Brown, M., & Tucker, K. (2017). Unconsented Sterilisation, Participatory Story-Telling, and Digital Counter-Memory in Peru. *Antipode*, *49*(5), 1186-1203. https://doi.org/10.1111/anti.12316

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Unconsented sterilisation, participatory story-telling and digital counter-memory in Peru

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[When published the article will include a full acknowledgements page and a translated abstract]

Abstract:

This article aims to prompt reflection on the ways in which digital research methods can support or undermine participatory research. Building on our experiences of working on the Quipu project (www.quipu-project.com), an interactive, multimedia documentary on unconsented sterilisation in Peru, it explores the ways in which digital technologies can enable participatory knowledge production across geographic, social and linguistic divides. It also considers the new forms of engagement between knowledge-producers and audiences that digital methods can encourage.   Digital technologies can, we contend, help build new spaces for, and modes of engagement with, participatory research, even in contexts such as the Peruvian Andes where digital technologies are not well-established or commonly used. Doing so, we argue, entails responding sensitively to the social, linguistic and digital inequalities that shape specific research contexts, and centring the human relationships that are easily sacrificed at the altar of technological innovation.

Keywords: digital methods, participatory research, unconsented sterilisation, cultural memory, Peru

Scholarly interest in digital methods – those that rely on digital technologies to generate and disseminate research data – is booming across the humanities, geography and social sciences (DeLyser and Sui 2013; Graham and Shelton 2013; Gold 2012; Rogers 2013; Sui and DeLyser 2012). Interactive platforms, digital analytics, data visualisation and other digital practices are increasingly being explored as research tools, sparking a range of debates about their significance and potential. Prominent amongst these has been a discussion of the ways in which digital methods reconstitute and redistribute research expertise, facilitating new modes of participatory knowledge production and creating new publics for humanities, geographic and social research (Delyser and Sui 2014; Gubrium and Harper 2013; Gubrium, Harper and Otañez 2015; Kennedy et al 2015; Landström et al 2011; Marres 2012; Ruppert 2013). In this article, we aim to prompt further reflection on the ways in which digital research methods can support or undermine participatory research. We explore the use of digital media to build new spaces for participatory research, and the implications of doing so for participatory research relationships, experiences and findings. We focus in particular on the role of narrative and voice in participatory digital research, and the ways in which centring these can help promote more inclusive and participatory forms of digital knowledge production and engagement.

Our reflections on these issues are rooted in our experiences of working on the Quipu project (www.quipu-project.com), an interactive, multimedia documentary on the impact of unconsented sterilisation in Peru. The project takes its name from an Incan method of record-keeping, believed to have been widely used throughout Andean South America before Spanish colonisation, that uses knots and coloured threads to produce complex, tightly woven records and accounts (Salomon 2004). The name Quipu is a metaphor for

the way in which the project is producing complex, interwoven, multi-vocal knowledge of the unconsented sterilisation that took place in Peru as part of a government-led family planning programme in the mid-1990s (Boesten 2007, 2010; CLADEM 1999). It does this through working in collaboration with organisations in the Peruvian Andes to collect and share the testimonies of individuals affected by unconsented sterilisation, through a dedicated free phoneline. The phoneline connects to an online content management system which, once consent has been given for the testimony to be recorded and shared, adds the testimony to a digital archive. Individuals who call the phoneline are also able to listen to the archived testimonies, providing an opportunity to learn about others' experiences of unconsented sterilisation in the country, and to understand how their testimony contributes to an emerging collective narrative. The testimonies are made accessible to a global audience through the project website, which allows users to listen to the testimonies in their original form, with subtitles provided in English or Spanish. At the time of writing, approximately 130 testimonies have been recorded and added to the digital archive, which will remain open to new testimonies until December 2016, and free to access online thereafter. The project is a collaborative venture between Chaka Studio, a London-based transmedia documentary company, Convenio IAMAMC-AMHBA in Huancabamba, AMAEF-C-GTL in Cusco, and other organisations in Anta, Peru, and the two of us at the University of Bristol. Its principal 'output' is the digital archive of testimonies accessible through the phoneline and website, which have been co-produced by the partners.

