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Materialising Digital Borderscapes: Examining the Effects of Digital Systems on Asylum Seekers and Refugees

Saskia Greyling [1] and Corey R. Johnson [2]

[1] Institut de géographie, Université de Neuchâtel, Switzerland
[2] Environmental and Geographical Science Department, University of Cape Town, South Africa

Correspondence: Saskia Greyling (saskia.greyling@gmail.com)

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Abstract

Digitalisation is increasingly adopted in the public sector in South Africa. The country's Department of Home Affairs has a significant digitalisation project that aims to improve its efficiency in service delivery. Despite this project, it was the Covid-19 pandemic that saw the introduction of a digital interface to manage the bureaucracy of asylum seeker and refugee administration. This article examines the impacts of this asylum seeker and refugee permit extension online system. The article traces how the online system works to refigure how asylum seekers access the state and the possibility of securing documentation. We demonstrate that this online system has effects far greater than simply improved efficiency; instead, it fundamentally refigures the borderscapes navigated by asylum seekers and refugees. Here, digitalisation shifts bureaucratic responsibility to the asylum seekers and refugees, and in so doing, distances them from the state. We show this by paying attention to how the online system changes the materialities of asylum seeking; the spaces in which protection is sought; as well as the practices thereof, where actors other than the state are called on for assistance. In the world of technological interventions, this online system for permit renewal is a seemingly mundane example of digitalisation; yet its effects on the possibilities for social, legal, and even economic inclusion of asylum seekers and refugees are significant.

Keywords

borderscapes; bureaucracy; digital mundane; digitalisation; migration; South Africa

1. Introduction

In 2021, a year into the Covid-19 pandemic lockdown, South Africa's Department of Home Affairs (DHA) launched an online system through which permit-holding asylum seekers and refugees could renew their

documentation. The implementation of a digital response to a governance challenge is not surprising; digitalisation is increasingly being adopted in the public sector in South Africa. Like in many places around the world, shifting governance and decision-making practices to digital forms is often justified for its possibilities for improving state efficiency, increasing transparency and accountability in decision-making, and more generally, appealing to assumptions around what "modern" governance looks like in the contemporary period. Furthermore, the country's lockdown associated with the Covid-19 pandemic catalysed the use of digital tools to make up for limited in-person engagements. This article explores one such example of a crisis-driven digital response, in this case, the digital management of permit renewals for asylum seekers and refugees.

South Africa's legal framework and constitutional protections for migrants make the country a desirable destination for many. The country's bureaucratic administration of migration is considerable, and while migration to the country is sometimes posed as a crisis, the crisis that this article examines is rather the crisis of the management of migration, particularly in relation to asylum seekers and refugees. The DHA, the national department that is mandated to deal with citizen registration, international migration, and refugees, has a number of projects that seek to address this crisis. Many of these are digital in nature, from the online booking of appointments for certain services for citizens, to the outsourcing of particular visa administration to companies like VFS Global. However, the administration of asylum seekers and refugees remained, prior to the Covid-19 pandemic, strictly managed through face-to-face engagements. The Covid-19 pandemic, however, necessitated a shift in the way the DHA dealt with permit-holding asylum seekers and refugees, and in particular, the renewal of their documentation. Throughout this article, we use the terms "permit" and "visa" interchangeably. Under the original iteration of the Refugees Act (No 130; Republic of South Africa, 1998), recognised refugees and asylum seekers were issued "permits" as forms of legal documentation. Subsequent amendments to the Act have renamed these permits "visas." As many practitioners and refugees themselves still refer to documentation as "permits," we use these terms interchangeably throughout the article.

This article draws on academic debates that centralise digitalisation processes in urban governance. Particularly, we are inspired by calls to examine the "social relevance of digital data and digital technologies in various domains of society" (Büchner et al., 2022), looking beyond those that are considered to be exceptional or novel or successful, and instead focusing on any digital intervention with social relevance. To do this, we borrow from Leszczynski's (2020) exploration of the digital mundane. She calls for paying attention to the everyday, taken-for-granted aspects of the digital, the "seemingly ordinary and routine sites, objects, data productions, and networked practices of everyday life" (Leszczynski, 2020, p. 1194). In the world of technological interventions, the digital intervention that this article follows is of the mundane variety, a system seemingly so simple that it sits on the cusp of even being considered a digital intervention. Yet, the online system operates as a "pervasive digital [mediation] of the spaces and practices of daily life" (Leszczynski, 2020, p. 1195). For many asylum seekers and refugees, the introduction of a digital system changed how they could interact with the state. In the refugee space, the challenges of navigating a wholesale shift to a digital tool are significant. The DHA's adoption of a digital tool as a crisis response demanded that permit holders have access to smartphones and data, apps that can scan documents to PDF files, knowledge of how to attach files and how to respond to a template form, and be savvy to check spam folders. While the nature of the digital intervention—an email system—is mundane, the social relevance and implications of its introduction are significant.

