"… the language of art is not political; it enables a greater expression of these kinds of realities, especially for young people who have been victims of the armed conflict…".*

The workshops also provide a space for young people to tell their stories so in this sense,

" …art also acts as therapy in which drawings, or other artistic mediums are able to represent all of the things that have affected people or they have lived through during the armed conflict and in these ways they are able to recover because let's say that psychological issues, one way or another have to flow and this is a very effective form."

In contrast to other organisations, Lluvia de Orion focuses on working with both victims and those who have not been directly affected by violence considering this to be an important way of raising a greater awareness, promoting memory and, consequently, preventing violence.

There is a wide body of literature that support Laura's claims that art is a powerful non-verbal medium to express experiences and feelings (Malchiodi, 2011; Carey 2008). Art has been considered to be a "… a direct portal to the symbolic realm, and as such may be a useful medium to access both traumatic and resource-based memories in children, and in adolescents and adults with earlier trauma exposure" (Gray, 2011, P40). Indeed, art therapy in various guises has been utilised in post conflict healing and recovery around the world in places such as the Congo, Bosnia, and Northern Ireland (Kalmanowitz and Lloyd, 2005; Baker 2006).

The work of Lluvia de Orion provides an interesting example of convergence between formal and informal cultural initiatives in a post conflict space. Whilst this project evolved as a direct response to first hand experiences of violence and its effects, Lluvia de Orion now work with the Casa Nacional por la memoria historica, a government created space for historical memory. Therefore this demonstrates the openness of the local government to endorse and support community driven projects.

Our version of events: citizen journalism and community media

The digital age has aided the ability of local communities to articulate alternative stories, and project diverse representations, to those highlighted by mainstream media. Access to radio and digital media in the barrios of Medellín has emerged as a powerful tool for the community to project their voice.

Ciudad Comuna is a community communications organisation for young people in Comuna 8, an area which receives high numbers of displaced people escaping violence in rural areas of Colombia (Personería de Medellín, 2013, P29). The purpose of the organisation is "…to promote a reflection on human rights, youth participation, cultural development and the social alternatives to overcoming armed conflict… to get young people away from the risk of being recruited by armed gangs…"

As in the case of Culturizzarte organisation, Ciudad Comuna regards media and creativity as a vehicle for social change, education and providing a space away from the threat of gangs.

The organisation is run by volunteers who provide training for the local community in the disciplines of journalism, audio visual production, and radio. This is non-accredited informal educational training which takes place within the centre, providing courses for approximately 80 young people per year. Young people are recruited for the courses through the newspaper, the website and social media such as Twitter, Facebook and YouTube.

A key focus of the organisation is the promotion and production of community led media. Content for the newspapers, radio shows, projects and websites is collated via an editorial committee. The editorial committee is an open participatory space in which residents of Comuna 8 can suggest ideas for content.

Similarly, residents can propose projects and content via the social media and web pages. For example, the organisation is considering adopting the Ushahidi platforms, after receiving a suggestion made by a student attending the school.

The reporting of stories in Comuna 8 also serves as a means of mapping human rights abuse and the armed conflict in the community. As the manager of Ciudad Comuna highlights, official statistics on incidents of armed conflict in the comuna are not an accurate reflection of reality. As a result, Ciudad Comuna: "… are working with community leaders across the districts to obtain information so that we can map the real incidents of armed conflict …". Community induced mapping of human rights abuses and armed conflict is being developed using the open source software, ArcGIS. ArcGIS software will enable people to visualise accurately the real situation through graphic maps, thus providing alternative to the official government data.

The appropriation of technology by this marginalised community illustrates how digital can be utilised to dispel untruths and counter stigmas often presented by mainstream media and the government. In particular the community driven mapping of human rights poses some interesting questions on how this information could be utilised. Would it challenge or complement official statistics? How could these incidents of human rights abuses been verified? Would these maps help to shape the local government's human rights policy and improve justice? Would it help to reduce violence in the area?

It is worth remarking on the nature, aims and methods of these organisations. Firstly, these organisations are relatively new organisations, established after the implementation of the PUI in 2004, having inherited the mantle from organisations that emerged during the late 80s and early 90s. These organisations operate in some of the most marginalised areas of the city (Comuna 8 and 13), with some of the highest murder rates, displaced people and poverty. Thus, the emergence of these organisations during this period of Medellín's social and urban transformation highlights some of the failures of this strategy. The existence of these organisations is rooted in the continued threat of violence, human rights abuses and injustice. Therefore cultural community organisations serve as a clear reminder that the state is failing to fulfil its duty of ensuring law and order and justice.

Secondly, these are all self-sustaining voluntary organisations. Despite being known to formal organisations, they do not receive any regular funding from the local government, although Ciudad Comuna receives money from the participatory budgeting scheme for printing. During interviews, when questioned about receiving government support, these organisations did not make any pejorative comments about being unable to access government funding. This could be attributed to the continuing lack of confidence in the state in these areas. Comuna 8 and 13 have witnessed some of the gravest effects of the armed conflict and the absence of effective state apparatus. Although the state has invested heavily in these communities in recent years, perhaps the community is not accustomed to a culture of state intervention. Furthermore, both of these Comunas have been victims of relatively recent state perpetrated violence, notably in 1995 and 2002, for which no one has been prosecuted. Given this, it is perhaps understandable that these community organisations do expect the state to support them, thus they seek their own solutions within their community.

Notwithstanding, these organisations have contact with formal networks, for example, our visit to Ciudad Comuna was arranged by Medellín Digital. Similarly, we met Maurizio Cortez of Culturizzarte at a government organized peace workshop in Comuna 13 where he displayed his art work. This event was attended by Sergio Fajardo, the former mayor and current Governor of Antioquia. Arguably Lluvia de Orion enjoys the strongest relationship with formal institutions, working closely with the Faculty of Communication at the University of Antioquia and other educational institutions. Moreover, the organisation is promoted on the National Centre for Historic memory's website as a key organisation dealing with historical memory in the province of Antioquia. Therefore, the fact that that these organisations make themselves visible to formal institutions could suggest that they seek to lobby and gain recognition as a means of negotiation to shape the current political agenda.

The interaction between these organisations and the state warrants some reflection on social/community movements in contemporary Colombian society. As social movement theorists have suggested, the state is no longer capable of ruling by force and thus has created new ways of interacting with civil society, and especially with social movements (Melucci and Lyyra, 1998). The complex and multi-layered nature of interactions (co-operative, independent, consultative, protest, lobbying) between community organisations in Medellin and the state would certainly support this theory.

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Conclusion

It is apparent that Medellín provides an interesting case study given the variety of culture and digital policies operating concurrently within community led initiatives.

Despite the apparent disparate outcomes of digital policy like Medellín Ciudad Inteligente, the cultural spaces and libraries, and the funding for cultural projects, all of these strategies share a common aim. The notion of inclusive and active citizenship is a common strand across policy making in Medellín. This idea is hinged on the belief that citizens should take the role of stakeholders, working collaboratively with the state to shape their community. By addressing socio-economic problems, it is assumed that social and economic well-being can flourish, which will in turn aid stability. Thus in this context, the apparently innovative and inclusive policies are motivated by the need of the state to reassert its authority by promoting itself as a trusted, responsive and legitimate entity. Thus, akin to other post conflict state strategies, it is evident that this holistic approach to development is premised on an understanding that community involvement is paramount in the reconstruction of normalised civic life.

Whilst the research visit to Medellín provided a snap shot of some of the diverse cultural and digital community and governmental projects, this paper is limited to providing an overview of the activities and their role in the community. In order to fully understand and evaluate the processes employed by these cultural and digital organisations in violence prevention, memory, resistance and mapping human rights abuses, further field research would be required.

Formal and informal digital and cultural activities in Medellín present an interesting paradox: despite the celebrated success of the development of the city, exemplified by culture spaces, libraries and innovative transport systems, Medellín is still a city in transition. The raison d'être of community led cultural programmes responding to the on-going effects of conflict typifies this. As a consequence, they expose the sustained failing of the state to perform vital functions of maintaining law and order, protecting human rights and obtaining justice. It may therefore be slightly premature to champion Medellín's strategy as a blueprint for urban post conflict recovery. Thus, it is possible to suggest that a true measure of the success of Medellín's transition will be when such organisations cease to exist as circumstances do not warrant the necessity.

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Twitter and the 2011 riots in England

the impact of social media
and lessons for public policy.

By Rob Procter

Professor of Social Informatics, University of Warwick

Introduction

The role different communication platforms play in civil society is now a significant area of research, fuelled by the expansion over the past ten years in new forms of information and communication technologies (ICTs). The recent rise of social media platforms such as micro-blogs (e.g. Twitter) and social networking sites (e.g. Facebook) has potentially wide ranging implications, leading some observers to claim that we are witnessing the emergence of a new 'public sphere', where citizens can crowdsource information and news, express opinions, organise, hold politicians, public institutions and services to account in ways that were previously impossible. The value of social media in coping with the aftermath of natural disasters is well documented (Bruns et al. 2012, Sutton et al. 2008, Tonkin et al. 2012, Weaver 2010). Equally, events such as the Arab Spring of 2011 have been heralded as evidence of how social media can strengthen the capacity of citizens to challenge and overcome social and political repression (e.g. Khondker 2011).

The contributions in this report (Bean 2013, Crandell & Omenya 2013, Search for Common Ground 2013), while powerfully illustrative of the potential of social media for empowering citizens and communities, also provide a much-needed recalibration of our expectations of what is achievable and the challenges that may need to be faced if they are to be realised.

The rise in the importance of online content for real-time social intelligence gathering has resulted in companies, government agencies (e.g. police) and NGOs spending ever increasing amounts of time trying to establish how to interpret and react to information, rumours and opinions expressed through online social networks. A particular focus of academic research has been the role social media plays during crisis situations (Allan 2006, Barsky et al. 2006, Bruns 2006, Vis 2009, Mendoza et al. 2010, Bruns et al. 2012, Sutton et al. 2008, Tonkin et al. 2012, Weaver 2010). Comparing three crisis situations in 2005, including Hurricane Katrina, Thelwall and Stuart (2007) examined how different communication technologies were used. New ICTs were seen as especially useful for sharing information and fact-finding in the initial stages of an event, after which mainstream media outlets were able to deal more successfully with covering the aftermath.

User-Generated Content (UGC), the rise of 'produsers' (Bruns 2008) social news and citizen journalism have changed radically the way news is gathered, analysed, reported, and disseminated by online and traditional news media. An important part of this process has been the convergence between social and broadcast media in the newsroom (Hänska-Ahy 2013). The integration of UGC into newsroom routines is key especially in circumstances where there are restrictions in media access (both imposed by government authorities – e.g. the Iran protests and Arab uprisings – and natural, e.g. disasters like Hurricane Sandy) and/or events are unfolding at a fast pace (González-Bailón et al. 2011).

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"User-Generated Content has changed radically the way news is gathered, analysed, reported, and disseminated"

[1] For a critique of some of the more deterministic, utopian analyses of the social and political impact of ICT, see Castells (2007)

Ensuring that communities are able to respond effectively to crisis situations, whether they be natural, social or political, is a special case of the wider problem of supporting social resilience. Social resilience refers to the ability of social structures (societies, local communities or organisations) to resist, absorb, compensate or adapt to external pressures and shocks that may endanger the livelihood or wellbeing of their members or endanger social structures as a whole (Adger 2000, Ostrom 1990). Social media platforms such as Ushahidi have developed with the specific aim of providing citizens with the means to discover and provide information in times of social and political stress and have now been deployed in numerous crisis situations world-wide. At the more mundane level, a diverse range of "grass-roots" community sites and hyper-local news services provide citizens with the tools to report problems to relevant agencies or track the activities of their political representatives.

However, despite the evident potential of new ICTs for meeting the challenges of sustaining social resilience, its realisation cannot be taken for granted. Hence, understanding the risks that social media might expose citizens, institutions and communities to as well as the benefits – and how to mitigate the former so as to maximise the latter – is an issue of great importance. All forms of media are open to manipulation; arguably all that changes with the advent of social media is the means by which this can be accomplished. Of particular interest then, if we wish to provide a degree of protection against such manipulation, is how people make sense of information that they discover through social media and how they then respond to it. Key questions and the focus of this chapter, are: how trustworthy is information found in social media and how is it possible to make judgements of its trustworthiness? We can begin to answer these questions by examining the phenomenon of rumour in social media and how people deal with them.