Working on Quipu has allowed us, the two academics on the project, to explore some of the ways in which digital technologies can facilitate participatory knowledge production and prompt new forms of engagement between knowledge-producers and audiences.[i] We have experienced some of the tensions and challenges that arise when working with digital technologies in geographically, socially and linguistically complex contexts. We have also become convinced of the great potential of digital methods, when thoughtfully used, to promote participatory knowledge production and engagement across geographical, social and linguistic divides. Digital technologies can, we contend, help build new spaces for, and modes of engagement with, participatory research, even in contexts such as the Peruvian Andes where digital technologies are not well-established or commonly used. Doing so, we argue, entails responding sensitively to the social, linguistic and digital inequalities that shape specific research contexts, and centring the human relationships that are easily sacrificed at the altar of technological innovation. Our discussion unfolds in three stages. We begin, in the first section of the paper, by outlining the social, political and linguistic context in which we have been working, and the unequal power and knowledge relations that shape it. In the second section, we reflect on the processes through which the project has unfolded, and the multidimensional digital methods we developed in response to this context. In the third section, we draw out the broader lessons of Quipu, and outline some paths towards more inclusive, participatory and impactful forms of digital research.[ii]

Rights, recognition and cultural memory: sterilisation in Peru

> *We feel like the living dead. That's how we are... That's why we want them to listen to us, to hear our cries. That's what we want. We will fight until we all get what we want. That is my testimony, my friend. Thank you.*
>
> Testimony #50, place unspecified, 2015

On 15 September 1995, President Alberto Fujimori of Peru gave a speech at the Fourth World Conference on Women in Beijing, part of a series of high-profile conferences on gender equality organised by the United Nations. Positioning himself as a progressive and forward-thinking statesman, he outlined his views on the importance of women's development and empowerment, and the steps being taken by the Peruvian government to promote these.   Alongside a law to prohibit violence against women and a commitment to increase the resources allocated to women's programmes to 50 percent of the national budget, he emphasised his government's modern approach to family planning, which included making previously illegal voluntary vasectomies and fallopian tube ligation available to all. 'Peruvian women are not going to remain confined or constrained by the intransigence of ultraconservative mentalities', he declared, but would 'have at their disposal, with full autonomy and freedom, the tools necessary to make decisions about their own lives' (UN 1995).

Less than two years later, in June 1997, the Defensoría del Pueblo, the Peruvian ombudsman's office, began to receive reports of women who had been sterilised through fallopian tube ligation without their consent, and of other so-called 'irregularities' in the application of Fujimori's family planning policy. These included cases of women who were sterilised without signing any authorisation, women who were not treated for complications arising from surgical interventions, a women who was sterilised a day after giving birth without any medical follow-up, and a woman who died of internal bleeding as a consequence of surgical intervention (Defensoría del Pueblo 1998: 8-9). These reports prompted the ombudsman's office to open an investigation in 1998 into the role of voluntary surgical contraception in the family planning policy. This identified a number of problems, including inconsistent freedom of choice, a lack of follow-up treatment after surgical intervention, a compulsive tendency in the application of the policy, and the use of quotas to determine how many women should use particular methods of contraception (including surgical sterilisation) (Defensoría del Pueblo 1998: 4). Human rights and women's organisations also began to systematically gather evidence of human rights violations related to voluntary surgical contraception (CRLP-CLADEM 1998; CLADEM 1999; Ewig 2006), and national newspapers reported cases of women who died as a direct result of (usually unconsented) surgical sterilisation through late 1997 and 1998 (Boesten 2010: 82; Defensoría del Pueblo 1999: 10-11).

It is now suspected that many of the almost 300,000 women and men who were sterilised between 1996 and 2000 as part of Fujimori's National Population Programme did not give their full, informed consent for the intervention (Amnesty International 2015). They were lied to, pressurised and, in some cases, physically forced to undergo sterilisation, often in unhygienic conditions and with little attempt to provide suitable aftercare. Many were illiterate or educated only to primary level, most of them were women, most of them were indigenous or mestiza, and most of them lived in rural Andean communities, far from centres of power in Peru (Defensoría del Pueblo 1999: 20). At least 17 people, 15 women and two men, are known to have died as a direct result of surgical sterilisation, and another six women to have suffered serious complications such as paralysis of limbs and heart failure (Defensoría del Pueblo 1999: 44-95). Although the Peruvian government initially attempted to portray these failings as the work of a few isolated, irresponsible doctors, it is now clear that they were much more systematic and deep-rooted. The sterilisation quotas that clinics throughout the Andes were expected to meet served to incentivise medical personnel to sterilise men and women without appropriate consultation, or without leaving sufficient time between an initial consultation and surgery being performed (Boesten 2010: 75; CLADEM 1999: 45-50). The lack of investment in rural health services, the failure to improve hygiene and availability of medical supplies that resulted from this, and the gendered and racialised discourses that led doctors to assume they were best-placed to decide whether and when surgical intervention was appropriate also played their part (Boesten 2010: 81). The

application of the Peruvian National Population Programme 1996-2000 is now regarded in human rights circles as a major violation of the reproductive and other human rights of tens of thousands of Peruvians.

