

# When the Civic Turn turns Digital: Designing Safe and Secure Refugee Resettlement

**Rikke Bjerg Jensen**  
ISG, Royal Holloway  
University of London  
Egham, TW20 0EX, UK  
rikke.jensen@rhul.ac.uk

**Lizzie Coles-Kemp**  
ISG, Royal Holloway  
University of London  
Egham, TW20 0EX, UK  
lizzie.coles-kemp@rhul.ac.uk

**Reem Talhouk**  
Open Lab, Newcastle  
University  
Newcastle upon Tyne, NE4  
5TG, UK  
R.R.Talhouk2@newcastle.ac.uk

## ABSTRACT

Across Europe, refugees are required to engage with the “civic turn” – a process of integrating refugees into the social and cultural aspects of the new land. Over a two-year period, we engaged 89 refugees settling in Sweden, to explore how accelerated and digitalised resettlement processes shape the civic turn. Framed within wider literature on transitioning and everyday insecurities, we show how this “digital turn” exacerbates existing barriers to resettlement experienced by refugees. By critically analysing these barriers, we reveal how the civic turn rests upon a series of everyday social and cultural practices and relations, which are largely ignored in digital service design. We show how this leads to a “vacuum” for our participants. We call on the HCI community to engage with this vacuum and understand resettlement as encompassing multiple digitally-mediated transitional phases of citizenry. We do so by focusing on the digitalisation processes shaping these transitions.

## Author Keywords

Refugees; Resettlement; Everyday Security; Digital; Transition

## CCS Concepts

•**Security and privacy** → *Social aspects of security and privacy*; •**Human-centered computing** → *User studies*;

## INTRODUCTION

Sweden, like other Western European countries, has adopted a resettlement policy framed within the “civic turn” [8, 10, 42]. This is a move towards civic conditioning, where competences in the language, history and norms of the new country, as well as political loyalty and relevant employment skills become a condition for citizenship. In Sweden, this civic turn requires digitally-mediated interactions with the Swedish state as part of an accelerated digitalisation programme. Refugees settling

in Sweden must therefore become part of what we term in this paper a “digital turn”, in order to transition towards citizenship and secure their future in Sweden.

Several studies [15, 20, 19, 68, 75, 58, 3, 2] within the field of Human-Computer Interaction (HCI) have explored how technologies can support refugee resettlement, but few have looked at HCI’s central role in securing the transition from refugee to new citizen. Instead, HCI researchers have focused on platforms for the provision of local information to newly arriving refugees [68], cultural understanding [57] and information regarding bureaucratic processes [15]. The interplay between information policies and refugees has also been explored, focusing in particular on policies pertaining to network access, refugee information rights and data management [49]. Others have noted how a lack of technological ability and issues of balancing home and work in a new land prevent refugees and immigrants benefitting from digital technologies that could be useful for them, e.g. [45, 44, 7, 36]. How wider informal support networks help refugees and other marginalised communities navigate institutional technologies has also been researched within HCI [16, 64]. This sits alongside recent HCI scholarship which has called for a broader understanding of security in the context of refugees and migrants [20, 19]. However, no existing work, to our knowledge, has been done to explore how security is to be integrated into the design of increasingly digitalised resettlement services to support refugees in making the turn towards becoming new citizens.

We look at HCI through the lens of digitalised refugee resettlement, focusing in particular on the everyday security that multiple transitional phases engender. We examine how refugees settling in Sweden experience the civic – and digital – turn. We situate our enquiry in Sweden as it provides an advanced example of: (1) how the civic turn can be digitalised and (2) a civic programme that places human and societal security at its core. By examining qualitative data from a series of collaborative sessions with 89 refugees resettling in Sweden, we identify the wider social and cultural aspects of resettlement. This enables us to analyse the gaps that emerge between our participants, multiple resettlement transitions and their everyday security. We highlight instances where accelerated digitalisation processes have amplified the barriers to resettlement in Sweden, and how building resilience requires both formal and informal support networks. We show that

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(s).

CHI’20, April 25–30, 2020, Honolulu, HI, USA

© 2020 Copyright held by the owner/author(s).

ACM ISBN 978-1-4503-6708-0/20/04.

DOI: <https://doi.org/10.1145/3313831.3376245>

while increased digital service provision has expedited and systematised the resettlement process, it has also left a vacuum for refugees. These are critical consequences of the Swedish digitalisation agenda.

We call on HCI researchers to support practices of everyday security that help people respond to these digital side-effects and vacuums. We ground this call to action in the following findings:

- Calibrate for different speeds of digital access to support the challenges that come from age, language difficulties and poor health. Our findings show that everyday insecurities linked to refugees' precarious existence is amplified by the experiences of the resettlement process. These amplified insecurities affect the speed and direction of the civic turn, and the effectiveness of digital service provision.
- Connect digital services to an understanding of place and community support. The ability to digitally connect to each other, to family, to the State and to civil society was essential for our participants to build resilience, whilst they also experienced numerous barriers to connectivity.
- Attend to the spaces that form around digital services – what we have termed “vacuums” – where face-to-face interactions have been replaced by interactions with technology.

The paper extends research within HCI in development contexts, [64, 16, 3, 31, 33, 66], and refugee scholarship, e.g. [82, 38], on the interplay between technology and resettlement and presents the notion of everyday security [22, 81].

## BACKGROUND

This section acts as a primer to contextualise the meanings embedded in the research findings. We do so to extend the research beyond the everyday setting through which the findings emerged. The background provided in this section situates the research in the civic turn as it pertains to wider European and specific Swedish notions of citizenship and broader conceptualisations of security. It relates the civic turn to the increased digitalisation of resettlement and enables HCI to speak to everyday security through the civic turn.

### Security through the Civic Turn

The growth of immigration in Europe has influenced public discourses about social cohesion and welfare state sustainability. Concerns about rising unemployment, expanding socio-economic gaps, and increasing unrest and fragmentation within societies have fuelled these discussions [53]. How to cultivate “good citizenship”, such as civic virtues, identifications and loyalties, is central to such discourses [43, 53]. A move away from the idea that integration is best obtained through the extension of rights dominates many European approaches to immigration. Instead, the “making” of refugees into citizens, through the acquiring of language skills, political grounding and loyalty, and relevant employment skills, as a condition for admission, permanent residence or citizenship [34, 59] is foregrounded.

The underlying principles of this civic turn are, in part, driven by a push for security: security for the individual, security for the state and security for society as a whole. The notion

of security is therefore central to the ideas engrained in the civic turn; particularly in the sense that security is linked to the concept of maintaining and protecting orders of values [73]. Through the process of resettlement, and as envisioned in the policies underpinning the civic turn [52], refugees are encouraged to adopt the values of their new land and to order those values, and their purposes, in a certain way. From this perspective, security is not only understood as protection from harms but also as cultural and social processes of attaining that protection; a process that Smith [73] refers to as “securing”. From this perspective, the process is used to order the underlying principles central to a society and to ensure that people are engaged with that order. For many refugees, resettlement also relates to engaging with new forms of “everyday security” [22, 81]; the security issues that emerge in the new land for refugees and how refugees can respond to those issues [20]. Here, security is thus not only a formulation of protection but also of emancipation, freedom to live free from fear [11, 61].

### The Swedish Civic Turn

Sweden has traditionally been an inclusive society, based on “Swedish exceptionalism” or the “Swedish Model”, and has a long history of immigration [74]. For example, during the so-called “refugee crisis” in 2015, 163,000 people applied for asylum in Sweden [79]. Recently, however, authors have noted the “erosion” of Sweden’s inclusive policies [23, 65], whilst integration remains a two-way adaptation process: adaptation of the refugee to Swedish society and adaptation of Swedish society to the refugee. The civic education programme is not tied to a particular history or religion but teaches general civic and democratic principles [54, 41]. In a similar vein, Swedish immigration policy does not mandate attainment of specific educational or language targets in return for citizenship [35, 8], foregrounding instead the importance of security of residence as a means of integration and the provision of Swedish language teaching as a means of supporting this integration. This approach to the civic turn means that security is embedded within notions of emancipation and freedom as part of the wider security complex.