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Rumour and Social Media

Rumours are an enduring feature of human discourse, so it is important to understand how they materialise and propagate in new communication spaces such as social media. Research suggests that social media provides an extremely fertile ground for rumours and misinformation (Mendoza et al. 2010), especially during crises, when unverified statements may even sometimes be picked up and given credibility by mainstream media reporting or government agencies such as the emergency services. Rumours tend to spread rapidly through social networks, especially when their veracity is hard to establish. During an earthquake in Chile, for example, rumours spread through Twitter that a volcano had become active and there was a tsunami warning in Valparaiso (Mendoza et al. 2010). Twitter has also been used to spread false rumours during election campaigns (Ratkeiwicz et al. 2011).

The scale of the problem is hard to estimate with confidence. For example, observers put the proportion of 'fake' Twitter accounts (i.e. accounts that are not what they purport to be because they are controlled by users who disguise their true identities or are linked with 'bots' rather than people) between 5 and 10%. Similarly, the number of fake Facebook accounts has been estimated to be between 5 and 10%. The relationship between fake accounts and trustworthiness of social media content is not easily established, however. Many of these fake accounts seem to exist primarily for the purpose of boosting the follower counts of other users; indeed there is a healthy market in this. Such practices are not necessarily innocuous, however, since the number of followers is often used as a proxy or rule of thumb for the trustworthiness of a social media source. Estimates of untrustworthy content vary; a study of the Bombay terrorist attack of 2011 concluded that only 17% of the total tweets posted contained information that was credible (Gupta et al. 2012). A similar study of social media during the Boston bombing of 2013 concluded that 29% of the most viral content were rumours (Gupta et al. 2013a).

Studies of rumours and urban legends in psychology have explained their popularity in terms of conversational and social properties, i.e. it appears that people spread rumours because they make appealing stories, because they are hard to verify and because they impact positively on social status (Guerin & Miyazaki 2006). Ennals et al. (2010) report that people read untrustworthy sources for a variety of reasons, including interest, entertainment value or friends' recommendations. However, such studies largely pre-date the rise of social media, so one question that needs to be addressed is does social media materially impact on people's engagement with rumours and, if so, how?

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2. http://www.ushahidi.com/
3. Trust in mainstream media and state agencies is, of course, not a given, but subject to cultural and political predispositions. Indeed, depending on the context, such sources may be viewed by citizens as suspect at best and completely untrustworthy at worst.
4. http://blogs.denverpost.com/techknowbytes/2012/08/02/regulatory-filing-reveals-number-fake-spam-duplicate-facebook-accounts/5818/
5. http://cir.ca/news/fake-twitter-followers

If we wish to understand the benefits and risks of using social media during crises or in more mundane situations, then we need to examine how it is used, that is, how do people produce and consume information they find there? This prompts a number of questions: Is social media vulnerable to faults, misinformation and misinterpretations compared to other channels? If that is the case, is that because it's new and people cannot easily assess the veracity and trustworthiness of many sources? How do people make sense of information they encounter on social media? Are there ways in which it is possible to make it easier for people to determine its trustworthiness?

It may be helpful to first establish what exactly we mean when we talk about 'rumour'. A strict interpretation might define all information as rumour until it is verified in some way. Unfortunately, this would not appear to be very useful for understanding how people engage with and make sense of rumours. It may be helpful to distinguish between different kinds of rumour, as in the following typology:

- speculation (e.g. that the Chancellor will raise taxes in the budget)
- disputed information (e.g. that reducing state spending is the most effective way to cut the deficit)
- misinformation (e.g. that climate change is not be caused by human activity)
- disinformation (e.g. that Obama is a Muslim)

At first sight, this typology seems to provide a means for ranking information by its trustworthiness. However, it becomes clear on closer examination that this is a very subjective judgement: what might be misinformation to one person, for example, might be disinformation to another. Furthermore, such judgements may change over a rumour's trajectory, such that its trustworthiness may change over time, or different versions of what might be nominally the same information may be perceived to be more or less trustworthy. Indeed, it may be that the emergence of different versions is what marks out different phases of the rumour trajectory.

In the following sections, we will examine in some detail a case study of how the public reacts to rumours in social media and the challenges rumours in social media present for organisations that the UK public might normally consider as trusted sources of information, such as the emergency services and mainstream news media. Using the same case study, we also examine how the emergency services and mainstream news media are responding to the challenges of social media. We conclude with some recommendations for further research.

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"If we wish to understand the benefits and risks of using social media during crises or in more mundane situations, then we need to examine how it is used"

Twitter

Twitter is a micro-blogging site that was set up in 2006 and which allows users to post messages ('tweets') of up to 140 characters in length. Twitter can be accessed through the Web, SMS and a variety of mobile devices such as smart phones and tablets. A recent estimate puts the number of UK Twitter users at 10 million. According to recent statistics released by Twitter, however, a majority of users do not tweet but just listen to others.

Unlike social media platforms such as Facebook, Twitter's friendship model is directed and non-reciprocal. Users can follow whomever they like, but those they follow do not have to follow them back. When one user follows another, the latter's tweets will be visible in the former's 'tweetstream'. It is not necessary, however, to follow another user to access tweets: by default, Twitter is an open platform, so tweets are public and can be discovered through Twitter search tools. The one exception to this is the direct message (DM), which is private, and can be seen only by the follower to whom it is sent. Users can also reference another user through the mention convention, where a user name, prefixed with '@', is included anywhere in a tweet. A user, thus referenced, will see the tweet in their tweetstream.

Another important Twitter convention is the RT option. By either clicking on the retweet button or by copying the original tweet and putting 'RT' in front of it, users can forward tweets from other users to their own followers. In this way, tweets can propagate through users' follower networks. One final important Twitter convention is the hashtag, which is distinguished by prefixing a string of text with'#'. In this way, hashtags provide a way for users to label a tweet with a topic, and so enables the co-creation of a fluid and dynamic structure within the tweetstream that facilitates information discovery: anyone using the same hashtag can see what everyone else is saying about this topic.
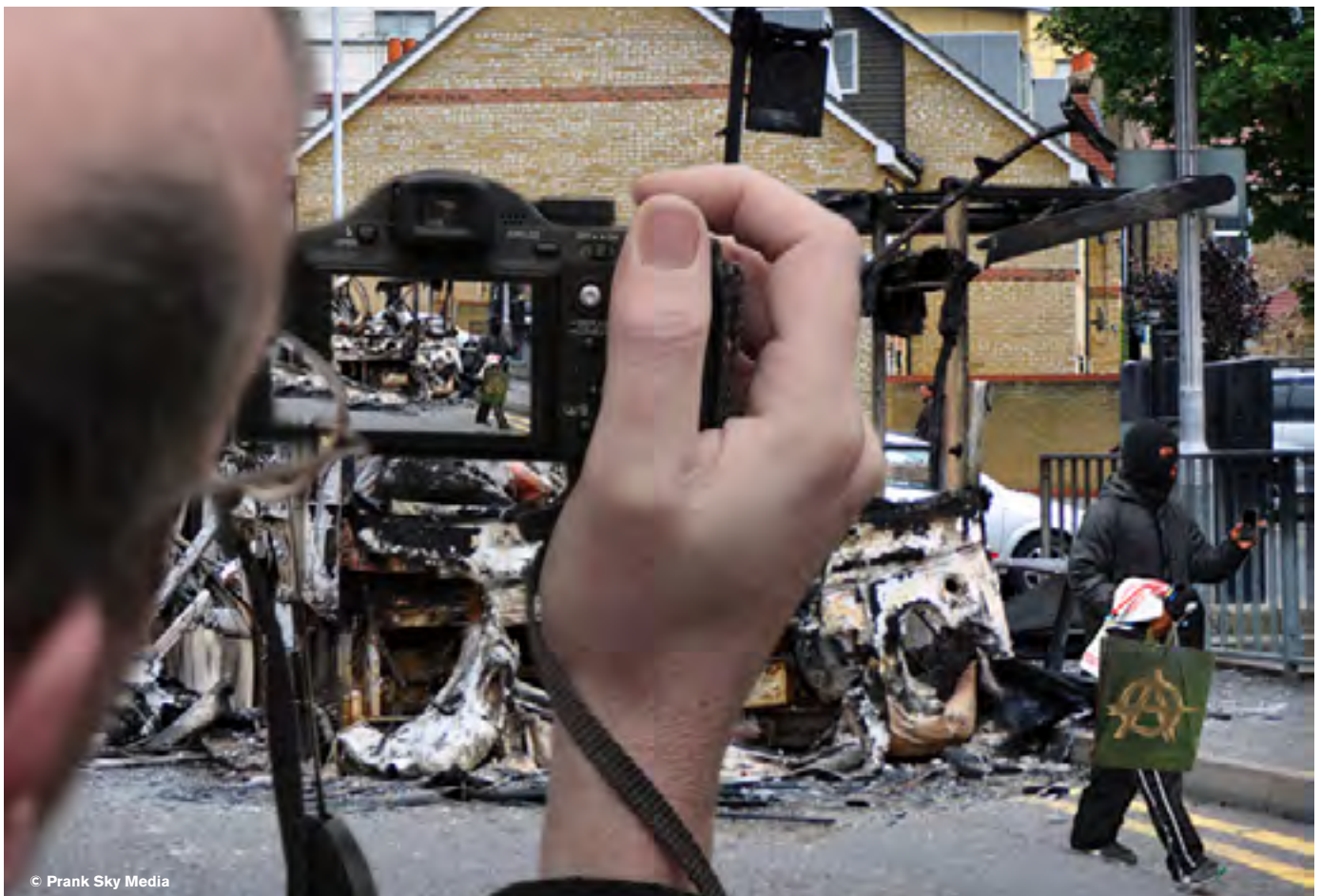
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The 2011 Riots in England

The 2011 riots began as an isolated incident in Tottenham, London, on 6 August but subsequently quickly spread across London and to other cities in England, giving rise to levels of looting, destruction of property and violence not seen in England since the Liverpool Toxteth, Bristol St Paul's, Manchester Moss Side and Broadwater Farm riots in the early and mid 1980s. Eventually, after five days, the riots ceased. The causes have been attributed to many factors (Baker 2012, Birch and Allen 2012, Briggs 2012, Gorringe & Rosie 2011, Guardian 2011, Lewis et al. 2011, Newburn 2012, Morrell et al. 2011, Murji & Neal 2012).

In the immediate aftermath of the riots, some politicians and media commentators were quick to blame social media, including Twitter for their scale and extent, and calling for social media to be closed down during such events. Procter et al. (2013a) reported finding examples of Twitter use that might be judged to be inciting unlawful acts, but concluded that these were far outweighed by evidence that Twitter was used for more positive ends during the riots and, in particular, in the organisation of the riot cleanup. Furthermore, they noted that the police themselves rejected the idea of closing down social media sites, arguing that they are a valuable tool for information gathering, for keeping the public informed and for providing advice.

Various researchers have since examined the role that Twitter and other social media platforms played during these events and come to broadly similar conclusions (Baker 2012, Bassell 2012, Casilli & Tubaro 2011, Tonkin et al. 2012).

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6. blog.twitter.com/2011/09/one-hundred-million-voices.html
7. www.guardian.co.uk/uk/2011/aug/12/louise-mensch-social-network-blackouts

Methodology

Like many other research communities, the proliferation of 'born digital' data such as that available from social media platforms means that social sciences are facing a data deluge that promises to revolutionise research. However, this is an opportunity that which the research community is presently not equipped to exploit (Savage & Burrows 2007). Where once the main problem was a scarcity of data, researchers must now cope with its abundance. Twitter users, for example, currently generate around 400 million tweets per day. Analysing such huge volumes of data demands new methodologies (see. e.g. Burnap et al. 2013).