The Peruvian state has been reluctant to acknowledge the coercive and abusive way in which the family planning policy was applied. The Ministry of Health has neither acknowledged the violations of rights that took place nor established a mechanism to compensate those affected, and within the Peruvian state more broadly, the issue of unconsented sterilisations has generally been ignored. The Peruvian Truth and Reconciliation commission (CVR in Spanish), a two-year investigation into the political violence that overwhelmed Peru in the 1990s, did not consider the violation of rights that accompanied the family planning policy. Its remit was narrowly focused on the conditions that led to the internal armed conflict, and on attributing criminal responsibility for human rights violations that took place as part of this. Thus while acts of sexual violence such as rape, forced prostitution and forced abortion committed in the context of the armed conflict were investigated by the CVR, albeit not entirely successfully (Theidon 2013: 140), human rights violations committed in relation to the National Population Programme were not. Attempts to attribute criminal responsibility through the Peruvian judicial system have also failed, as cases initiated by the state prosecutor have been repeatedly shelved. This lack of acknowledgement by the Peruvian state has, moreover, been mirrored in broader processes of memorialisation in Peru, which have tended to focus on the nature and legacies of armed conflict, despite contestation over narratives and identities (Feldman 2012; Milton 2011; Moraña 2012; Murphy 2015).

Collective and state-sanctioned memory of the Fujimori era in Peru thus largely ignores the human rights violations committed as part of the National Family Planning Programme in the late 1990s. The coercive and abusive nature of the sterilisation policy, and the physical, psychological and emotional trauma experienced by those who were sterilised without their consent, are a 'missing memory' (Zepeda 2014: 119) in Peru's recent history – an episode in the country's history that has been forgotten as other memories and episodes have taken centre stage (Sturken 1997: 7). Cultural memory of authoritarian Peru has largely been produced and contested in the space between the narratives of state officials (which emphasise the need to impose order and stability on a chaotically violent country) and the counter-narratives of human rights advocates (which emphasise the violations committed by the state in its response to armed insurrection). Despite the best efforts of national Peruvian women's and human rights organisations such as CLADEM and DEMUS and their local partners, the memories of the mainly indigenous or mestiza Andean women and men who were sterilised without their consent have been marginalised in the production of cultural memory .

 The Quipu project has sought to intervene in this contested terrain of cultural memory. The project is a 'technology of memory', conceived as a way to 'embody and generate memory' and therefore 'implicated in the power dynamics of memory's production' (Sturken 1997: 10). Responding to the demands of people who were sterilised without their consent in the late 1990s, it seeks to disrupt the silences and silencing in emerging historical narratives in Peru, by centring the memories and perspectives of those affected. In doing so, Quipu facilitates the production of counter-memory – a field of discourse that, for us, is inherently diverse, incorporating a range of voices, memories and perspectives that have been marginalised in dominant cultural memory (cf Medina 2011: 16) – in relation to Peru's authoritarian past. Counter-intuitively perhaps, given the lack of access to internet and digital media in the rural and mountainous areas that were most affected by unconsented sterilisation, the project relies on the connectivity and archiving potential of digital technologies to achieve this. Although this has not been without its ethical and practical challenges – as we discuss in the next section – it has allowed the collaborators on the project to bring together previously marginalised memories and narratives from communities across Peru, and, through

combining online and offline technologies, to make this digital counter-memory accessible to these communities as well as audiences around the world.

Technologies of memory and counter-memory: building the Quipu

> *Over the years that we have complained, nobody has ever listened to us. The women from the countryside who never ask for anything are dying. Some have already died, my friends, without anyone listening to them. So we want justice.*

> Testimony #36, Cusco, 2015

The Quipu project is a form of participatory research in a Latin American tradition reaching back to Orlando Fals Borda and Paulo Freire, which might be characterised as 'public history', 'participatory historical geography' or another disciplinary innovation which has yet to be coined (cf McIntyre 2008: 1-3 for the literature review; Bressey 2014 and DeLyser 2014). It responds to the desire of activists and community leaders in Peru to document and record the experiences of those who were sterilised without their consent. It was developed in close collaboration with Peruvian partner organisations including Convenio IAMAMC-AMHBA in Huancabamba and AMAEF-C-GTL in Cusco. Quipu was designed in a way to ensure participants retained as much power and control over the research process and output as possible. The phoneline allows callers to tell their story on their own terms, and it gives access to all the data generated to all participants through the phoneline, thereby allowing those same participants to analyse and extract meaning from the archived material. The project was made possible thanks to a collaboration with Chaka Studio and a network of volunteers, supported by an initial grant from the UK's Arts and Humanities Research Council (AHRC) REACT-Hub for 'interactive' documentary (Dovey and Rose 2012).[iii] A series of other grants followed, alongside a crowdfunding campaign, which facilitated the emergence of the project in iterative stages.

