

Human Values in Curating a Human Rights Media Archive

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ABSTRACT

Cultural institutions, such as museums, often curate politically and ethically sensitive materials. Increasingly, Internet-enabled, digital technology intersects with these curatorial practices offering new opportunities for public and scholarly engagement. We report on a case study of human rights media archiving at a genocide memorial centre in Rwanda, motivated by our interests in ICT support to memorialisation practices. Through an analysis of our discussions with staff about their work, we report on how accounts of the Rwandan Genocide are being captured and curated to support the centre's humanitarian agenda and associated values. We identify transferable curatorial concerns for human rights media communication amongst scholarly networks and public audiences worldwide, elucidating interaction design challenges for supportive ICT and contributing to HCI discourses on Value Sensitive Design and cultural engagement with sensitive materials.

Author Keywords

Human Rights Media; Rwanda; Genocide; Memorial; Curation; Value Sensitive Design.

ACM Classification Keywords

H.5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous.

INTRODUCTION

Interest in cultural institutional settings has grown in recent years in the Human Computer Interaction (HCI) field, as networked digital technology increasingly intersects with the curatorial practices of these institutions, within a global frame [4, 17]. In parallel, increased attentiveness has been shown to the *human values* being supported by and implicated in the design of such technologies, including their ethical, legal and political dimensions, and transnational, multigenerational, cross-cultural spheres of operation [5, 6, 10, 21, 24, 25, 30]. In this paper, we

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contribute to these discussions on cultural engagement, diversity and value in HCI, by reporting on a study with a genocide memorial centre in Rwanda [18] about archiving human rights media for worldwide audiences [11].

Our study formed part of a UK-based research project to understand how Information and Communications Technology (ICT) is being used to support practices associated with visiting and managing memorials in an international context, to deliver socio-cultural and technical insights on the participation of memorial centres as *sustainable* institutions in a global economy [12].

Herein, we report on our recent case study of the Kigali Genocide Memorial (KGM) [18] and its genocide archive (which is partially online [11]). Part of this case study – and the analytic focus of this paper – was to understand how accounts of the 1994 Rwandan Genocide are being captured and represented through KGM's media archiving practices, supported by technology, and what values are expressed by the KGM staff members when describing their work. We further aimed to highlight voiced curatorial concerns for those working with sensitive materials at KGM to support public and scholarly communication.

In the following, we provide background information on Rwanda and its 1994 Genocide, to set KGM's founding in context, focusing on the ethical and political values that direct its work. With KGM's institutional remit in focus, we position our study objectives in relation to work in HCI and related fields. We describe our method and analytic process, and discuss our key findings. In concluding, we elucidate transferable insights about curatorial concerns for supporting the communication of human rights media for international public and scholarly audiences, and describe interaction design challenges in this endeavour, contributing to HCI discourses about design for human values and cultural engagement with sensitive materials.

Background on Rwanda

Rwanda is a small East African country, one of the poorest in Africa [8]. Yet through heavy investment in IT infrastructure and following a national plan [28], Rwanda aims to become the 'IT Hub' for the East African economic zone. This plan is part of reconstruction efforts to transform the country after the 1994 Genocide, in which some 800,000+ Tutsis, Twa and Hutu moderates were massacred, under the instigation of the Government of the time [26].

It is widely accepted that the extent of this atrocity was due in no small part to inaction by the United Nations (UN), with peace being eventually restored by rebel Tutsis, of the Rwandan Patriotic Front (RPF). The RPF has remained in power since, stabilising Rwanda largely through President Kagame. However, some people have alleged that activities such as political oppression and enacting anti-genocide ideology and anti-divisionist laws – in the face of genocide deniers and those who would actively contest historical accounts – have led to subsequent human rights violations [14]. Now, 20 years following the Genocide, its discussion remains difficult for Rwandans – emotionally, politically, and legally; many remain guarded about it. Nonetheless, the country enters a period of national mourning each year for 100 days to commemorate the victims.

KGM and the Documentation Centre (KGM-DC)

KGM was established in 2004 as a national focal point for memorialising the Rwandan Genocide, with the support of the Rwandan government and the Aegis Trust, a UK-based charity and NGO [2]. Aegis created the UK's Holocaust Centre and memorial [31], which Kigali City Council members visited after the 1994 Genocide, leading to an invitation for Aegis to help them develop what would become KGM. Consequently, an Anglo-Rwandan dialogue heavily informed the founding of KGM, and KGM's institutional remit echoes that of Aegis: to promote the prevention of genocide to international audiences [2].

KGM constitutes a mass grave (with 250,000+ Genocide victims interred), a museum exhibition presenting a curated historical narrative of the genocide events, memorial gardens that have been designed to reflect the curation of the exhibition, and a recently launched Documentation Centre (KGM-DC). KGM-DC contains an archiving facility and library, and the archive incorporates a *physical* collection of genocide-related media (e.g. photos, letters and print publications) and a collection of digital resources.

At the time of our study, KGM pursued its humanitarian cause through three departments, Education, Social Enterprise, and Documentation, and activities including: an in-house extracurricular education programme for Rwandan schoolchildren; an international tourism service (Discover Rwanda), and not-for-profit enterprise initiatives that aim to sustain the centre; a social programme that financially supports genocide survivors in their everyday living; and the KGM-DC. It is the *documentation* work of the KGM-DC that is the focus of our analysis in this paper.