Procter et al. (2013a, 2013b) analysed rumours in a corpus of tweets collected during the August 2011 riots in England. Their methodology made use of simple computational tools to expose underlying structures in the corpus and thus enabled identification of potentially significant fragments. The content of these fragments was then analysed using established qualitative methods. The methodology was based on the classic two-step flow model of communication, highlighting how information flows from 'opinion leaders' to others (Katz & Lazarsfield 1955, Wu et al. 2011). To map this model onto the corpus, Procter et al. used a computational tool to group source tweets and their retweets into 'information flows' (Lotan et al. 2011). Ranking information flows by size (i.e. number of retweets) provided a simple way of determining their relative significance, which would be important for deciding where to focus subsequent content analysis. To understand how Twitter was being used, they developed a code frame (Krippendorf 2004) for tweet content to categorise information flows (e.g. a report of an event, a comment about a report, a request for information, etc.) and used the resultant groupings to explore how people were using Twitter in the context of a given rumour.

Other studies have used contagion or meme-based models to analyse the propagation of rumours in social media (e.g. Leskovec et al. 2009, Paranyushkin 2012, Kaigo 2012). Burnap et al. (2013) report on a promising method for Twitter content analysis based on Sack's membership categorization analysis (MCA) (Sacks1992). MCA is a model of human category work based on observation of everyday human conversational practice (Housley & Fitzgerald 2009). Burnap et al. demonstrate how MCA can be used create rules for the analysis of content in terms of category configuration and different forms of attribution and activity. The rules they coded for were designed to detect 'tension' in tweets that might prefigure certain kinds of events, but the method is potentially adaptable to other kinds content analysis such as rumour detection and credibility.

Rumours and Social Media

Procter et al. (2013a) examined in detail the rumour that a mob of rioters was attacking Birmingham Children's Hospital (see Figure 1 and Table 1). Figure 1 shows the timeline of the rumour, which began on August 8 and highlights some salient tweets (1-7), which are shown in Table 1 and examined in more detail below.
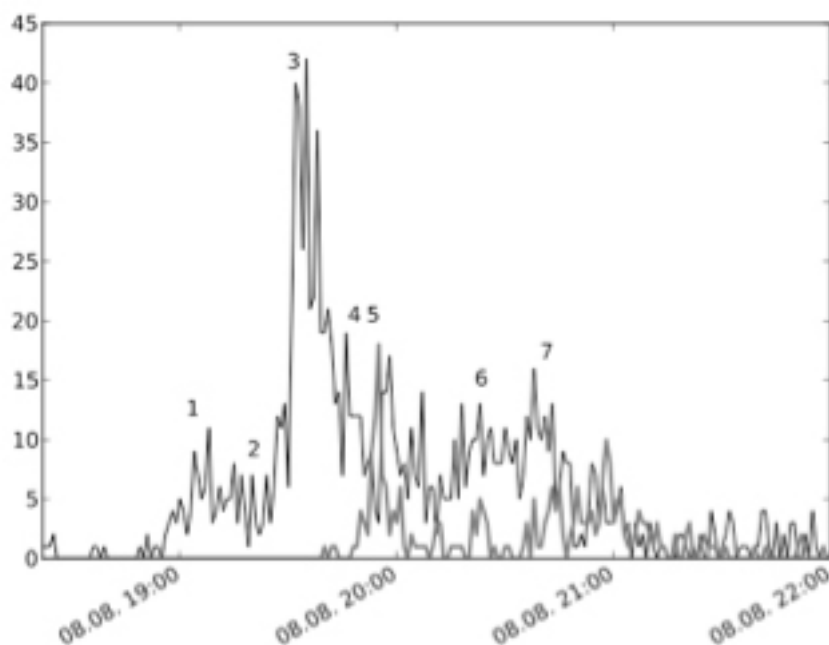

Figure 1: Timeline for Birmingham Children's Hospital rumour. Y axis is the volume of tweets per ten minute interval. The — represents tweets supporting the rumour and — represents tweets challenging it.

Tweets 1-3 repeat the initial rumour in various forms and generate a significant volume of retweets, especially (3), which is the source of the largest information flow in this sub-corpus. Tweets 4-7 illustrate variants of denials of the rumour, variously referring to eye witness reports (4), offering an alternative explanation for reports of police being seen near the hospital (5), relaying information from other media sources (6) and drawing parallels with other (false) rumours (7).

1.	08/08/2011 19:03	Police in Brum moving to protect the Childrens Hospital as a pile of hooded people move towards it! #birminghamriots
2.	08/08/2011 19:20	Gangs are trying to get into Birmingham's Children Hospital. That is fucking disgusting. Have they no heart? #BirminghamRiots
3.	08/08/2011 19:31	Rioters in Birmingham make moves for a CHILDREN's hospital, are people that low? #Birminghamriots
4.	08/08/2011 19:48	Girlfriend has just called her ward in Birmingham Children's Hospital & there's no sign of any trouble #Birminghamriots
5.	08/08/2011 19:53	May I remind clueless/hysterical #birminghamriots commentators that Children's Hospital sits face-face with city's central police station
6.	08/08/2011 20:13	#birminghamriots brmb radio and chief medical officer have confirmed Birmingham children's hospital has NOT been hit by riots
7.	08/08/2011 20:41	#birminghamriots children's hospital NOT attacked. Bull's head NOT cut off. Primark NOT on fire. Can we stop these ridic rumours now.

Table 1: Selected information flows from Birmingham Children's Hospital sub-corpus.

As in the riots corpus as a whole, a number of tweets in this sub-corpus contained links to other media, e.g. mobile phone images, blogs and, more rarely, other media such as newspaper websites.

Using the datasets Procter et al. (2013a) produced by coding the rumour sub-corpora information flows as claim, counterclaim, etc., the Guardian Interactive team created animated visualisations of each rumour's trajectory over time (see Figure 2a, 2b), illustrating the changes over the rumour lifecycle of the weight of claim and counter-claims.

Figure 2a, 2b: Extracts from the visualisation of the time line of the Birmingham Children's Hospital rumour showing information flows supporting the rumour (green) and flows challenging it (red). Each individual circle represents a tweet and its size reflects the influence (i.e. the number of followers) of the actor who tweeted it. Individual tweets are grouped according to the information flow to which they belong. We can see in this example how, initially, tweets supporting the rumour dominate (Figure 2a) but, within two hours, tweets challenging it become dominant (Figure 2b).

The Birmingham Children's Hospital example reflects a pattern or trajectory common to the seven rumours that Procter et al. studied:

1. A rumour starts with someone tweeting about the occurrence of an alleged incident.

2. The rumour is picked up by their followers and gets retweeted (see Figure 2a). Some form of evidence – eyewitness reports, references to mainstream news sources, links to pictures or to mainstream news sources on the Web, etc. – may be added as the original tweet gets retweeted and various reformulations of the rumour also begin to appear.

3. Others begin to challenge its credibility (i.e. make a counter-claim), assessing the evidence and offering refutations of it, perhaps on the basis of logical arguments (e.g. "it's not possible because …") or new information that throws into doubt the veracity of evidence previously offered.

4. A consensus begins to emerge (see Figure 2b). Where this is that the rumour is false, it may nevertheless re-surface in the corpus as latecomers pick up the original tweet and join in.

5. A common feature in these rumours is that the mainstream media is seen to lag behind crowd-sourced ('citizen journalism') reports appearing in social media. For example, in the Birmingham Children's Hospital case study, counter-claims seem initially to be driven by a) reports coming in from plausible eyewitness sources (4: 'Girlfriend has just called …'), b) an appeal to alternative and, perhaps more plausible, explanations for the initial claim (5: a more mundane reason for police massing near the hospital) and, finally, reports from mainstream media (6).

This emphasises how collaborative efforts by large numbers of 'produsers' (Bruns 2006) can provide competing and, at times, better coverage of events than mainstream media. Similarly, we observe the absence of early involvement of the police and other emergency services in the rumour lifecycle. For example, in the Birmingham Children's Hospital case study, it was over 24 hours after the initial rumour before a mainstream media organisation tweets a report sourced from a trustworthy source, the local police.

8. For interactive visualisations, see www.guardian.co.uk/uk/interactive/2011/dec/07/london-riots-twitter

The use of links to other media, e.g., mobile phone images, blogs and online newspaper sites as corroborating evidence is another common feature in all seven of the rumour case studies. However, they show that this evidence cannot always be taken at face value. For example, the authenticity of the image purporting to show that the London Eye burning was subsequently challenged (see Table 2) by claims that it had been faked ('photoshopped') to give the impression of a blaze.

03:80 - Pictures of the London Eye are so far known as being fake. To be confirmed. #LondonRiots

CONFIRMED. LONDON EYE PHOTOS FAKE http://t.co/rWYaNM6 #londonriots

That picture of the London eye was most likely photoshopped by some gyp on their freshly robbed MacBook. #londonriots

London Eye Is NOT Burning (not yet anyway) this pic is #photoshopped http://t.co/2DbHdlv #LondonRiots #PrayForLondon

London eye's picture is a FAKE picture, I apologise. http://t.co/3U4n5Gm .. #FAKE #London #LondonRiots

The London Eye is NOT on fire. That pic was photoshopped. #prayforlondon #londonriots

I think your a dick if your photoshopping pictures stirring up rumours eg: London eye #londonriots

People are making fake photo's of the London Eye and Big Ben burning. That's sick, the #londonriots are not entertainment.

Big Ben - The London Eye and Waltham Abbey are NOT ON FIRE - the photos are fake - RT this #londonriots

The London Eye isn't on fire, neither is Big Ben. You can't burn metal and heard of Photoshop, hellooooo? #londonriots

London eye in flames is a hoax - several photos making the rounds. Great photoshop skills though 8/// #Londonriots #ukriots

Table 2: Tweets claiming the image of the London Eye burning was a fake.

A more recent study of social media use during Hurricane Sandy found evidence of similar attempts to fake images (Gupta et al. 2013b).
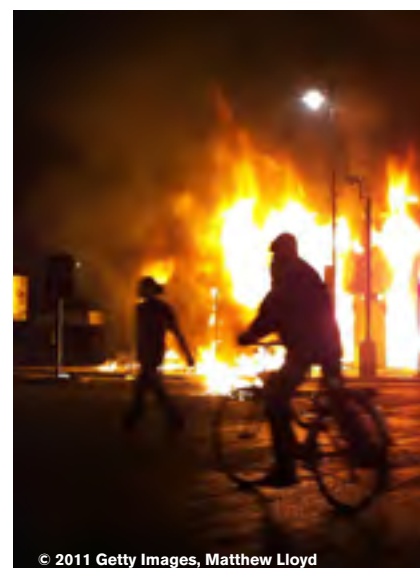
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Social Media and the Riot Cleanup

People's use of social media as a way of mitigating the impact of crises has been a particular feature of recent studies. There are many hundreds of examples of this in the riots corpus. Procter et al. (2013a) chose for more detailed examination one of the most compelling examples, the use of Twitter for mobilizing support for and organising the riot clean up. Table 3 shows selected information flows on this topic. Many of these actors have thousands of followers (those highlighted in Table 3 below total over 7 million) and their tweets get retweeted more than 31000 times in total.

Date, Time	Actor type	Followers	Tweet
08/08/2011 22:41	Member of the public	266	Can we organize a #riotcleanup on social media? Clean up! Tool up with binbags, tea flasks and smiles. After a nap. #londonnriots
08/08/2011 23:54	Non-media organisation employees	8145	#riotcleanup at Camden 11am, Chalk farm 10am, Roman Rd Hackney 9am, Clapham 9am, Peckham 10am, Westbourne Grove 9am
09/08/2011 00:36	Riot account	68075	#riotcleanup - all info of cleanups @riotcleanup please RT and spread the word
09/08/2011 01:33	Riot account	68075	#riotcleanup info stream and all info @Riotcleanup please spread the word and RT
09/08/2011 04:44	Celebrity	1643996	Visit www.riotcleanup.co.uk for info on how and where to help if you can. #riotcleanup
09/08/2011 12:19	Celebrity	1461290	Love this picture, these people are the REAL Great Britain: http://t.co/6E3VGje #riotcleanup @Lawcol888

Table 3: Selected information flows for the riot cleanup.

Although Table 3 shows evidence that some contributors were not taking the cleanup entirely seriously, this set of information flows reflects a mixture in more or less equal measure of appeals for help, information about cleanup activities (where to meet, at what time, etc.) and praise for the efforts of 'ordinary' people to respond positively to the challenges of dealing with the aftermath of the riots.