Immigration policies pertinent to the welfare state create spaces in which resettlement can be supported by recognising the cultural heritage and identity of the refugee as they settle in their new land. Importantly, however, Swedish national identity is oriented towards the welfare state as it is typically emphasised as the core promoter of social inclusion and national belonging [13, 25, 55]. Whilst Sweden promotes the moral and civic importance of “work, productivity and economic contribution to the welfare state” [8, p. 18], it also seeks to strike a balance between the drive for individual contribution to the welfare state and universal, egalitarian ideals. The tone of this balance is today influenced by political sensitivities of “controlling-the-numbers type of logic” [8, p. 20].

### *Turning to Digital Technology*

Sweden’s response to the increase in the number of people going through resettlement has been to put in place a systematised and accelerated digitalisation programme. In an everyday context, the process of resettlement starts with an individual

applying for asylum through the Swedish Migration Authority [52], which is the central co-ordination point for asylum-seekers in Sweden. Once registered as an asylum-seeker, it is possible to apply for an LMA<sup>1</sup> card and access a number of services, including healthcare and Swedish language classes. The initial application phase is largely “non-digital” and requires the individual to physically hand in their application to the Migration Authority [52]. However, as the individual moves through the Swedish immigration system, resettlement services are increasingly facilitated through digital interfaces. Whilst the asylum-seeker is waiting for a decision on their application, they can join a Swedish course and take part in local language caf  s, and can either stay in a reception centre or arrange their own housing. Most interactions between the individual and the Swedish state is, at this stage, communicated through a digital portal. Once permission to remain has been granted, developing Swedish language skills often require re-training to gain Swedish qualifications (see also e.g. [8, 14]).

This is also evident in recent policies established to control immigration numbers, whilst improving the efficiency and effectiveness of Swedish resettlement processes [80]. Within this lies the consideration of expediting resettlement decisions through the use of digital services. This is part of the Swedish policy of accelerated digitalisation [48] that is interwoven into the new Swedish public management policy programme [27]. A digitalised programme of public management provides a number of opportunities for creating spaces in which the transition process from refugee to citizen can be supported. Nevertheless, these policies of acceleration come with numerous pitfalls, for both the refugee and the state.

In summary, a broader conceptualisation of security considers security as both protection and emancipation, where the security of the individual can be supported. In the Swedish resettlement context, this notion of everyday security is challenged by an accelerated digitalisation process that is increasingly focused on controlling the number of people going through the resettlement programme. As outlined in the Findings section, our participants clearly highlight this tension between expedited integration processes and everyday feelings of security.

## RELATED WORK

This section outlines HCI scholarship in relation to complex and multiple refugee transitions, before synthesising existing HCI work relating to different sites of transition within the refugee context. This is done to ground the present research, which is set in a particular context and site of transition, Sweden, in a broader understanding of such sites.

### Transitions and HCI

A fundamental objective of technologies designed to support life transitions is to achieve security for the individual who is transitioning [50, 69] where security often takes the form of emancipation. The complex situations in which these technologies are used therefore also require careful security analysis, as security itself can be framed as a means to emancipation

and freedom [11]. In this context, the element to be secured is the individual [11].

Emancipation and individual security are particularly salient when considering the life transitions experienced by refugees. Indeed, much HCI work related to life transitions specifically focus on the difficulties embedded in such experiences [50, 69]. Transitions are contextually specific, with much of the literature focusing on transitions experienced as part of domestic life, e.g. life disruptions related to home and family relations [50, 24], motherhood [5, 32] or, more generally, major life events [51]. The difficulties that many refugees and immigrants experience often relate to the notion of “home”, with research highlighting how an inability to balance home and work in the new land often means that there is an inability to make use of digital technologies designed to support their transitioning [45, 44, 7, 36]. The domestic impact of the disruption is thus critical because “the home” is often seen as the anchor point for a sense of safety and security. Overcoming disruption requires rebuilding both social and technological networks and gaining access to both [50, 69]. Existing HCI research also shows how wider support networks help refugees and other marginalised communities navigate institutional technologies [16, 64]. However, what emancipation means and how to achieve it, can lead to contestation [60] and form part of the disruption that the technology is intended to overcome. Work in HCI work therefore plays a central role in exploring how digital technology might facilitate this. In the context of refugee migration, life transitions are multi-faceted and are often tied to the spaces through which refugees transition, e.g. refugee camps, sites of interim stay and sites of resettlement.

### *Sites of Transition: Refugee Camps and Interim Stay*

Refugee camps and interim stay settlements represent particular modes of transition as the sites themselves are in transition. Jordan’s Za’atari camp and its Syrian refugee residents have been the focal point of several HCI research projects. Fisher et al. [31] and Yafi et al. [86] worked alongside humanitarian organisations, focusing on the role of youth as information mediators. Other HCI researchers have explored the feasibility and implementation of how technologically facilitated projects can contribute to social cohesion and community-building [85, 67] as well as contributing to UNHCR’s objectives of health and wellbeing, heritage preservation, social cohesion and capacity-building in the camp [31]. More widely, such projects fall in line with the current predominant approach of how to frame and understand refugee camps as more permanent spaces for communities [9, 21]. With a similar ethos of framing camps as protracted living spaces, Nabil et al. [56] and Sabie et al. [63] investigated how ICTs may augment refugee shelters in refugee camp, in Jordan and Iraq, respectively, to improve quality of life and wellbeing. In the Palestinian context, Yerosus et al. [87] and Aal et al. [1] explored the role of computer clubs as a means of building digital capacities of refugees as well as bridging social and gender gaps. Fisher et al. [31] studied how young refugees overcome limited connectivity within the Za’atari camp, whilst community-level access divides to connectivity was investigated in the camp [67]. Such research brings to light how restrictive policies in place to limit connec-

<sup>1</sup>LMA refers to the Swedish Reception of Asylum Seekers’ Act.

tivity in these camps, as part of their security measures, shape digital interactions [49]. Lebanon has also attracted research focusing on Syrian refugees residing in informal tented settlements, exploring the potential for technologies to improve refugee access to reproductive and antenatal healthcare [77, 76]. Temporary sites of transition are therefore an integral part of the refugee experience and have been indicated to be sites in which technology may play a role in promoting dignified interactions [78]. Refugee experiences within these spaces shape the ways in which freedom and security as well as disruption and insecurity are felt and embodied by the individual.

#### *Sites of Transition: The New Land*

Modes of transition in “the new land” are, to a large extent, driven by the host or receiving state. In the United States, where refugees are urged to integrate, several projects have investigated the use of technologies to facilitate accessing services and integration. Brown et al. [15] designed and piloted a translation and support platform using IVR to assist refugees in engaging with bureaucratic processes of resettlement. Whilst Baranoff et al. [6] placed NFC tags around a city to support refugees in navigating their urban surroundings, Irani et al. [40] used a human-centred design approach to provide design recommendations for Refuge Tech, a platform intended to support refugee integration. With the aim of designing a digital information and communication technology platform for refugees, Lee et al. [47] identified that such platforms should have space for community feedback, flexible service categorisation, password laps considerations and location-based context.

Similar to the work carried out in the United States, HCI research on refugee transitions in Germany has focused on refugee integration. Schreieck et al. [68] investigated the challenges in designing platforms that provide local information for refugees coming from multiple countries and communicating in multiple languages. Several projects in Germany have explored the role of technologies and computer clubs in facilitating social and cultural integration. Weibert et al. [83] utilised inter-cultural computer clubs as a space to strengthen relationships in multicultural neighbourhoods where refugees reside. In Sweden, Coles-Kemp et al. [20] highlighted that while mobile phones provide the means to connect to family and friends, such connections also introduce new vulnerabilities as refugees feel under pressure to always stay connected.

The refugee experience of transition is to a large extent driven by the policies of the state, making the civic turn in the context of the Swedish welfare state a key factor in resettlement. However, regardless of this – and as evidenced throughout this section – no existing HCI research focuses on institutionalised digital services for refugees. Rather, existing research focuses on digital systems that compliment state resettlement processes. With this broader understanding of transition and sites of transition as a general framework, the paper asks: how can refugee transitioning in general and the civic turn in particular be supported by digital technologies – if the civic turn is to truly offer security for the refugee? As such, we argue that existing work emerging on the role of digital technology in refugee transitions, across the CHI community, is fragmented.

