

team) sat together to explore our respective experiences and share ideas—of the research partnership, our lives as researchers, the development of our respective organizations, and our changing societies. Employing the structured participation described above, each person contributed her or his perspective in turn. In this manner, we engaged in a mutual learning process to identify what might be interesting to reflect further upon and write about. Beyond the specific content, this open-ended sharing laid important foundations for ownership and empowerment. Moreover, as an NAR team member said, “when we sit, we learn from each other about the cultural aspect as well.”

4. *Crystalizing Themes (End of Day 2, Kigali)*. Toward the end of the second day, we began to synthesize and integrate the themes that had surfaced. To do so, each team member first individually reviewed notes from the ideation phase and identified key themes. Then we met as a group, to discuss the themes and, collectively, arrived at a set of five to pursue further.

5. *Developing Reflections (Day 3-10, Kigali)*. In deepening and recording our reflections, we wanted to preserve the voices of the two organizations and their respective perspectives. We were aware of the power of written language to claim voice. With that concern in mind, we considered five strategies for developing and writing the reflections. Each strategy strikes a different balance among the competing goals and constraints of preserving voice, enhancing sharing and learning, available time, and writing skill in English. (S1) *Cross-organization pairs discuss and write*. One researcher from NAR and one from VRT would pair up to discuss a selected theme and each write about that theme individually. (S2) *Whole group discuss and write*. The entire group of NAR and VRT team members would discuss and write together all aspects of all the themes. (S3) *Within organization discuss and write*. Working as independent teams, NAR would discuss and write the NAR reflections for the five themes and VRT would discuss and write their respective reflections. (S4) *Discuss by organization, write by VRT*. First discuss separately within our respective teams, then come together to share and discuss the important points; then VRT would write all the reflections. (S5) *Discuss by whole group, write by VRT*. The entire group of NAR and VRT would openly discuss all the themes, while VRT listens and takes notes; then VRT writes all the reflections, with careful review and editing of the writing by NAR.

In considering the five strategies above, we quickly ruled out S1 as too isolating and S2 as unwieldy. S3 and S4 were appealing from the perspective of preserving voice through closed organizational discussion. However, such closed discussion would deprive teams of the mutual learning that can come through listening. Upon the NAR team’s suggestion for the VRT team to lead the writing, we settled on S5, though with some hesitations given our awareness of the power of written language to claim voice. Since the VRT team was more fluent writing in English, and familiar

with the ACM template (language, style), it made sense for the VRT team to lead the writing. Also, NAR team members had other concurrent responsibilities and time constraints; while the VRT team wrote, NAR could turn to their other work projects. To help preserve voice, the VRT team took verbatim notes and audio recorded the conversations, and used as much explicit wording from the NAR team as possible in the writing. The NAR team carefully reviewed all writing and made edits to improve the language and phrasing of ideas.

FIVE REFLECTIONS

Adapted from design reflections, collaborative reflections provide an opportunity to examine conditions, activities, actors, actions, outcomes, emotions, and processes in depth [10, 18]. In choosing our five themes, we sought a set that as a group would bring forward cross-cultural, cross-discipline, and longer-term considerations. We begin by examining our common ground—setting the stage for similarities and differences to emerge. We conclude with explicit reflections on our multi-lifespan design partnership. In between, we reflect on the role of trust in research partnerships, our respective research landscapes, and the potential for research itself to act as a healing mechanism in a post-conflict setting. For each reflection, we introduce the theme in general terms followed by key questions. Then each organization provides its account of the theme, NAR followed by VRT. To resist homogenization, we intentionally did not reference each other’s reflections.

1 Common Ground: Sensibilities and Commitments

Introduction. We begin our collaborative reflection considering common ground between our two organizations. On the surface, our organizations seem quite different. NAR is a Rwandan NGO with a focus on peacebuilding activities and, more recently, with targeted research activities to inform national and regional policy around similar concerns. VRT is a US university research project serving as a testbed for the larger multi-lifespan design research initiative. What shared sensibilities brought our two organizations together? What commitments have sustained our research partnership for nearly a decade, as each organization has developed and progressed over time?