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9. All times are shown in Coordinated Universal Time (UTC). Local time in August 2011 was UTC+1.

The Emergency Services and Social Media

There has been much attention paid to how emergency services are responding to the benefits and risks of social media as a disaster mitigation tool (Yates & Paquette 2011, Merchant et al. 2011). The 2011 riots provide an opportunity to examine how the emergency services, in this case the police, are adapting their policies and operational practices.

Numerous government agencies in the UK and elsewhere have published guidelines for the strategic and operational use of social media over the past five years (e.g. Brainard & McNutt 2010, NPIA 2010, Bruns et al. 2012). For example, in 2010 the UK National Policing Improvement Agency (NPIA) published Engage, a strategy document outlining how social media could be used to support policing at the neighbourhood level. In his study of how successful the Engage strategy had been, Crump (2011) observed:

An ambitious national police agenda led by the Association of Chief Police Officers has promoted the use of social media to engage groups previously uninvolved in discussion of local policing, and has envisaged its use as a basis for deliberation about priorities. (ibid p. 1)

Crump concluded *"… that the constraints of police culture have meant that Twitter has been used cautiously and as a reinforcement for existing means of communication." (ibid p. 1)*

Procter et al.'s (2013b) study of the use the police made of social media during the 2011 riots provides evidence that they (and emergency services and government agencies generally) face difficult problems in making effective use of social media services such as Twitter during crisis situations, though they acknowledge that it would be unwise to generalise about the performance of the police as a whole: the picture varies from force to force. After the riots, a senior Metropolitan Police officer acknowledged: "We're still not wholly up to speed in using social media as an intelligence tool, an investigative tool and most importantly as an engagement tool." In contrast, Greater Manchester Police were singled out for praise in the way they used social media during the riots.

For the UK police the riots were a decisive moment, dispelling any doubt about the urgency of strengthening police capability in their use of social media. Since then, for example, there has been a significant increase in the number of followers of police accounts (Crump 2011) and many forces have also signed up to Twitter's recently announced Alerts service. Such measures may prove to be effective for improving dissemination capacity. However, as with other emergency services, one of the major challenges for the police lies in establishing the trustworthiness of information on social media. The police have tried and tested procedures for evaluating information but these do not translate well to social media sources.

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Journalism and Social Media

Journalists have long used ICTs in their work. Computer-assisted reporting was first used in the 1950s to support journalists covering election results. Investigative journalists in particular have often used public datasets combined with data collected specifically as part of their investigation to provide the evidence and analysis to support their stories. Two things have changed.

First, new forms of data have become available, often born-digital as well as the sheer availability of data. Journalists are entering a world where data is abundant – a situation described as the "data deluge" (Hey, Tansley & Tolle 2009) – but where their traditional methods for data analysis fail to translate to new kinds of digital data and scale to the volume of data that can potentially be processed. Where previously the challenge for the journalist was to find data to underpin their analyses, today the massive availability of different forms of data is challenging their capabilities and capacity to analyse and make sense of them. Assessing the veracity of news reports and their sources is one of the key challenges.

Second, the data are often available as raw, real-time streams rather than as carefully collected, collated and quality-assured corpora. At the same time, social media datasets are often "messy", making them difficult to process using pre-defined, automated workflows and often requiring a degree of human effort and expertise to make them 'fit for purpose'.

Journalists are currently using a plethora of applications, in order to meet their diverse needs, e.g. Tweetdeck for monitoring the social web; Storify – for news aggregation; crowdsourcing tools like Ushahidi, and online content filtering sites like Storyful. For example, news media organisations such as Al Jazeera and the BBC have been using the Ushahidi platform to leverage crowdsourced data from mobile and social channels in near real-time, especially where other sources were not available.

Methods and tools vary according to the nature of the journalistic task, however. For example, observations of the Guardian newsroom (Voss, Procter & Brooker 2012) revealed that journalists prefer simple Twitter clients rather than more sophisticated clients such as Tweetdeck in activities such as live blogging. Where there is little time to actively search for user-content), a constantly updating live feed is difficult to manage alongside other tasks. The benefit of the simple Twitter client is that users can choose when they want to see the most recent tweets in their feed, and it is easy to keep previous tweets at the top of the screen (by simply not clicking to see new ones), so as to be able to know where they are and refer back to them whilst attending to other tasks (i.e. preparing a live blogging post into which a tweet might be copied and pasted). For reliability's sake, many of the journalists observed preferred to rely on sources that their experience suggested they could trust. While this may solve the problem of veracity, it limits journalists' capacity to exploit social media as a source of breaking news to its full potential.

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Conclusions

While Twitter is a fertile medium for launching rumours, the evidence available to date is that it also provides robust mechanisms for self-correction (Sutton et al. 2008, Mendoza et al. 2010). Procter et al.'s (2013a) findings from their study of rumours on social media during the 2011 riots in England were broadly consistent with those of Mendoza et al. (2010) who noted that users deal with 'true' and 'false' rumours differently: the former are affirmed more than 90% of the time, whereas the latter are challenged (i.e. questioned or denied) 50% of the time. However, though their findings do not support concerns that Twitter is intrinsically vulnerable to rumours (see Burns & Eltham 2009), they do confirm the conclusions of other studies (e.g. Crump 2011) that the emergency services have yet to get a grip on using social media effectively. Procter et al. also argue that there is a need to explore how self-correction mechanisms may be amplified so that the trustworthiness of information can be assessed more quickly.

If social media is to be used effectively as a tool for both disseminating and gathering information, then the emergency services need to know more about how it works as a channel for communication. The problem is that during crises, tracking events calls for constant monitoring of large volumes of information of uncertain trustworthiness. Consequently, strategies for mobilising social media must be adapted to take advantage of local knowledge and circumstances: how, for example, different sources map onto communities, their geographies, interests and agendas.

For journalists working in mainstream news media, while social media has opened up new sources, the tools they have available do not assist with the problems of interpreting and verifying the trustworthiness of that content (Hirschman 2012, Weiss 2012). Specifically with respect to the intersection of social and traditional media, Manes (2012) has argued that: "What is needed are newsrooms that can filter, verify, curate, and amplify social media for their audiences, in addition to journalists reporting in enterprising and contextual ways."

The use of computational tools as a means to discriminate between trustworthy and untrustworthy information in social media is an active area of research(e.g. Qazvinian et al. 2011, Xia et al. 2012, An et al. 2013, Castillo et al. 2013, Sikdar et al. 2013, Derczynski et al. 2015, Zubiaga et al. 2015). Findings to date reveal a number of features in the digital 'signatures' of social media content and of their sources that are correlated with the degree of trustworthiness and veracity and can be used to classify content with quite impressive precision. However, computational methods remain vulnerable to being misled as those who are determined to spread rumour and misinformation adapt their behaviours.

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It must be emphasised that individual citizens are just as much in need of support for establishing the trustworthiness of information and sources in social media as are news media, government agencies and NGOs. It must not be assumed that if the latter have the means to determine the veracity of information then the dilemmas citizens face when using social media go away. It is therefore essential that any technologies developed to assist in the determination of veracity must, as is the case with social media platforms themselves, be freely available to all who may benefit. Twitter has recently taken a step forward in this regard with the launching of its Alerts feature, which it describes as "… a new feature that brings us one step closer to helping users get important and accurate information from credible organizations during emergencies, natural disasters or moments when other communications services aren't accessible." As of February 2014 there are reported to be more than 100 participating government agencies and NGOs. At this time, there is no evidence available as how it is being used and to its effectiveness in ensuring people have access to trustworthy information.

Finally, while the role of social media during crises has been the subject of much research, it is arguably equally important to understand its role – both actual and potential – in supporting communities in managing their day-to-day problems (e.g. Masden et al. 2014). Well-developed, extensive, functioning and robust networks of trusted sources are more likely to serve communities well during crisis situations. There is a rapidly growing number of community-oriented social media sites dedicated to supporting the accomplishment of 'mundane' social resilience at the local level. If we can understand how to make these initiatives work effectively for communities, then we may have more confidence that social media's potential to benefit the lives of individual citizens and communities is achievable.

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Uchaguzi Kenya 2013

Citizens monitoring elections through SMS and web platforms

By Angela Crandall and Rhoda Omenya

Questions for the Uchaguzi Kenya 2013 case study:

- **Which tools were used by Kenyans during the 2013 General Elections for mobilization purposes and why?**

- **How could the lessons learned from Uchaguzi KE 2013 benefit other nations?**

- **What lessons are there for the mainstream media and for government agencies with responsibilities for ensuring public safety, such as the police, and how do they adapt to the challenges of social media as an intelligence source and as a tool for engaging with the public?**

- **What will be produced and what is the future of the project?**

- **A final internal and external report has been published online (http://www.ihub.co.ke/blog/2013/07/uchaguzi-monitoring-and-evaluation-final-report-released/) and in print. We continue to engage with the ICT Election Watch Project led by Hivos.**

Team

Angela Crandall

Angela focuses on the uptake and the increasing utility of ICTs in East Africa from a user's perspective, having conducted research for a Raines fellowship in Tanzania (2009) and a Fulbright fellowship in Kenya (2010 – 2011). Angela is currently the Research Lead at iHub, Nairobi's Innovation Hub for the technology community. Prior to moving to Kenya in 2010, Angela was involved in corporate outreach to engage businesses in dialogue on sustainability at the World Wildlife Fund (Washington, DC, USA). She has experience working with infoDev (World Bank); the US State Department; and the Environmental Law Institute (ELI). Angela studied at Georgetown University and University of Cape Town. She is also the co-founder of Waza Experience, an initiative aimed at prompting under-privileged children to explore innovation and entrepreneurship concepts grounded in real-world experience.

Rhoda Omenya

Rhoda's work pulls from extensive research experience in the field of community development. She focuses on spurring citizen participation in the tech scene, specifically local tech solutions that empower communities. Rhoda is the lead of the monitoring and evaluation of Uchaguzi Kenya 2013 as well as the Kenya Open Data research. Rhoda studied Environmental Services at Kenyatta University (Nairobi, Kenya).

Introduction

Crowdsourcing has the ability to achieve that which was previously deemed difficult – inclusivity. It allows for wide-scale collection of data and information from the masses that are, more often than not, excluded from matters that concern them and require their voice. If executed well, crowdsourcing can be a great point of democracy and, by extension, social and economic development of a nation and its citizenry. Crowdsourcing exists in many forms – from being able to source for funding for one's projects (Kickstarter) to being able to find the nearest hospital (MedAfrica) – all geared towards increasing access to pertinent information that works towards improving engagement politically and socially, thereby improving citizens' welfare.

Crowdsourcing is a term coined by Jeff Howe in 2006 (Sharma A., 2010) and can be defined as the act of taking a job traditionally performed by a designated agent (usually an employee) and outsourcing it to an undefined, generally large group of people in the form of an open call. The term has evolved to a more cohesive definition being offered that emphasizes essential characteristics. Most notably, it is a type of participative online activity in which tasks are undertaken voluntarily as a response to an open call made to share information (Estélles-Arolas and Guevara 2012). Crowdsourcing entails mutual benefit, with the crowdsourcer obtaining information desired from a vast number of people in real-time, especially when conducted online via social media, for instance. In turn, sharing back findings (via reports, publications, live maps or newswire articles) informs participants, and the value system that follows builds a virtuous cycle that allows for future crowdsourcing deployments.

The focus of crowdsourcing is increasingly shifting to the online realm, with most common examples of ICT-based crowdsourcing occurring during disaster relief and crisis mapping situations. Examples include the 2010 earthquakes in Haiti and Chile (Meier P., 2011), where Ushahidi crowdsourcing online platform was used. In this platform, SMS messages were sent to the platform and a network of volunteers verified the information and mapped it onto a public crowdmap. SMS was not the only media used as Twitter was also used to provide situational awareness and to marshal people and organizations to provide assistance where needed (Yates and Paquette, 2011). During the 2010-2011 Australian floods, Queensland police also took to Twitter and Facebook to provide the public with regular updates and to deal with the spread of misinformation on Twitter (Cheong and Cheong, 2011).

