Adverse complicities

On the difficulties of challenging the status quo in migration research

Max Krüger* maximilian.krueger@uni-siegen.de Siegen University Siegen, Germany

Ana Maria Bustamante Duarte ITC, University of Twente Enschede, The Netherlands a.bustamante@utwente.nl

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

ABSTRACT

In this position paper we reflect on our experiences working and researching on matters of migration within HCI, and draw out specific limitations we perceive in current work which future work would need to address.

CCS CONCEPTS

• Computer systems organization → Embedded systems; Re*dundancy*; Robotics; • **Networks** → Network reliability.

KEYWORDS

datasets, neural networks, gaze detection, text tagging

ACM Reference Format:

Max Krüger, Ana Maria Bustamante Duarte, and Anne Weibert. 2018. Adverse complicities: On the difficulties of challenging the status quo in migration research. In 2021 ACM CHI Virtual Conference on Human Factors in Computing Systems, May 8-13, 2021, Online virtual conference. ACM, New York, NY, USA, 5 pages. https://doi.org/10.1145/1122445.1122456

1 INTRODUCTION

When looking at HCI literature related to migration, two predominant lines of work can be easily identified. First, it is the studies which have investigated further the role digital technology has when used directly by (forced) migrants [9, 13, 18] or by various actors supporting them in different moments of their migration process [14, 23]. The second line has focused on the design process of digital technologies with diverse communities of (forced) migrants for various purposes such as easing (physical and mental) health access and care [24, 26], supporting cultural identity manifestations [17, 22], connectivity among distributed families [11] and reconstructing their social capital [3], information access (see e.g., [4, 21, 29]) and communication [6], navigation of host cities (see e.g., [5, 7]), or food security [25].

Despite the insights these works have shown, we considered that further questions need to be done. Based on our research experiences and practices, we are questioning aspects ranging from the

CHI '21, May 8-13, 2021, Online virtual conference

© 2018 Association for Computing Machinery.

ACM ISBN 978-x-xxxx-x/YY/MM...\$15.00

https://doi.org/10.1145/1122445.1122456

nature of the funds supporting the research on digital technologies in migration scenarios to the general research process we carried out (how do we do it, our roles, and final contributions their impact). We cannot speak for other HCI researchers or institutions, so these reflections come as personal. They are based on our individual questions and observations from the projects we were part of and the attempts to continue them. The insights we reached also informed what we, as individual HCI researchers, considered future research on migration and HCI based on the issues, potentials, and questions that we had left after all the implementations.

Our main insights "problematized" funding bodies and the roles of actors involved in the research as a whole. Since our projects were funded through European funding, we reflect a bit further on the European agencies impacting the form digital technology is being researched, developed, and used. We suggest that HCI research has not explored in-depth and critically reflect on the restrictive role of, for instance, digital technologies in migration and their use to support compliance with border protection policies and regulations (many of which are focused on profiling, surveillance, and policing of diverse migrant groups) (see e.g., [15]). We suggest that, in this climate, a more activist stance seems to be required for HCI research that counters official political visions and developments of digital technologies in migration [10].

2 **BACKGROUND AND POSITIONALITIES**

2.1 Max Krüger

I have worked for 2,5 years on a research and design project addressing issues that refugees and their supporters face in two mid-sized cities in Germany. The project, funded jointly by the German state of North-Rhine Westphalia and the European Fund for Regional Development (EFRE), aimed to develop digital tools that support refugees and migrants already in Germany as well as volunteer and professional supporters to overcome hurdles encountered in the attempt to resettle: general orientation, finding suitable language, navigating the educational and professional bureaucratic system and finding opportunities for education and work, accessing health care. Employing a participatory approach, we engaged with various stakeholders, including refugees and migrants, volunteer supporters, and professional supporters from public and private organizations. The project officially ended in October 2019 since the tools have been maintained in both locations through networks developed in the project. While I had lived in various countries previous to the project, I had no experience with migration and the challenges migrants experience in Germany. This lack of experience has made it difficult to understand the complicated (regulatory) context of migration in Germany and our participants' positionalities and the power relations and imbalances between them. This has

^{*}All authors contributed equally to this research.