NAR. At first, NAR’s partnership with VRT was driven more by dissimilarity than by commonality. We believe for a successful partnership to occur it helps if there are differences for each side to explore. When thinking about partnerships we consider three questions: (1) What is there to discover in the other party? (2) What opportunities for learning exist, and how can this learning improve what we do and how we do it? (3) What opportunities exist to grow our thinking? The third question especially has guided our interactions with VRT. We viewed the partnership as an opportunity for an organization from a growing democracy to work with a team from an established one, and learn lessons that could contribute toward improving our democracy.

While our partnership was based on opportunities found in difference, it was sustained by shared sensibilities. Both team leaders are committed to maintaining relationships, personal and professional. At NAR, genuine and honest communication is at the center of our work. When collaborators do not share the same commitment to partnership and honest communication, we are not as successful. For example, NAR has partnered with other Western institutions where foreign researchers push for work to be done a particular way, and resist local suggestions and feedback.

VRT. Attention to generational shifts through long-term technical and societal changes is central to multi-lifespan design. As such, VRT saw an opportunity to connect with NAR's commitment to support younger generations of Rwandans, in particular, those who were born after the genocide. We share concerns with NAR around how new generations differ from the generation that experienced the genocide and what conditions we need to build so that future generations do not inherit trauma.

Our collaboration was also built on a shared sensibility toward supporting an emerging democracy in Rwanda. Both VRT and NAR paid attention to Rwanda's unique conditions as a society engaged in transitional justice processes [19]. In particular, VRT was interested in understanding what kind of information systems would make sense in post-genocide Rwanda, and how such systems could contribute to further development of its democracy (e.g., what kind of speech would or would not be appropriate, under what circumstances, and how information systems would accommodate this speech).

Above all, we shared an innovative spirit for creative approaches and new ideas. Whenever we saw an appropriate opportunity—whether it was research or non-research—we acted. We have collaborated on a wide range of projects, from organizing filmmaking workshops for Rwandan youth and co-developing a high school curriculum on international justice, to organizing design research trainings for Rwandan NGO research staff and practicing this new process for research co-authorship.

2 Trust

Introduction. Research is built on trust. It permeates research partnerships as well as the relationships researchers have with participants and communities. Trust needs to be negotiated, built, and nurtured in any research environment, and even more so when that environment spans cultures, disciplines, and longer time periods. In communities with a recent legacy of trauma, such as post-genocide Rwanda, where trust has been compromised, how can research operate? In what ways (if at all) did our research contribute to rebuilding and strengthening trust?

NAR. Trust and trust building is an essential element of our work. Our research depends on partnerships; with central and local partner organizations, international funders, local

government institutions, foreign research teams, and our participants. These partnerships cannot work without trust. To build trust we look for common ground, mutual understanding, and how partners might add value to NAR's work (e.g., research, writing and analysis skill building).

In our sensitive context, trust with our participants is critical for our research. We work in an environment where some researchers, and foreign researchers in particular, have been portrayed by some government officials as malicious. For our focus groups, to establish our credibility and trustworthiness we communicated how research is objective, what kind of organization NAR is, and identified any other partners involved in the project. We then had to make sure it was well known to our participants that the work was authorized by the proper authorities. Some participants had the feeling that they could face negative repercussions for sharing sensitive information and, hence, would seek confidentiality. In addition, our focus groups were structured to build trust through inclusivity. We sat in a circle and made efforts to ensure that everyone participated on an equal basis. Facilitators were trained to not disagree or agree with participants, and to present themselves in such a way that would not reveal a particular background or identity, thereby creating an environment where people felt they could participate openly and honestly.

VRT. The VRT project requires us to engage with a wide range of stakeholders including individual colleagues and research teams, schools, libraries, archives, government ministries, NGOs, and international organizations. Each stakeholder has different roles in the complex processes of transitional justice and peacebuilding. In such contexts, we focus on two aspects of trust: to earn the trust of others and to trust others.