We encourage this community to come together to set out a research agenda that engages with the everyday security worries that transpire in the meeting between the civic turn and the digital turn.

## METHODS

The research engagements employed a common methodological approach of Experience-Centered Design (ECD) research [84] and built on collaborative collage which is one of the engagement tools termed “creative security methods” [26]. It uses collaging techniques to enable small groups to discuss research questions and present their views in a collage produced on paper. We adopted these methods to enhance dialogue and bring to the fore the voices of our participants whilst creating a space for empathetic exchange of experiences. These methods were designed to enable everyday routines to be taken seriously in a security context. The methodological approaches used in the engagements and the composition of participant groups are set out in Table 1. Research engagements were focused on creating collective narratives rather than a collection of individual narratives. This was supported by our research design which engaged groups of refugees rather than individuals. The research engagements provide a broad framing of refugee experiences, whilst focusing on the use of technologies for resettlement as part of the turn towards civic integration and accelerated digitalisation [48, 10, 8]. The research engagements built on the co-construction of a shared understanding between participants and researchers, and between the participants.

	1	2
<b>Location</b>	Malmö, SE	Trelleborg, SE
<b>Timings</b>	12/2017-05/2019	11/2017-03/2018
<b>Participants</b>	55	34
<b>Gender</b>	Mixed	Mixed
<b>Age</b>	45–76	28–60
<b>Language used</b>	Swedish, English	Swedish
<b>Methods</b>	Collage, drawings	Collage, drawings
<b>Materials</b>	Post-its, coloured sheets and pens, stamps, pegs, tape	Post-its, coloured sheets and pens, tape

**Table 1. Research Design and Structure.** These sessions focused on collective narratives rather than individual narratives.

### Research Design

The research was carried out in two schools in southern Sweden – Malmö (RgM) and Trelleborg (RgT) – with 89 refugees learning Swedish, aged 28–76, between November 2017 and May 2019. Research participants were recruited with the assistance of teaching staff. The Swedish immigration policy allows refugees to live and be educated in Sweden whilst applying for residence [8, 14]. It was therefore possible to recruit participants who were at different stages of their civic turn. No specific selection or exclusion criteria were used to target specific groups of refugees. Rather, the research was designed to work within the constraints of the educational setting and to engage with refugees undertaking Swedish language lessons. This was, however, also a factor which limited the study to participants learning Swedish.

Prior to commencing the study, we visited both schools and met with the teachers facilitating the research engagements. We did so to make sure that the research approach was suitable for engaging with the participants and that it would not disrupt planned school and language-learning activities. As a result, the research was designed to be collaborative and inclusive, which meant that the methods needed to be sufficiently flexible to cater to everyone's educational background, language ability and skill set. To support this, we used brainstorming and feedback sessions to enable participants to either co-create shared narratives or for individual participants to create their own narratives. ECD employs collaborative techniques to facilitate small group discussions, which emerge organically, in either written, spoken or illustrated form. Due to the collaborative nature of the sessions, the researchers facilitated participation, observation and note-taking to capture group interactions and individual narratives.

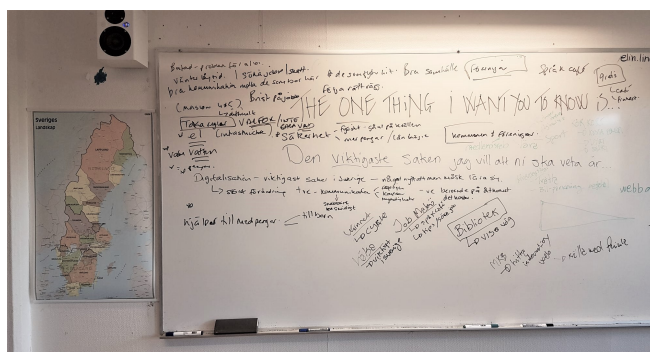


Figure 1. Collective feedback session which shows how findings were agreed upon within each group. Example from RgM, May 2019.

This method of combined observation, note-taking and discussion created a space in which participants could reflect upon their individual and collective transitions. These reflections were shaped by the overarching provocation: “The one thing I want you to know is” and were captured in individual and group collages, in the collective feedback session (see Figure 1) and in researcher field notes. Using this overarching provocation, each session started with a brainstorming activity where participants would capture their individual and collective narratives on post-it notes and assemble them on larger pieces of paper. Participants were also given the option to use stamps, pegs and colourful tape and pens. These materials enabled participants to personalise their contributions and they added another analytical layer to the narratives based on the compositions of the contributions. In line with this, by arranging these materials in different ways, the participants were able to explore relationships between the different narratives.

The use of these particular materials was thus a deliberate choice due to their flexibility and because, as everyday objects, they were less intimidating than having to fill blank pieces of paper. These objects, therefore, allowed a more in-depth reflective discussion, which was captured by the researchers on the whiteboard in class (see Figure 1). The participants reflected and commented on the feedback so that, at the end of each session, a consensus on key findings and interpretations had been reached and captured in researcher field notes.

All participation was voluntary and participants were free to decline participation or leave during the sessions. The study was conducted in accordance with the ethical policies and practices of the researchers' academic institution and under ethical approval granted from this institution. Due to the sensitivities of the group and the importance of anonymity, participation was not audio-recorded. Whilst a wide range of refugees was recruited, the groups were dominated by Syrian refugees who had been in Sweden between six months and two years. Group demographics, whilst mixed, were largely made up of participants from the professional classes in their country of origin. It was decided to conduct the study in the language common to all participants: Swedish. This was made possible with the research being conducted by two Swedish-speaking researchers. However, some participants used translation apps on their mobile phone to translate their contributions from their first language (e.g. Arabic) into Swedish or English. This was a limitation of the research design as some participants had to rely on other participants or technology to express their views. Other related studies, e.g. [30], enable participants to express their views in their native language through the use of translators and the use of native-speaking facilitators. However, this approach was not deemed appropriate given the mixed demographics and the Swedish educational setting. All outputs were captured in either English or Swedish – all Swedish contributions have been translated into English for the purpose of this paper. Another limitation relates to the fact that our participants contributed their stories as a collective, and did not want their stories to be linked back to them individually. This is a methodological constraint and the reason why we report our findings according to field site, RgT and RgK.

### Data Capture and Analysis

The research materials, e.g. post-it notes, colourful tape and pegs, were used as a means of participants reflecting on what they wanted to say, a vocabulary-building exercise and a way of externalising the notion of resettlement that was, up until that point, largely an internalised experience. Some participants chose to use several post-it notes to convey one long narrative, whilst others felt more comfortable writing short sentences on each post-it note and then assemble them all on one sheet of paper to establish relationships between them. Some participants used tape to connect the post-it notes and construct a narrative, whilst others felt more comfortable writing directly onto the sheets of paper.

Four forms of data were captured during these sessions: (1) written post-it notes, often arranged on larger pieces of coloured paper; (2) sheets of paper with written text; (3) researcher observations captured in note form; and (4) feedback from the summary discussion captured on whiteboards. The analysis used Gillian Rose's analytical approach to interpret the data [62], as this allowed for both a visual and textual analytical frame. In particular, a thematic analysis was employed to develop qualitative interpretations of participant contributions. Image records were kept of all the generated data and, through a systematic categorisation and interpretation of these data, specific themes emerged directly from the data. This was done through an approach where we, individually and manually, traced dominant themes across all the captured data [18,

12]. To ensure consistency, the themes were aggregated and explored based on the different analytical components and relationships between the individual themes were established. All themes are presented in the research findings below.

## RESEARCH FINDINGS

As the findings outlined in this section show, several barriers to making the civic turn presented themselves. For many, these barriers were linked to increased digitalisation of essential services. While many of the collages and post-it notes narrated these insecurities and exemplified the barriers to emancipation, they also showed glimpses of resilience established through interactions with wider support networks. Moreover, the analysis brought to the fore the notion of a *vacuum* that participants experienced in their interactions with the civic turn. These findings are discussed in detail in the following section.

### Theme 1: Transitions at Multiple Speeds

This section highlights the different speeds at which individuals “turn” during resettlement, which emerged as a key theme in the data analysis. In particular, this section demonstrates how pressures, such as language barriers as well as age and poor health, slowed down the civic turn for many participants. During group discussions and collage-work, it thus became clear that participants’ transitional experiences were characterised by an individual’s ability to “make the turn” and that this often relied on the specific challenges and obstacles experienced throughout resettlement.