In addition to being used during crises, crowdsourcing is also increasingly being used in election monitoring. Ushahidi, the crowdsourcing online platform used in Haiti and Chile was also used as an election monitoring instrument in Lebanon, Afghanistan, Mexico and India – all in 2009. In the same year, data collection using trained election monitors was carried out during Namibia's 2009 election. In 2010, Togo, Burundi and Sudan in 2010 applied it to their elections used the same mechanism, where reports from the public were collected. In Ghana, in 2012, Jangbeeshi, a mobile application developed by the African Elections Project, was developed to crowdsource data from polling stations. The advantage about it is that it was adapted to fit the different mobile operating systems.

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For the same election *Ghana Votes 2012*, an Ushahidi-powered instance map, was designed to show reports from citizens, civil society groups and the elections body, thus tailoring it to a one-stop shop all information related to the elections.

With relation to East Africa, in March 2010 HIVOS, an international development organization, held a roundtable on upcoming elections in East Africa with various stakeholders from Kenya, Uganda and Tanzania. The objective of the roundtable was to mobilize partners and interested parties together around the theme of upcoming elections in East Africa (Tanzania - 2010, Uganda - 2011, Kenya - 2013) with the aim of mapping out common interests and concerns so as to outline possible interventions and interests and commitments of each stakeholder engaged through the process. Of particular importance to the roundtable was the identification of appropriate and innovative ways of using ICTs as tools for effective monitoring and management of the elections' processes.

This roundtable was a platform where partners working in the fields of governance, democracy, human rights and ICT met and exchanged ideas to design intervention strategies specific to each country and common to the region. Out of this roundtable, the concept of Uchaguzi, Swahili for decision, was developed. This initial idea became the bedrock of the *ICT Election Watch* project by HIVOS that was piloted in Kenya in 2010 during the referendum, and used during Tanzania, Uganda and Zambia national elections in October 2010, February 2011 and September 2011 respectively. Learnings from the various deployments are being incorporated into the *ICT Election Watch* project of Hivos, supporting building of national partnerships around a long-term and permanent national technology platform for broad-based electoral monitoring.

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Ushahidi

The software behind many crowdsourcing instances is Ushahidi. Ushahidi started as an informal group of Kenyan technologists and bloggers creating software with the aim of figuring out a way to gather more and better information about the post-election violence in Kenya in January 2008. In a few weeks, over 300 crowdsourced reports were received and the site had approximately 40,000 hits. Since then Ushahidi has grown into a non-profit technology company, with 501(c) (3) status, that specializes in developing software for crowdsourcing, visualization and interactive mapping. They build tools for democratizing information, increasing transparency and lowering the barriers for individuals to share their stories.

The Ushahidi platform is open source and available for free to individuals and organizations. It is now being utilized by organizations worldwide for information collection, visualization and interactive mapping. Its key features include:

- **Free & Open Source:** The Ushahidi Platform is free for download and use. It is released under the GNU Lesser General Public License (LGPL).

- **Interactive Mapping:** The Ushahidi platform gives information mapping tools.

- **Dynamic Timeline:** One can track reports on the map over time. One can filter data by time and see when things happened and where, as it's also tied to the map.

- **Multiple Data Streams:** The Ushahidi Platform allows one to easily collect information via text messages, email, Twitter and web-forms.

In the year 2011 to 2012, Ushahidi has grown in adoption and generative uses of the platform. Most Ushahidi maps developed after 2010 have addressed crises or elections, with a strong emergence of humanitarian maps around the world: Egypt, Europe, Western Sahara, Palestine, Liberia, Saudi Arabia, Pakistan, Athens and Southern Africa. Other notable examples of Ushahidi deployments include:

- HarassMap in Cairo, which allows women to report on sexual harassment in the city
- The Uchaguzi deployment for election monitoring in Kenya's 2013 general election
- Facility mapping for Liberia's early warning system
- Oil spill reports from the Gulf Coast in Louisiana and Texas
- Election irregularity reporting in almost every South American country
- Libya crisis reporting
- Japanese earthquake and tsunami
- Haiti earthquake
- Pakistan floods
- Russian fires
- Tanzanian general elections
- Kenyan referendum and election
- Arab spring

The core Ushahidi platform is now used in 159 countries around the world; has been translated into 35 languages and has been deployed over 50,000 times. They have also pushed into new areas, including jumpstarting a global community of crisis mappers, launching a hacker space in Nairobi, and creating BRCK - a backup generator for Internet, explained below.

Ushahidi's other services include SwiftRiver, which is an open source platform enables the filtering and verification of real-time data from channels like Twitter, SMS, Email and RSS feeds. Its capabilities include:

- **Intelligence from the Web:** SwiftRiver helps you curate real-time data and analysis on any topic or interest relevant to you or your organization.

- **Analysis & Insight:** SwiftRiver helps users discover nascent relationships and trends in data sets that may appear to be unrelated.

- **Brand Monitoring:** Setup streams that search for mentions of your brand or product online and manage social media campaigns (e.g. Twitter, SMS, email) from one dashboard.

- **Add Context to Content:** SwiftRiver adds context to content using semantic analysis. Auto-categorize and classify email, twitter, text messages or news articles based on keywords.

Crowdmap allows one to set up their own deployment of the Ushahidi Platform without having to install it on their own web servers. It is the fastest, simplest installation of the Ushahidi platform and its features include:

- **Monitor Elections:** By using the crowd to monitor and visualize what went right, and what went wrong, in an election.

- **Map Crisis Information:** Whether it's a natural disaster, epidemic or political crisis, Crowdmap is built to handle information coming out of a crisis.

- **Curate Local Resources:** Crowdsourcing isn't just for emergencies as it can be used for local knowledge and business too.

In the following sections, we will examine a case study of the Ushahidi deployment to monitor elections in Kenya during the 2013 general elections. We conclude with some recommendations for future deployments of citizen-driven ICT Election Watch initiatives.

"The core Ushahidi platform is now used in 159 countries around the world; has been translated into 35 languages and has been deployed over 50,000 times."

Kenyan Elections

Elections in Kenya have been held every five years since 1962. In 1992, Kenya ceased to be a one party state when parliament revoked the law and changed it into a multi-party democracy. Moi Toroitich Arap Moi, who was already president, won the first multi-party election and the second in 1997 until 2002 when the opposition came together under one party - NARC (National Rainbow Coalition). NARC constituted the National Alliance Party of Kenya (NPK) and the Liberal Democratic Party (LDP) and other smaller parties and together they defeated KANU (Kenya African National Union) - that had ruled Kenya since independence for nearly 40 years - in a landslide. Mwai Kibaki, then under NARC, became the third president of Kenya, defeating KANU's candidate, Uhuru Kenyatta.

However, NARC was troubled by in-fighting that led to one half of the coalition, LDP, being thrown out of the government due to disagreement over the 2005 referendum, where LDP did not support the proposed constitution. The 'rebel' LDP then formed the Orange Democratic Movement (ODM). 'Orange' arose out of one of the symbols used in the referendum. Uhuru Kenyatta (KANU) and Raila Odinga (LDP) headed ODM. Later on, ODM split with Uhur Kenyatta, backing President Kibaki's re-election, Kalonzo Musyoka, and forming ODM-Kenya. The opposing ODM remained with Raila Odinga, William Ruto, Musalia Mudavadi and others.

In the December 2007 elections the flag bearer of ODM, Raila Odinga, faced-off with President Kibaki. President Kibaki won the election under circumstances that observers termed 'questionable' as they were conducted in a manner that indicated rigging. On the swearing-in of President Kibaki, tribal civil unrest broke out resulting in the infamous 2007-2008 'Post Election Violence' mainly between the Kikuyu and Kalenjin. Eventually, in late February 2008, a power-sharing agreement was reached in which Kibaki would remain President and Odinga would gain the new post of Prime Minister. A coalition government, with an equal number of ministers for the PNU and the ODM, was named in April 2008.

Due to the bungled 2007 elections, a new independent regulatory body, the Independent Electoral and Boundaries Commission (IEBC), was founded in 2011 under the new constitution, replacing the defunct Electoral Commission of Kenya. This new constitution, enacted in 2010, also gave rise to the a devolved system of government where 47 counties were formed, each with their own government that included new posts of governor, senator, member of national assembly, women's representative and county assembly representative.

The post election violence of 2007 - 2008 resulted in the development of Ushahidi, a technology platform that was created to map incidents of violence occurring in the country, as shared by citizens via the web and text. The name itself, Ushahidi (Swahili for 'testimony'), illustrates the core role of citizens on the platform. Citizens give 'testimony', informing others of the happenings on the ground, alerting authorities and enabling faster response. In 2013, Ushahidi came full circle since the 2007 elections with Uchaguzi. This year, Ushahidi and its partners launched *Uchaguzi Kenya 2013* whose aim was to help Kenya have a free, fair, peaceful and credible general election. Uchaguzi enabled Kenyans to keep an eye on the vote and provides avenues through which they can report any incidences significant to the election, with any technology available to them thereby facilitating collaboration between Kenyan citizens, election observers, humanitarian response agencies, civil society, community-based organizations and law enforcement agencies to monitor elections.

Overview of Uchaguzi KE 2013

The idea for Uchaguzi was introduced in 2010 when partners working in the fields of governance, democracy, human rights and ICT met and exchanged ideas to design intervention strategies specific to each country and common to East Africa. Of particular importance to the roundtable was identifying appropriate and innovative ways of using ICTs as tools for effective monitoring and management of the elections processes. It was then tested during the 2010 referendum elections in Kenya and consequently used during Tanzania, Uganda and Zambia national elections in October 2010, February 2011 and September 2011, respectively.

The consortium of organizations that came together as partners each brought their core competencies. Ushahidi, who had developed the original Ushahidi platform used during the post election violence of 2007 - 2008, redeveloped the platform to suit an election context. HIVOS came in as the initiator, implementer and funder of the project. HIVOS conceptualized the greater *ICT Election Watch* project that ideally covers Africa. CRECO (Constitution and Reform Education Consortium), a network of civil society organizations – brought their members in as on-the-ground verifiers. These were the principal project pioneers who have been working together since the project inception in 2010 during the Kenya referendum.

Other organizations that HAVE supported Uchaguzi include: National Steering Committee on Peacebuilding and Conflict Management (NSC), Kenya Red Cross and IEBC all of whom acted as acted as response partners; Mercy Corps, CHF and National Youth Bunge Association, all coming under the umbrella of USAID who provided on the ground monitors and verifiers; SODNET, who supported Ushahidi by providing the SMS short code; The Catholic University of Eastern Africa, who provided on-the-ground monitors; iHub Research, who carried out the monitoring and evaluation of the whole deployment.

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Methodology

Based on a need expressed by the Uchaguzi project team, iHub Research documented the process of building and running the Uchaguzi Kenya 2013 deployment, critically analyzing the entire process and delivering recommendations to be used for actionable planning. Research methods included:

Performance Indicators

Performance indicators were used to measure inputs, processes, outputs, outcomes and impacts of Uchaguzi. The developed indicators used in the research borrowed heavily from earlier evaluation research conducted by the Harvard Humanitarian Institute in 2011. The Harvard Humanitarian Initiative research team, led by Jennifer Chan and Melissa Tully, conducted an evaluation of Uchaguzi 2010 referendum deployment. The indicators enabled progress to be tracked, results to be demonstrated and corrective measures to be suggested.

Rapid Appraisal Methods

Rapid appraisal methods were used to gather feedback from Uchaguzi stakeholders on decision-making, qualitative understanding of why changes were made, and to provide context for the data collected. Some of the methods used included key informant interviews, one focus group discussion with on-the-ground international election observers from Zimbabwe, Zambia, Uganda and Tanzania and direct observation to record what was seen and heard.

Stakeholder Analysis and After Action Review

In addition to collecting information from the stakeholders, a basic stakeholder analysis was conducted to develop an understanding of the power relationships, influence and interests of the various people involved in a project. An After Action Review (AAR), a simple process used to capture lessons learned with the goal of improving future performance, was conducted on March 24th with the major stakeholders of the Uchaguzi 2013 deployment.

Literature Review

The above tools were used in tandem with a comprehensive review of all relevant material, including reports from previous Ushahidi Crowdmap deployments to determine metrics for success, and attendance and documentation of event proceedings and activities related to the process.

Metrics Development

An initial assessment of Uchaguzi using toolkits created by The Harvard Humanitarian Initiative research team was carried out and the resulting gap assessment was aggregated into three critical elements necessary for the success of the Kenya deployment:

1. Crowd: reports, outreach, radio and media;
2. Verification: partners, strategy;
3. Response: International, Grassroots, local.