The staff members at KGM-DC work with a politically and ethnically contested history, and with material that is both emotive and visceral; herein we frame this as *sensitive archive material*. Given the socio-political complexities of discussing the Rwandan Genocide, KGM also strives explicitly to work beyond the influence of the Rwandan Government, using international connections to foster *independence*, support their *international outreach*, and to remain entirely *self-funding* as a cultural institution [18].

RELATED WORK

We now contextualise our study within prior related work, addressing research of relevance to HCI researchers about the archiving of sensitive digital materials in relation to human rights media, within cultural institutions that have a global reach. It is this specific focus that sets our case study apart from the study of cultural institutions per se.

Some recent work in HCI and related fields has begun to address issues around working with politically and ethically sensitive materials. For example, memorialisation practices and 'end of life' issues have been explored in a variety of different settings [23]. Also emerging is work on post-conflict settings in which memorialisation and processes of reconciliation may play a part; indeed, this has been explored specifically in the Rwandan context [e.g. 24, 25, 34]. Other work has explored reconciliation around personal sensitive materials in a domestic-familial context [7]. Connecting these areas of focus is a broader developing concern within HCI to design for enduring *human values* [10]. This foregrounding of values is a complex endeavour that has raised critical reflection on issues of cultural specificity and stakeholder 'voice' in the research process [5]. We are mindful of such issues as we approach our work herein; in our case we consider how these issues are addressed not just within our research process (i.e. reflexively) but also within the organisational practices of KGM-DC, to inform HCI discourses on value in design and cultural engagement with sensitive materials.

Our study has also been informed by wider literatures on museum and cultural studies describing the curatorial challenges of speaking to multiple audiences about sensitive materials within international contexts. For example, complex issues of representation and authorial voice have been actively considered at the long-established holocaust memorial Yad Vashem in Jerusalem [19] and in relation to the Holocaust exhibition at the Imperial War Museum, London [13]. Within such literatures, questions about digital media representations of genocide, and the potential for providing online access to archival content, have also been addressed, for example, at centres such as the Shoah Foundation Institute in California [29].

Studies on the types of sensitive media content being handled by genocide archives also inform our work. We have reflected significantly on Yoo and colleagues' [34] exploration of potential user responses to genocide archives (e.g. The Voices from the Rwanda Tribunal project), and their consideration of the design challenges for such archives from a multi-generational perspective. Relatedly, KGM-DC also deals with sensitive video data. The core of the KGM-DC work is the production and representation of *survivor video testimony* (as opposed to external judicial perspectives in the aforementioned project [34]). Survivor video testimony is a genre of human rights media communication that is understood and reproduced globally [22], and which captures individual first-hand witness accounts for authenticity and the fostering of empathetic

response in viewers [ibid]. Since its founding in 2004, KGM has produced original survivor testimony accounts in digital video format, and KGM's use of this media genre has been to no small degree informed by the established organisational practices of the Aegis Trust and the Shoah Foundation, alongside another institution that KGM works in partnership with, University of Texas Libraries (UTL) [17]. The particular archiving challenges presented by human rights documentation have been recently reported as insights from the KGM-UTL collaboration, focused around the UTL Human Rights Documentation Initiative (HRDI) [ibid]. These relate to the *preservation* of 'fragile' media from physical deterioration or political attack and associated trust and legacy issues that affect *access* [ibid]. Lack of expertise, infrastructure and economic resource reportedly present other challenges that shape the everyday archiving strategies being explored by KGM-UTL.

As Kelleher and colleagues point out [ibid], such organisational challenges reflect the wider growing importance of managing archives that employ digital representations of cultural artefacts. Debate within library and information studies has also sought to question the changing nature of archives, with concern for collection, management, access, and scholarly communication, within an international context and impacted by developments in digital networked technologies [29, 32]. For many institutions, digital resources and the endeavour to share broadly (often initially for scholarly purposes [32]) pose new problems of Digital Rights Management (DRM) yet to be adequately addressed [9]. Responses to this are an issue picked up by McLagan [22] who highlights the complex politics of 'branding' digital human rights media. But currently under-explored by Kelleher and others, is detail about *how* the appropriation of digital tools and resources by cultural institutions like KGM is actually being carried out to serve the humanitarian *values* of the institution.

In framing our study, we further highlight that KGM is a cultural institution currently *developing* its archiving practices, with support from key stakeholders: Aegis Trust and scholarly partners Shoah Foundation and UTL. We position KGM's archiving endeavour within a Rwandan socio-political agenda of reconciliation and transformation, mediated by technology development encapsulated in the Rwanda Vision 2020 report [27].

This positioning of KGM in dialogue with worldwide public audiences and scholarly networks means that our study findings may inform a discourse within HCI on ICT development and use in the context of transnational interactions and global processes [e.g. 6, 15, 21, 28]. Methodological critique within this discourse raises concern for 'Western' researchers' positioning with respect to working with participants in 'other' parts of the world such as Africa, and conceptual issues of cultural difference-making and spatial categorisation (e.g. Here and There, East and West, Global North and South) that may influence the study of phenomena like technology appropriation [21,

30]. Our study design and analysis has been informed by this critique, as we explain in the sections to follow.