As some of the post-it notes from RgM in Figure 3 demonstrate, learning a new language was experienced as a dominant obstacle in the transition process: “*learning a new language is hard*”, “*there aren’t many other refugees working in the office*” and “*there is a lot of pressure to learn Swedish*”. Studying and learning Swedish was also seen as a barrier to engaging with Swedish society and understanding Swedish culture. Several participants referred to different associations (*föreningar* in Swedish) as an example of a potential access point to Swedish society, and through which to establish informal networks that would help them build resilience through the resettlement process. However, such associations were often made inaccessible through cultural and linguistic barriers. As one participant in RgM noted: “*the biggest problem is, in my opinion, language, because you cannot do anything and you just have to be lonely and have psychological problems*” (Figure 3). Understanding the requirements of resettlement, and the cultural and social values engrained in Swedish society, was therefore intimately tied to language, which, in turn, had a direct effect on the speed of the civic turn.

Time pressure also emerged as a recurring finding in the collages, with some post-it notes showing layered time pressures relating to finding a place to live, finding a job and studying. Several participants highlighted that going back to school was experienced differently when there was a family to support, as opposed to attending school as an individual without family responsibilities. For others, time pressure was linked to the time taken to learn Swedish before progressing through the education system and accessing higher paid employment. For some, time pressure was linked to an economic pressure to

juggle work and study. In one post-it note, one participant in RgT highlighted: “*it takes a lot of time to work and be at home*” (Figure 3). Whilst this pressure of balancing home and work life is not exclusive to refugees, see e.g. [45, 44, 7, 36], the resettlement process amplifies these pressures because the situation for a resettling refugee is often more precarious, with less resources and less social support to fall back on. Pressures relating to the feeling of not having enough time for everyday, mundane tasks were therefore often described as a barrier to engaging with aspects of the civic turn.



Figure 2. A collection of collages and post-it notes which illustrate the stresses experienced by older participants, in particular.

Health pressures were also felt in different ways by participants. For some, there was a fear of being unable to access healthcare when it was needed, thus, relating their health concerns to time pressures. As expressed by a group of older participants in RgM: “*you have to wait a long time to see a doctor*” (Figure 3) and “*booking a consultation with the doctor takes a long time, the illness might develop*” (Figure 2). For those participants who had left family members in their old country, the psychological challenges of being isolated and alone lead to concerns about mental wellness: “*integration is very difficult and includes many psychological problems*” (Figure 3). This also disrupted their access to support networks, which was seen to help them build resilience as part of the resettlement process. Some participants brought with them physical and mental trauma from their migration and the situation in their old land that needed treatment. This was evident in several of the post-it notes contributed by younger refugees who had left parents or other older family members back in their old country. Linked to the pressures related to age, it was clear that resettlement and transitioning was experienced as “*a young person’s game*”. Such fears, issues and concerns were seen to create pressures that diverted energy and investment from engaging in Swedish society.

The failure to adapt quickly to new surroundings and the undesired need to “*start from scratch*” were some of the reasons for a slower turn given by older participants, whose Swedish transition had slowed down or even stagnated. For them, the inability to navigate increasingly digital systems to access essential services had become another barrier – rather than support – to resettlement. Moreover, and particularly, these

older participants found that age made it harder to learn a foreign language, which was a critical barrier to being able to fully engage with and settle into a new life in Sweden. Contributions from older participants very clearly highlight the difficulty of settling into a new environment. A group of older participants noted: “When I move to this new country I have to learn a new way of life. This is hard” and “I find it hard to fit into the new environment.” Whilst, for younger participants, the motivation to integrate into Swedish society was driven by imagining their future in Sweden, contributions from older participants illustrate a sense of hopelessness: “hope that is taken away” and “I am stressed now because I cannot find a job for the future” Figure 2. The speed at which individuals would turn towards Sweden was thus not linear or straightforward in any simple manner; rather, it comprised complex cultural, social and economic dimensions, which participants noted were not accounted for in digital resettlement services.



Figure 3. A collection of collages, created by participants in RgM, all pertaining to the barriers experienced when trying to settle in Sweden.

### Digital Support for Transitioning

The barriers experienced by our participants created separations, shaped how they would engage with their new Swedish environment and the extent to which they would be able to fully make the turn expected by Swedish society. Such barriers also influenced how these groups would incorporate digital technologies into their everyday lives to ease the transition from their old life to a new life – from a settled existence in their old land to an unsettled existence in this new land – and to re-establish a sense of security. However, whilst the younger participants used such technologies, their mobile phones in particular, to overcome such obstacles, it was clear that many of the older participants did not have this capacity or capability. This was particularly evident in cases where older participants noted that they did not possess the same technological skills to navigate translation apps or wider services: “I can’t keep up with all the technological developments . . . this is making life really hard”. In many cases, older participants relied on their children for navigating digital systems and interactions.

Whilst the use of digital technology to access essential services and wider support networks holds both advantages and disadvantages for refugees, the resettlement process relies on such technologies; successful transitioning requires access to and an ability to benefit from digital services. As

one group noted: “we have no choice but to be connected.” Refugees thus have to stay digitally connected to resettle, which, in turn, opens up multiple channels to their old land, e.g. through social media, instant messaging and other digital platforms. These support networks are also essential for resilience-building. Many participants were suspended in a split presence between their current life and their previous life, stitched together, in part, by digital technology.

### Theme 2: Digital Connections as a Barrier

In this subsection, we outline the findings emerging in relation to the specific barriers to resettlement experienced by our participants. In particular, the accelerated digitalisation of the Swedish resettlement processes, which emerged as a key theme in the analysis, is highlighted.

Statements such as “society forces us” to engage through digital means and “no alternative . . . opting out is not possible” exemplifies how many of our participants felt about the this digitalisation process. It is evident that whilst such technology connects people through digital means, it does not by itself, as our participants articulate, connect refugees to their new land or enable a smooth transition process. This narrative was particularly evident in one collage (Figure 4). Positioning the Swedish Migration Authority (*Migrationsverket* in Swedish) at the centre, the participant, a young man, illustrated the centrality of this institution in the everyday lives of refugees. It highlights how this Authority shapes most aspects of the resettlement process. Statements, such as “has bad translators”, “bad rules”, “one gets stressed”, “waiting a long time for a decision”, “money”, “unpleasant staff”, and “lonely without my family”, highlight the barriers between the state and the individual refugee and the inability of digitalisation to break down those barriers.

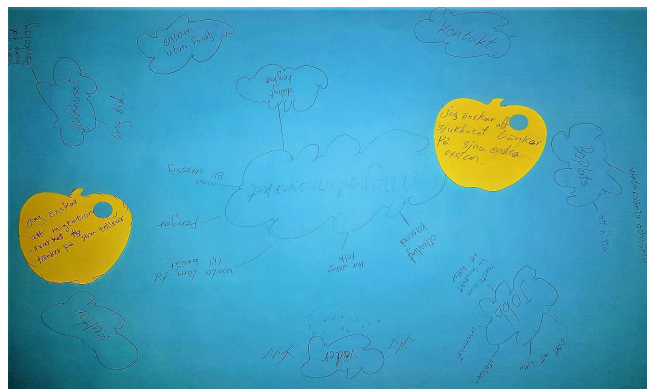


Figure 4. Barriers related to the Swedish Migration Authority as seen from one participant in RgM: housing, welfare, taxes, health, culture.