In tracking the online system and how it works, we pay attention to how the online system changes the materialities of asylum seeking, from who to contact for assistance to the form of the documentation that they need to produce to be recognised and comply with the online system. We track the shifting spaces in which asylum seekers and refugees and the state meet, from long queues for face-to-face engagements at reception centres to a digital mediation through an email address, where the interaction often happens in intimate home spaces or with the help of intermediaries at internet cafes or community organisations. We examine the shifts in the practices of asylum seekers and refugees engaging with the DHA—for some, a welcome relief to be spared long queues in often hostile conditions, to an online engagement, but for others, having to figure out an online system that is unfamiliar and requires particular technological tools and know-how, and thus turning to actors outside of the state for assistance.

Through this tracking of asylum seekers and refugees' experiences of this tool, the article demonstrates and argues that this ostensibly online system fundamentally refigures borderscapes, extending these into a digital realm. A digital tool that could easily be argued as merely a tool of efficiency for improving state practices, a careful examination of the effects of the online system demonstrates striking effects for an often vulnerable group of people. We argue that the online system shifts bureaucratic responsibility to the permit holder, and that the digital borderscape becomes embodied by asylum seekers and refugees who navigate the process of seeking the protection of the state through a digital interface.

The article proceeds as follows: In the following section, we consider the proliferation of digital tools in the realm of migration governance. We propose that smaller digital interventions are underexamined, and make the case for exploring the impacts of seemingly banal digital tools at work in migration spaces. We then turn to explaining the context of the case and presenting the methodology through which this research was undertaken. The following section unpacks the effects of the DHA's deployment of the online system for permit renewals, and finally, we conclude by arguing that even mundane digital tools can have significant effects.

2. Digitalising Borders and the People That Traverse Them

In recent years, border control processes have increasingly moved to the digital realm. No longer simply clear, fixed lines of separation at the territorial edges of nation states, the concept of the border has thickened, and is now understood to be a process, as mobile, and as "dispersed a little everywhere, wherever the movement of information, people, and things is happening and is controlled" (Balibar, 2004, p. 1). As Dijstelbloem (2021, p. 57) explains:

> Borders shape networks of circulation, instituting both crude and refined selection mechanisms to sort people. But alongside the deployment of barbed wire, ID systems, databases, and patrol boats, borders are bringing something else into motion: the machinery of governing, decision-making, risk assessment, and coordination.

The deepening of the border through data-driven decision-making and artificial intelligence is changing the ways in which people encounter and engage borders.

The "borderscape" concept provides a useful lens to account for the multiplicity of border processes and through which to view how the border is displaced, negotiated, reproduced, and represented, and the myriad processes, actors, and scales involved (Perera, 2007). It draws on the work of the anthropologist Appadurai (1990) on "scapes" (the global flows of people, information, technology and ideologies), and, in combining borders with scapes, it conceptualises borders as dynamic and operating differentially in relation to different actors, creating liminal spaces (Rajaram & Grundy-Warr, 2007). The concept seeks:

> To express the spatial and conceptual complexity of the border as a space that is not static but fluid and shifting; established and at the same time continuously traversed by a number of bodies, discourses, practices and [internal and external to the state] relationships. (Brambilla, 2015, p. 19)

Increasingly, borderscapes are also traversed by digital tools for migration governance. Godin and Donà (2021, p. 3278) use the term "techno-borderscapes" to "shed light not only on the complexities and dynamics of borderscapes (territorial, geopolitical and symbolic) but also the ways in which digital encounters between actors in transit spaces shape migrants' trajectories and their transnational social networks." Techno-borderscapes, or digital borderscapes as we refer to them, are increasingly experienced by migrants in their everyday negotiations with migration governance.