Permission to make digital or hard copies of all or part 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 components of this work owned by others than ACM must be honored. Abstracting with credit is permitted. To copy otherwise, or republish, to post on servers or to redistribute to lists, requires prior specific permission and/or a fee. Request permissions from permissions@acm.org.

Krüger & Bustamante Duarte & Weibert

led me to question my ability to fulfil the role of supporter in these matters.

2.2 Ana María Bustamante Duarte

As part of my PhD research, I investigated participatory approaches to collaborate mostly with young forced migrants, but also with local supporters, to design geo-technologies that could ease their digitally mediated experience of navigating new geospatial environments while accessing to relevant information. The research was carried out in one of mid-sized host cities in Germany. The project lasted three years (ended in September 2018) as it was part of an MSCA-ITN focusing on developing strategies and tools to enable "smart" open cities. One of the tools we developed, to its early stage, was handed over to a local organization. Unfortunately, the rest of the applications could not be widely distributed and sustained. While I considered myself a migrant in Germany since I am originally from Colombia, I do not dare comparing my migration experiences with those lived by the persons with a variety of forced migration backgrounds with whom we collaborated in the project. Despite this, when exchanging stories on our diverse realities certain elements emerged as common, particularly when related to experiencing and navigating a new city to live in and its related procedures. Nonetheless, my limited experience in the specificities of their situation, the particularities of my migration, and the scope of the project I was part of, made difficult to collaborate in more meaningful ways with the different groups of collaborators, specially (forced) migrants.

2.3 Anne Weibert

I have focused on neighborhood dynamics both as a researcher and an activist for the past ten years, where I have worked with children and adults in intercultural computer clubs. There, my research is concerned with computer-based collaborative project work and inherent processes of technology appropriation, intercultural learning and community-building. I have also been part of a project that developed a digital platform for refugees, migrants and everybody who is new in a city, aiding with the resettlement process by providing initial orientation, overview on language courses, information on cultural aspects, work, housing, and the structure of everyday life in general. Being a resident in a so-called "neighborhood of arrival" myself had and continues to have me witness first-hand the complexities of migration regulations in Germany, their entanglement with an increasingly digital bureaucracy, and the excluding and discriminating consequences, both can have. This has led me to emphasize the value of the situated knowledge of local migrant residents - and ask how their problems, needs, questions and dreams can be responsibly included in research to make a difference.

3 THE LIMITS

In the following, we will reflect on several aspects of our own experiences to draw out the limits we experienced to what HCI research offers to meaningfully address challenges (forced) migrants face in Germany and Europe. In the following sections, we will describe this by analyzing three roles we consider to be at the core of the discussion, the role of 1) funding bodies and schemes, 2) institutions, and 3) researchers and collaborators (see [10]).

3.1 The role of funding

In 2018, we were confronted with two calls for funding published by the EU. First was the call for proposals by the Asylum, Migration and Integration Fund (AMIF). This seemed at first like a promising opportunity to continue our work in this field. We were from different institutions but could potentially collaborate in projects financed through this fund. However, upon closer inspection and reflection, we became increasingly uncomfortable with the call and finally decided not to develop a proposal. The call requested proposals for five topics: 1) local and regional networks for the integration of third-country nationals; 2) legal migration projects with third countries; 3) integration of third-country nationals who are victims of trafficking in human beings; 4) care for migrant minors, including unaccompanied minors; and 5) engagement of diaspora communities on awareness-raising.