The project was named after the quipus (sometimes spelt khipus), the intricate structures of knots and coloured threads that were used to transmit information within the Inca empire. Historians speculate that quipus were widely used in the years preceding the sixteenth-century Spanish conquest precisely because they could be understood across the multilingual empire that spanned from Colombia in the north to Argentina in the south. The practice was not entirely wiped out by Spanish colonialism, but the tradition of trying to make the few surviving artefacts 'intelligible' to the outsider had begun even before Peru's declaration of independence in 1821 (Salomon 2004: 20-29). Much of what is known about quipus today is based on the technical study of artefacts that were unearthed in burial sites across coastal sites in Peru, and which – reflecting the marginalisation, silences and absences of Andean histories within networks of global knowledge production (Gänger 2013: 400) – are now stored in museum collections in the former imperial centres of Paris, London, Berlin and New York, as well as the national capital, Lima, and regional Peruvian archives and museums (Harvard 2005). Debates about the 'readability' of the precolonial quipus have focused on their effectiveness, or otherwise, in communicating information to 'non-literate' audiences (Orton 2003: 22; Salomon 2004: 25), and on whether quipus should be characterised as a system of mnemonics or as a form of writing that could be universally read if only the code could be cracked (Urton 2003: 3-36).

As the project progressed, we found it increasingly useful to employ what is known about the function and nature of Incan quipus to think about our collaborative work practices and the challenges of making these effectively participatory. The anthropologist Frank Salomon has suggested that the quipus he encountered in the Andean village of Tupicocha were made not by one individual but by four hands, with one person 'holding the ends of the main cord while another arranges the pendant cords' (2004: 146). During the three years of the project, team members have worked in and between Peru, Chile and the UK, the location and collaborators shifting as the project has grown and evolved. Workshops have been held in villages, towns and cities to promote knowledge of the phoneline, and to elicit participants. We have worked closely with local organisations to develop the project and to work out ways of making the phoneline a useful part of their campaigning strategies. Maintaining lines of communication amongst geographically diverse participants with unequal access to phones and the internet was particularly difficult. Our project management relied upon digital communication, accompanied by analogue telephone communication with offline participants, attempting to ensure that the main cords of the project were secure while new collaborative relationships and ideas were knotted in. Like the precolonial quipus, our work has developed through an iterative process, constantly being added to with new material, knots shifting to reflect new realities.[iv] Just as Salomon concludes for the Tupicocha quipus, our working practices on the Quipu project have helped us 'seize and hold awareness of having created and upheld each other. They are reciprocity made visible' (Salomon 2004: 279).

The Incan quipus have also helped us think about the digital counter-memory we hoped to generate in the project, and the ways in which we could capture and present this memory in an accessible, engaging and non-homogenising format. Quipus are intricate and complex, woven out of interlocking strands of multiple colours that are held together and given meaning through strategically-placed knots. Each coloured thread represents something worth recording and remembering, knotted to other strands in a way that communicates a particular relationship or interpretation. None of the strands is the same; none is reducible to any other; each has a role to play in the whole, its relationship communicated by the precise knot used to connect it with the other coloured threads. Each individual memory and narrative, likewise, represents something worth recording and remembering, its meaning contextualised in relation to other memories and narratives, always an intrinsic part of cultural memory as a whole. Quipus help us recognise that cultural memory is inherently multivocal, comprised of multiple voices and perspectives, yet displaying patterns and regularities that help us make sense of individual narratives and their relationship to others. Quipu represents the memories and narratives of those who have participated in the project as a series of coloured threads on the website, connected together by thematic knots that highlight the regularities and patterns in these testimonies without diminishing each individual's perspective and voice.[v]

Working collaboratively in this way, adding threads and knots to our network of partners whilst holding the other threads secure, has not always been a straightforward process. Quipu's many partners – the sterilised people, academics, activists, documentary-makers, creative technologists and activists – have all come to the project with their own expectations, their own politics and ideas about what the project could and should achieve. Many of the activists, for example, see the project as a way of gathering evidence of the extent of the abuses and violations that accompanied Peru's National Population Programme, and of helping those affected to gain experience of giving their testimony in preparation for a potential court case. Some participants hoped that the project would influence Peruvian presidential politics, when Fujimori's daughter Keiko campaigned for the rehabilitation of her father's political legacy (she was narrowly defeated in the 2016 presidential election). Others have seen the project as an intervention in Peru's representational politics through its centring of voices and perspectives that have typically been marginalised. What unites

these diverse aspirations is a recognition of the power and political resonance of personal testimony (cf Matthews and Sunderland 2013: 102), and a shared conviction that the project should collect and provide a means to collectively acknowledge the memories and testimonies of those affected by unconsented sterilisation in Peru. The layered politics of the Quipu project are sustained by the focus on story-telling, which allows it to act as a vehicle for the participants' different aspirations and goals.