In relation to border security, Glouftsios and Scheel (2021, p. 124) note that "digitisation is intrinsically linked to the rise of pre-emptive, discriminatory logics of control that call for the anticipation and pro-active addressing of 'risks' associated with international mobility." They show how digitisation of borders has three implications for border management, namely the "interconnection of an array of previously largely unconnected actors enacting border controls;...the emergence of an operational logic of control that revolves around the traceability of mobile subjects; and...restrictive effects on migrants' and border crossers' capacity to subvert control practices" (Glouftsios & Scheel, 2021, p. 125). It is these three aspects, individually and entangled, upon which much of the digitalisation and migration debate focuses, and how we structure our engagement with the overlaps between borders and digitalisation.

For example, the traceability of migrants and their mobilities are made visible to the state and other actors through complex digital interventions, what Tazzioli (2018, p. 273) refers to as the "digitalisation of the frontier," where:

> Migration movements are simultaneously the objects of an archival function, real-time monitoring and future-oriented risk analyses: migrants are spied upon, tracked and archived through mapping monitoring software in order to open up future spaces of intervention to make migration a governable phenomenon.

Digital bordering practices prioritise efficiency (Leese & Pollozek, 2023), and are therefore interested in surveillance in the moment as well as the potential for planning interventions in the future.

More intimately, migrants are traced through the state's adoption of biometric technologies. Amoore (2006, p. 338) has described how biometric borders "extend the governing of mobility into domains that regulate multiple aspects of daily life." Processes of digitalisation also work restrictively, minimising the possibility of migrants subverting control. Digital tools invoked at the border make migrants "knowable" across systems

(as Glouftsios & Scheel, 2021, demonstrate in relation to a migrant's registration and database conflict) and increasingly, the use of neural networks for undertaking processes of bordering creates what Amoore (2024) refers to as "the deep border," where "deep learning algorithms are reordering what the border means, how the boundaries of political community can be imagined, and how borderwork can function in the world" (Amoore, 2024, p. 2). Now, migrants are traced and restricted by digital tools before they are even personally identified, regardless of inherent biases in such technologies (Aradau, 2023).

One aspect of scholarship on this topic focuses on how interconnections in technology are used to improve border security. Another aspect, although not the focus of Glouftsios and Scheel (2021), has shown how digital tools are critical for migrant and refugee place-making in cities and while in flight from conflict and persecution, becoming essential components of migrant infrastructure providing "digital passages" (Latonero & Kift, 2018). In Bangladesh, for example, Hussain and Lee (2021) found digital resources to be critical components of Rohingya refugees' livelihoods, configuring power relations amongst the refugee community itself as well as with the humanitarian actors and infrastructure in the camps, despite the government's limitations on their access and use of digital tools for control. In the South African context, Meyers (2022) shows how female migrants use digital technology as a tool for transformative agency before, during, and after migration. And also in South Africa, in the negotiation of everyday experiences of migration, digital tools are a critical force of mobility to navigate the various layers of immobility confronting Somali refugees (Brudvig, 2019), and for finding what Antenucci and Tomasello (2023) refer to as urban digital citizenship (even if citizenship in relation to migrants is broadly defined), through which borders are produced and reproduced.

Sitting somewhere between the digitalisation of border security and digital tools supporting the agency of migrants is the implication of the state's neoliberal turn to managing refugees and asylum seekers. Ilcan and Rygiel (2015) trace the transformation in humanitarian responses with respect to refugee camps, where, following neoliberal interventions, responsibilities are shifted to individuals. And yet despite the appearance of having more agency in their asylum journeys, the neoliberal shift promotes "government at a distance" (Abrahamsen, 2004, p. 1459, as cited in Ilcan & Rygiel, 2015, p. 336), which ultimately disempowers the refugee. Here, what looks to promote agency instead normalises the refugee experience, promotes resilience to it, and decreases the impetus for contesting the status quo of settlements. The implementation of technical interventions in relation to the mediation of access to resources is not an unusual or unprecedented move in South Africa, where, in other contexts (particularly water and electricity meters), residents are required to adapt behaviours in relation to technical devices that mediate their access to resources (see von Schnitzler, 2017). In such examples, residents find ways to circumvent, adapt, and re-tool these devices, and in so doing, side-step the state and its expectations of residents. Although digital interventions may be trickier to re-tool, von Schnitzler's (2017) narrative accounts for everyday agency in response to neoliberal agendas. Agency is therefore critical to consider in relation to holding the state accountable despite its best efforts to shift responsibilities to asylum seekers and permit holders.

Tracing, restrictive effects, and interconnections are key themes that emerge in relation to the digitalisation of borders. There are many digital tools at work in the realm of bordering with wide-ranging effects on migrants, all of which warrant academic attention. However, there are other digital interventions that work at smaller scales with equally notable effects on migrants. Even the implementation of a seemingly "mundane" digital intervention (Leszczynski, 2020) has considerable effects on the borderscapes navigated by migrants, and particularly, often vulnerable groups like asylum seekers and refugees.