Once we had a close look, we noticed topics No.1, 2 and 5 presented issues of governing and controlling migration. Specifically, topic No. 1 was aimed at "local and regional authorities", e.g. public administrative offices, tasked with governing various aspects of (migrant) life, including work and education, welfare, legal status, etc. In our work we had found that often these were (unsurprisingly) the very institutions from which troubles for refugees and migrants originated and we were unwilling to apply with a project of which the aim would need to be to strengthen their position. Proposals to topic No. 2 were requested to "achieve a better match between skills and demands in the EU's labour markets". While one need not to object to this aim, this does little to support e.g. refugees from conflicts in countries that are considered "safe return countries" (such as Afghanistan) or migrants taking mortal risks to cross the Mediterranean sea. Topic No. 5 aimed to engage the diaspora community to inform "about the opportunities of voluntary return and reintegration programs" and provide "balanced information on the risks of irregular migration". Such statements seemed to be focused on making stronger EU programs that assist migrants to return from the EU to their respective countries of origin, several of which had been facing avid criticism through the years.

A similar case we faced with the H2020 call Work program 2018-2020 No 13 "Europe in a changing world – Inclusive, innovative and reflective societies". This funding scheme presented calls for several topics including migration. This main topic had seven aspects 1) understanding migration mobility patterns: elaborating mid and long-term migration scenarios; 2) towards forward-looking migration governance: addressing the challenges, assessing capacities and designing future strategies; 3) social and economic effects of migration in Europe and integration policies; 4) mapping and overcoming integration challenges for migrant children; 5) addressing the challenge of migrant integration through ICT-enabled solutions; and 6) international protection of refugees in a comparative perspective; and 7) addressing the challenge of forced displacement.

We were inclined to Topic No. 5 (in the call DT-MIGRATION-06-2018-2019) due to our previous experiences in both universities with designing ICT solutions to support forced migrant communities.

¹There is a numbering error on the official call, and topic No. 4 here is labelled as No.5 there and all numbers are move one ending on topic No.7 here being No.8 in the official call and No. 4 is missing.

Nonetheless, after having some meetings and analyzing the call in more detail, we first realized that the intention was to strengthen the public institutions' role. This was notices by extracts such as to "support policymakers and public administration at all levels in planning and taking decisions on migration-related issues through data analytics and simulation tools". The final aim of the call was to create tools that supported a continuous and extensive data collection of migrants (with very detailed data) to leave it at the disposal of local authorities presenting it as by doing such they could "provide migrants with information on and easy access to relevant public services specific to their needs." Among the data they aimed to collect through such management tool for migrants was "migrants' personal and family situation, including their legal status, origin, cultural background, skills, language skills, medical records, etc." Before it also stated the need for the systems to account for "gender differences, the skills and capacities of migrants to express their needs." Despite the clear invasive nature of the call and its scope, the proposals were still encouraged to create these tools through co-creation processes with migrants and on a GDPR compliance form. The rest of the call's text is focused on matching the needs of the migrants appropriately and effectively and for the tools to support policymakers to do so.

These brief excerpts from the call's text already make clear which were its general goal. First, their main aim was not directly to support refugees and migrants, but the ability to govern and control migration, to restrict it (topic No. 5 AMIF call), or to manage migrant 's integration through data collection and data analytics methods available to public institutions (Topic no. 6, H2020 2018-2020). As has been observed in many other places, the EU and its member states' political climate is not encouraging or supporting immigration but is somewhat restrictive, oppressive, and surveilling [8, 12]. Several cases can exemplify these. For instance, the criminalization of rescue at sea when those rescued are immigrants [8]. As has been extensively documented, ICT are employed to control the EU's borders (defined as the "smart borders" strategy (see e.g., [16, 20]). In this regard, two regulations were put in place, EURODAC, to create a centralized biometric database for migrants, and EUROSUR to use technologies such as drones and satellite imagery to surveil migration movements on the Mediterranean Sea [16]. The EU has also started to focus on new sources for tracking and estimating migration flows, resulting in their processing of dynamic and constantly updated data from their phones or social media accounts [27]. These call for proposals can therefore be understood as furtherance of this agenda. In such a climate, it is difficult for HCI research that depends on external funding to engage in research that disagrees or actively counters this political agenda in favour of a more free immigration politics of the EU and to support immigrants actively. Also, it is hard to focus on research that is not techno-solutionist and that it is meaningful for migrant communities in Europe when the majority of the funding is focused on control and restriction, strengthening institutions tasked with control, governance and administration. This also includes datafication of migration for, as they say, more effective approaches to policy making and -enacting.