For some participants, increased digitalisation had further amplified the distance between them and resettlement services. This was particularly related to their inability to understand digitalised services or “the mindset” of these services. However, participants in both settings – RgM and RgT – acknowledged that in order to successfully navigate the services of resettlement, it was necessary to be able to interpret inherent cultural values and practices. Understanding the underlying intentions and logic of the digital interactions with the state

was thus seen as important, yet, impossible for those who had limited or no engagements with wider social or cultural aspects of Swedish society. The data also revealed another layer of disintegration, experienced largely through the reliance on digital technology for essential services. The data clearly show that whilst digital technology might help a refugee to navigate education, welfare and employment systems, it does not help with integrating into Swedish society. As expressed by one participant in RgT: *“we first have to change ourselves to understand another culture”*. In some group sessions in RgT, aspects of everyday life, such as religion, beauty, mindset and values more broadly, were foregrounded as examples of the differences between their old and new land. In this context, the digital was not seen to help the individual develop an understanding of the Swedish mindset or Swedish cultural norms. Cycling was also used as an example in RgM to highlight the cultural differences: *“in my country nobody cycles. Here, everyone cycles.”*

### **Theme 3: A Digital Vacuum in Resettlement**

In this subsection, we explore the findings that emerged in the data that show how the accelerated digital turn results in refugees being stuck in a type of vacuum: spaces between decisions, where the digital turn and the civic turn are misaligned and where insecurities become or are felt as amplified. We outline how this vacuum materialised because of a sense of waiting, a lack of connection with the state, separation from family and the impact on everyday security.

The policy of accelerated digitalisation has been driven by the aim of making the resettlement process more efficient and faster, yet, our findings suggest that this creates additional barriers for refugees. The digital service also needs to connect refugees to the place into which they are resettling. Whilst most of the collages produced by the participants articulate the centrality of digital technology in their daily lives, they also show that these technologies are only useful when they connect the individual to wider support networks. The articulations of uncertainty and waiting conveyed a sense that Swedish society is difficult to enter, which was amplified by increased digitalisation of services, which reduced everyday relational interactions for our participants. Limited personal relations with Sweden and its people thus led to a feeling of isolation and disconnection for some participants in their resettlement process and drove the pull of a digital turn away from Sweden and a Swedish way of life.

#### *Limited Contact with the State*

The use of digital technology to engage with the state, whilst potentially more efficient, was explained to result in gaps both within and around the communication. This was emphasised by one participant in RgT, who noted that *“it is stressful to have to use the mobile phone when you need a proper answer about unemployment benefits or from the commune ... face-to-face meetings would work better and be more efficient.”* However, mobile phones were not seen to replace face-to-face interaction within “the system” – *“you never get the same person twice”*. The lack of face-to-face interaction in the processes needed for resettling was seen to exacerbate the precariousness of their situation.

This sense of limited contact with the state also emerged when participants talked about their interactions with the immigration authorities. Participants described how they felt a distanced connection with the state when being forced to use digital services to establish this connection. In Figure 4 one participant notes *“to move to a new country, the first barrier is immigration service”* and *“there is no specific authority for foreigners to get correct information”*. As a result, The Swedish Immigration Authority is seen to *“add to the stress”* of immigration. Many noted that this differed significantly from their home country, where their engagements with local and national authorities had been facilitated largely by face-to-face interactions. As one participant in RgM noted: *“I don’t understand digital interactions ... in my country we have to go into the official offices to sign papers.”* In many ways, this led many participants to feel culturally distanced from the immigration service. They explained how they would find communication difficult, find it difficult to get the right information and find it difficult to know what information to provide to the immigration service. For some, the rules felt obstructive and the staff in the immigration offices were seen as unhelpful and not well-informed.

#### *Being Stuck in Resettlement*

Common to the narrative of being stuck was the ability to stay digitally connected to an old way of life, whilst struggling to navigate the Swedish resettlement process and engage with Swedish society. The civic turn thus became increasingly bifurcated between the two lands, which affected how our participants envisioned their future in Sweden. In one collage from RgT, *“thinking about the future”* was linked to the label *“psychological”* by the use of an arrow to show the direction of the civic turn; from thinking about a future in Sweden to having to *“establish contact with another culture which does not understand”*. Another collage in RgM (Figure 2) expressively highlights the sense of being stuck in an existence that bears no resemblance to the future they aspired to: *“I can’t use my high school degree/diploma in Sweden, so I have to start all-over again”*. Many participants also talked about income concerns and how a lack of money exacerbated the feeling of being unable to progress. The sense of being stuck was further amplified by the need to learn Swedish and gain Swedish qualifications before entering the employment market. For many, this meant abandoning aspirations and dreams and accept a job they did not want with no sense of a way forward. In addition to feeling stuck because of a lack of a home, a job or money, most participants also related their inability to progress in Sweden to their separation from family. The data showed that separation from wider support networks was a big driver of insecurities. A number of specific and personal narratives related to family separation emerged in the data: *“3 years ago, I arrived in Sweden. My family is still in the old country. After I arrived, I was not able to contact them for a year. During that time, I felt I was outside the world. I couldn’t access Swedish society, because I was sad and anxious all the time.”* Imagining a life in Sweden often became a hindrance in itself as it required some participants to appreciate a future without their family.



### *Waiting in the New Land*

Some participants felt under pressure as a result of being in a “waiting position”. One younger participant in RgM explained: “I will have to wait six months for my housing request to be dealt with” another noted refugees were “waiting for something better”. Another participant in RgM noted: “I will have to wait for a long time to get a place to live”, whilst another participant in the same group highlighted: “I have stress in life but I have a problem with my knee, which is why I don’t work”. There was also a strong sense of waiting for those for whom a right to remain had yet to be granted, either to them or to their family. As one participant in RgT noted: “When I didn’t receive right to remain, I was very stressed”. Many participants were uncertain if they would be able to find a job or suitable accommodation, or if they could afford life in Sweden: “I have been waiting for a place to live for a very long time” was a recurring narrative from most participants, as also evident in most of the collages. The strong sense of waiting was thus an integral part of the Swedish civic turn and resettlement process. The digital turn intensified the sense of waiting as it was seen to be out of sync with how our participants experienced resettlement. More specifically, whilst the digital turn was meant to “speed up” the resettlement process, our participants’ journey through resettlement was experienced as slow and uneven. Waiting also shaped many of the interactions with essential services such as housing, public transport and health. Waiting for suitable housing was a concern of most participants and meant that re-building a home, a space often associated with security, was difficult. Many participants talked about waiting for health appointments and this waiting made them anxious.

### *Managing the Vacuum through Everyday Security*

Everyday security for the participants was primarily focused on maintaining relationships to help ease the uncertainty. Support from family and friends gave them the confidence and security to move forward; and helped build resilience. As noted by one participant in RgM: “talking to my family back in Syria helps me relax”. The support received from having these wider digital networks, often cultivated through the mobile phone, provided the necessary grounding for some participants to resettle. For those participants, whose civic turn was not happening fast enough, either because of health issues, unsettled status or other stresses, the connection back to the old land, facilitated through digital technology, also slowed down their civic turn. Here, access to digital technology and networks became a distraction. This was, in part, because the digital connection to the old land diverted attention away from the obstacles experienced in the new land; the civic turn became bifurcated between what is old and what is new. This was seen to create additional stresses as it enabled refugees to witness what they had left behind – “there is much stress in my home country as there is always war” – but it was also seen to soften the transition from refugee to resettled. For most participants, however, it was clear that “adapting to a new environment takes a very long time”.

The data showed that when there is no family and friends, everyday security is replaced by mobile phone practices. For example, as noted by one participant: “There are no friends

in the new country. I think the phone is necessary. It helps me a lot. I use it to search the internet, to translate, to search maps.” This quote from RgT articulates the assemblage of usages that the mobile phone provides; yet, it also exemplifies how digital technology enables the refugee to maintain an existence outside of the civic turn.

### **Findings in Conclusion**

This subsection ties together the key findings from the individual themes. Our findings show that whilst Sweden is often seen as a “kind” country that offers security through its welfare support system and the availability of essential services for all, successfully making the civic turn requires more than a stable society. Research findings clearly demonstrate that a successful civic turn – from the perspective of the individual and of the state – also requires access routes into Swedish society. More specifically, it requires a way of navigating and connecting with the cultural landscape and the social structures, which are essential to integrate into a Swedish way of life and a Swedish way of being. In Figure 3, one older participant in RgM noted: “adapting to a new environment takes a long time”. Whilst accelerated digitalisation – an accelerated digital turn – might make the bureaucracy of resettlement more efficient, the civic turn remains an individual adaptation and transition process that might be slow and not align with the speed of the digital turn. The misalignment between the civic and digital turn creates a vacuum or spaces of waiting and, without support, these spaces become places of insecurity.

