
Refugees & HCI Workshop: The Role of HCI in Responding to the Refugee Crisis

Reem Talhouk

Open Lab
Newcastle upon Tyne, UK
R.R.Talhouk2@ncl.ac.uk

Vasilis Vlachokyriakos

Open Lab
Newcastle upon Tyne, UK
Vasilis.Vlachokyriakos1@ncl.ac.uk

Anne Weibert

University of Siegen
Siegen, Germany
anne.weibert@uni-siegen.de

Konstantin Aal

University of Siegen
Siegen, Germany
konstantin.aal@uni-siegen.de

Syed Ishtiaque Ahmed

Cornell University
Ithaca, NY, USA
Sa738@cornell.edu

Karen Fisher

University of Washington
Seattle, USA
fisher@uw.edu

Volker Wulf

University of Siegen
Siegen, Germany
volker.wulf@uni-siegen.de

Permission to make digital or hard copies of part or all of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage and that copies bear this notice and the full citation on the first page. Copyrights for third-party components of this work must be honored. For all other uses, contact the Owner/Author. Copyright is held by the owner/author(s).
CHI'17 Extended Abstracts, May 06-11, 2017, Denver, CO, USA
ACM 978-1-4503-4656-6/17/05.
<http://dx.doi.org/10.1145/3027063.3027076>

Abstract

Over 21 million refugees are residing in camps, journeying through Europe or resettling in new countries [19]. The magnitude of the humanitarian crisis calls for technological innovation in addressing the challenges being faced by refugees and humanitarian aid stakeholders. At our CHI 2016 Special Interest Group (SIG) on Refugees and Human Computer Interaction (HCI) [17], HCI researchers expressed interest in exploring the difficulties faced by refugees and having a participatory approach when addressing these difficulties. Additionally, further consideration is needed regarding the methodological, organizational and practical challenges in working with refugee communities. Accordingly, this one-day workshop followed by a day of informal meetings with stakeholders aims to (1) explore research methods that can be adapted and applied to refugee contexts and to (2) formulate a research agenda for future work. Participants will be joined by members of organizations that engage with refugees in Denver and be presented with testimonials from refugees in order to develop a research agenda.

Author Keywords

Refugees; Research Agenda; Ethics; Methods

□

Challenges faced by refugee communities

Access to services:

Language barriers, restrictive policies and a lack of familiarity with their new environment's formal systems make accessing services.

Integrating into host communities:

Integrating in to host communities is a challenge for refugee communities, even when they have moved to countries that share similar cultures. This is due to (1) refugees being perceived as an economic and social burden and (2) camps acting as an isolation mechanism.

Journeying to safety:

Refugee communities are continuously transitioning contexts and locations. Journeys within the same country and between countries leaves them vulnerable to family separation, smugglers and lack of access to any means of communication.

Figure 1. Brief overview of challenges faced by refugee communities

ACM Classification Keywords

H.5.3 Group and Organization Interfaces;

Background

The number of refugees has reached an unprecedented level of 21.3 million [19]. The world is not only witnessing the biggest refugee crisis since World War Two but also the first crisis of its kind in the digital age. The call for innovation by the humanitarian system has been reflected through innovation labs and technology communities setting up offices all around the world. This had led to the development of technologies that attempt to meet refugee needs and assist them while residing in camps, journeying to new countries and resettling in new communities (figure 1). While the majority of technologies aiming to aid refugees overcome the barriers they face (figure 2) have predominantly been developed and deployed in Europe and the West. Technologies in developing countries have mainly focused on facilitating the work of humanitarian organizations (i.e. in delivering aid, maintaining refugee records etc.)[5].

Related Work

Researchers within the HCI community have also began to address the refugee crisis. Brown et al. [6] utilized asynchronous IVR to facilitate the completion of refugee resettlement processes by placing a translator who shared the same culture and language of the refugee as a mediator. Along the same lines, Baranoff et al. [4] placed near field communication tags (NFC) around an American city. The tags provided information in the refugee's preferred language and help guide them through the city. Other technologies aim at enhancing communication with refugees such as translation tools used by doctors and clinicians during

consultations [12]. In Palestine capacity building activities were conducted in computer clubs [2,14,22] as a way of improving relations between refugees and university students [15]. Through design activities and using technologies the computer clubs explored overcoming gender barriers [1] and increasing inter-cultural understanding [20]. In a Syrian refugee camp Xu et al theorized that participatory mapping of refugee camps by the community may be a method for strengthening community bonds [21]. Fisher et al [9] used co-design methods in Za'atari camp, in Jordan, with refugee youth to capture their daily rituals and the challenges they face.