Here, we have shown that the increasing adoption of digital interventions in migration governance has wide-ranging effects on migrants in general, and asylum seekers and refugees in particular. Using Glouftsios and Scheel's (2021) distinction in the work of these digital tools, we show how migrants are traced, surveilled, segmented, and channelled across systems and spaces, and paradoxically simultaneously restricted and made responsible for their documentation by digital tools. We also show how other digital interventions can be used to foster interconnections needed to find place and community while navigating borderscapes. In the following section, we describe the context in which this research was undertaken.

3. Setting the Context: Post-Apartheid South Africa and Refugee Protection

South Africa presents an interesting case to unpack the effects of law, policy, and digitisation on refugee governance and inclusion. Prior to the democratic transition in the early 1990s, the country was considered refugee-producing and had no formal legislation or policy for refugee protection. During the democratic transition, agreements with the United Nations High Commissioner for Refugees (UNHCR) governed specific refugee flows from Mozambique. Along with the country's embrace of international human rights law, a new Constitution was drafted that proclaimed that South Africa "belongs to all who live in it" and the core civil and political rights in the Bill of Rights were extended to "[e]veryone" regardless of nationality or immigration status (Republic of South Africa, 1996). Formal refugee protection followed shortly thereafter in 1996, with the accession of the 1951 Convention Relating to the Status of Refugees, and promulgation of domestic legislation in the form of the Refugees Act (Republic of South Africa, 1998), establishing an individualised urban refugee regime based on local integration, a significant departure from the refugee camp paradigm prevalent on the continent. The legislation development process was heavily influenced by the international human rights framework, international legal experts, and South African civil society organisations, often at tension with government officials and concerns over "illegal immigration" (Handmaker et al., 2008).

The system as devised envisaged asylum seekers would lodge applications at Refugee Reception Offices (RROs) established in the major urban centres of the country. While individuals underwent refugee status determination processes—initial application forms, status determination interviews, and reviews or appeals for negative decisions—documentation would be issued as proof of legal status. This documentation, in the form of A4-sized permits, has evolved in form but has generally been valid from one to six months, depending on the individual's place in the process, and would require the individual to renew these documents by reporting to the RRO where they lodged their application upon expiry. These permits were to be re-issued until the asylum process was completed, either with the claim being recognised or rejected after appeals. Once recognised as a refugee, a refugee permit would be issued that would generally be valid for four years, which could be renewed on expiry if conditions in the country of origin persisted.

Remarkably ambitious, South Africa's refugee system was touted by the UNHCR as "one of the most progressive in the world" (Rulashe, 2007). However, in practice, the system is considered to be rife with problems and one that "fail[s] to fulfil its primary purpose—identifying those individuals in need of protection" (Amit, 2012a). For the purposes of this article, in this section we hone in on two challenges in the asylum system preceding the Covid-19 pandemic: first, the challenge of accessing RROs and receiving documentation, and second, the "disabling" nature of that documentation and lack of recognition throughout daily life.

Accessing RROs has proven difficult over the lifespan of the Refugees Act. The literature is replete with descriptions of overburdened offices with interminable queues, dysfunctional practices, and corruption (Amit, 2012b, 2015; Amit et al., 2009; Lawyers for Human Rights, 2020; Vigneswaran, 2008). Simply accessing an RRO is often a long, arduous process with survey data collected in 2011/2012 showing 53% of respondents slept overnight outside an RRO to improve their chances of accessing it, with only 35% of individuals accessing the RRO on their first visit, and 2/3 did not receive a permit on their first visit; on average, respondents required three visits to an RRO to have an administrative issue resolved. Many applicants reported that officials did not effectively communicate the process to them, with roughly half of respondents stating they did not understand the purpose of the information requested of them (Amit, 2012b, pp. 10–12). Similarly, research demonstrates that corruption in queues and to access services is a significant obstacle for many (Amit, 2015; Lawyers for Human Rights, 2020). Many of our own respondents had similar stories to share, of queuing overnight, of feeling unsafe, of having to return without knowing why.