### **DISCUSSION AND CALL TO ACTION**

The most striking aspect of the findings was the need to design for the spaces that open up around the digital turn; what we have referred to as a “vacuum”. In the desire to speed up and make more efficient the bureaucratic decisions of the Swedish state, spaces emerge between decision points in which insecurities can develop and which can distract refugees away from the civic turn. In this discussion we use the findings to critically inspect the notion of the turn, identify the gaps in the digital delivery and create a call to action for digital civic engagement. In particular, we highlight how accelerated digitalisation of resettlement services are othering refugees to a greater extent. Our findings show that this is often done by the system trying to integrate refugees by assimilating them to the mainstream culture, without accounting for their distinct differences and cultures, which are essential for establishing a sense of security in the new land.

### **Critically Evaluating the Turn**

The concept of the civic turn is designed to address the fundamental security issue of inclusion in Swedish society. In this sense, security is not only protection from harms but also the ability to live free from fear, e.g. [61]. The civic turn is designed to protect many elements: the state, Swedish principles, refugees and Swedish society. The threats to these elements include: disruption to the cohesion of Swedish society, non-contribution to the Swedish welfare state, degradation of the health and well-being of refugees, degradation of the economic well-being of Swedish society. The digital services are designed to provide access to services and allocate economic, social and political resources that counteract those threats.

However, our data show that the ways that digital services are currently designed do not respond as effectively as they might to the threats and concerns that refugees face. For these services to provide a secure civic turn, the following design principles need to be observed:

- Calibrate for different speeds of access to support the challenges that come from age, language and poor health.
- Connect digital services to an understanding of place and community support; wider support networks.
- Attend to the spaces forming around the digital; what we term the “vacuum”.

Our data show that the digital turn does not make for a secure civic turn. This is partly due to the nature of everyday security concerns which are not simply the mundane security concerns articulated by the non-elites, but are concerns that are ephemeral and appear outside of the political [37]. The civic turn as a policy is designed by the state and aimed at assimilating refugees into mainstream culture. The political and economic risks that it addresses are thus ones of societal cohesion, cost efficient decision-making and the contribution to welfare wealth. The issues are addressed in the belief that responding to them benefit both the individual and the state. However, our data reflect concerns that do not appear in the political discourses of resettlement. The issues reveal the tension between designing a system that encodes universal principles of security but that powers of access to benefit from those principles vary between individuals and groups. The data also show that digitalisation of the civic turn exacerbates these tensions and further defines refugees as “the other”; thus, making the civic turn harder.

### **Re-Thinking Everyday Security in HCI**

From a security perspective, the access control central to digital services with its underpinning identification and authentication processes re-enforce the otherness of refugees, re-enforcing notions of difference and exclusion [4], rather than inclusion. The civic turn is not only an administrative process but is also a social process. In Swedish society, the civic turn is largely facilitated through interactions with civil society which provides relational services to refugees. Relational services are meant to help refugees make the civic turn needed to achieve the security goals of the civic turn and reduce the sense of difference. In a sense, relational services almost act as a counterpoint to the categorisation enforced by the digital services. However, relational services themselves are not always easy to access; institutions such as associations/föreningar are often difficult for refugees to access, cutting them off from institutions that can facilitate the civic turn [3].

Cipolla and Manzini [17] highlighted how face-to-face interactions between people is particularly important in marginalised communities as a means of responding to the shortfalls in transactional approaches to service design. One of the shortcomings that is repeatedly referenced in our data is the space or vacuum that emerges around the digitalised services, i.e. the space in between the short bursts of interaction with the state where refugees are waiting and feel stuck. Relational services are an important means of responding to that vacuum, and to

introduce different types of interaction that help refugees to safely and confidently move from one transaction to the next, see also [15, 71].

### *Digital Civic Engagement: A Call to Action*

The digitalisation of the civic turn is producing spaces around the services in which insecurities can and, as our findings show, do develop. HCI researchers are vital in the bid to find innovative and effective ways that enable refugees to develop effective everyday security strategies in this context. This might take the form of civic platforms and technologies.

Another avenue for HCI is to consider that AI and machine learning are beginning to cross-over into social care. For example, robotics is being considered for social care, primarily in the domain of elder care (e.g. [39], [72], and [70]). Although the refugees we worked with were digitally active and used digital technology to both turn to and turn away from the new land, the digital only helped them to gain the knowledge necessary to turn to a new land, it did not help them to learn how to relate to a new land. This poses the question of whether the algorithmic service design and machine learning being developed in robotics for social care can perhaps be combined with next generation of avatar technology [28, 46] to augment face-to-face support for refugees, and whether such relational support will help refugees to make the civic turn in a way that mutually benefits both the refugee and the new land. However, it is important to stress that while technology might indeed be beneficial in some cases, the integration of technology can only ever be successful if the relational and human is foregrounded and technology use understood within that context. Such HCI research and innovation has ethical and social risks [29, 46] but equally, the social, economic and political risks of not supporting this turn are significant as our data show.

### **CONCLUSIONS**

By understanding refugee resettlement as a process of multiple transitions increasingly facilitated through digital technology, we have explored how refugees resettling in Sweden experience the civic turn. We have illustrated how resettlement is shaped by multiple speeds of access and transition and how a failure to design for these different speeds creates uncertainty and insecurity. We have identified the social and cultural spaces that emerge around the digital turn and argue that these need to be considered in the resettlement process. As such, we stress the importance of connecting digital services to place and to community support in order to build resilience and attend to refugees’ everyday security concerns.

### **ACKNOWLEDGEMENTS**

We would like to thank our participants for taking part. Without their efforts, enthusiasm and energy this work would not have been possible. We would like to thank the anonymous reviewers for their valuable insights and suggestions, and Oliver Bates for his very helpful comments on an earlier draft of this work. Coles-Kemp’s contribution is funded by EPSRC award EP/N02561X/1 and Talhouk’s contribution is funded by EPSRC award EP/L016176/1 (Centre for Doctoral Training in Digital Civics). The underlying research data are openly available from Figshare at <https://doi.org/10.17637/rh.11537007>.

## REFERENCES

- [1] Konstantin Aal, George Yerousis, 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*. ACM, 111–120.
- [2] Asam Almohamed and Dhaval Vyas. 2016. Vulnerability of displacement: challenges for integrating refugees and asylum seekers in host communities. In *Proceedings of the 28th Australian Conference on Computer-Human Interaction*. ACM, 125–134.
- [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*. ACM, 59–67.
- [4] Claudia Aradau. 2004. Security and the democratic scene: Desecuritization and emancipation. *Journal of International Relations and Development* 7, 4 (2004), 388–413.
- [5] Madeline Balaam, Judy Robertson, Geraldine Fitzpatrick, Rebecca Say, Gillian Hayes, Melissa Mazmanian, and Belinda Parmar. 2013. Motherhood and HCI. In *CHI'13 extended abstracts on human factors in computing systems*. ACM, 3215–3218.
- [6] Jennifer Baranoff, R Israel Gonzales, Jay Liu, Heidi Yang, and Jimin Zheng. 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*. ACM, 7–12.
- [7] Luis Fernando Baron and Ricardo Gomez. 2017. Living in the limits: Migration and information practices of undocumented Latino migrants. In *International Conference on Social Implications of Computers in Developing Countries*. Springer, 147–158.
- [8] Emily Cochran Bech, Karin Borevi, and Per Mouritsen. 2017. A 'civic turn' in Scandinavian family migration policies? Comparing Denmark, Norway and Sweden. *Comparative migration studies* 5, 1 (2017), 7.
- [9] Alexander Betts and Paul Collier. 2017. *Refuge: transforming a broken refugee system*. Penguin UK.
- [10] Karin Borevi, Kristian Kriegbaum Jensen, and Per Mouritsen. 2017. The civic turn of immigrant integration policies in the Scandinavian welfare states. (2017).
- [11] Mike Bourne and Dan Bulley. 2011. Securing the human in critical security studies: the insecurity of a secure ethics. *European Security* 20, 3 (2011), 453–471.
- [12] Virginia Braun and Victoria Clarke. 2013. *Successful qualitative research: A practical guide for beginners*. sage.
- [13] Elisabeth Brennen. 2017. *National Identity and Refugee Policy: The Divide Between Sweden and Denmark*. Ph.D. Dissertation.
- [14] Grete Brochmann and Anniken Hagelund. 2012. *Immigration policy and the Scandinavian welfare state 1945-2010*. Palgrave Macmillan.
- [15] 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*. ACM, 321–330.
- [16] Alexander Cho, Roxana G Herrera, Luis Chaidez, and Adilene Uriostegui. 2019. The Comadre Project: An Asset-Based Design Approach to Connecting Low-Income Latinx Families to Out-of-School Learning Opportunities. In *Proceedings of the 2019 CHI Conference on Human Factors in Computing Systems*. ACM, 607.
- [17] Carla Cipolla and Ezio Manzini. 2009. Relational services. *Knowledge, Technology & Policy* 22, 1 (2009), 45–50.
- [18] Victoria Clarke and Virginia Braun. 2013. Teaching thematic analysis: Overcoming challenges and developing strategies for effective learning. *The psychologist* 26, 2 (2013), 120–123.
- [19] Lizzie Coles-Kemp and Rikke Bjerg Jensen. 2019. Accessing a New Land: Designing for a Social Conceptualisation of Access. In *Proceedings of the 2019 CHI Conference on Human Factors in Computing Systems*. ACM, 181.
- [20] 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*. ACM, 584.
- [21] Paul Collier and Alexander Betts. 2017. *Refuge: Rethinking refugee policy in a changing world*. Oxford University Press.
- [22] Adam Crawford and Steven Hutchinson. 2015. Mapping the contours of 'everyday security': Time, space and emotion. *British Journal of Criminology* 56, 6 (2015), 1184–1202.
- [23] Magnus Dahlstedt and Anders Neergaard. 2019. Crisis of solidarity? Changing welfare and migration regimes in Sweden. *Critical Sociology* 45, 1 (2019), 121–135.
- [24] Jill P Dimond, Erika Shehan Poole, and Sarita Yardi. 2010. The effects of life disruptions on home technology routines. In *Proceedings of the 16th ACM international conference on Supporting group work*. ACM, 85–88.
- [25] Martin Dribe and Christer Lundh. 2008. Inter-marriage and immigrant integration in Sweden: An exploratory analysis. *Acta Sociologica* 51, 4 (2008), 329–354.