During CHI2016, 40 HCI researchers attended a SIG meeting hosted by the workshop co-organizers titled "Refugees and HCI SIG: The Role of HCI in Responding to the Refugee Crisis" [17]. The discussions during (and after) the SIG and the co-organizers' experiences in engaging with refugee communities and humanitarian stakeholders have identified issues that need to be further explored within the HCI research community. The first key issue identified was that as a research community we should engage deeper with refugee communities to better understand their needs and where technology can play a role in assisting them. Duffield et al [7], has criticized that digital humanitarianism's affirmative notions can result in technologies that distance refugee communities from humanitarian stakeholders. Therefore, it is critical that our work be informed by refugee communities and have a deep understanding of their current context, needs and aims. The methodological challenges encountered when engaging with refugees is also another key issue. The presence of barriers in accessing the population [10], the conflicting agendas of

□

Current Technologies

Refugee.Info [16] aids refugees overcome language barriers that hinder them in navigating in their new environments in Europe.

Refugees Welcome [13] connects landlords to refugees seeking accommodation.

Hababy [8] aids refugees in locating health services when journeying through Europe.

humanitarian agencies and refugee communities [3] and the vulnerability of the community are challenges expressed in the literature but also experienced by the workshop co-organizers and SIG participants. Experiences have highlighted a need to re-appropriate HCI research methods.

The Opportunity

Denver currently hosts over 50,000 refugees [18], therefore the situation of CHI2017 in Denver provides a great opportunity to engage with refugee communities and local organizations working with refugees. Therefore, building on from the SIG, we aim to host a one-day workshop (followed by one day of informal meetings with stakeholders) that builds on the experiences of (1) HCI researchers and organizations working with refugee communities and (2) refugee communities (in Denver and worldwide).

During the one-day workshop participants will (1) critically reflect on the methods used when engaging with refugee communities and humanitarian stakeholders and (2) work with key informants in Denver to formulate a research agenda. Two local organizations in Denver have expressed interest in participating and providing testimonials from the Denver refugee community. Additionally, one the day after the workshop interested participants can join us in engaging with a number of the organizations' staff that will be participating are members of the refugee community. Combined with testimonials gathered from refugees around the world participants will explore formulating a research agenda that is not only relevant to the Denver community but also to other refugee communities. Additionally, our collaborating organizations have indicated to us that their staff can

provide insights regarding the challenges refugees face when residing in camps, journeying to new countries and resettling in the U.S.

Workshop Goals

The one-day workshop will build on the experiences of refugees and researchers and organizations working with refugee populations, in order to (1) critically reflect on methods to use when conducting HCI research with refugees and (2) develop a research agenda that would guide HCI research with refugees. In the process of meeting those aims the workshop will be a space for building future collaborations among HCI researchers and the local Denver communities. The aims will be achieved through a series of break out discussions and design activities.

More specifically, the aim of the workshop is to bring together a community of researchers to build on the current experience in conducting research with refugee communities. This extends to experience working with refugees in camps, journeying through Europe and undergoing resettlement in the U.S. We aim to explore the roles researchers take on when engaging with refugee communities. Furthermore, given the numerous stakeholders involved in the refugee humanitarian response we aim to explore researchers' agency in balancing their research agendas with that of the refugee communities and various other stakeholders. To properly tackle the challenges faced in undertaking the above mentioned activities, we aim to unpick the applicability of the current methods and standards of ethical review boards (i.e. regarding participant recruitment and participant compensation).

Figure 2. Examples of technologies developed by technology communities

The second aim of the workshop is to investigate the action-oriented research methods that HCI is currently employing (or should employ) in such sensitive and emergency-response contexts. Taking commonly used methodologies for engaging with vulnerable populations and communities as a starting point –i.e. Action Research (AR) [11] and “HCI for Development”–we attempt to trigger a critical discussion about the application and adaptation of HCI and other social sciences methods in such contexts in order to respond to these peoples’ acute and long-term needs while allowing us to reflect on the role of HCI for development.