We learned persistent presence was important for building trust. Many Rwandans shared the sentiment that Westerners often came and took things from Rwanda but would not return nor give back. In contrast, VRT has consistently returned to Rwanda (2008, 2009, 2012, 2014, 2015, and 2017). Despite longer fallow periods in the partnership, we would eventually follow through. During our first trips, we were often greeted by Rwandans with surprise, "You came back!" Today we share a firm handshake and say, "Good to see you again." Our reappearance is no longer a surprise. In this way, our commitment to multi-lifespan design has built trust with our Rwandan partners. Collocation is also important for building trust. While telepresence and remote collaboration are becoming more pervasive, physical presence and face-to-face meetings were still key for making progress. Longstanding project questions were navigated in a matter of hours through face-to-face meetings. Simply being there in person helped to show our sincerity, build rapport, and move things forward. In Rwanda, physical presence is highly valued and greeting with physical contact is appropriate. During our workshops

with Rwandans in 2012 and 2015, we welcomed our participants with handshakes and holding hands as signs of trust.

Learning to trust others is as important as earning others' trust. According to Baier [2], we trust when we are vulnerable to harm from others, yet believe those others would not harm us even though they could. VRT relies on the integrity of our local partners when operating in a foreign environment. As an outsider seeking to understand highly sensitive and nuanced issues tied to transitional justice, it is key to find a partner who is trusted by the local community. In 2012 we worked closely with another Rwandan peacebuilding NGO to conduct workshops in three rural towns in Rwanda [22]. Doing that work, we trusted in our Rwandan colleagues with their extensive experience to bring together participants from both the survivor and perpetrator communities to collaborate; their expertise in trauma counseling to intervene when tensions arose; and their integrity to accurately translate both linguistic and cultural languages between the Kinyarwanda speaking participants and the English speaking VRT team. We trust our partners to be forgiving when we make honest mistakes working in unfamiliar cultural settings. When such issues arise, we trust our partners to give us guidance on how to correct those mistakes.

3 Research Landscape: Crossing Nations & Institutions

Introduction. The HCI design community emphasizes the importance of understanding and situating a study in real-world contexts, typically understood in terms of participants, locations, and discipline. Research also involves a complex set of additional actors. Funders, reviewers, publishers, national and institutional review boards each have their own norms, expectations, and infrastructure. It is rare to see these aspects of the research landscape reflected upon. These features are heightened working in a cross-cultural, cross-discipline research partnership. Who were the relevant actors in our respective research landscapes? What norms and policies determined legitimate research practice, including who could conduct research, of what sort, and in what conditions?

NAR. We work in an environment where the majority of research is not research for research's sake. Rather, research is a strategy. It is conducted to inform or justify an action or a program that an organization is working on. At NAR, research is done for two reasons: (1) to measure the impact of, or establish a baseline for, a specific intervention; or (2) to understand or more clearly define a problem reported by constituencies. In the latter case, research is an approach to problem solving—used to understand the cause, effects, and actors associated with a particular issue.

Research related to programmatic interventions is supported by donor organizations that fund an entire project, not only the research. Institutions like the Swedish International Development Agency (SIDA), the United States Agency for International Development (USAID), the Swiss Agency for

Development and Cooperation (SADCO), or the German Society for International Development (GIZ) fund our work. We plan projects based on funders' areas of interest. For example, for our work on citizen forums we could approach SIDA because they are interested in democracy and accountability. In our research landscape, short-term projects run from six months to one year, and long-term projects from four to five years. Projects also might involve other international organizations beside the funder. At NAR, our societal healing program was funded by SIDA, but we partnered with Interpeace to co-design the program. Funders are also concerned with organizational capacity. For large budget projects, a donor might require another international organization to manage funds.