APPROACH

We now describe our study design, the nature of the data we collected, and our analytic method for addressing the following research questions:

- (1) *How is the Rwandan Genocide being captured and represented through KGM-DC's everyday archiving practices, supported by technology?*
- (2) *What values are expressed through the work of the KGM-DC staff, supported by technology?*

Our objective through addressing these questions was to understand current practices at KGM-DC and how these were motivated and shaped by institutional values and endeavours, to identify *transferable* insights about working with human rights media in cultural institutions, and curatorial concerns for human rights media communication to public audiences and scholarly networks worldwide. In this paper, we use these insights to frame interaction design challenges for developing ICT to support these concerns.

Study Design

Our interdisciplinary project team, at the University of Nottingham, held diverse skills in computer science, interaction design, social psychology, economics, and genocide education. A teacher amongst our team had worked with KGM for many years, and visited the staff there on several prior occasions. Both KGM and Aegis had previously partnered with our University on research projects, and our study design was grounded by a scoping visit to KGM by a subset of the team, carried out six months prior (Mar. 2010), to make observational studies and to hold planning meetings with KGM staff. KGM was particularly motivated to partner with us because they were launching the KGM-DC at the time, and were keen to gain, in their words, an '*outsider perspective*', to help evaluate their developing work practices. Akin to the framing of their other 'international facing' partnerships with academic institutions (e.g. [17]), ours was also positioned as mutually beneficial, whereby deliverables included *pragmatic*, constructive results for real-world impact, and *reflexive* understandings for scholarship and learning. Mindful of the critical discourse on researchers' cultural positioning [e.g. 6, 15, 21], we made sense of stakeholder cultural dynamics within the particular communities of practice of KGM and our University. We were also aware of the ethical concerns of working with participants in a complex socio-political environment and reflexively examined the values implicated in their participation.

In many ways our approach echoes and is inspired by Friedman and colleagues' concerns for Value Sensitive Design (VSD) [5, 10]. VSD is a 'theoretically grounded approach to the design of technology that accounts for human values in a principled and comprehensive manner throughout the design process' [10, p. 348], placing analytic focus on: the values of research stakeholders, designers;

values that may be embedded in a given technology; understanding individuals as they live and act as citizens within society; and the pragmatic, ethically-sensitive goal of designing technology to better support human endeavour. These concerns were shared in our study but in alignment with a different methodological orientation: Experience-Centred Design (ECD) [33]. ECD is similarly phenomenological and pragmatic, but distinctly interpretative and exploratory, guided by an emphasis on empathic engagement and dialogical (i.e. self-other) interaction within the functioning of human relationships.

Recruiting at KGM

In consultation with Aegis and KGM directors about our aims (Dec. 2010), we were recommended to liaise with KGM managers of the three key departments (introduced above). All of our communications were in English as many of the KGM staff members had a good working knowledge of the language. We conducted introductory discussions with each of these managers via Skype (Jan.-Feb. 2010); they then facilitated communication with their departmental teams. Together with these contacts, we designed three focus groups to take place at KGM in Kigali, each relating to a department and attended by associated staff, at which our emerging understanding of KGM practices could be explored in depth. During our consultation process, the managers recommended we also conduct interviews with the KGM Director along with local representatives from a pan-African telecoms company to gain additional perspectives. The Documentation manager (Director of KGM-DC) also recommended a ‘tour’ of the facility for staff to discuss their work *in situ*.

Participants interviewed (for this paper) were all Rwandan nationals, aged 18-35, all Rwandan University graduates and members of the Genocide survivor community, except for the KGM-DC Archivist, a Canadian visitor with a background in Photography and Curation, and the British Aegis Director. All names reported below are pseudonyms.

Visiting KGM

Three members of our project team (the three authors of this paper) organised to visit KGM in Kigali for a week in March 2011, at a time to fit with KGM’s preparations for the national commemoration period. We conducted three focus groups (Education team, n=4, 3hrs; Social Enterprise team n=3, 3hrs; Documentation team, n=12, 4hrs), a guided tour of the KGM-DC (n=5, 3hrs) and three face-to-face interviews (n=4, 2hrs each). We also spent several hours every day observing KGM visitors and staff and visited other memorials outside Kigali to contextualise (within national memorialisation activities) our experiences of visiting KGM. We each wrote field notes capturing our personal experiences in Rwanda, and collected video recordings of the focus groups and tour, along with photographs of the setting, media artefacts published by Aegis-KGM, and internal strategy documents. Following our visit we conducted a further interview with an Aegis

director at the UK’s Holocaust Centre [31] (n=1, 3hrs), to discuss our initial insights on the data collected at KGM.

On KGM-DC: Data Collection and Analysis

In this paper, we focus specifically on data collected during the KGM-DC tour and focus group. The way in which the KGM-DC team wished to engage with our research team, inviting the tour to take place alongside the focus group, was significant for how we chose to collect our data. For the tour, the staff members chose to present their archiving practices in the form of a workflow that engaged *individuals* at various points, each member describing what aspect of the workflow they were involved in and how. The focus group that followed engaged the wider KGM-DC team. Our participants sat alongside us on chairs in one of the meeting rooms at the centre, making for an informal setting in which we structured the discussion with open questions from a semi-structured interview schedule.