- [26] Paul Dunphy, John Vines, Lizzie Coles-Kemp, Rachel Clarke, Vasilis Vlachokyriakos, Peter Wright, John McCarthy, and Patrick Olivier. 2014. Understanding the experience-centeredness of privacy and security technologies. In *Proceedings of the 2014 New Security Paradigms Workshop*. ACM, 83–94.
- [27] Anna Emanuelsson. 2017. After the Critique of New Public Management-A Discourse Analysis of Problematisations Within Public Administration in Sweden. (2017).
- [28] Sara Salevati Feldman, Ozge Nilay Yalcin, and Steve DiPaola. 2017. Engagement with artificial intelligence through natural interaction models. In *Proceedings of the conference on Electronic Visualisation and the Arts*. BCS Learning & Development Ltd., 296–303.
- [29] Emilio Ferrara, Onur Varol, Clayton Davis, Filippo Menczer, and Alessandro Flammini. 2016. The rise of social bots. *Commun. ACM* 59, 7 (2016), 96–104.
- [30] Karen E. Fisher and Eiad Yafi. 2018. Syrian Youth in Za’Atari Refugee Camp As ICT Wayfarers: An Exploratory Study Using LEGO and Storytelling. In *Proceedings of the 1st ACM SIGCAS Conference on Computing and Sustainable Societies (COMPASS ’18)*. ACM, New York, NY, USA, Article 32, 12 pages.
- [31] Karen E Fisher, Katya Yefimova, and Eiad Yafi. 2016. Future’s Butterflies: Co-Designing ICT Wayfaring Technology with Refugee Syrian Youth. In *Proceedings of the The 15th International Conference on Interaction Design and Children*. ACM, 25–36.
- [32] Lorna Gibson and Vicki L Hanson. 2013. Digital motherhood: How does technology help new mothers?. In *Proceedings of the SIGCHI conference on human factors in computing systems*. ACM, 313–322.
- [33] Shikoh Gitau, Gary Marsden, and Jonathan Donner. 2010. After access: challenges facing mobile-only internet users in the developing world. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*. ACM, 2603–2606.
- [34] Sara Wallace Goodman. 2010. Integration requirements for integration’s sake? Identifying, categorising and comparing civic integration policies. *Journal of ethnic and migration studies* 36, 5 (2010), 753–772.
- [35] Sara Wallace Goodman. 2012. Fortifying citizenship: Policy strategies for civic integration in Western Europe. *World Politics* 64, 4 (2012), 659–698.
- [36] Tamy Guberek, Velia Muralles, and Hannah Alpert-Abrams. 2019. “Irreversible”: The Role of Digitization to Repurpose State Records of Repression. *International Journal of Transitional Justice* 13, 1 (2019), 50–70.
- [37] Xavier Guillaume and Jef Huysmans. 2019. The concept of ‘the everyday’: Ephemeral politics and the abundance of life. *Cooperation and Conflict* 54, 2 (2019), 278–296.
- [38] Nicholas Harney. 2013. Precarity, affect and problem solving with mobile phones by asylum seekers, refugees and migrants in Naples, Italy. *Journal of Refugee Studies* 26, 4 (2013), 541–557.
- [39] Hanna-Leena Huttunen, Simon Klakegg, Nils Van Berkel, Aku Visuri, Denzil Ferreira, and Raija Halonen. 2017. Understanding elderly care: a field-study for designing future homes. In *Proceedings of the 19th International Conference on Information Integration and Web-based Applications & Services*. ACM, 390–394.
- [40] Azalea Irani, Kriti Nelavelli, Kristin Hare, Paula Bondal, and Neha Kumar. 2018. Refuge Tech: An Assets-Based Approach to Refugee Resettlement. In *Extended Abstracts of the 2018 CHI Conference on Human Factors in Computing Systems*. ACM, LBW554.
- [41] Astrid Jaeger. 2018. Designing Civic Education for Diverse Societies. (2018).
- [42] Kristian Jensen. 2016. *Scandinavian Immigrant Integration Politics: Varieties of the Civic Turn*. Forlaget Politica.
- [43] Christian Joppke. 2008. Immigration and the identity of citizenship: the paradox of universalism. *Citizenship studies* 12, 6 (2008), 533–546.
- [44] Vikki S Katz and Carmen Gonzalez. 2016a. Community variations in low-income Latino families’s technology adoption and integration. *American Behavioral Scientist* 60, 1 (2016), 59–80.
- [45] Vikki S Katz and Carmen Gonzalez. 2016b. Toward meaningful connectivity: Using multilevel communication research to reframe digital inequality. *Journal of Communication* 66, 2 (2016), 236–249.
- [46] Deborah Lawler-Dormer. 2018. Self-styling an emotionally intelligent avatar. *Technoetic Arts* 16, 1 (2018), 33–42.
- [47] Jennifer Lee, Lexi Schwartz, Emily Long, and Mustafa Naseem. 2018. Using Experiential-Learning and Iterative Design to Benefit Colorado’s Refugees. In *Proceedings of the DIS 2018 Companion Publication of the 2018 Designing Interactive Systems Conference*. ACM, 259–263.
- [48] Johan Magnusson. 2017. Final Report for Accelerated Digitalization of the Public Sector. (2017).
- [49] Carleen Maitland, Sandra Braman, and Paul T Jaeger. 2018. *Digital Lifeline?: ICTs for Refugees and Displaced Persons*. MIT Press.
- [50] Michael Massimi, Jill P Dimond, and Christopher A Le Dantec. 2012. Finding a new normal: the role of technology in life disruptions. In *Proceedings of the acm 2012 conference on computer supported cooperative work*. ACM, 719–728.
- [51] Michael Massimi, Svetlana Yarosh, Madeline E Smith, and Joseph Jofish Kaye. 2014. Designing technology for major life events. In *CHI’14 Extended Abstracts on Human Factors in Computing Systems*. ACM, 83–86.