VRT. The VRT project has received its major funding from the Computer and Information Science and Engineering (CISE) Division of the US National Science Foundation (NSF). Specifically, the project is funded as a testbed for the larger enterprise of developing multi-lifespan design. Although our work is interdisciplinary, spanning HCI, international justice, transitional justice, and peacebuilding, our research activities focus on generating scientific and design knowledge. Since this is US government funding, there is a commitment to generate knowledge that will benefit US citizens, including enhancing technical innovation in US society and industry. Our published research papers tend to emphasize technical contributions to the design of information systems and technology in general, rather than specific societal contributions to transitional justice and peacebuilding in Rwanda.

Our research findings are primarily published in technical venues in HCI. In the HCI community, the publication norms are 10-page conference paper length, anonymization for a double-blind peer review process, annual conference cycles, and expectations for novelty. Multi-lifespan design researchers must demonstrate to reviewers that submissions based on preexisting (longer-term) projects are still making new contributions, rather than presenting previous results. As multi-lifespan and other longer-term approaches have become better known, the research community has come to recognize that temporal installments from a single ongoing project can constitute novel research contributions. In this and other ways, the field has become increasingly accepting of the longer-term project.

4 Research as a Healing Mechanism

Introduction. Given the wounds to individuals, communities and society resulting from genocide, we turn now to explore the potential for our research activities to act as a tool for healing for those who have experienced trauma from violent conflict. We use NAR's definition of societal healing which situates an individual's healing within the broader society:

Societal healing encompasses a complete healing that involves not only a psychological healing but also a restoration of interpersonal relationships in communities

that were previously divided. It requires support from all levels of society in order to facilitate the healing of its members and includes community leaders, government institutions and healing actors in the society. This process of healing helps to rebuild trust, promote tolerance of differences and builds a sense of community again, which serves to heal the society as a whole. [17, p. 10]

How then could our respective research activities contribute to healing individuals and societies? What evidence do we have that some participants were experiencing healing through our research activities?

NAR. We work in a sensitive context—all of our participants have been touched by the genocide and/or other cycles of violence in Rwanda, though not in the same ways. As researchers, we must be attentive to how our activities affect survivors, perpetrators, children born after the genocide, “old case” refugees, and “new case” refugees, as well as how our activities will impact national conversations and policies.

In our fieldwork, our participatory programs focus, among other things, on societal healing by building a sense of personal and civic empowerment in citizens. We work directly with community members as well as with local community-based organizations. Our 2015 project mapping different actors and approaches involved in community healing offered a safe space for participants to return to, reflect on and share their experience of violent history. For some participants, it is the first time they were able to speak about or even recognize their trauma. Community members and local professionals did not necessarily realize that symptoms like chronic headache, nightmares, lack of motivation, lack of appetite, a sense of hopelessness regarding the future, and chronic stomach pain can be indicators of trauma. We believe recognizing and giving voice to trauma contributes to healing.

At NAR, we elevate our participants’ local stories and highlight them on a national stage. A case in point: Rwanda’s National Unity and Reconciliation Commission publishes the Rwanda Reconciliation Barometer (RRB), which tracks progress in reconciliation from across the country. The second edition of the RRB was published in 2015. In that same year, NAR in collaboration with Interpeace published a report on societal healing which highlighted ongoing trauma as a still pervasive issue. This report contributed to shifting the national focus on trauma and healing in at least three ways: (1) through an international conference on healing held in 2016, (2) the National Commission for the Fight Against Genocide (CNLG) highlighted the issue of trauma in their most recent report to Parliament, and (3) based on CNLG’s findings, the Cabinet has recommended further research on trauma among genocide survivors.

VRT. A multi-lifespan design approach positions researchers to engage with longer-term societal problems such as passing on trauma across generations. Based on our

recent research experiences, at least two multi-lifespan activities have provided opportunities for healing: meaning-making workshops and envisioning workshops.