What has emerged from these collaborative working practices and reflections is a multi-dimensional method for recording and archiving the memories of Peruvians who were sterilised without their consent, and for audiences in Peru and elsewhere to listen and, if they wish to, respond to them. It works through an online platform that enables callers to our Freephone landline phone numbers in Peru to upload their testimonies, which are then made available through the phoneline to callers in Peru, as well as to audiences around the world through a curated experience and archive on a webpage. The existence of the phone number was advertised through radio adverts and personal visits to affected communities, facilitated through contacts in Peru, particularly in Convenio IAMAMC-AMHBA in Huancabamba and AMAEF-C-GTL in Cusco, who had several years' experience of working with local communities on the issue. Workshops were organised to discuss the project and its method, where it might lead (increased national and cross-national knowledge of their cases, for example) and what it may or may not bring about (extra resources from the state, reparations, legal justice). All of the first calls were made after these workshops. The landline Freephone number initially yielded no unsolicited calls; discussion of this with workshop participants led to reconsideration of the nature of the communication networks we were relying on. The subject did not lend itself to a public phone call – from a phone booth located in a public square or municipal offices, which is where most telephones are located in these areas, rather than in private homes. People were more comfortable giving their testimonies in private settings, so mobile phones were preloaded with credit and given to six women from our Peruvian partner organisations, who took them to neighbouring villages to enable those who wished to use them to share their memories and experiences. This was a major breakthrough for the project.

Once a narrative is shared through the phoneline, it is manually edited to make sure it does not contain abusive or potentially libellous material about individuals according to our moderation guidelines, and is then made publicly available through both the phoneline and project website. After listening to the recorded narratives which are in either Quechua or Spanish, our team of transcribers and translators produce transcriptions in Spanish and English, coding them according to four broad criteria which refer to 1. the government's sterilisation programme; 2. the physical sterilisation operation (the *ligación* in Spanish);[vi] 3. the physical and emotional consequences of the sterilisation; and 4. the campaign for justice.[vii] Users of the website can then navigate the archive listening to individual testimonies (presented as individual hanging cords from the central quipu), and/or by moving between testimonies according to theme (by clicking on the colour-coded quipu knots), thereby curating their own experience of the Quipu project. The knots therefore create a sense in which individual testimonies are combined into, and can be experienced as, collective narratives, maintaining the individual nature of the testimonies at the same time as allowing them to be experienced through one narrative thread.

The spoken word is privileged throughout the website, as it is in the phoneline, to preserve and respect the integrity of the testimonies that have been shared. We use 'voice' in quite a literal sense, following scholars such Kanngieser (2012), not as a simile for perspective as in some recent literature (Kilty 2014). 'We did not give 'voice' to anyone, nor did we help the 'subaltern speak' (Spivak 1985; Menchú 1984). The archive is transcribed and translated, but never dubbed. User testing of the website confirmed that part of its power

lay in the experience of listening, regardless of whether the listener is a native speaker of Quechua or Spanish or not. We were cautioned by wizened digital developers that the attention span of any digital audience would be limited and that an online experience had to be fast and visually-engaging for it to retain the interest of flitterers, surfers and distraction-seekers. But within an interface that is visually appealing, the raw sound of the Quipu phoneline is evocative and draws the listener in (cf Kanngieser 2012: 338). It takes some of its feeling of authenticity from aural reference to surviving Andean 'modes of communalism' in oral cultures (Rabassa 2010: 2). The internet also allows website users to listen to the audio testimonies in their own homes. The intimacy of the setting – in one's bedroom, for example – makes the effect much more powerful than if the Quipu project were located in a museum installation, to which listeners make a physical journey and prepare themselves to be educated, enlightened or challenged.[viii]

The website allows users to respond to the testimonies, and, in doing so, to acknowledge the memories and experiences that have been shared. Many of the testimonies left on the phoneline, including #38 and #50, cited in this paper, call for listeners to take action: to share the stories, to work to bring the perpetrators to justice, and to help secure economic and other resources for those who suffered physical and emotional damage from the sterilisation programme. Maintaining the centrality of voice in the project, an oral response section was added to the website, rather than a conventional sidebar for comments. Users of the website press a button and speak their responses into their microphone, and their testimony is uploaded to the website and, importantly, made available to people calling the landline in Peru. Now, when people call the Quipu Freephone landline number, they are given the option to press '1' to leave a testimony, '2' to listen to other testimonies, and '3' to listen to the responses of people who have heard the testimonies. This can be seen as closing a connected circle, with the listener acknowledging the testimony-giver through feeding back their own response. It also adds to the meaning that users take from their experience of the Quipu website, encouraging them to see the act of listening as a political act as well as a symbolic gesture (cf Matthews and Sunderland 2013: 100).[ix]