During the day of informal meetings we aim to bring together HCI researchers and stakeholders engaging with refugees to formulate a research agenda around HCI research and refugees. This would entail researchers and stakeholders working together to identify areas in which technology can play a role in addressing the refugee crisis. Additionally, workshop participants would be requested to propose concrete examples of research projects that may be built on and explored in future work. The proposed work should take in to consideration the appropriate methods for conducting research with refugee communities discussed during the previous day.

Organizers

Reem Talhouk (main contact) is a doctoral trainee in Digital Civics at Open Lab, Newcastle University. Her research encompasses the use of technology to build refugee community resilience. Her previous work in Lebanon explored the use of technology in improving access to healthcare by refugees and improving refugee

agency within healthcare-provider/refugee relationships.

Karen Fisher is a Professor of human information behavior, social innovation and design at the Information School, University of Washington. Karen has worked with refugee youth from around the world, focusing on how they serve as information and technology wayfarers on behalf of other people. Karen works at Za’atari Camp as well as with Arab refugees in Europe, understanding their information behavior, and building capacity through education, livelihoods, and social engagement.

Vasilis Vlachokyriakos is a research associate at Open Lab, Newcastle University and lead of OL:Athens. His work centers on designing, developing and evaluating digitally-mediated models of citizen participation that engage communities in developing the future of local service provision, decision-making and democracy. The OL:Athens initiative engages with local solidarity groups in Greece exploring the design of technology for the Solidarity Economy while exemplifying an alternative model of conducting AR research.

Konstantin Aal is a PhD student at the Institute for Information Systems and New Media, University of Siegen. His main research focus is fall prevention with older adults. He is also part of come_IN, a research project which founded several computer clubs for children and their relatives including refugees.

Anne Weibert is a PhD student and a research assistant at the Institute for Information Systems and New Media, University of Siegen. Her interest is in computer-based collaborative project work and

inherent processes of technology appropriation, intercultural learning and community-building.

Volker Wulf is a computer scientist with an interest in the area of IT system design in real-world contexts, and a special focus on flexible software architecture which can be adapted by end-users, as well as methods of user-oriented software development and introduction processes. He is head of the Institute for Information Systems and New Media at the University of Siegen.

Syed Ishtiaque Ahmed is a PhD Candidate in the Department of Information Science at Cornell University. He conducts research in the Intersection between Human-Computer Interaction (HCI) and Sustainable Development. He has engaged with marginalized groups in Bangladesh and India which resulted in the design of several technologies. His doctoral research is focused on “voice” as a socio-technical means for freedom.

Pre-Workshop Plans

The workshop will be promoted through a dedicated website (<https://openlab.ncl.ac.uk/refugeesandhci/>), that will communicate the aims and structure of the workshop and will also be updated with refugee testimonials and position papers of workshop participants. Furthermore, participants from the SIG will be invited through the google group and mailing list that had been set up after the SIG. Participants will be selected based on extended abstracts in which they relate their current/previous work to refugee communities, contexts and needs.

We will continue to engage with our two collaborating local organizations in Denver in order to organize the

second day of informal meetings. They will engage with the refugee communities and collect testimonials. Additionally, we will be working with them to find a venue close and familiar to the community to host these meetings. Lastly, we will be collecting testimonials from the refugee communities the organizers work with in Lebanon, Jordan and Greece. These testimonials will be used in the workshop to further give voice to the refugee communities residing in refugee camps and journeying through Europe.

Workshop Structure

The workshop will be interactive in nature and a space for constructive discussions that build on the participants’ experiences. Participants will break out and work in groups, based on their position papers, and utilize several interaction design methods to meet the aims of the workshop. Their work will then be presented back to the other groups. Activities of day one would not only allow participants to unpick the methods appropriate for conducting research with refugee communities but will also sensitize them for engaging with the refugee community on day two.