We used Interpretative Phenomenological Analysis (IPA) to make sense of our data [20]. This involved our individual coding of video recordings and interview transcripts for analysing: (i) the participants’ voiced experiences and (ii) researcher-participant dialogue in the context of the study; and eliciting phenomenological themes. We then each selected data excerpts, representative of the themes relevant to our research questions, for further group analysis. We discussed multiple researcher interpretations to establish consensus, deriving higher-level themes illustrated with excerpts. Our emerging collective insights were grounded by insight from the previous KGM visit and other aspects of the broader study (e.g. other interviews). We now turn to report findings from our analysis, supported by data excerpts and incorporating accounts of some but not all of the KGM staff we engaged.

FINDINGS

This section is structured around three distinct but interdependent phenomenological themes, generated in our analysis, reflecting the curatorial concerns and values expressed to us by centre staff. We open with a description of the observed and reported practices at KGM-DC, to clarify contextual details within our account to follow.

Overview of the KGM-DC Practices

At the time of our visit, the KGM-DC video archive contained some 1800 records, of which only a small subset had been digitised and made available online. Staff explained how KGM-DC primarily films, produces and archives video testimony of Rwandan Genocide survivors. This collection is complemented by film (including VHS and reel-to-reel tapes) about the Genocide collected from elsewhere, and other physical materials (e.g. propaganda and letters) stored in a custom-built, climate-controlled facility – some of which is also being digitised.

Staff described the process of collecting video testimony. Categories of testimony had been iteratively developed (e.g. Victims, Perpetrators, Liberators, Children, Women)

as the archive developed and in response to local need. Schedules for collection were systematically developed and then participants sought. Participants were often provided by local survivor associations, and screened for suitability by KGM-DC staff. Staff members were then sent to record testimony, often in a person's home or workplace.

Following testimony collection, the DV tapes were brought back to KGM-DC to be systematically logged and processed. Video was digitised, edited, tagged with metadata (e.g. time and date of recording) and then comprehensively categorised and indexed with archival search terms. Once processed, the testimony was added to a Glifos Media Wiki content management system and made available online. The DV tapes were systematically packaged and sent to UTL for repeat hard copy backup, before being returned to be stored on site. The web hosting of the online archive was also served from UTL, to ensure preservation and maintenance of the online archive (with high-speed local access to the wiki served at KGM-DC).

In parallel, the physical archivist systematically processed physical media collected for or donated to the archive. She cleaned materials, asset-tagged and logged them, then systematically digitised them to sit alongside the videos on the media wiki, before safely storing all physical materials.

Legitimation through personal testimony

We now consider the values held in, and experiences of, the activities and processes framed above. The first of our analytic themes reflects the considerable value placed upon using first hand accounts for structuring *authentic representations* of the genocide.

Producing quality testimony

KGM-DC staff member Simon described the screening process used to select suitable testimony candidates.

"If you get 20 survivors, we can't go straight and start encoding, we have to go to see which one will give us a testimony, according to the quality or the content. After talking to someone who will give us a testimony, you can understand the quality of a testimony from him."

Discussion raised the assessment of 'quality testimony'. It was further suggested that quality might rest on a geographical basis: 'The quality of the testimony we can get from Murambi is not the same as we can get from say one sector in Kigali' (Simon), with areas such as Murambi being 'A key area where genocide has taken intensity' (Jean). Maurice argued that, for him, 'Each testimony is good quality', but then went on to point out how one might need to find thematically relevant testimonies. When asked how candidates were prioritised, the KGM-DC Director gave more detail on the processes that had driven data collection since KGM's founding: 'At the beginning we just said "Let's collect some oral testimonies" - we had a simple choice of those who wanted to share their testimonies'. He explained how selection had effectively been snowballed, by knowing something happened at a specific site and then *looking for* testimonies there, adding: 'We want *balance* and to make sure we are *covering the*

history as much as possible, so that we see we are at least *covering different areas*'. In achieving this 'coverage' and 'balance' in the collection, the Director explained *how* some thematic choices were made. These could be driven by specific temporal events.

"For example if we had a women's commemoration then we'd want to get different types of experiences. When we were collecting, we were saying 'Can we get some testimonies of widows, adults and children, can we get women who have lost children but still have a husband?' So we try to look at what would be the experiences among women."

Such events provided opportunities to develop the archive in diverse ways, broadening the scope of its representations and reflecting multiple aspects of survivor experience. This richer picture, staff explained, also made for the perceived quality of the archive. In describing a methodical testimony collection, staff expressed how 'quality' is about validity, which in turn concerned capturing the witnessing of authentic experience. They emphasised that understanding 'who' is *providing* the testimony and 'where they come from' is *as* important for determining quality as understanding 'who' is *producing* the testimony and *how*.