The ethics of privileging voice in the project have not been straightforward, however. One of the exercises which required the longest discussions and led to innumerable false-starts, redesigns and rewritings was the wording of the phone transcript. How to explain to someone who had not experienced the internet, for example, that their testimony would be available all around the world? These questions were further complicated by linguistic difference: how to translate these concepts between Spanish and Quechua? Given the nature of our subject material, the issue of consent was at all times central to our discussions. Participants were repeatedly reminded that their testimonies would be made available for *anyone* to listen to them. The external members of the project's Ethics Committee took a leading role in shaping our thinking about this, as did our communications with our NGO partners in Peru. Many people giving testimonies were explicit that they saw themselves as 'speaking out' against injustice, and that they wanted to name themselves in their testimonies rather than to have their names changed and locations anonymised. We initially resisted editing the testimonies, hoping to fulfil the participants' desire to be heard fully and without intervention. Ultimately we had to make some difficult decisions, however, about the way that we presented the testimonies online, balancing some of our participants' desire to speak out publicly against the need for anonymity in an uncertain political and security situation in contemporary Peru.

Our collaborative working practices, and the intervention into the cultural memory of unconsented sterilisation that the Quipu project represents, have unavoidably generated their own patterns of inclusion and exclusion. Working directly with organisations that aim to promote women's empowerment and local organisational capacity, for example, has undoubtedly contributed to an imbalance in the number of

testimonies left by affected women and affected men. To date, only 1 percent of the testimonies in the Quipu are from sterilised men, even though men are estimated to represent around 10 percent of those who were sterilised in Peru in the 1990s – a reflection, to some degree, of the ways in which local awareness and participation in the project has been shaped by our partner organisations' existing networks.[x] The use of a bilingual (Spanish and English) website to disseminate the testimonies beyond the communities affected also perpetuates the marginality of Quechua – and the marginalisation of Quechua-speakers – online. Here too, the project has been shaped by existing networks of expertise and the linguistic hierarchies that they reflect and perpetuate. Relying on a website – and the digital networks that promote and disseminate it – to foster counter-memory in Peru and beyond also shapes the impact and reach of the project: inevitably, it attracts an audience that is comfortable with, or at the very least open to, digitality, a drawback common to much work in digital humanities (cf Bartscherer and Coover 2011). Nevertheless, the project can claim to have made important progress in generating and disseminating knowledge of unconsented sterilisation in Peru across geographical, social and linguistic divides, and helped local organisations and groups to put the issue of unconsented sterilisations onto the agenda for the 2016 presidential elections in Peru.[xi]

Orality, responsibility and new forms of impact: lessons from the Quipu

> *With this message we want people from all over the world to know what happened in our country, Peru. And everyone to learn about the sterilisations and vasectomies they did to all of us.*
>
> Testimony #27, Ayacucho, 2014

The Quipu project has highlighted new ways of collaborating and producing knowledge across geographical, disciplinary and linguistic divides, and their inherent challenges. It has opened our eyes to the potential of voice-driven digitality as a method for participatory research. It has demonstrated the opportunities presented by digital projects that integrate research, documentary and social engagement in mutually reinforcing ways. It has also confirmed some of our fears about digital methods, and the assumptions that seem to be deeply embedded in those research cultures where digitality is most celebrated and actively pursued. Excitement about the novelty of digital cultures and methods, and the scope for playful innovation that they offer to cultural commentators, creators and researchers, too often comes at the expense of reflection on the social and political contexts which might prompt and shape their use (for a review see Thomas 2016). Our experiences of developing, carrying out and disseminating our work on Quipu show that it is possible to use digital methods to foster participatory knowledge production, and, by combining online and offline technologies, to do participatory digital research even in contexts where digital technologies are not well-established or commonly used. Doing so is by no means a straightforward endeavour, however, not least because of asymmetries in participation and in the consumption of digital outputs.

Quipu has placed the voices and testimonies of those who were sterilised without their consent in 1990s Peru at the centre of the project from the beginning. While this responded to a specific dimension of our research context, namely a silence and silencing in dominant cultural memory of Peru's authoritarian past, it is what has allowed the project to meet the needs of its different audiences and users and ultimately take on a life of its own. The testimonies that the project has brought together are, to borrow Rosaleen Howard's