Timetable

DAY ONE (OFFICIAL WORKSHOP DAY)

09:00-09:30 Welcome

09:30-10:00 Icebreaker

10:00-10:30 Coffee break

10:30-11:30 Mapping of initiatives & methods used

11:30-12:00 Identifying methodological challenges

12:00-13:30 Lunch

13:30-14:30 Personas exercise

14:30-15:15 Identifying challenges in engaging with communities based on personas

15:15-15:30 Coffee Break

15:30-17:00 Study design exercise

17:00-17:15 Closing of day one

Day Two (Informal Stakeholder/Community Meetings)

Rendezvous time & location TBD

09:00-09:30 Welcome

09:30-10:00 Icebreaker

10:00-10:30 Coffee break

10:30-11:30 Storyboarding activity

11:30-12:30 Mapping of community challenges & needs

12:30-14:00 Lunch

14:00-14:05 Regrouping based on challenges

14:05-15:05 Critically reflecting on existing technology

15:05-15:35 Coffee break

15:35-16:30 Generating research questions

16:30-17:00 Closing of workshop

Post-Workshop Plans

All the documentation of the activities and workshop outputs will be shared through the workshop website, google group and mailing list. Additionally, they will be showcased during the conference. Media produced including testimonials gathered will be shared via the workshop website including accompanied by blog posts about how they contributed to the workshop. Recommendations for methods to be used when

engaging with refugees and the formulated research agenda will be published as a blog and/or journal commentary or note. Additionally, those interested among the research attendees will work together to publish a special issue of a journal on HCI and refugees with one of the articles evaluating the current status of HCI and refugees in relation to the research agenda produced during the workshop.

Call for Participation

The different challenges faced by refugee communities and the humanitarian system has instigated a call for technical innovation. Given the versatile nature of refugee contexts this one-day workshop aims to provide a forum for researchers to discuss challenges encountered while engaging with refugee communities and the research methods best fit for conducting research with refugees. Furthermore, the second day of informal meetings we will invite local refugee communities, organizations engaging with refugees and participating researchers to develop a research agenda that identifies the areas in which technology and HCI research can play a role in addressing challenges being faced by refugees. More details regarding the workshop can be found at [our website](#).

We invite researchers interested in participating to submit 4-6 page position papers (ACM [Extended Abstract](#) format). Papers should critically reflect on how the researchers' research/interest addresses issues faced by refugee communities. Experience reflected on does not have to be specific to work with refugees, however those interested should discuss how lessons learnt and methods used can be adapted and applied to refugee contexts.

Submissions should be sent to r.r.talhok2@ncl.ac.uk in .pdf format. Position papers will be reviewed based on relevance to the workshop and the potential for contributing to discussions on methods and the research agenda to be developed during the workshop. At least one co-author of each accepted paper should attend the workshop and one day of the conference.

Important Dates:

Early Submission Deadline: 21st December 2016

Early Notification: 23rd December 2016

Final Submission Deadline: 20th January 2017

Final Notification: 24th February 2017

Workshop Day: 6th-7th May 2017

References

1. Konstantin Aal, Thomas von Rekowski, George Yerosis, Volker Wulf, and Anne Weibert. 2015. Bridging (Gender-Related) Barriers. In *Proceedings of the Third Conference on GenderIT (GenderIT '15)*, 17–23. <http://doi.org/http://dx.doi.org/10.1145/2807565.2807708>
2. Konstantin Aal, George Yerosis, Kai Schubert, Dominik Hornung, Oliver Stickel, and Volker Wulf. 2014. Come_IN@Palestine: Adapting a German Computer Club Concept to a Palestinian Refugee Camp. In *Proceedings of the 5th ACM international conference on Collaboration across boundaries: culture, distance & technology (CABS '14)*, 111–120. <http://doi.org/http://dx.doi.org/10.1145/2631488.2631498>
3. Jens Adam and Hedegaard Hansen. 2014. *Power relations in the Za'atari refugee camp*. Thesis. Roskilde University, Denmark.
4. Jennifer Baranoff and R Israel Gonzales. 2015. Lantern : Empowering Refugees Through Community-Generated Guidance Using Near Field Communication. In *Proceedings of the 33rd Annual ACM Conference Extended Abstracts on Human Factors in Computing Systems (CHI'15)*, 7–12. <http://doi.org/http://dx.doi.org/10.1145/2702613.2726950>
5. Joe Belliveau. 2016. Humanitarian Access and Technology: Opportunities and Applications. *Procedia Engineering* 159: 300–306.
6. Deana Brown and Rebecca E Grinter. 2016. Designing for Transient Use: A Human-in-the-loop Translation Platform for Refugees. In *Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems (CHI'16)*, 321–330. <http://doi.org/http://dx.doi.org/10.1145/2858036.2858230>
7. Mark Duffield. 2016. The resilience of the ruins: towards a critique of digital humanitarianism. *Resilience*: 1–19.
8. EmpowerHack. Hababay. Retrieved October 11, 2016 from <http://empowerhack.io/#hababy>
9. Karen E Fisher, Katya Yefimova, and Eiad Yafi. 2016. "Future 's Butterflies : " Co-Designing ICT Wayfaring Technology with Refugee Syrian Youth. In *Proceedings of ACM SIGCHI Conference on Interaction Design and Children 2016*, 25–36. <http://doi.org/http://dx.doi.org/10.1145/2930674.2930701>
10. Barbara Harrell-Bond and Eftihia Voutira. 2007. In search of "invisible" actors: Barriers to access in refugee research. *Journal of Refugee Studies* 20, 2: 281–298.
11. Gillian R. Hayes. 2011. The relationship of action research to human-computer interaction. *ACM Transactions on Computer-Human Interaction* 18, 3: 1–20.

12. Ellen Howard and Christine Wilson Owens. 2002. Using the internet to communicate with immigrant/refugee communities about health. In *Proceedings of the ACM International Conference on Digital Libraries*, 397.
13. Refugees Welcome. Refugees Welcome International. Retrieved October 11, 2016 from <http://net.fluechtlinge-willkommen.de/>
14. Toni Robertson and Ina Wagner. 2015. 3D Printing with Marginalized Children - An Exploration in a Palestinian Refugee Camp. In *Proceedings of the 14th European Conference on Computer Supported Cooperative Work (ECSCW 2015)*, 19–23. <http://doi.org/10.1007/978-3-319-20499-4>
15. Nitin Sawhney. 2009. Voices beyond walls. In *Proceedings of the 8th International Conference on Interaction Design and Children - IDC '09*: 302. <http://doi.org/10.1145/1551788.1551866>
16. Refugee.Info. Refugee.Info. Retrieved October 11, 2016 from <http://www.refugee.info/>
17. Reem Talhouk, Syed Ishtiaque Ahmed, Volker Wulf, Clara Crivallero, Vasilis Vlachokyriakos, and Patrick Olivier. 2016. Refugees and HCI SIG: The Role of HCI in Responding to the Refugee Crisis. In *proceedings of CHI Extended Abstracts on Human Factors in Computing Systems (CHI'16)*, 1073–1076. <http://doi.org/http://dx.doi.org/10.1145/2851581.2886427>
18. Jeff Todd. Colorado Prepares To Welcome Refugees Fleeing Crisis. Retrieved October 11, 2016 from <http://denver.cbslocal.com/2015/09/11/colorado-prepares-to-welcome-refugees-fleeing-crisis/>
19. UNHCR. 2016. Figures at a Glance. Retrieved July 16, 2016 from <http://www.unhcr.org/figures-at-a-glance.html>
20. Anna Weibert, Konstantin Aal, Thomas von Rekowski, and Volker Wulf. 2015. Hey, can we make that, please?: Upon Craft as a Means for Cross-cultural Community-Building. *Community Informatics* 11, 2.
21. Ying Xu, Carleen Maitland, and Brian Tomaszewski. 2015. Promoting Participatory Community Building in Refugee Camps with Mapping Technology. In *Proceedings of the Seventh International Conference on Information and Communication Technologies and Development (ICTD '15)*: Article 67, 4 pages. <http://dx.doi.org/10.1145/2737856.2737883>
22. George Yerosus, Konstantin Aal, Thomas von Rekowski, David W. Randall, Markus Rohde, and Volker Wulf. 2015. Computer-Enabled Project Spaces. In *Proceedings of the 33rd Annual ACM Conference on Human Factors in Computing Systems (CHI '15)*: 3749–3758. <http://doi.org/10.1145/2702123.2702283>