The identified gaps were expounded into categories: partnerships (who are they, their roles and what do they expect); research, analysis (who needs what and in what format); verification (who are the verifiers and what support will they need); technology (security, visualizations, short code); communication strategy (who are the audiences and what are their expectations). These categories were analyzed in turn to holistically understand the strengths and weaknesses of the Uchaguzi KE 2013 deployment.

Uchaguzi KE Tools for Engaging Citizens

Figure 1. The Uchaguzi 2013 Process Workflow

The process workflow that Uchaguzi used was modeled from the Standby Task Force, a skilled volunteer community of personnel who provide dedicated crowdsourcing, mapping, data scrambling and technology testing support to organizations in the humanitarian, human rights, election monitoring and media space. Citizens sent information to the platform through the Short Message Service (SMS) short-code 3002, smart phone applications for iOS and Android, email, the web form on Uchaguzi.co.ke and through social media feeds (@Uchaguzi and #Uchaguzi). There were two digital teams on the first tier of receiving reports coming into the platform – the media monitoring team and SMS team. The media monitoring team identified citizen social media feeds, monitored them and extracted useful and actionable information to pass to the GPS and translation team (if need be).

Challenges faced by the media monitoring team were around the quickly changing dynamics online, where some hashtags were hard to follow due to the magnitude of the stream flow (e.g. #Kenyadecides) and new hashtags continually emerged necessitating constant search for new social feeds. The media monitoring team noted the 'online mass action' of #KOT (Kenyans on Twitter), that spoke out against foreign journalists who had sensationalized reports about Kenya as well as the incredible number of Kenyans on social media who continually promoted peace and patience during the tense election period.

The second team that received incoming information was the SMS team through the short-code 3002. The team received SMSs from CRECO members, citizens and other CSOs (Civil Society Organizations) and created reports from those relating to the Uchaguzi categories. Within this team there was another small team called the Emergency team, composed of a few people, who handled SMSs classified as URGENT. Challenges faced by the SMS team largely revolved around the manual process and the fact that many duplicate reports were created (due to the manual process).

Geo-location team was next in line to receive the reports created by the SMS and media monitoring teams and locate the grid coordinates for a given report to plot that location on the report map. The geo-location team also collected and kept track of all available maps of the area where emergencies were taking place. It was therefore vital for the team members to be proficient in or familiar with at least some of Open StreetMap, Google Earth, ArcGIS, QuantumGIS, Wikimapia, creation of KML files and map databases. The challenge faced by Geo-location was that there were many reports that were impossible to geo-locate, as the information in the SMS was not geographically located.

The translation team was responsible for translating reports from any local language into English with help from *The Translators Without Borders*. The major challenge faced was that some team members did not understand the instruction on where to write the translation and therefore wrote it in the verification box (the latter to be done by the verification team), thus causing some confusion.

The third tier of volunteers was the reports and verification team that approved and verified the reports respectively. The reports team determined which reports were fit to be mapped, thereby acting as the first quality control step in the workflow process by evaluating all information submitted in report form and by working closely with the Media Monitoring, Geo-Location and Translation Teams. This team confirmed that the report has been translated (if necessary), geo-located, and that there were no duplicate reports. The major challenge faced by the reports team was the large number of messages received, which at times overwhelmed the number of volunteers available at one given time.


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The verification team worked with the Media Monitoring and SMS Teams to assess reports, collaborating with Reports and Emergency Desk teams for any urgent or critical items, working with Uchaguzi partners to assess veracity of information in the reports and using the Internet and social media to the determine the reliability of sources (triangulate) and then escalating them to the response partners, i.e. IEBC and the NCS. Thus, it was vital for the verification members to have previous experience in crisis mapping and be very detail-oriented. They prioritized reports that had been categorized as "security issues", "dangerous speech" and "police actions". The challenges encountered were network problems and subsequent difficulty reaching the personnel on the ground.

There were two teams that played support roles - the technology team and the analysis and research team. The technology team was in charge of maintenance of the http://uchaguzi.co.ke for the duration of the election-monitoring period. The greatest achievement for the tech team was that the site worked and the servers did not crash. They were also flexible by being able to build things on the fly and thus respond quickly to arising requests, e.g. adding new links and tabs, moving the research and analysis team to a mirror site when they were unable to download reports from the original site due to the load. One of the technology challenges faced related to the alert system, which was sending out multiple similar alerts. Eventually, the alert system had to be shut down, effectively closing one of the feedback loops for communication with citizens.

The second support team was the analysis and research team in charge of analyzing information received on the platform and providing situation room reports in the form of data visualizations. The team was to release reports twice daily that were an aggregation of the reports received depicting trends and collated statistics. The largest challenge for the analysis team was the "dirty" raw data that had not been properly coded or cleaned. This made analysis on a tight timeline difficult since some reports had not been categorized well and therefore the data team had to manually check for the content and categorize them before analyzing.

During the election period, Kenyans mobilized each other primarily through SMS and social media, (Facebook and Twitter). Politicians mobilized citizens through political rallies and both traditional (TV, radio, billboards, etc.) and social media (Twitter, Facebook). The Uchaguzi platform utilized SMS, social media, email and a web form in order to offer citizens a variety of options through which to report. SMS was the most utilized channel due to ease of access for most citizens. Many Kenyan media houses have also embraced the rising role of new media in coverage of Kenya's elections and the mobilization of public opinion around such tools. Agencies such as Nation Media and the Standard Group harnessed social media by using it to broadcast their news and engage in dialogue with citizens. There were also various Twitter hashtags that were used during the elections such as #KenyaDecides, #kenyaelections13, #uchaguzi, #choice2013, #Ke2013 and #KeDecides2013. These hashtags were created by the public, media and other concerned parties and were used to aggregate all information concerning the upcoming Kenya General Elections on March 4th 2013, occurrences of the actual Election Day and post election - relating to the results.

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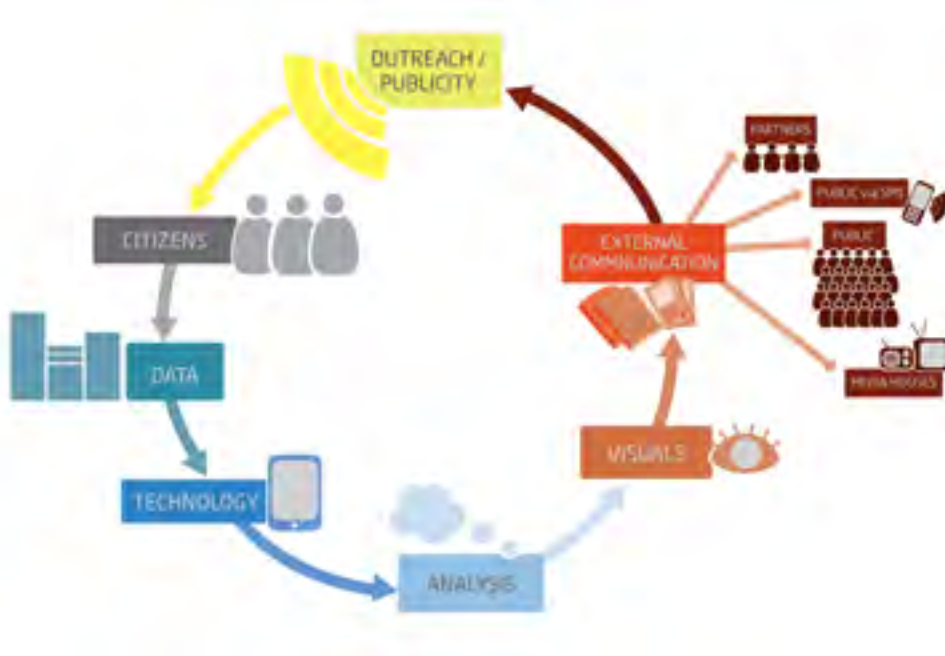© Taylor
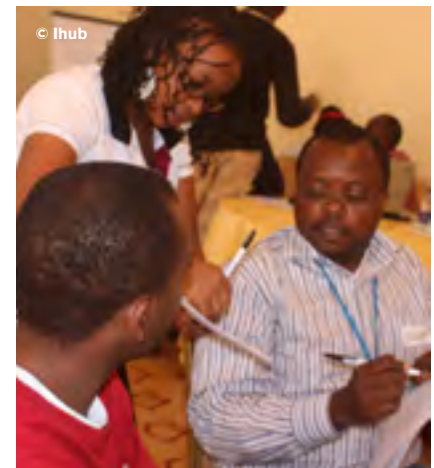
Transforming Citizen Engagement

Figure 2. The ideal feedback loop of a crowdsourcing deployment

The above figure illustrates the cyclic model of a functioning crowdsourcing deployment, which begins with publicity and outreach efforts made to citizens concerning an upcoming deployment. This will enable citizens to begin to familiarize themselves with the platform, grow their trust in it and learn how to use it. Once time for the actual deployment arrives, citizens engage with the platform and their information is aggregated on the backend and analyzed to identify the trends. The output is then converted into visuals that can then be fed back to citizens (for them to know the response of their input), media houses and deployment partners. This feedback is what is used to improve the same deployment either IN real time (by updating the platform) OR for future deployments. If publicity is not carried out effectively, many citizens will not know about the platform or how to use it. This consequently leads to poor quality of information sent to the platform, which affects every other output. Therefore, each juncture of the feedback loop must be effective for the next step to also be effective. If the various steps can be successfully executed, then overall engagement with citizens will be a success.

Also key to improved citizen engagement is buy-in by the users. If users do not believe in the platform and use it, any platform will fail. Uchaguzi KE 2013 helped to make the proof of concept for citizen-driven ICT-based election watch initiatives because Kenyan users and partners sincerely believed in the utility and value of it. The platform enabled citizens from around the country to contribute and feel that their voice matters. With over 3,500 unique reports received from the public from March 1 – March 8, 2013, Uchaguzi Kenya 2013 was able to engage the public in monitoring election-related incidents happening around them. It appears therefore that platforms such as Uchaguzi can help to stir citizenry out of apathy and give them a renewed sense of responsibility and desire for engagement. Uchaguzi created an opportunity for participatory democracy whereby each citizen was encouraged to participate in electoral matters. The growth and evolution of social movements such as the ones aforementioned is not attributed only to Uchaguzi, but also to other enabling factors such as a government that did not deter these movements from taking place and reaching out to citizens, proliferation of the mobile phone, etc. But the ICT-based platform acted as a catalyst for citizens to engage around a national event.

Consequently, Uchaguzi has addressed digital exclusion by creating a way in which most Kenyans can interact with the platform through SMS. With the high mobile penetration rates, most citizens have a phone and are therefore able to be included in the process. This was illustrated by the diverse locations around the country from which information was sent in, as seen in the figure below.

Figure 3. Uchaguzi Kenya 2013 locations from where reports were received

Conclusions

The overarching lessons learned from our evaluation of Uchaguzi apply to any nation wishing to carry out an ICT-based election monitoring. For one, such a deployment is a complex ecosystem of organization, resources and volunteers and therefore requires all processes to began early to build effective partnerships that will be able to arrange all the various aspects needed. Due to the complexity of running such an extensive election watch, carrying out such a deployment requires many resources. Therefore it is vital to have a strong project lead that is supported by a team of project managers from each core organization who can then manage the available resources for maximum effectiveness in proper timing.

Documentation of the whole process is also vital to enable reflection in hindsight after the deployment. For Uchaguzi KE, this was well through online through wiki documents. The greatest lesson is that future deployments should learn from previous deployments. For example, the next nation to carry out an ICT-based election monitoring should learn from the Kenyan context and improve on their deployment so that each deployment is more effective.

Our evaluation reveals that the deployment would have been strengthened with explicit strategies guiding the various areas of the deployment and communicated well to all partners. A partnership strategy would have indicated the roles and responsibilities of partners and made provisions for safeguarding commitments. For example, an overall outreach and publicity strategy would have detailed the activities needed to improve awareness and use of the platform by Kenyan citizens and organizations. For future deployments, considerations should be made around whether deployments will be one-time event based or prolonged over the election cycle. Greater automation of the platform should also be seriously looked at as this will help to reduce the manual processing time.