formulation, stories 'born of social and political crisis, preserved in memory not merely as a record of times past but, above all, as a tool with which to act upon the present' (1990:2). Verbalising and sharing testimonies through Quipu has allowed those affected by unconsented sterilisation in Peru to participate in the creation of meaning about their world and their past experiences (cf Jimeno 2014: 24), and in doing so, to act upon a present that marginalises and forgets their perspectives. This has generated a sense of collective purpose and ownership amongst many of those who have shared their testimonies, facilitating connections amongst the geographically-dispersed organisations and communities that have been campaigning about unconsented sterilisation in Peru over the past years, and therefore has created new political alliances. Being *listened to* and acknowledged by audiences in Peru and around the world has also been transformative, for many participants, for the sense of recognition and solidarity it has created.[xii] At our Lima launch, one of our participants Esperanza Huayama commented that 'the project has helped us to get our voices heard'. For those accessing the project beyond Peru's borders, it is the opportunity to listen directly to the voices and words of those affected by unconsented sterilisation that has most moved and engaged audiences. Listening to the memories and testimonies of those who were sterilised without their consent has invited 'a reciprocal involvement from […] listeners' (Howard 1990: 6). It has drawn audiences into the world that those leaving their testimonies are creating, opening what Alfredo Molano calls 'a relational channel' (cited in Jimeno 2014: 23; see also Cameron 2011) between testimony-givers and listeners. Because of the nature of the technologies we worked with, this relational channel has operated more effectively from the analogue to the digital, rather than from the digital to the analogue. Nevertheless, the orality of the project points to new opportunities for 'responsive understanding' (Kanngieser 2012: 338) between participants and audiences in digital research.

The Quipu project does not claim to simply transmit or amplify the testimonies of Peruvian women and men in a pure or unmediated form. The phone and web interface are a crucial part of audiences' experiences of engaging with the project, shaping understanding of the politico-historical context in which it is embedded, and prompting modes of relating to the narratives and memories. The interactive design of these interfaces, and the audio and visual landscapes they conjure, incite particular kinds of engagement with the project. So, more prosaically, do the website's introductory video and text and the spoken text that phoneline users hear before leaving their testimony. The curation and moderation of the testimonies, and the editorial decision to categorise and code their subject matter, also play a role in shaping audiences' expectations and experiences,[xiii] and in interpellating both testimony-givers and listeners. Creating this type of interface, so central to public understanding and consumption of the project, entails assuming a number of editorial and curatorial responsibilities, including transparent moderation and editing, ensuring a consistent approach to framing, moderating and translating content, maintaining dialogue and contact with partner organisations, and mediating the representational demands of participants (cf McIntyre 2008: 65-66).

Assuming such editorial and curatorial responsibilities, and engaging with the ethical and political dilemmas that they pose, has only been possible, in the Quipu project, in the context of relations of trust that have slowly been constructed amongst our participants. It took several years of careful and respectful relationship-building between Chaka Studio and leaders of women's rights organisations and other key activists, and the mutual and reciprocal learning that this process facilitated, to reach a point where meaningful collaboration became thinkable and achievable. Much of this took place before the involvement of academics and the development of the interactive documentary. Time spent working and learning together, was crucial to the development of the shared vision and sense of purpose that are the hallmarks of the project. This is not to say that this process has not been without its tensions and challenges – certain assumptions and instincts are too deeply-embedded, we have found, for us to always be able to find

compromises and solutions that are equally acceptable to all.[xiv] The project was sustained by a spirit of collaborative endeavour, and a sense of shared excitement and purpose. Long-term engagement, listening and learning among the project's various partners – the women's organisations in Peru, Chaka Studio, the Ethics Board and the two of us – is what has allowed us to work productively together, whilst attempting to preserve the integrity of each partner's vision and purpose. In this respect, the methods we have used to manage our day-to-day work together are not so different from other forms of collaborative research, in that they rely on and require trust, relationship-building and regular communication. Digitality is not a substitute, in other words, for the communicative and human dimensions of research. It is, rather, an additional terrain on which to pursue and facilitate these encounters.

The web of relationships that revolve through and around Quipu points to a new model of engagement between academics and society, a new model – to use the preferred vocabulary in the UK at the moment – of impact. The project would not have been possible without institutional support and funding that put a value on research that prioritised engagement and co-production. We contend, echoing the participatory geographers Pain, Kesby and Askins (2011) that through strategic engagement with projects like Quipu, the 'impact agenda' can be harnessed and broadened. This model of engagement is inclusive: of experiences and communities that have previously been ignored; and of methods and forms of expertise not normally brought together. This is a gradual, subtle and multi-layered form of impact, an impact that is difficult to predict and measure, but which is potentially much more powerful and lasting than the adoption of recommendations by policy-makers and other power-brokers, or the use of research findings to inform policies or business strategies.