- [52] Migrationsverket. 2019. Migrationsverket. <https://www.migrationsverket.se>. (2019). Accessed: 2019-02-10.
- [53] Per Mouritsen. 2013. The resilience of citizenship traditions: Civic integration in Germany, Great Britain and Denmark. *Ethnicities* 13, 1 (2013), 86–109.
- [54] Per Mouritsen and Astrid Jaeger. 2018. Designing Civic Education for Diverse Societies: Models, Tradeoffs, and Outcomes. (2018).
- [55] Mehek Muftee. 2015. Children’s agency in resettlement: a study of Swedish cultural orientation programs in Kenya and Sudan. *Children’s Geographies* 13, 2 (2015), 131–148.
- [56] Sara Nabil, Reem Talhouk, Julie Trueman, David S Kirk, Simon Bowen, and Peter Wright. 2018. Decorating Public and Private Spaces: Identity and Pride in a Refugee Camp. In *Extended Abstracts of the 2018 CHI Conference on Human Factors in Computing Systems*. ACM, LBW552.
- [57] Marcel Neuenhaus and Maha Aly. 2017. Empathy Up. In *Proceedings of the 2017 CHI Conference Extended Abstracts on Human Factors in Computing Systems (CHI EA ’17)*. ACM, 86–92.
- [58] Ariel Noyman, Tobias Holtz, Johannes Kröger, Jörg Rainer Noennig, and Kent Larson. 2017. Finding places: HCI platform for public participation in refugees’ accommodation process. *Procedia computer science* 112 (2017), 2463–2472.
- [59] Pontus Odmalm. 2007. One size fits all? European citizenship, national citizenship policies and integration requirements. *Representation* 43, 1 (2007), 19–34.
- [60] Columba Peoples. 2011. Security after emancipation? Critical theory, violence and resistance. *Review of International Studies* 37, 3 (2011), 1113–1135.
- [61] Paul Roe. 2008. The ‘value’ of positive security. *Review of international studies* 34, 4 (2008), 777–794.
- [62] Gillian Rose. 2016. *Visual methodologies: An introduction to researching with visual materials*. sage.
- [63] Samar Sabie, Jay Chen, Azza Abouzied, Fatma Hashim, Harleen Kahlon, and Steve Easterbrook. 2017. Shelter dynamics in refugee and IDP camps: Customization, permanency, and opportunities. In *Proceedings of the 2017 Workshop on Computing Within Limits*. ACM, 11–20.
- [64] Nithya Sambasivan, Ed Cutrell, Kentaro Toyama, and Bonnie Nardi. 2010. Intermediated technology use in developing communities. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*. ACM, 2583–2592.
- [65] Carl-Ulrik Schierup and Aleksandra Ålund. 2011. The end of Swedish exceptionalism? Citizenship, neoliberalism and the politics of exclusion. *Race & Class* 53, 1 (2011), 45–64.
- [66] Paul Schmitt, Daniel Iland, Elizabeth Belding, Brian Tomaszewski, Ying Xu, and Carleen Maitland. 2016a. Community-level access divides: A refugee camp case study. In *Proceedings of the Eighth International Conference on Information and Communication Technologies and Development*. ACM, 25.
- [67] Paul Schmitt, Daniel Iland, Elizabeth Belding, Brian Tomaszewski, Ying Xu, and Carleen Maitland. 2016b. Community-level access divides: A refugee camp case study. In *Proceedings of the Eighth International Conference on Information and Communication Technologies and Development*. ACM, 25.
- [68] Maximilian Schreieck, Jonas Zitzelsberger, Sebastian Siepe, Manuel Wiesche, and Helmut Krcmar. 2017. Supporting refugees in every Day life—intercultural design evaluation of an application for local information. In *Twenty First Pacific Asia Conference on Information Systems, Langkawi, Malaysia*.
- [69] Bryan C Semaan, Lauren M Britton, and Bryan Dosono. 2016. Transition resilience with ICTs: ‘Identity awareness’ in veteran re-integration. In *Proceedings of the 2016 CHI Conference on human factors in computing systems*. ACM, 2882–2894.
- [70] Amanda Sharkey and Noel Sharkey. 2012. Granny and the robots: ethical issues in robot care for the elderly. *Ethics and information technology* 14, 1 (2012), 27–40.
- [71] Emrys Shoemaker, Gudrun Svava Kristinsdottir, Tanuj Ahuja, Dina Baslan, Bryan Pon, Paul Curriion, Pius Gumisizira, and Nicola Dell. 2019. Identity at the Margins: Examining Refugee Experiences with Digital Identity Systems in Lebanon, Jordan, and Uganda. (2019).
- [72] Elaine Schaertl Short, Katelyn Swift-Spong, Hyunju Shim, Kristi M Wisniewski, Deanah Kim Zak, Shinyi Wu, Elizabeth Zelinski, and Maja J Matarić. 2017. Understanding social interactions with socially assistive robotics in intergenerational family groups. In *Robot and Human Interactive Communication (RO-MAN), 2017 26th IEEE International Symposium on*. IEEE, 236–241.
- [73] Graham M Smith. 2005. Into Cerberus’ Lair: Bringing the Idea of Security to Light 1. *The British Journal of Politics & International Relations* 7, 4 (2005), 485–507.
- [74] Maritta Soinin. 1999. The ‘Swedish model’ as an institutional framework for immigrant membership rights. *Journal of Ethnic and Migration Studies* 25, 4 (1999), 685–702.
- [75] Reem Talhouk, Syed Ishtiaque Ahmed, Volker Wulf, Clara Crivellaro, Vasilis Vlachokyriakos, and Patrick Olivier. 2016. Refugees and HCI SIG: The role of HCI in responding to the refugee crisis. In *Proceedings of the 2016 CHI Conference Extended Abstracts on Human Factors in Computing Systems*. ACM, 1073–1076.

- [76] Reem Talhouk, Tom Bartindale, Kyle Montague, Sandra Mesmar, Chaza Akik, A Ghassani, M Najem, H Ghattas, Patrick Olivier, and Madeline Balaam. 2017. Implications of synchronous IVR radio on Syrian refugee health and community dynamics. In *Proceedings of the 8th International Conference on Communities and Technologies*. ACM, 193–202.
- [77] 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*. ACM, 331–342.
- [78] Reem Talhouk, Kyle Montague, Andrew Garbett, Vera Araújo-Soares, Chaza Akik, Hala Ghattas, Balsam Ahmad, and Madeline Balaam. 2019. A Call For Embedding Dignity In Humanitarian Technologies. In *Proceedings of the 9th International Conference on Communities & Technologies-Transforming Communities*. ACM, 1–4.
- [79] UNHCR. 2015. Global Trends: Forced Displacement 2015. <https://www.unhcr.org/576408cd7.pdf>. (2015). Accessed: 2019-09-10.
- [80] Statens Offentliga Utredningar. 2018. Ett ordnat mottagande - gemensamt ansvar för snabb etablering eller återvändande. (2018).
- [81] Nick Vaughan-Williams and Daniel Stevens. 2016. Vernacular theories of everyday (in) security: The disruptive potential of non-elite knowledge. *Security Dialogue* 47, 1 (2016), 40–58.
- [82] Melissa Wall, Madeline Otis Campbell, and Dana Janbek. 2017. Syrian refugees and information precarity. *new media & society* 19, 2 (2017), 240–254.
- [83] Anne Weibert, Dave Randall, and Volker Wulf. 2017. Extending Value Sensitive Design to Off-the-Shelf Technology: Lessons Learned from a Local Intercultural Computer Club. *Interacting with Computers* 29, 5 (2017), 715–736.
- [84] Peter Wright and John McCarthy. 2010. *Experience-Centered Design: Designers, Users, and Communities in Dialogue*. Morgan and Claypool Publishers.
- [85] 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*. ACM, 67.
- [86] Eiad Yafi, Katya Yefimova, and Karen E Fisher. 2018. Young Hackers: Hacking Technology at Za’atari Syrian Refugee Camp. In *Extended Abstracts of the 2018 CHI Conference on Human Factors in Computing Systems*. ACM, CS21.
- [87] George Yerosis, Konstantin Aal, Thomas von Rekowski, David W Randall, Markus Rohde, and Volker Wulf. 2015. Computer-enabled project spaces: Connecting with Palestinian refugees across camp boundaries. In *Proceedings of the 33rd Annual ACM Conference on Human Factors in Computing Systems*. ACM, 3749–3758.