Once obtained, the form of the documentation issued has presented its own unique challenges for asylum seekers, and to a lesser extent, recognised refugees. In the early 2000s, permits were issued on white paper, containing a picture of the applicant attached to the paper, their personal details, a case file number, and the conditions of the permit holder—the permits featured no security details and were often altered by ballpoint pen by DHA officials (Belvedere, 2007, pp. 61–62). Later versions contained barcodes and were issued on security paper, but informal practices of manual extension and alteration remained common (Scalabrini Centre Cape Town, 2016, pp. 14–15). The documentation itself does not resemble identity documentation issued to citizens, posing both technical and practical challenges as these permits are often not recognised when accessing healthcare, education, or when applying for bank accounts (Landau, 2006). The lack of recognition and acceptance has led the Refugees Act documentation to be labelled as "disabling" (Belvedere, 2007).

For the most part, these systemic challenges of the DHA have remained unaddressed, and the process is continuously imperfect. The Covid-19 pandemic prompted a new approach to undertaking permit renewal for asylum seekers and refugees, and later, new applications. We shift now to contextualise the implementation of the online system.

4. Examining an Ambitiously Named Digital Intervention

Simply an email address, the "online system" is almost too banal to be considered a "digital intervention," and yet the social relevance of this intervention is significant and critical to examine. Leszczynski (2020, p. 1194) calls examples like this the "digital mundane." She acknowledges the tendencies to focus on what she calls "the spectacularism and exceptionalism of the new" in debates on digitalisation and proposes instead that we should not neglect the "on-the-surface, taken-for-granted, seemingly ordinary and routine sites, objects, data productions, and networked practices of everyday life" (Leszczynski, 2020, p. 1194). The focus of this article perhaps started off as an examination of something new—the online system was indeed something new, something unprecedented in South Africa for asylum seeker and refugee permit extensions. And yet it quickly became apparent that this online system was far from "spectacular" or "exceptional." It is simply an email address that the DHA called, somewhat ambitiously, an "online system."

Despite the banality of the system, the effects were staggering for asylum seekers and refugees seeking to renew their permits. We focus here on the experiences of asylum seekers and refugees who were forced to transition to the online system. Ten migrants were interviewed. Respondents were selected through the assistance of a migrant advocacy organisation. Individuals were selected based on having experience with the online system, and respondents reflected a range of legal statuses, length of time in South Africa, and digital and English literacy. These variations were intended to provide a means to understand how different groups interacted with the system and its challenges. Respondents came from African countries including Cameroon, Congo Brazzaville, Democratic Republic of the Congo, Kenya, Rwanda, Somalia, Uganda, and Zimbabwe, and hold different permit types (Section 22 "asylum seeker" visas, Section 24 "refugee" visas, and Zimbabwean Exemption Permits), which have different demands of their holders and offer differing rights to stay in South Africa. Respondents' personal details were anonymised to ensure their privacy. In addition, eight interviews were undertaken with key informants who work in the field of migration governance, either in an advocacy role, as a researcher, or part of a civil society organisation. An interview with an official who worked within the DHA was also conducted. While the official's primary duties did not involve the online system, they were familiar with its roll-out, operations, and documentation. We also undertook two participant observation sessions at a migrant advocacy organisation that assists with the online system, which gave insights into the types of challenges experienced by people, as well as the documents and the process of assistance offered by the organisation. Interview transcripts were analysed for stories about the experiences of interactions with the DHA, both in person and online, as well as reflections on the materialities of documentation past and present, and the practices of renewing documentation through the online system. Key insights were pieced together to tell a compelling narrative about asylum seekers' and refugees' experiences with the online system. Through these methods, this article unpacks the implementation of the online system initiated by the DHA. It explores the nature of the online system, its promises and its materialities, its practices, and its effects. In so doing, we make an argument for why we need to look at the everyday effects of digital interventions.

5. Digitalisation Out of Crisis? The Establishment of the Online System

South Africa's response to the Covid-19 pandemic included a national disaster declaration, the closure of all ports of entry, and the introduction of a national lockdown limiting mobility. In terms of the refugee regime, all RROs were closed, and the DHA announced that any refugee or asylum documentation that expired during this time would be considered valid through a departmental directive (DHA, 2020). As the pandemic wore on, subsequent directives extended expired documentation. In April 2021, the DHA began to implement the online system as a means to address the now sizeable backlog and reduce public health concerns. While the DHA has a broader project of digitalisation, the shift to an online system for refugee and asylum permit renewals was responsive to the pandemic, and therefore implemented without the guidance of policy directives for rolling out a system with considerable implications for permit holders. The statement by the Minister outlined the process:

> With the online extension, a holder of an asylum seeker visa (section 22) or a refugee status (section 24), is able to request an extension of visa validity through email, without having to physically go to a refugee reception office. (DHA, 2021)

The visa extension directive briefly outlined a process where visa holders should email the office where their visa was granted, in order to request an extension (see Figure 1). Following this email, they should receive

the template to complete and a list of required documents, including a template form requiring basic information on the applicant, a proof of address such as a utility bill or a sworn statement, and a copy of the previous or expired visa. Once these have been submitted to the correct email address, the applicant receives communication regarding the DHA's decision regarding the extension request.