During our work with refugees and migrants in three mid-sized German cities, we gained direct experience with public and administrative institutions' often problematic role for refugees and migrants. Throughout the projects, it became increasingly clear

that public institutions such as employment or asylum offices are often not experienced as sources of advice and support for refugees and migrants aiming to make oneself at home but as a source of tremendous trouble. While sometimes this might simply be the difficulties of complying with an unfamiliar bureaucratic system, the inflexibility and rigidity of such can be easy to underestimate by those not being directly affected by it. We also repeatedly encountered stories where refugees were purposefully misinformed to ruin their chances of successfully claiming asylum. A Ghanaian woman, for example, who had overstayed her tourist visa and applied for asylum with her child, was told that she could travel back to Ghana and apply for asylum from there. However, since she had been in Germany without a valid visa, she would in fact have been not allowed to enter Germany again. In 2018, several of our collaborators who had arrived in Germany in 2015 and 2016 had received letters from the Federal Office for Migration and Refugees inviting them to a voluntary conversation about their asylum status. These letters were sent to people who had received a residency title during a time of sharply increased applications where significantly more titles were created. Lawyers now warned anybody of answering these letters and participating in the conversation, as the federal office would have used the occasion to revisit this process and withdraw the residency permit. Furthermore, during 2017 and 2019, the number of countries considered unsafe to return to was diminished from five to two [1] (this number has changed again since then, see [2], which would facilitate the forced return of people to their countries of origin and the removal of benefits from them while in Germany.

To be clear and fair, we also encountered government officials whose care and support was impressive, and a blanket accusation against employees of the relevant offices would be very unfair. There were certainly people whose deep commitment and honest care is impressive and deserving of praise, whom we wish we could support in providing assistance, and some who have become close collaborators who we do aim to support in offering assistance and advise. Yet, the experiences mentioned above were not in our view due to specific person's behaviours, but a reflection of a more significant structural issue which was related to the political decisions they enacted; these were systemic, not personal, to make migration into Germany more difficult for anybody who is not directly interesting for the German economic system.

3.2 The role of the researcher and our collaborators

Lastly, we have to take a critical look at ourselves and other nonrefugee or (forced) migrant supporters who we might be included in our work. As mentioned at the beginning, at least in the case of Max a lack of experience and familiarity with the experience and difficulties of (forced) migrants in Germany easily led to faulty, perhaps, even harmful assumptions and decisions in the design of a research project, e.g., about who to include, who to design with, and who to design for.

In the case of Ana Maria, the fact that the participatory engagements were not long term and the main geo-technology aimed for was not developed in full by the end of the funding of the project might have caused harm and unfulfilled expectations with the communities we collaborated with. Despite that additional incentives defined and agreed upon with the communities aside the designed technologies were defined together and put in placed to still have meaningful outcomes for the communities of collaborators; however, these might have fallen short.

Furthermore, our own roles and goals, and those of some of our other collaborators, might have gotten into the way of achieving the goals of (forced) migrants collaborators. Our engagement in such matters as academic HCI researchers has several conditions. As stated before, one of these is usually funding for our research with often comes from third parties. Simultaneously, the work of our collaborators also relies on (often rather short-lived) funding structures, which bring about local insecurities, how support initiatives and engagement can be sustained at all. Funders have specific expectations which result in deliverables negotiated in the funding application. In the current economic and political climate, such goals are often economic or/and tied to national or (in our case) EU politics, which, as we tried to demonstrate above, are often not the goals of (forced) migrants.