Conclusion: Centring the human in digital research

The Quipu project shows that it is possible to use digital media to build new spaces for participatory research, and to foster new forms of engagement between participants and audiences across geographic, linguistic and digital divides. Working collaboratively with transmedia company Chaka Studio in London, Convenio IAMAMC-AMHBA in Huancabamba, AMAEF-C-GTL in Cusco and other organisations in Peru, we have been able to develop a multi-dimensional method for recording and archiving the previously marginalised testimonies of Peruvians who were sterilised without their consent, and to produce a digital counter-memory of unconsented sterilisation that is accessible to all. The project, our collaborative working practices and the success of this multi-dimensional research method suggest, we believe, at least four pathways forward for future digital research.

Quipu points, firstly, to some of the ways in which digital tools and networking methods can be repurposed for more consciously political and ethical ends. Critical scholarly engagement need not – and indeed should not, in our view – consist of sniping from the sidelines (cf Pain, Kesby and Askins 2011). Scholarly critique, rather, can inform and guide practical, participatory and embodied interventions; digital methods and concepts can help focus, develop and enact critique in a range of research contexts (cf Aradau and Huysmans 2014).

Secondly, if this potential is to be realised, creative technology – and the creative technologists who are able to breathe life into it – cannot be treated as mere appendages to a research project, something to be called upon when websites and archives need to be designed or communication and impact strategies need to be implemented. They need to be fully integrated and costed into projects as participants and collaborators.

Creative technologists need to fully participate in scoping discussions about the purpose and nature of research, including its political and ethical orientations, just as any other sets of partners do.

Investment in research relations, thirdly, is therefore just as important in digital research as it is in other participatory and qualitative forms of research (cf Castleden, Mulrennan and Godlewska 2012; DeLyser 2014; DeLyser and Sui 2014; Askins and Pain 2011). The digital is not a quick fix, to be applied as a simple way of increasing the volume of research data and the pace of research processes. Relationships with research participants still need to be nurtured; time and space still need to be carved out for trust-building, learning and meaning-making amongst research partners. The dangers of sacrificing depth for reach, inherent in digital projects, may make investment in research relations even more valuable.

The Quipu project teaches us, finally, that human connections formed through story-telling and listening can play a central role in participatory digital research. Stories can 'direct attention to the interweaving of the personal and the social, the particular and the general' (Cameron 2012: 586). Much of the power of the testimonies gathered in Quipu, like other forms of participatory research, comes from the simplicity of people telling their stories. These can be amplified and become transformative through the process of constructing new digital spaces that facilitate engagement with people and perspectives that are not encountered in everyday life.

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[i] We do not, and indeed believe we cannot, claim to speak on behalf of all the partners in the project in this article; we reflect and write from our position as academics in the UK university system.

[ii] We are co-authoring other outputs with our partners which will take different media formats, and are planning workshops in early 2017 to explore the impact of the project with its initial participants in Ayacucho, Cusco and Huancabamba. The two of us are writing another article which analyses the testimonies themselves, rather than the research process, which is our focus here.

[iii] The Chaka Studio collective was formed by Rosemarie Lerner, María Court and Sebastian Melo, with Ewan Cass-Kavanagh.

[iv] In this way it has some commonalities with McIntyre's description (2008: 5) of participatory research as a 'braided' process of exploration, reflection and action.

[v] As one of the anonymous reviewers usefully pointed out, the thematic knots also offer a first step towards analysing the content of the testimonies (cf Cahill 2007).

[vi] Much of our work on the translations centred around the term *ligaciones.* In the end we have chosen to use the English term 'sterilisation' rather than 'ligation'. Ligación is commonly used in this context in Peru, but use of 'ligation' – the literal translation of *ligación,* meaning 'tying', caused a lot of confusion amongst our testers in the UK.

[vii] We continue to seek funding to translate the Spanish testimonies and the website framework into Quechua.

[viii] Nevertheless we did experiment with a Quipu installation, converting a disused magistrates' court in Bristol into an Andean health centre in which visitors came to listen to the testimonies. For a review see Wired 2015.

[ix] The Take Action section of the website also features links to campaigns in Peru run by Amnesty International and DEMUS, and the option – called for by many during our user-testing – for donations to be made to our partner organisations in Peru.

[x] It may also reflect dominant constructions of unconsented sterilisation in Peru, and of speaking out about it, as a 'women's issue'.

[xi] See the Quipu project twitter feed @quipuproject for some of these, including comments from participants at our 10 December 2015 launches in Lima and Bristol, and coverage on the BBC, New York Times, *El Mercurio, La República,* and *El País.*

[xii] See also the complementary findings of Christensen (2012) for the use of research story-telling methods with indigenous communities in Canada.

[xiii] Indeed, the curation and editing are arguably what make Quipu more engaging to audiences than the testimonies given in public to the Peruvian Truth and Reconciliation Commission that have recently been made available in video and audio form via YouTube (CVR 2015).

[xiv] A recurrent tension, for example, has focused on our attitudes to networked learning and working, e.g. relying on volunteer translators sourced through networks vs trained translators.