This sense of accountability in capturing content was carried through to the use of video-editing tools. When Jeremy talked about his editing work, he explained trying to make minimal edits to address production quality rather than reconstructing content: 'I do not cut pictures, just small things like if he is talking about something which is not corresponding with the video' or 'if the image is not good'. Editing was presented as a qualitative process required of Jeremy with significant implications for the archive's function within the wider institution, as the KGM Director conveyed when putting KGM-DC practices in the context of the top-level endeavours and departments.

"Which is important? Which is not? What should we remove from this testimony, what should remain? What is teaching more? Which message do people like or will have most impact on our other things?"

Whilst Jeremy's video-editing process might imply the imposition of narrative, what emerged as significant in our discussions was staff desires to convey the importance of being *transparent* in their approach, and beyond question in their representation of the genocide experience whilst retaining maximum impact from the materials.

Subjectivity and staff commitment

The KGM Director described staff motivations for working at KGM-DC and the role of *survivors* in the curation process, framing the relationship of staff to the material.

"People who are working on the archive - so heavy, heavy to them, they're - 80 per cent are survivors themselves, what other survivors talk about is their own experience, and this is not an easy job to do."

Given the difficult nature of the work, the Director was keen to highlight the value of having 'a team which is committed, which we really appreciate'. He suggested that staffing the KGM-DC with survivors had implications for the moral *weight* they'd feel to sustain the archiving work.

"To sustain this project, there's an element of commitment. We are [as survivors] already victims of it. We care about it - we say, 'in order to

shape the *future of our children*, we have to remember, it's a commitment'. We are talking about genocide but we're also talking about their families, we are talking about them: they have seen it."

Not only did this personal connection bind staff to the complex and 'heavy' work they were doing, it seemingly lent an *authority* or legitimisation to their role in processing the archive material. On multiple levels then, survivor voice was presented as essential for communicating, representing, and memorialising the genocide. This was the case both in terms of the *content* and also the *staff*, positioned as survivors offering a personal, sustained 'commitment' to sensitively handling records. One might argue that such records are inherently subjective, but in this case personal experience was used to demonstrate the authenticity and veracity of the testimonial accounts.

To summarise, the theme on legitimisation to emerge from our study was embedded in expressed concerns for authenticity, veracity, commitment and expert management of materials, in a team with a strong collective identity.

Professionalism in an international scholarly network

Through the tour and discussions with staff, we gained insight into how the sensitive materials were indexed, stored and displayed. This archiving work was found to be *highly collaborative*, involving *considerable interpretation* of content by subject experts and *dialogical understanding* between the KGM-DC team and their scholarly partners.

Collaboration within a specialist team

KGM-DC staff described being intentionally cross-trained so as to better understand the *specialist collective process* of archiving the sensitive materials. Most staff supported and took part in others' job roles: 'everyone has something they *specialise* in but everyone tries to have an awareness of what everyone else does' (Canadian archivist, Robyn). One task that required an interesting combination of specialist input and collaboration was the work of indexing the video testimonies, as Jean demonstrated, showing us his process of indexing the testimony of a woman.

"We have here a thesaurus that we are using to ask topics, the keywords. At five minutes and 36 seconds she is talking about 'Discrimination and Persecution'. I listen to the content she is talking about and then I use those topics. 'Roadblocks' is a sub-topic, embedded within 'Discrimination and Persecution'."

Jean described how understanding the context in Kinyarwanda (the Rwandan language) was critical and this translation alongside the development of index terms was an ongoing process engaged through dialogue with Rwandan linguists, UTL and The Shoah Foundation. Pointing to a document on his desktop, Jean elaborated on the *active* interpretation involved in practice, *on his part*, by introducing a new term within the indexing job.

"This is a new term. This is it in Kinyarwanda [points], and then we will have to translate it in English and French as well. If it is better to use the keywords from UTL then it is okay, but if it is a context which is matching the new term we use the new term."

We found that ongoing dialogue between KGM-DC and international expert partners aimed to produce new shared

understandings of the media content within a transnational and scholarly frame of reference. Jean said that this teamwork was being standardised through the development of a guideline document, which he would have checked by others: 'I will have to submit the draft to those guys at the Shoah Foundation.' The impact of employing such terms for structuring genocide representations is not to be underestimated, as stated in the draft guideline itself: 'Those terms shall be the real reflection of the events'. Overall, a strong theme to emerge from our discussions was that the processing of archive media was *entrusted* to a specialised team and its established partners. The KGM-DC Director was clear on the relationship with Aegis, UTL and Shoah as external partners: 'We approached them'.

Reaching for 'international standards'

Staff members were keen to demonstrate their professionalism and desire to conform to international standards, for engaging in scholarly communication worldwide. This endeavour was couched within a learning process as KGM-DC staff member, André, explained.

"Day to day we struggle to reach standards. So we may find that one of the videos is not very well done and then we have to work with it again, or we may find that one of the corresponding documents is missing some data and then we have to work on it again. So I think we are in this process of trying to improve, to reach the standard."