Second, our interest is often further more tied to research and design of interaction with computers and other digital technologies. From our limited insights gained in the projects we were part of, several challenges (forced) migrants face when arriving are not directly or most easily solved by the design of computing applications. On the contrary, they could be better addressed, for example, by non-tangible aspects (e.g., creation of networks of support in the host countries, dynamics of care) or more tangible and practical aspects like accompanying people to administrative offices, negotiating with lawyers, filling out forms, or many others. Technological tools can, in some cases, offer support but their design takes valuable time from (forced) migrants participating.

Our own "desires", perhaps even "neediness" [19] to "do good" or to "care" [28], might get in the way of critically challenging the status quo since it suggests to people to assume this role of care recipients, in need of support contributing to rather forms of injustice and marginalization. Unexamined, this might easily lead to unequal, even violent relationships (as described for example by [28]) or to what elsewhere has been called "community fetishism" the exploitation of specific communities by researchers specifically for their challenges, as working on such challenges is financially and academically profitable [10]. In summary, such situation does not fulfil the actual goal that should be to overcome epistemic exploitation and power imbalances in the interactions of (forced) migrants when collaborating in research.

One of the many possible steps to overcome this could be, in our view, to work with representative migrant or refugee selforganizations who, due to their role, might avoid researchers causing (further) harm with communities. However, supporting the supporters might also come with the issues of attending to visions of the final target population that are already mediated by discourses based on power unbalances and based on precariousness of the diverse migrant populations. In countries like Germany, the direct participation of the various migrant populations in research and design projects aiming to challenge the political status quo, is hindered by various factors. For instance, the daily live activities involved with "resettling" in a new place leave sometimes very little time to dedicate to such work. Also, in some cases there is a risk associated with taking critical political stances that might impact their asylum process.

Lastly, this leads to some difficulties to realize equitable and mutually beneficial research and design collaborations, for which good intentions are insufficient to overcome them. In all our cases, the project work was crucial in the process of obtaining doctoral degrees, and is thus highly and clearly beneficial to us as academics. Yet, accounting for the benefit to our collaborators becomes more tricky, even if working for the benefits of our collaborators was the explicit aim of all of us. In one case, the final tool was never fully finalized and as a result is neither impactful nor sustained. The more probably value of the project for migrant participants was the creation of spaces outside of the school environment to interact and discuss issues with people in similar situations, and the provision of training certificates. In the other case, the developed tools were finally realized and are being sustained now 1,5 years after the official end of the project. However, their benefit turned out to be more for supporters such as volunteers or NGO workers in their work of offering support and care towards forced migrants rather than for them directly. The benefit of the project for (forced) migrants was in the ability to address practical problems directly during our encounters, such as translating letters, providing opportunities to practice language skills, creating social connections and access to experts on specific issues migrants face (e.g. housing rights or education) from which they could gain immediate direct support, rather than the mediated and delayed support a future application would offer.

4 CONCLUSION: NECESSARY REFLECTIONS

From these, personal, concerns we draw several quick reflections for future HCI research, which we would like to discuss further at the workshop:

1) To reflect further on the responsibility of HCI researchers to engage in meaningful discussions on current funding opportunities and structures that enable research of digital technologies in migration. Specifically, with regards to whether these funding structures enable or prohibit challenging the status quo, including legal structures and policies, wherever necessary. Some questions we rise here are: What are ways out of this for HCI? How can HCI research be more than just in the service of governments?

2) To critically reflect on the kind of actors we engage with in our research, including but not limited to (forced) migrants themselves. As the precarious situation several migrants are placed in by nations makes full participation in critical HCI research difficult or dangerous, we must also look to support organizations, but here further difficulties await us, as we outlined above. The main question that remains for us on this is, what kind of organizations make suitable allies for critical research and design work?

3) To examine our own roles and the nature of engagements (time, type, duration, intention, etc) to identify where our HCI research and design practices have contributed to 1) the negative situations/experiences for migrants, and 2) to control, and surveil (forced) migrants instead of countering directly these narratives and the oppressive and restrictive conditions many of the persons and groups in this situation face.