In our meaning-making workshops, we observed how research activities could create healing conditions at the individual level by producing an environment where participants can reflect on their personal experiences, express feelings, and reconcile emotional conflicts. During the meaning-making workshops, we showed a selection of short video clips (1–3 mins) that touched on core issues in transitional justice. After watching each clip, we asked participants to individually reflect on the content and describe its message in their own words. The clips sometimes triggered memories of participants’ personal trauma. For example, after watching a clip that described a story of an 80-year old genocide survivor’s testimony in court, one of our participants began to cry as she recounted her own experience surviving the genocide and testifying at the ICTR. Concerned about potential re-traumatization, the VRT team called for a break and asked the participant if she wanted to stop and leave the workshop. The participant asked us to continue and explained how the workshop helped her to express emotions. While difficult, she saw the experience as positive. She stayed and participated in the entire workshop.

In our envisioning workshops, we observed how research could create healing conditions at the community level by bringing together different groups (e.g., survivors and perpetrators, lawyers and archivists) to collaborate on generating shared visions for the future. By engaging in a series of multi-lifespan co-envisioning design activities, participants were given opportunities to explore design ideas through which they reflected on how a deeply wounded society could begin to heal over time and across generations. A compelling example emerged during one of our co-design sessions [23] with Rwandans and others from the Great Lakes region in the diaspora living in the United States, where participants created a short scenario describing their design of a “sexual abuse counseling network”:

Maria is a 47 years old woman, a lady, who was raped 27 years ago when she was a young lady. She tried to live with that pain and struggle through her young life. She came to know Sexual Abuse Counseling Network 15 years ago, and she made a decision to forgive her perpetrators or violators, the people who violated her. And she has since married and has one child and husband. Today she is one of the biggest voices of the Sexual Abuse Counseling Network.

5 Multi-lifespan Design Partnership

Introduction. Within HCI, the vast majority of research partnerships come together around a specific research question or project that can be answered or accomplished within a two- to three-year timeframe, if not shorter. In contrast, research partnerships developed from a multi-

lifespan design approach anticipate having long, sustained ongoing relationships that will evolve as the problems and their solutions unfold over longer periods of time (e.g., 100 years). Shifting technology, socio-political contexts, organizational growth, as well as change in individual personnel are integral to this approach. What were our expectations for and experiences with this type of longer-term partnership? What opportunities and challenges emerged that would not have otherwise? What temporal rhythms have we experienced?

NAR. A multi-lifespan design partnership sets up a different set of expectations around how we learn from and with our partners. At NAR, partnerships range from six months to two years, and learning opportunities are built around completing a specific report or project. Over our longer-term partnership with VRT, a different set of opportunities has emerged around reflection. We can look back on process: what works, what might be helpful, and what challenges exist. When we work with foreign organizations we aim to borrow and adapt their knowledge and skills to our own context. Our multi-lifespan partnership has allowed NAR and VRT to change together. For example, research has become a much bigger part of NAR's work, and we have shifted how we might consider collaborating with VRT in the future.

In a multi-lifespan design partnership, you can build deep relationships. Both parties learn about their respective partner's cultural and political context. Over the course of the partnership, members of NAR have visited VRT in the US. In doing so we gained an understanding of how an American university research team works. Likewise, VRT's work in Rwanda creates opportunities to understand NAR's local political realities on the ground. Longer-term partnerships also build familiarity and trust, we are able to plan professional projects while also checking in personally (e.g., How are particular family members? How is school?). This honest exchange and shared sensibility on personal and professional relationships helped facilitate balance in the partnership.

Because of the length of our partnership, our work rhythms have been defined by intervals of activity, then quiet. We would not expect to be in constant contact with VRT, and because of our strong relationship we are confident we will receive a thoughtful response following any communication.

VRT. We do not expect a single contained project to solve an entire multi-lifespan design problem. VRT, in particular aims to support transitional justice in Rwanda as well as international justice globally. This requires engaging in a range of processes and mechanisms—judicial and non-judicial—associated with attempts to come to terms with the legacies of large-scale past abuse. Such processes take a long time and require multi-faceted actions. Over time, contexts evolve, new stakeholders emerge, new questions are raised, and new solutions are needed. In turn, new

project ideas are conceived. With the broad purview of VRT, an array of sub-projects has surfaced.