This 'reaching for standards' was addressed through the interest and respect with which staff oriented to international scholarly partners including UTL and Shoah, showing an openness to learn from their expertise. Jean conveyed this, emphasising day-to-day team collaboration in the learning trajectory: 'We have always to call on UT archivists to help us because they are more experienced than us; over time we have been receiving supportive comments from UT; and we support each other to make a significant improvement'. Adoption of tools such as Glifos and Final Cut Pro, recommended by these experts but adopted and appropriated at KGM-DC, were supporting professional development to achieve digital literacy and self-empowerment, as Jeremy conveyed: 'I believe that by using those tools we are getting aware that we can do more'. As Jean added: 'Our ability to use those kinds of technologies has been evolving over time'. Robyn pointed out that developing this archive presented a new challenge for all involved, including partners, to pioneer ways of working: 'basically we started out with new staff, new technology, new concepts; as our collection grew so did our knowledge of what we were doing'.

We further observed, through descriptions of the systematic media back-ups on their partners' servers, that the process of international standardisation connected with KGM's endeavour to remain independent and sustainable within Rwanda. André clarified how UTL's remote access from abroad helped secure data storage: 'They can enter our network; whenever there is a problem we can give them access to our network'. Overall, the endeavour to *store* and *sustain* the media archive was being achieved through international networks and shared standards of scholarship.

Making human contact through digital resources

The third theme to emerge from our analysis centred on the core KGM endeavour, to promote genocide prevention to global audiences, using the KGM-DC media on Internet-enabled platforms to engage ‘as many people as possible’ (KGM Director) with the humanitarian cause. We now discuss the value that KGM-DC staff placed on Internet-enabled media communication when describing their work.

Web media communication to promote and sustain KGM

The KGM website [18] and related genocide archive [11] were described to us as important and effective means of communicating with international public audiences, including scholars, public interest groups and the Rwandan diaspora. In Maurice’s words: ‘It’s good to have technology to reach out to people who are far away from us’. And Simon: ‘There is an advantage in the website of letting people around the world “visit”, to help them know about what happened in Rwanda’.

Engaging public audiences at a distance was found also to be an important mechanism for *sustaining the archive*, keeping KGM-DC operating. The reach of the web presence helped the centre gain forms of charitable support and visibility from outside Rwanda that, in turn enabled other humanitarian endeavours to be economically sustained *at the centre* (e.g. social enterprise, genocide education), coordinated within the Aegis partnership. As Maurice said of the audiences: ‘We want people to commit’. One example of this is a web-based international student network, Aegis Students [1], that organises charitable work *in Rwanda* (Discover Rwanda) alongside campaigning for donations; on this site, KGM-DC media was being used to galvanise this student community into social action in Rwanda. Such social enterprises were described as having a significant local impact within survivor communities, and galvanising long-term commitment and interest from international visitors.

Indeed, whilst valuing the web presence, we found the unanimous staff view was that online visitor *engagement* was not ‘complete’ until people physically visited the centre. Simon said: ‘There is a big difference; someone who visits the centre can feel more emotion, can talk with us about the archive face-to-face’. Staff personally placed greatest value on *face-to-face* interaction for fostering empathetic understanding about survivor experiences. Thus, remote, virtual engagement was considered to be a prompt to visiting Rwanda to experience, first hand, the impact of the genocide events *as the Rwandan people present them, live them, and memorialise them*.

Robyn foregrounded tensions on framing interpretation for online audiences.

“One of the issues with this publically accessible website and this type of material is the type of context with which you’re accessing it. Being around the Documentation Centre and the team here gives people a more comprehensive understanding of the history.”

André explained that, at the time of our study, the KGM-DC actually received ‘very few visitors in person’. Reflecting on this, he highlighted the potential role of the online media to encourage *more* visiting in person.

We found a desired close link between the endeavour to sustain engagement through web resources, and endeavours to sustain local survivor communities and the genocide prevention message worldwide. The KGM Director emphasised that, as members of the survivor community, his staff had a *personal* stake in this.

“You can stop genocide physically, but, from my experience, genocide from survivors is given to children, like trauma is transmitted. We are already victims. So this is why we should teach the world this message.”

Hence the local-global outlook on human rights media curation at KGM-DC is linked to: the expressed value in creating online communities of interest for promoting awareness and social action; and the central importance of human contact for ‘complete’ understanding and impact.

Tensions on public, Internet-enabled dialogue

This sense of the incompleteness of ‘remote visiting’ expressed by staff was found to raise questions about the public accessibility of the archive and its processes for display, and to what extent aspects of the archiving work should be opened up to involve those outside of the specialist KGM-DC team.

The role of the online archive for *financially sustaining* the centre remained a tricky issue, as Robin explained, raising a question about public ‘openness’ online: ‘Whilst it’s currently open to everyone it may not stay that way; whilst the collection is important for everyone, it’s a very specialised collection’; as a point of comparison, ‘look at the Shoah Foundation’s collection, you can’t just access it’.

On the one hand, dialogue with the Internet-enabled public was valued for developing tools and curatorial practices. Maurice explained why staff welcomed emails from website visitors and were ‘open’ to their thoughts.

“It’s always good and meaningful to interact with our visitors, to know their questions and impressions. This is all new to us. We are open to everything: comments, questions, critique. It is very sensitive data we are making online. We always have to be careful.”

Maurice implied that this email dialogue was important for ‘carefully’ gauging the sensitivities of others. He explained that his team were recording statistics about their web audiences and inviting feedback, as part of their endeavour to develop best practices: ‘Of course we are interested to see where people come from, and know the feedback from them to help improve our job and output’.