REFERENCES

- [1] 2019. Liste der Länder mit guter Bleibeperspektive wird kürzer.
- [2] 2021. BAMF Bundesamt für Migration und Flüchtlinge - Infothek - Was heißt gute Bleibeperspektive? https://www.BAMF.de/SharedDocs/FAQ/DE/IntegrationskurseAsylbewerber/001bleibeperspektive.html?nn=282388.
- [3] Asam Almohamed, Dhaval Vyas, and Jinglan Zhang. 2017. Rebuilding social capital: Engaging newly arrived refugees in participatory design. In Proceedings of the 29th Australian conference on computer-human interaction. 59–67.
- [4] Asam Almohamed, Jinglan Zhang, and Dhaval Vyas. 2020. Magic Machines for Refugees. In Proceedings of the 3rd ACM SIGCAS Conference on Computing and Sustainable Societies. 76–86.
- [5] Jennifer Baranoff, R. Israel Gonzales, Jay Liu, Heidi Yang, and Jimin Zheng. 2015. Lantern: Empowering Refugees Through Community-Generated Guidance Using Near Field Communication (CHI EA '15). Association for Computing Machinery, New York, NY, USA, 7–12. https://doi.org/10.1145/2702613.2726950
- [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. 321–330.
- [7] Ana Maria Bustamante Duarte, Nina Brendel, Auriol Degbelo, and Christian Kray. 2018. Participatory Design and Participatory Research: An HCI Case Study with Young Forced Migrants. ACM Trans. Comput.-Hum. Interact. 25, 1, Article 3 (Feb. 2018), 39 pages. https://doi.org/10.1145/3145472
- [8] Pirate Care. 2019. Pirate Care, a Syllabus. https://syllabus.pirate.care/.
- [9] Lizzie Coles-Kemp, Rikke Bjerg Jensen, and Reem Talhouk. 2018. In a New Land: Mobile Phones, Amplified Pressures and Reduced Capabilities. In Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems (Montreal QC, Canada) (CHI '18). Association for Computing Machinery, New York, NY, USA, 1-13. https://doi.org/10.1145/3173574.3174158
- [10] Débora de Castro Leal, Angelika Strohmayer, and Max Krüger. 2020. On Activism and Academia: Reflecting Together and Sharing Experiences Among Critical Friends. (2020).
- [11] Yumei Gan, Christian Greiffenhagen, and Stuart Reeves. 2020. Connecting distributed families: Camera work for three-party mobile video calls. In Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems. 1–12.
- [12] Sabine Hess, Bernd Kasparek, Stefanie Kron, Mathias Rodatz, Maria Schwertl, and Simon Sontowski (Eds.). 2017. Der lange Sommer der Migration. Assoziation A, Berlin, Germany.
- [13] Joey Chiao-Yin Hsiao and Tawanna R Dillahunt. 2018. Technology to support immigrant access to social capital and adaptation to a new country. *Proceedings* of the ACM on Human-Computer Interaction 2, CSCW (2018), 1–21.
- [14] Rikke Bjerg Jensen, Lizzie Coles-Kemp, and Reem Talhouk. 2020. When the Civic Turn Turns Digital: Designing Safe and Secure Refugee Resettlement (CHI '20). Association for Computing Machinery, New York, NY, USA, 1–14. https: //doi.org/10.1145/3313831.3376245
- [15] Maximilian Krüger, Konstantin Aal, Volker Wulf, Franziska Maria Tachtler, Reem Talhouk, Ana María Bustamante Duarte, Karen E. Fisher, Eiad Yafi, and Koula Charitonos. 2019. Technology at/of the Border: A Workshop about Stories and Experiences. In Proceedings of the 9th International Conference on Communities Technologies - Transforming Communities (Vienna, Austria) (CT '19). Association for Computing Machinery, New York, NY, USA, 336–342. https://doi.org/10. 1145/3328320.3328408
- [16] Mark Latonero and Paula Kift. 2018. On digital passages and borders: Refugees and the new infrastructure for movement and control. *Social Media+ Society* 4, 1 (2018), 2056305118764432.
- [17] Silvia Lindtner, Ken Anderson, and Paul Dourish. 2012. Cultural appropriation: information technologies as sites of transnational imagination. In Proceedings of the ACM 2012 conference on computer supported cooperative work. 77–86.
- [18] Jessica Lingel, Mor Naaman, and danah m. boyd. 2014. City, Self, Network: Transnational Migrants and Online Identity Work. In Proceedings of the 17th ACM Conference on Computer Supported Cooperative Work Social Computing (Baltimore, Maryland, USA) (CSCW '14). Association for Computing Machinery, New York, NY, USA, 1502–1510. https://doi.org/10.1145/2531602.2531693
- [19] Liisa H. Malkki. 2015. The Need to Help: The Domestic Arts of International Humanitarianism. Duke University Press.
- [20] Mihaela Nedelcu and Ibrahim Soysüren. 2020. Precarious migrants, migration regimes and digital technologies: the empowerment-control nexus. *Journal of Ethnic and Migration Studies* 0, 0 (2020), 1–17. https://doi.org/10.1080/1369183X. 2020.1796263 arXiv:https://doi.org/10.1080/1369183X.2020.1796263
- [21] Dina Sabie and Syed Ishtiaque Ahmed. 2019. Moving into a Technology Land: Exploring the Challenges for the Refugees in Canada in Accessing Its Computerized Infrastructures. In Proceedings of the 2nd ACM SIGCAS Conference on Computing and Sustainable Societies (Accra, Ghana) (COMPASS '19). Association for Computing Machinery, New York, NY, USA, 218–233. https: //doi.org/10.1145/3314344.3332481
- [22] Dina Sabie, Samar Sabie, and Syed Ishtiaque Ahmed. 2020. Memory through Design: Supporting Cultural Identity for Immigrants through a Paper-Based