The multi-lifespan design approach also provided us with a broader concept of a project, one that goes beyond the traditional definition of research. That spaciousness allowed us to partner with non-research organizations on diverse transitional justice projects. Our first collaboration with NAR began with a non-research project—a 2009 filmmaking workshop for Rwandan high school students. In this workshop, we used the VRT video clips to teach filmmaking alongside the concept of international justice. Albeit not traditional research, through this workshop we learned how new generations conceptualize new meanings of justice (e.g., restoration of the country's natural beauty). We do not view these non-research activities as isolated from our more traditional research activities.

Our multi-lifespan design partnership allowed us not only to grow together during collaborations, but also to grow independently during fallow periods [9]. Every few years VRT and NAR would get together to collaborate on a new project. We exchange current news in our respective countries and the latest progress in our work. In turn, we would generate new questions and ideas, and bring them back to our home organizations to recalibrate our next steps. Over time, multi-lifespan design advanced from a conceptual theory [8] to include practical methods and toolkits [15, 22, 23]. The VRT collection generated use cases with diverse communities in Rwanda, the US, and more internationally. At the same time, NAR grew (and continues to grow) into a research institution, focused on research and civic engagement. Accordingly, our partnership has evolved from a non-research to a research-based collaboration where we discussed how multi-lifespan design methods and toolkits can support NAR's civic engagement projects.

DISCUSSION

In this paper, we have reflected on a longstanding research partnership—one that spans culture, discipline, and time. While seemingly difficult to accommodate so much difference, as our collaborative reflection demonstrates there is more that binds our two teams together than separates us. We share common ground in purpose, in spirit of innovation, in commitment to ongoing relationship, and a deep concern for individual and societal healing. To draw out the contributions, we reflect on our collaborative reflection process, the multi-lifespan design partnership, and transferable insights for the broader HCI community.

Reflections on Reflections: Process

Many elements of our collaborative reflection process were successful, in particular the four guiding principles. The principle of *balanced teams* served us well with respect to team composition and structured writing, even down to space allocated for each reflection in this paper. The makeup and size of each team created a balanced environment—big enough for lots of ideas, but small

enough to be manageable and for each person's voice to be heard. Our principle of *structured participation* helped create space for everyone to speak thoroughly. It also helped maintain a pace of conversation respectful of each team's norms around sharing and listening. Our principle of *extended time for face-to-face conversation*, especially in the form of collocation, was also invaluable. It expedited decision making and simplified writing. Working in ideal conditions, we could imagine rotating locations, so that part of the time reflecting and writing is spent at each partner's location, and vice versa. Such exchange would help to facilitate sensitivity to culture, context, and the pragmatic reality of place.

Moreover, the collaborative process of generating the reflections brought both teams together and created a stronger sense of trust and empowerment. Team members felt comfortable sharing their experiences, expressing their feelings toward particular decisions or topics, and challenging each other's ideas. The sense of trust and empowerment we cultivated together created a foundation for a generative environment. New project and research ideas were readily formed and discussed. Four examples included: (1) How the appropriation of new mobile technologies challenges traditional community approaches to dialogue and peace building for younger generations of Rwandans. (2) How to both technically and ethically store, share, and repurpose video containing sensitive participant contributions. (3) What kinds of direct and indirect trauma exist, and how is it transmitted among different actors (e.g., between generations, between community members, between participants and researchers). (4) How can a multi-lifespan approach be integrated with other research approaches (e.g., participatory action research).

Other elements of our process were more limited. While our work was guided by the principle of *leveraging strengths across disciplines*, our specific strategy for writing this HCI design research paper (where VRT has the disciplinary expertise and did the majority of writing) did not lend itself to fully balanced authorship. Our decision not to reference or refine reflections based on the other organization's reflections was also a compromise. Doing so would have created a space for dialogue, but at the expense of preserving each team's unique voice.