There are lessons for mainstream media and for government agencies with responsibilities for ensuring public safety, such as the police, where social media is concerned. The mainstream media and government have a key role in helping to educate the citizenry on their responsibilities as citizens and also on increasing awareness and use of ICT-based Election Watch. This awareness and civic education should not be a singular event but a continuous process of training and educating. This should be done extensively among members rather than a select few. Secondly, mainstream media has shown adaptation towards the same by creating their online presence and engaging with citizens. Government agencies need to be more proactive in the same. For both media and government, their greatest challenge will be ensuring validity of information received in the quickest time possible to allow for reactionary measures to be taken.

From this deployment, the proof of concept of Uchaguzi has been clearly made; the fact that users and partners sincerely believed in the utility of the product highlights the value of such an ICT election-watch initiative. Nonetheless, it is highly recommended that Uchaguzi partners apply the identified lessons learned to their operations and future deployments, otherwise the same recommendations will be repeated each time a deployment is held, as observed when comparing this report to the evaluation of the Uchaguzi 2010 deployment. With proper project, time and resource management, management of citizen expectations; and value creation amongst partners, future deployments will improve in their efficiency and impact.

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Ushahidi Future

Ushahidi's primary focus is to maintain the core work that they do within their open source software, making sure it is always available for free to end-users. This means that they are working towards:

- Doubling down on cloud-based services,
- Improving platform usability,
- Integrating their primary three tools, and
- Understanding usage and user needs better.

Looking forward, Ushahidi aims to increasing engagement with groups that need the tools they build, and is emphasized by two primary initiatives called "v3" and CrisisNET.

Rebooting Ushahidi's Core: v3

Ushahidi has been working off the same code base for the Ushahidi platform for 5 years. User experience research within their developer base was done in order to build a better Ushahidi core platform called "v3". The purpose of v3 is to provide a better crowdsourcing platform, so that the crisis responders, election monitoring organizations and community leaders can do their work more efficiently. It's a mobile first platform for those with basic phones and moving up to those with web access for a beautiful visual feel. Additionally, v3 is a comprehensive data collection and management software, enabling decision makers to better parse the massive inflow of information to make better decisions. New types of data channels will be added, such as sensor data, as well as improving crowd curation through improved workflow so that multiple streams can come into an intelligent dashboard for faster and more organized views.

CrisisNET

CrisisNET (Crisis.net) is an Ushahidi initiative to create a clearing house for the world's crisis data, giving people fast, easy access to critical government, business, humanitarian and crowdsourced information. Through combining a strong user experience with powerful functionality, CrisisNET gives consumers of crisis information – whether ordinary citizens or disaster responders – an interface to view, explore and export a wide variety of crisis relevant data. CrisisNet does the heavy work around managing crisis data, enabling users to focus on more important tasks. The platform continually collects data feeds for a wide variety of sources, then organizes, converts and restructures the data into a single, well-documented format. That data stream can then either be exported into external platforms or visualized by users directly at Crisis.net. The data stream allows developers and others with technical skills to quickly build new tools relevant to the next disaster.

Through such initiatives and ongoing innovation, Ushahidi looks to continue disrupting the way information flows in the world by providing tools for democratizing information with the least barriers to entry.

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Checkdesk:

Sorting, Developing & Disseminating Citizen Reporting in the MENA Region

By Dr Dima Saber (Birmingham City University, Birmingham Centre for Media and Cultural Research).
In collaboration with Tom Trewinnard (Meedan)
(Postgraduate student, School of Modern Languages and Cultures, University of Leeds.)

Introduction

"Imagine you are a journalist reporting on protests in Damascus on Friday 17 February 2012. International journalists are largely barred from entering Syria, while local journalists face repression – your main source is citizen media. Within a period of an hour you see multiple YouTube videos purporting to show demonstrations in Mezzeh, Midan, and Kafer Souseh. Some show civilians injured by gunfire and what appears to be plainclothes security men arresting protesters. You also see Facebook and Twitter updates announcing protests in the Al Hajar al Aswad and Yalda districts. What can you do to verify the reports? How do you draw a coherent narrative from such a rich but fragmented stream of information?"

The Checkdesk Solution:

Checkdesk allows a journalist to bring a "Report" from a diverse range of sources, and quickly add it to the desk; it generates an embedded view of the URL, rendering YouTube videos, Bambuser feeds or any user generated content playable from within the platform. From here a journalist can turn on the "Fact-checking Workflow". This creates an added layer of interaction at the report level, and highlights the report as undergoing review. Journalists and citizen journalists can then collaborate around a report-bound, free-form fact-checking process, designed to encourage questions and to replicate the common ad hoc fact-checking activities taking place on Twitter and Facebook.

At any stage of the fact-checking process, a journalist can assign a status to any report: "Verified", "Cannot be verified", "In progress", and "False". These statuses display wherever the report appears within Checkdesk, and journalists and community managers can link to individual reports, where all statuses and fact-checking discussion is retained and visible. In this way, Checkdesk brings transparency to the fact-checking process: even if users choose not to participate in fact-checking, they are able to see the "working out".

As the Arab region continues to face political, social and economic uncertainty, social media and citizen journalism have come to the forefront as a means for organising social movements that challenge existing powers and protest for social change. As Daniel L. Byman argues in *Revolution and Stasis in the Arab world*, while Syria still seems trapped in a vicious civil war, and while Iraq, Egypt, Libya, Tunisia and Yemen all have governments struggling to consolidate authority, the challenge that the Arab world faces now is not just the fall of old regimes, but the danger of prolonged regime weakness and its social, political and economic implications. Supporting a growing community of active and responsible citizen journalists is one way of building peace and stability in the Arab region. Although new ICTs offer indefinite opportunities for the region and its youth, investigative and media literacy skills remain essential for them to fully benefit from technology advancements. This is the main drive behind the Checkdesk project.

There is a consensus among media scholars that advancements in technology have opened up a new kind of "participatory citizenry" where civic participation is enhanced by media and information literacy (Culver & Jacobson, 2012). While the uprisings in Tunisia, Egypt, and elsewhere in the Arab world have been credited in part to the creative use of social media platforms such as Facebook and Twitter (Youmans & York, 2012), training and support are still crucial for Arab citizen journalists to further consolidate skills and practices for evidence-based journalism.

The following case study examines how Meedan (a US and Egypt based non-profit) partnered with Birmingham City University (BCU) and six Arab media outlets in Lebanon, Syria, Egypt, Jordan and Palestine with the aim of improving awareness of issues relating to democracy, civic participation and media literacy among citizen journalists in the MENA. Meedan and BCU also supported regional partners to undertake a series of trainings targeting local citizen journalists aimed at introducing them to Checkdesk as a fact-checking and verification tool for news stories. In parallel, a set of interactive online resources was developed and hosted at ArabCitizenMedia.org to allow trainees to consolidate their media literacy skills, enabling them to continue learning and draw others into the learning process, ultimately enlarging the community of Checkdesk's online users.

This report summarizes the work undertaken during the first two years of the project, looking at the overall objectives, work plan and achievements, in addition to the logical framework adopted for measuring impact. It also tackles the challenges faced during the implementation of the project (technical and field challenges), and summarizes Meedan's and BCU's mitigation strategies and plans for sustainability.
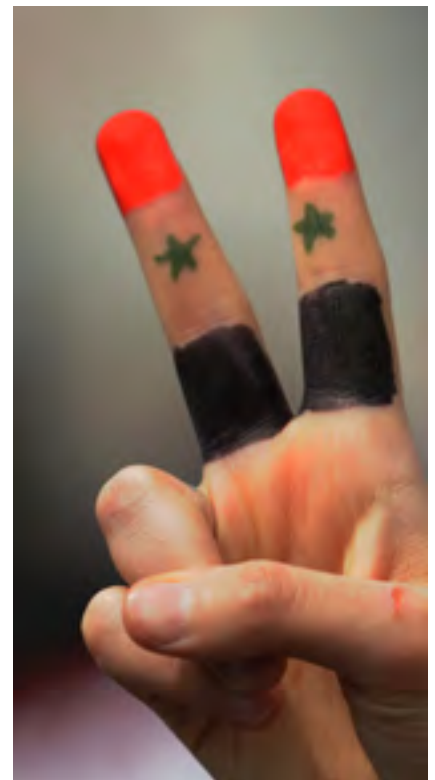
Checkdesk:

the development and deployment of six participatory reporting platforms around the MENA region

Background information and overall objectives:

While the 2011 uprisings have demonstrated how digital media can provide an effective channel for dissent, Arab citizens still need support to establish practices of evidence-based journalism, limit the effects of rumors and misinformation, and take a more effective role in the democratisation of political communication.

According to Arab media practitioners, undeveloped media literacy in the MENA is impeding the ability of citizens, and especially young citizens, to sort fact, opinion and rumour, make informed choices, and hold their governments to account (Abou Fadil 2010 ; UNESCO 2011). The Checkdesk project therefore aims at improving reporting, media literacy and community building skills for citizen journalists and activists in the Arab region in order to strengthen their role as investigators, contributors to the public sphere and as a watchdog on governments. By providing skills training and a purpose-built web platform, the Checkdesk project is empowering citizens to use new forms of social media technology to collaboratively report, verify news stories, and fact-check political statements.

It is clear that public debate in the Arab world needs a stronger culture of critical enquiry if governments are to become more accountable and citizens more informed. This is particularly true amid setbacks to democratic transitions that have challenged assumptions about the effectiveness of online publishing in aiding democratic change, especially in countries like Egypt and Syria. Vital in the region's uprisings, social media are increasingly used to spread misinformation and polemic, with often deadly consequences. To combat this, the region's next generation of transparency advocates require a grounding in media literacy tools and fact-checking techniques to help them examine and repair the flow of information so vital for democracy.

An example of the fact-checking workflow on Checkdesk

"Meedan and BCU teams partnered with six alternative and mainstream media outlets in the Arab region and developed a first iteration of the Checkdesk liveblog with leading Egyptian newspaper Al-Masry al-Youm."

The project's three overall objectives could be summarised as follows:

1. Improved awareness of issues relating to democracy, governance and human rights among Arab citizen journalists and activists

2. Improved civic participation in methods of selecting and disseminating newsworthy information on democracy, governance and human rights

3. Improved critical thinking in news media consumption among Arab citizen journalists and activists

To achieve this, Meedan and BCU teams partnered with six alternative and mainstream media outlets in the Arab region and developed a first iteration of the Checkdesk liveblog with leading Egyptian newspaper Al-Masry al-Youm (hosted at http://liveblog.almasryalyoum.com).

Five new iterations of the platform were later deployed allowing citizen journalists to report and verify news stories in times of political turmoil in the following countries:

- **Egypt**, Welad El-Balad Media Services: Leading media outlet in provincial Egypt (7 newspapers) http://yomaty.net/

- **Jordan**, 7iber: Top Jordanian citizen media collective http://7iber.checkdesk.org/

- **Palestine**, Ma'an: Leading news agency in Palestine http://maanblog.ps

- **Syria**, Al-Ayyam: Distributed network of journalists and activists reporting breaking news from across Syria http://shabab.ayyam.org/

- **Lebanon**, Annahar: Leading national daily newspaper with Social Media Exchange [SMEX] (Lebanon): Top citizen media training organization http://annahar.checkdesk.org/

Screenshot of Al-Ayyam / Syria liveblog.
Update made on October 24, 2013 "A big operation for the Free Syrian Army in Yarmouk Camp"

The use of Meedan Checkdesk platforms by web communities in the MENA region contributed to the improvement of the quality of published citizen reports in Egyptian and regional media outlets. The wider use of this enabling technology in support of citizen journalism verification and interpretation improved access to credible and accurate citizen reporting, ultimately enhancing the credibility of citizen content among professional journalists, main stakeholders and the wider public.

"The use of Meedan Checkdesk platforms by web communities in the MENA contributed to the improvement of the quality of published citizen reports in Egyptian and regional media outlets"

Arab Citizen Media: training tools and curriculum development

The Checkdesk project was designed to focus on the development of outputs (skills, collaborative community networks and training methodologies) that nurture long term and sustainable benefits, enabling beneficiaries to make use of the toolset and skills beyond the duration of the training. As described earlier in this report, Arab citizens need media literacy skills to enable them to play a more active role in their societies, make informed choices and hold their governments to account. Networks and citizen online communities are therefore critical for raising the profile of public voices and, as the 2011 uprisings have shown, can continue to evolve even after the immediate circumstances of their formation change.