On the other hand, the suggestion of *live* public dialogue within a web forum was met with considerable trepidation. This was explicitly because of the sensitive nature of the materials being presented and the complex socio-political environment of Rwanda, as Robyn further explained.

“A public forum is not possible with this kind of subject matter, that can get very complicated very quickly. There are a lot of people out there who have wrong intentions. If you’re talking about narrative and

discourse, there are different perspectives on Rwandan history. People could misuse the information.”

Concern was expressed about this kind of dynamic dialogue and the misappropriation of the sensitive material.

Similar concerns were expressed when considering opening up media *classification* to those outside the team, especially those with local knowledge. Robyn described the *potential* of this for assisting the challenging work of interpreting photographic material in the physical archive: ‘At the moment it’s just us doing it, however with the website we’re going to encourage people to submit information if they recognise the place or people, or when it was taken, or if they took it’. But further discussion revealed tensions; some staff members were against the idea of the public classifying this media because of, again, complexities associated with the risk of malicious misappropriation.

The sense of legitimacy associated with the personal identities of archive workers also carried with it implications for opening up the task of *capturing* archive data to others who do not work at the KGM-DC, and different processes of collection. Conscious that the centre had started associating digital media with GPS information indicating ‘where’ a photographic referent was captured [11], we asked the KGM-DC team what they thought about further leveraging location-based computing to input data into the archive *in-situ*. Jean immediately pointed to potential problems of ‘controlling’ this data and its subsequent use: ‘Who has control over who uploads?’ ‘What control do you have on that picture about who can see that picture?’ Simon added: ‘We can have people who add information in a *negative* way’. Maurice advocated this kind of tool for exclusive use by the KGM-DC team.

“I think the problem my colleagues raised, is mainly about making our system open and dynamic. But I think it could be interesting if we use it *within* the Documentation Centre as a team. If we send people around the country to go where mass killings happened during the genocide, and take a nice smart-phone, take pictures, write some description, and immediately associate that point with those data, it can really work and be really helpful. But, at this stage in our history, we don’t know if we can make it *open* and *dynamic*.”

In turn, we asked the team how they felt instead about ‘displaying’ the material at the site of its capture. Robyn replied: ‘I think that’s much more applicable’.

To summarise: in balancing the desires for outreach with trust and control, in terms of both communicating the humanitarian message and collecting and handling material for the archive, there was much tension amongst KGM-DC staff around the notion of public involvement.

DISCUSSION

We now turn to reflect upon our findings (mindful of our ‘outsider perspective’ and the ethical weight of the subject matter), to address our research objectives and to make sense of our participants’ voiced curatorial concerns for HCI researchers interested in working with cultural institutions on archiving sensitive materials within a global frame. We open with an interpretative summary of how

value and meaning is attributed in the KGM-DC archiving work, as voiced by the staff. This serves to contextualise two further discussion points, on how key archiving endeavours are pursued. In this discussion, we reflect on issues of cultural specificity and stakeholder voice to inform HCI discourses on Value Sensitive Design and cultural engagement with sensitive materials, and to frame interaction design challenges for supportive ICT.

The Currency of Witnessing in Human Rights Media

Our research team reflected that the personal identity of KGM-DC workers as survivors, and the team’s collective identity as a survivor community, was integral to the *identity of the archive*. Survivor identity and experience was found to have great currency, not only within the testimony genre, but also in terms of its production. This afforded the team the ability to approach and empathise with testimony subjects in their communities, and know how to recruit to capture and represent survivors’ voices. This empathetic ‘closeness’ to the subject was found to centrally inform the myriad of value judgments and decisions on the production process, largely making up the team’s specialist expertise to understand what makes for ‘quality testimony’ and deliver impactful human rights media. Moreover, the staff members’ survivor experience *legitimised* them in their effort, and afforded them a sense of authorial control over the archive in its development.

We have used this understanding to help frame the team’s voiced curatorial concerns for two digitally mediated endeavours: (i) *Dialogue with scholarly experts*; and (ii) *Dialogue with public audiences*.

Trusted Human Relationships in the Scholarly Network

We found that the KGM-DC staff greatly valued their collaborations with external scholarly experts (e.g. Shoah, UTL), for understanding how to develop their archive to meet international standards. We have conceptualised these partnerships in terms of a dialogue through which shared understandings are generated about how to construct a genocide archive that is accessible to multiple audiences worldwide. We relate this endeavour to Thorin’s notion of scholarly communication: dialogue encompasses ‘the processes by which scholars communicate with each other as they create new knowledge’ [32, p. 221]. Developing the KGM-DC archive presented a *unique*, transnational context for the creation of new knowledge, requiring original and highly specialised processes to be *pioneered*. KGM-DC staff developed a *trust relationship* with their partners over time as they adopted, appropriated and developed skills and resources. Networked IT systems afforded this dialogical process of developing the archive to take place at a distance as an active, ongoing endeavour.