Reflections on Reflections: Multi-lifespan Design

In addition to generating a process and guiding principles for collaborative reflection, we also surfaced specific challenges and questions tied to multi-lifespan design. As our partnership matures, longtime members of both organizations will begin to move on from the project, relying on new members to continue the relationship. The trust in our particular multi-lifespan design partnership is based largely on a long-term personal relationship between the two organizational leads, introducing a number of questions: How do we pass on trust to new members? Can we sustain a deep trusting relationship as team members

change? How do we transfer tacit cultural knowledge learned from long-term personal interactions?

One opportunity that we see is to engage in recurrent collaborative reflections (perhaps every three or five years) as a *multi-lifespan design best practice* for sustaining and invigorating research partnerships for the long term. Such regular reflective activity can help account for changes across teams and partnerships, as well as create an open forum to discuss what has and has not worked in the past, what to accomplish in the present, and what possible projects might be imagined for the future

Reflections on Reflections: Transferability

The key themes that we reflected upon such as establishing common ground, cultivating trust, and navigating foreign research landscapes, are not limited to multi-lifespan design partnerships, but germane to a wide range of cross-cultural and cross-disciplinary research settings. Wulf and his colleagues' *on the ground* investigation of social media use in political settings [21] is one compelling example. While many have thoughtfully reflected on issues of trust between researchers and community members, our case study adds more layers to the conversation by foregrounding issues of trust between different research partners. In addition, we propose collaborative reflection (along with its four guiding principles) as a fruitful practice for exchanging culture, knowledge, and skills among different actors. As discussed above, collaborative reflection itself worked as a mechanism for cultivating trust which, in turn, contributed to creating a more generative research environment.

CONCLUSION

In this paper, we have reflected on a multi-lifespan design partnership spanning culture, discipline, and time. In doing so we have developed a process for cross-boundary collaborative reflection and presented a model for what a multi-lifespan design partnership might look like. While the partnership between the NAR and VRT teams is not perfect—no partnership is—we believe we have explored and begun to develop a set of practices and reflection themes that could be adapted by other design researchers whose work engages in cross-boundary research partnership.

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REFERENCES

1. Seyram Avle, Silvia Lindtner, and Kaiton Williams. 2017. How methods make designers. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI '17)*, 472–482. <http://doi.acm.org/10.1145/3025453.3025864>
2. Annette Baier. 1986. Trust and antitrust. *Ethics* 96, 2: 231–260.
3. Nicola J. Bidwell. 2014. Moving the centre to design social media for rural Africa. *AI&Soc: Journal of Culture, Communication & Knowledge* 31, 1: 51-77.