It is in this context that BCU has taken a leading role in developing an interactive multi-media curriculum to suit a range of learning styles in parallel with the Checkdesk platform to consolidate, grow and engage with a wider audience. In this context, over 20+ resources were developed and made freely available to the public on an Arabic-language training website (arabcitizenmedia.org).

The first series of resources was developed by experts at BCU such as Paul Bradshaw, and in close collaboration with regional trainers and Egyptian activists including Ramy Raoof, Lilian Wagdy, Fatemah Farag, Sami Ben Gharbia, Mohamed Najem, Naseem Tarawnah, and others.

The set of resources covered the following topics:

- How to use Meedan's participatory reporting platform
- Web reporting
- Journalism ethics
- News curation
- Networking on the web and effective searches
- How to make your citizen report appealing to journalists
- News verification
- How to verify tweets and pictures
- Hyperlink verification
- News credibility

As the Checkdesk project grew over the last two years, and with five new partners on board, the BCU research team is working on deploying in November 2013 a new version of ACM in order to create a more sustainable reference for partners and trainees.

Below is the basic target audience and usability analysis that guided the development team through the design of the new sitemap:

Target audience	Usability
Project partners in Egypt, Lebanon, Syria, Jordan and Palestine	• Use the resources to define a better framework for their trainings • Use and share the resources to help build a wider community of citizen journalists and Checkdesk online users • Contribute to and enrich the content of the website through uploading their own training resources on issues related to citizen journalism and media literacy
Project trainees	• Better understand the basics of citizen journalism (skills, tools etc.) • Better understand the relation between media literacy and social change • Improve their fact-checking skills • Integrate these resources in their daily online practices and be inspired to use them in future trainings they might lead (ToT program) • Enrich and contribute to the content of the website through commenting, sharing and uploading new resources
Checkdesk online users	• Be able to make full use of the Checkdesk platform • Be inspired to promote the platform in their communities • Better understand the basics of citizen journalism and its role in fostering social change
Wider community of citizen journalists interested in media literacy and fact checking skills in the MENA region	• Introduce the idea of citizen journalism and media literacy and explain how it empowers citizens to become government and mainstream media watchdogs • Show how media literacy could help them raise their civic engagement • Show in basic terms how the Checkdesk platform could be integrated in their daily work

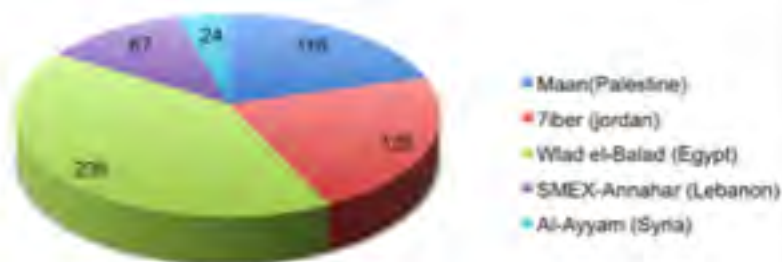ACM 2.0 (Full launch scheduled for November 2013)

Media literacy training series in Egypt, Lebanon, Syria, Jordan and Palestine

Working with six community media collectives around the MENA region, Meedan and BCU teams were able to develop a strong and diverse network of leading transparency advocates involved in the project. Over 1000 digital activists, citizen journalists and social media enthusiasts were trained on issues related to media literacy skills and media for social change in countries undergoing turbulent constitutional reform and where misinformation is used to disrupt democratic change. The project trainees were then able to employ and consolidate those skills to evaluate, fact-check and debate political news reports and media messages on issues relevant to democracy and social change, forming a self-sustaining online and active community of citizen reporters.

Total Number of Trainees

- Maan (Palestine)
- 7iber (Jordan)
- Wlad el-Balad (Egypt)
- SMEX-Annahar (Lebanon)
- Al-Ayyam (Syria)

Two regional partners meetings were also held in Cairo in 2012 and in Amman in 2013, with the objectives of helping to build a sense of network amongst partners, establish consensus around project milestones and share experience.

"Over 1000+ digital activists, citizen journalists and social media enthusiasts were trained on issues related to media literacy skills."

Challenges and Mitigation Strategies

Technical challenges

Over the course of the past two years BCU and Meedan teams have faced and overcome several challenges:

Infrastructure

Moving from one partner to six regional publishers has required a major overhaul of design, development, deployment and hosting infrastructure.

Server infrastructure

Hosting live production websites for six regional media partners, in areas where internet infrastructure is restrictive in terms of performance, has required the investment of considerable energy to build a server infrastructure that is stable, secure and scalable. To achieve these ends the development teams used industry standard tools such as Cloudfare (improves performance and security), Capistrano (for weekly deployments), and Pingdom (provides transaction alerts to indicate if a website is down).

Usability Testing

Increasing the scope of the project from one partner to six required the development of a flexible usability testing plan which allowed for quick iterative development processes while engaging a distributed user base with diverse needs and differing usage contexts. The strategy chosen requires that for usability testing sessions held remotely, designers and developers are present online listening to the usability tests. Immediately following the tests, the development team incorporated the feedback and observations gathered into the technical roadmap for development, allowing for quicker iteration and less time spent by usability team members writing reports. Under this strategy, remote usability sessions must be held regularly, with more intensive sessions held at partner meetings. Equally important in this process was a simple mechanism (using Google Docs) which allows users to log bug reports and feature requests, with follow up by the Meedan development team.

"The strategy chosen requires that for usability testing sessions held remotely, designers and developers are present online listening to the usability tests."

Field challenges

External factors have challenged, and continue to challenge, implementing partners ability to function. Ongoing unrest in Syria provides an obvious logistic and security challenge to Al-Ayyam (in particular with regard to training), while clashes and protests in Egypt have seen journalists working for Welad El Balad Media Services (though not people directly employed by the project) targeted and injured. Meanwhile in Jordan, 7iber was recently added to a list of blocked news websites under a controversial new press law, and Al-Ayyam were coerced to conduct their training series online, mostly over Skype, allowing them to reach Syrian activists and citizen journalists in Syria and elsewhere in the region. Ma'an News Agency also faced a lot of difficulties convening their training workshops in Gaza.

In addition to the long and difficult process to get the appropriate permits from the Israeli authorities, Ma'an trainers had to travel from the West Bank through Amman, Cairo and the Sinai to reach Gaza through Rafah crossing. Monitoring and managing the risks of the project is a significant ongoing undertaking, and the difficult environment faced by independent media producers in the region is distracting and energy sapping for project partners.

A screenshot of Wlad el-Balad's (Egypt) SWOT analysis. Final evaluation report, July 2013

Measuring impact?

In order to maximise impact and properly measure risks and success, a logical framework matrix was initially prepared by Meedan and BCU teams with specific indicators of achievements mapped to the proposed outcomes and outputs of the project. The design of the framework was based on background data of the citizen journalism landscape in the MENA region in terms of the demographics of the internet users in the country, penetration rates, the devices citizens use to get online, the most popular websites, and the role of citizen journalism in the political life. The evaluation measured achievements using both quantitative and qualitative assessment.

Quantitative Data

In order to gather training data from Checkdesk regional partners, BCU took a lead on setting up open access documents that allowed partners to update information on their training while the research team kept track of numbers. The quantitative evaluation considered the following metrics:

- Training date, location and duration
- Participant recruitment strategy
- Number of trainees
- Trainees age range
- Trainees gender (M = X, F = X)

An example of partners open access files documenting their training (7iber, Jordan)

Qualitative Data

While a relatively simple quantitative evaluation allowed the research teams to keep track of metrics related to training outcomes and online contributions, the assessment of key overall objectives such as the level of awareness in issues related to democracy and governance or the improvement of critical thinking in news media consumption required a more in-depth qualitative evaluation.

BCU gathered data through the following online and offline sources:

- Regular one-on-one Skype discussions with partners (explaining the Monitoring and Evaluation structure and answering questions etc.)

- M&E partner interviews, conducted during the second regional meeting in Amman in June 2013 by Dr Dima Saber and Noha Atef from BCU.

- Partner evaluation reports, submitted to BCU research teams on July 23, 2013. All partners (except for Al-Ayyam-Syria whose sessions took place online due to the situation in the country) circulated sign-up sheets at every training and submitted them along with their evaluation reports.

BCU research team also circulated online qualitative assessment forms (in English and Arabic) that partners were asked to update twice (before and after their training series). We were able to gather data on the following (findings available upon request):

- Overall assessment of the training outcomes in Lebanon, Egypt, Syria, Palestine and Jordan (training materials, trainees' responsiveness and engagement, training format and duration)

- Assessment of the trainees' knowledge of media literacy skills and methods of fact-checking news reports before and after the training series

- Assessment of the set of resources made freely available on arabcitizenmedia.org

An example of results of the qualitative assessment before and after the training series

Conclusion: sustainability and future activities

Building on the success of this two year project, Meedan and BCU teams are now looking into ways to expand their partner base to include journalism schools in Lebanon, Jordan and Egypt and empower activists and journalism students to fact-check news reports and political statements in countries undergoing turbulent constitutional evolution.

The aim is to model a culture of critical inquiry that could benefit both citizen and mainstream journalists, and the region's next generation of transparency advocates through supporting them to deploy media literacy and critical thinking skills, and to examine and repair information flows in their countries. Ultimately, the project should allow all beneficiaries to embed these new media practices into their everyday life through training, curriculum design and collaboration.

In order to maximise impact and create sustainable value, the project's development and research teams are now working on integrating Checkdesk into curriculum design, and training activists and students on using the platform as a learning tool that can inspire new modes of literacy in a highly polarised region. In this context, a first pilot project was initiated with the Lebanese American University of Beirut (LAU), providing faculty support to Dr Yasmine Dabbous and her Investigative Journalism class. Throughout the Fall 2013-14, Meedan and BCU teams will be training Dr. Dabbous and her journalism students on the basics of syllabus design and Open Educational Resources (OER), on media literacy skills and interactive ways to integrate technology into their teaching and learning process. An LAU iteration of the Checkdesk liveblog is scheduled to be launched in December 2013, allowing the students to use the platform as a learning tool inside their classroom, and to fact-check all content published on their student online newspaper, The Tribune.

BCU is also organising an unconference in April 2014 to create a network of beneficiary organisations and individuals actively involved in and promoting best practice investigative approaches in journalism. The aim of this unconference is to create a durable community of investigative transparency advocates actively engaged in fact-checking online content, acting as government watchdogs, and promoting critical investigative skills to the wider Arab public.

Appendices

Partner trainings (pictures, blog posts and videos, social media):

Wlad el-Balad (Egypt)
- Pictures: http://www.flickr.com/photos/weladelbalad/sets/
- Facebook: https://www.facebook.com/YomatyEgypt
- Video: http://www.youtube.com/watch?v=4tVH9-Nuc-8

7iber (Jordan)
- https://www.facebook.com/ghirbal

Ma'an (Palestine)
- Nablus: http://youtu.be/f3KgWRsJ0lw?t=34s
  http://bit.ly/1cw0S5E

- Ramallah: http://youtu.be/ZWYM2D6kl3s?t=6s
  http://bit.ly/16No36W

- Nazareth: http://youtu.be/gcRIRoecgY0?t=9s
  http://bit.ly/17XWVmK
  http://bit.ly/18RI7Hu

- Gaza: http://youtu.be/D68lnXocaAs
  http://bit.ly/15kwJVq
  http://bit.ly/1bSzjph
  http://bit.ly/16exL27

SMEX-Annahar (Lebanon)

- Pictures: http://www.flickr.com/photos/smexbeirut/sets/72157634767955480/

- Video: Voting on a tagline for An Nahar's revised CheckDesk instance: MikroScoop
  https://vine.co/v/hZHQ1vgUEZX
  https://vine.co/v/hZHxZ0TTPi2

- Facebook group (private): https://www.facebook.com/groups/mikroscoop/

- Twitter list of our community catalysts: https://twitter.com/jessdheere/mikroscoop

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