Making sense of these scholarly processes, we note that the network of developing knowledge is necessarily small and closed. Furthermore, the *human relationship* in the network seems to be of crucial importance; KGM required the development of a secure, trusted scholarly community for

bringing shared values and ethics to the handling of sensitive materials. We suggest that this requirement may, at times, sit *in tension* with the institutional aspirations to foster international collaborations and connections for visibility, accessibility, and financial sustainability. Thorin emphasises that in the uncertain landscape of digital archiving and curation, research communities need to find ‘trusted and enduring organizations’ to ‘preserve’ data and make it ‘available’, mindful that, with what technology affords them, ‘scholars are now beginning to expect that they will be able to move these digital materials into their own digital surroundings and modify them for use in their research and teaching’ [32, p. 238]. Networked systems afford easy access and the potential for rapid dissemination and re-appropriation of media (e.g. channelisation); in relation to sensitive archive materials this then requires that curatorial control reside in the *trusted human contact*.

This reflection frames a broader interaction design challenge to address how cultural institutions handling sensitive materials may extend their scholarly network within the ‘transnational imagination’ [21] whilst managing the pragmatics of multi-site curation. This may involve considering how web technologies are leveraged by archivists to support the development of trusted networks of collaborators, for dynamically developing best practices between cultural institutions that may be operating in different countries or at a distance. Reflecting on this challenge also prompts consideration of DRM [9] and models of data storage that enable the virtualisation of archive records and their mirroring to facilitate sharing through trusted networks, whilst ensuring the maintenance and longevity of collections. We may ask: How could interfaces to these networked systems be designed to reflect and leverage the significance of the trusted human contact?

Guardianship of Archive and Humanitarian Message

As a survivor community, the KGM-DC team’s collective identity arguably extends to incorporate the archive. In our observations, the team oriented to the archive more as *guardians* than curators, to facilitate the communication of the preserved archive materials rather than reinterpret them. It appeared that, for the staff, there were very real and emotive risks of working in a post-conflict setting with a fragile stability and a cultural preoccupation with a living and contested history. Fears about others misappropriating archive materials mean that approaches to opening up the archive to public audiences (in terms of consumption and production) are met with trepidation. At the same time, the benefits of engaging with multiple audiences worldwide to sustain the archive and spread the humanitarian message are held as core institutional endeavours. This tension raises broader curatorial challenges, such as how to support public dialogue around sensitive archive materials whilst keeping the curated message intact.

Such concerns point to an interesting interaction design challenge around the use of web platforms to support public engagement with sensitive archive materials whilst

fostering and supporting empathetic connection to the cause, to do the contextualisation work that face-to-face contact has traditionally been used for. A key design challenge is that this may need to be done without disrupting other endeavours (such as creating visitor footfall to the institution) that may be valued. An intriguing additional challenge is to consider how designers may leverage empathetic engagement with curators online to directly encourage face-to-face contact rather than replace it, as this may be considered crucial for ‘proper’ communication and cultural engagement with the materials.

We also further reflected upon how we, as UK researchers, had positioned the voice of our participants in our analysis, and felt that this positioning had relevance for the VSD agenda within HCI research. Recent HCI research on sensitive archive materials in the Rwandan context has suggested developing systems to *support diverse cultural values* and accommodate the appropriation of materials by different cultural groups [34]. In part this stance seems to suggest a tendency towards the ‘universal’ value principles critiqued by Borning and Muller [5]. Borning and Muller’s position appears to be one of pluralism, suggesting that at times the interaction designer must choose and respond to a set of values amongst competing alternatives. Sensitised by our ECD approach [33], we present herein an empirical example of this kind of instance – and choice point – for design. In the context of handling sensitive materials at KGM-DC, given the relationship between the staff as members of the survivor community and the archive materials, it seems problematic to suggest that diverse cultural values could be supported through ICT design for this institution, when the potential for appropriation of materials by those with differing and potentially opposing values is considered to be of serious concern. Interaction designers working with this community to develop ICT support to the archive would need to acknowledge the specificity of the cultural values at play within it.

CONCLUSION

In this paper we have reported on a case study of human rights media archiving at KGM-DC in Rwanda, motivated by our interest in ICT support to memorialisation practices and focusing herein on curatorial concerns for establishing public and scholarly communication around sensitive materials. Identifying as researchers in a scholarly partnership with centre staff, we have utilised our ‘outsider perspective’ to make sense of how the Genocide is being captured and represented, and what values are expressed by the staff in describing their work. We have been judicious in our account to respect sensitivities surrounding discussion of this Genocide and to emphasise our interpretative stance, elucidating transferable insights relevant for CHI about curatorial concerns and interaction design challenges to support the communication of human rights media for global public and scholarly audiences.

Significantly, we have framed two potential challenges for interaction design: (1) to support the development of

trusted networks of partners at a distance that centre on and leverage human capital and human dialogue; (2) to develop web platforms that enhance cultural engagement with an archive's contents by supporting empathetic interaction with its 'guardians' in furtherance of contextualising sensitive materials to enhance curatorial control.

In exploring this subject matter, our paper has also sought to reflect on and contribute to an HCI discourse on Value Sensitive Design (VSD), by offering an empirical case example that illustrates tensions on the universal versus pluralistic positioning of ICT designers about 'value', in efforts to support forms of community and cultural engagement that may be ethically and politically sensitive.

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