Home Drafting Tool. In Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems. 1–16.

- [23] Franziska Tachtler, Toni Michel, Petr Slovák, and Geraldine Fitzpatrick. 2020. Supporting the Supporters of Unaccompanied Migrant Youth: Designing for Social-ecological Resilience. In Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems. 1–14.
- [24] Franziska Tachtler, Reem Talhouk, Toni Michel, Petr Slovák, and Geraldine Fitzpatrick. 2021. Unaccompanied Migrant Youth and Mental Health Technologies: A Social-Ecological Approach to Understanding and Designing. (2021).
- [25] Reem Talhouk, Lizzie Coles-Kemp, Rikke Bjerg Jensen, Madeline Balaam, Andrew Garbett, Hala Ghattas, Vera Araujo-Soares, Balsam Ahmad, and Kyle Montague. 2020. Food Aid Technology: The Experience of a Syrian Refugee Community in Coping with Food Insecurity. Proc. ACM Hum.-Comput. Interact. 4, CSCW2, Article 134 (Oct. 2020), 25 pages. https://doi.org/10.1145/3415205
- [26] Reem Talhouk, Sandra Mesmar, Anja Thieme, Madeline Balaam, Patrick Olivier, Chaza Akik, and Hala Ghattas. 2016. Syrian Refugees and Digital Health in Lebanon: Opportunities for Improving Antenatal Health. In Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems (San Jose, California, USA) (CHI '16). Association for Computing Machinery, New York, NY, USA, 331–342. https://doi.org/10.1145/2858036.2858331
- [27] Linnet Taylor and Fran Meissner. 2020. A crisis of opportunity: Market-making, big data, and the consolidation of migration as risk. *Antipode* 52, 1 (2020), 270– 290.
- [28] Joan C. Tronto. 1993. Moral Boundaries: A Political Argument for an Ethic of Care. Routledge, New York.
- [29] Anne Weibert, Max Krüger, Konstantin Aal, Setareh Sadat Salehee, Renad Khatib, Dave Randall, and Volker Wulf. 2019. Finding language classes: Designing a digital language wizard with refugees and migrants. Proceedings of the ACM on Human-Computer Interaction 3, CSCW (2019), 1–23.