4. Monika Büscher, Dan Shapiro, Mark Hartswood, Rob Procter, Roger Slack, Alex Voß, and Preben Mogensen. 2002. Promises, premises and risks: Sharing responsibilities, working up trust and sustaining commitment in participatory design projects. In *Proceedings of the Participatory Design Conference*, 183–192.
5. Phil Clark. 2017. Rwanda—Expert Briefing. Retrieved September 18, 2017 from <https://www.africaresearchinstitute.org/newsite/rwanda-expert-briefing/>
6. Jonathon N. Cummings, and Sara Kiesler. 2005. Collaborative research across disciplinary and organizational boundaries. *Social Studies of Science* 35, 5: 703–722.
7. Gerhard Fischer, Andreas C. Lemke, Raymond McCall, and Anders I. Morch. 1991. Making argumentation serve design. *Human–Computer Interaction* 6, 3-4: 393–419.
8. Batya Friedman and Lisa P. Nathan. 2010. Multi-lifespan information system design: A research initiative for the HCI community. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI '10)*, 2243–2246. <http://doi.acm.org/10.1145/1753326.1753665>
9. Batya Friedman and Daisy Yoo. 2017. Pause: A Multi-lifespan Design Mechanism. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI '17)*, 460–464. <http://doi.acm.org/10.1145/3025453.3026031>
10. Dieter K. Hammer, and Isabelle Reymen. 2002. The role of emotion in design reflection. In *Proceedings of the 3rd International Conference on Design and Emotion*, 421–425.
11. Isaac Holeman, Edwin Blake, Melissa Densmore, 'Maletšbisa Molapo, Fiona Ssozi, Elizabeth Goodman, Indrani Medhi Thies, and Susan Wyche. 2017. Co-design across borders special interest group. In *Proceedings of the 2017 CHI Conference Extended Abstracts on Human Factors in Computing Systems (CHI EA '17)*, 1318–1321. <http://doi.acm.org/10.1145/3027063.3049288>
12. Lilly Irani, Janet Vertesi, Paul Dourish, Kavita Philip, and Rebecca E. Grinter. 2010. Postcolonial computing: A lens on design and development. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI '10)*, 1311–1320. <http://doi.acm.org/10.1145/1753326.1753522>
13. Thomas P. Moran and John M. Carroll. 1996. *Design Rationale: Concepts, Techniques, and Use*. L. Erlbaum Associates Inc.
14. Naasson Munyandamutsa, Paul Mahoro Nkubamugisha, Marianne Gex-Fabry, and Ariel Eytan. 2012. Mental and physical health in Rwanda 14 years after the genocide. *Social Psychiatry and Psychiatric Epidemiology* 47, 11: 1753–1761. <http://dx.doi.org/10.1007/s00127-012-0494-9>
15. Lisa P. Nathan, Nell Carden Grey, Milli Lake, Trond Nilsen, Elizabeth J. Utter, Robert F. Utter, Mark Ring, Zoe Kahn, and Batya Friedman. 2011. Multi-lifespan information system design: Investigating a new design approach in Rwanda. In *Proceedings of the 2011 iConference (iConference 2011)*, 591–597. <http://doi.acm.org/10.1145/1940761.1940841>
16. Never Again Rwanda. Website. Retrieved September 18, 2017 from <http://www.neveragainrwanda.org/>
17. Never Again Rwanda and Interpeace. 2015. *Societal Healing in Rwanda: Mapping of Actors and Approaches*. Retrieved September 18, 2017 from <http://neveragainrwanda.org/research>
18. Isabelle Reymen. 2001. *Improving Design Processes through Structured Reflection: A Domain-independent Approach*. Ph.D. Thesis. Technische Universiteit Eindhoven.
19. United Nations. 2004. The rule of law and transitional justice in conflict and post-conflict societies: Report of the Secretary-General. Retrieved December 4, 2017 from <https://www.un.org/ruleoflaw/blog/document/the-rule-of-law-and-transitional-justice-in-conflict-and-post-conflict-societies-report-of-the-secretary-general/>
20. Voices from the Rwanda Tribunal. Website. Retrieved September 18, 2017 from <http://www.tribunalvoices.org>
21. Volker Wulf, Kaoru Misaki, Meryem Atam, David Randall, and Markus Rohde. 2013. 'On the ground' in Sidi Bouzid: investigating social media use during the tunisian revolution. In *Proceedings of the 2013 Conference on Computer Supported Cooperative Work (CSCW '13)*, 1409–1418. <http://doi.acm.org/10.1145/2441776.2441935>
22. Daisy Yoo, Milli Lake, Trond Nilsen, Molly E. Utter, Robert Alsdorf, Theoneste Bizimana, Lisa P. Nathan, Mark Ring, Elizabeth J. Utter, Robert F. Utter, and Batya Friedman. 2013. Envisioning across generations: A multi-lifespan information system for international justice in Rwanda. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI '13)*, 2527–2536. <http://doi.acm.org/10.1145/2470654.2481349>
23. Daisy Yoo, Katie Derthick, Shaghayegh Ghassemian, Jean Hakizimana, Brian Gill, and Batya Friedman. 2015. Multi-lifespan design thinking: Two methods and a case study with the Rwandan diaspora. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI '16)*, 4423–4434. <http://doi.acm.org/10.1145/2858036.2858366>