Request for extensions must be sent to the refugee reception office where the last extension was done.

Refugee Reception office	Asylum Seeker (section 22) visas	Refugee (section 24) visas
Desmond Tutu Refugee Reception Centre	dtrrc.extension22 @dha.gov.za	dtrrc.extension24 @dha.gov.za
Cape Town Refugee Reception Centre	ctrrc.extension22 @dha.gov.za	ctrrc.extension24 @dha.gov.za
Durban Refugee Reception Centre	durbanrrc.extension22 @dha.gov.za	durbanrrc.extension24 @dha.gov.za
Musina Refugee Reception Centre	musinarrc.extension22 @dha.gov.za	musinarrc.extension24 @dha.gov.za
Gqeberha (Port Elizabeth) Refugee Reception Centre	perrc.extension22 @dha.gov.za	perrc.extension24 @dha.gov.za

Figure 1. The implementation of an email permit renewal process.

At this stage, the asylum seekers and refugees were to email the RRO where they had lodged applications. The initial iteration of the system did not speak to efficiency enhancements or any gains of a digital switch, and in 2021 the DHA announced it would introduce staged "walk-in" services along with the email extension process, introducing email addresses to schedule appointments at each RRO (UNHCR, 2021). As of June 2021, the DHA had processed 9,788 refugee visa extensions and 28,249 asylum seeker visa extensions; however, a number of issues were reported, such as a lack of capacity, unanswered emails, and exploitation at internet cafes (Mutandiro & Washinyira, 2021). Across the first seven months of 2022, the online system processed 43,155 Section 22 visas and 15,032 Section 24 refugee status visas, while 10,555 requests required "additional information to be emailed" and 13,406 requests resulted in the applicant being referred "back to the office" (DHA, 2022).

6. Shifting Materialities of the Online System

In this section we consider the shifting materialities prompted by the introduction of the online system and the ways in which the online system impacts how asylum seekers and refugees attempt to integrate into social spheres. The online system's move from physical interactions at RROs to the digital realm has produced a new form of intangible digital limbo, and with the digital visas, a new form of intangible documentation. The digital shift, while pronounced as a panacea to all challenges in refugee governance, has not addressed key structural issues within the refugee regime nor introduced a fully functional digital system. An overarching effect of the online system has been the shifting of these challenges and responsibilities to asylum seekers and refugees themselves, diminishing the visibility of these challenges at RROs. In this section we focus on the effects of

what respondents referred to as the "offline stop and start" (DHA respondent, 12 September 2024) or "up and down" (Somali Association of South Africa respondent, 21 June 2024) online system and intangible forms of digital waiting, the materiality of the online system digital visas, and how the system distances asylum seekers and refugees from rights and entitlements as well as the state. We show how these shifts have significant ramifications for social inclusion and daily life.

6.1. From Queues to Digital Limbo?

The online system presented a very different materiality to the way of renewing visas previously. To start with, the quintessential queue that all asylum seekers and refugees are familiar with no longer existed. When asked about the digital system, respondents compared it favourably to the long queues that snaked around buildings and demanded early arrival. Recollections of sleeping overnight in queues were recurrent (respondents 102, 29 May 2024; respondent 103, 9 July 2024; and respondent 105, 30 May 2024).

For the digitally literate, the system seemed like an obvious and welcome approach to managing the documentation extension process. One respondent, fluent in English, said the online system was clearly laid out: "It was just straightforward" (respondent 105, 30 May 2024). She remarked that the online system was inevitable; that digitalisation is to be expected. She felt that it was safer for her to submit her extension online, without her having to visit DHA offices: "That's the best thing, like I don't have to wake up early, go queue in some places and that's not even so safe, you know….It's faster….Because everything nowadays is digital" (respondent 105, 30 May 2024).

Another respondent was similarly impressed by the system. He sent an email to the online system to request the template and received an automatic response very promptly. The next day, the template that he needed to fill in was sent to him. He found this speedy response, albeit an automated one, reassuring:

> I thought this is very good….The next day I received the [template] form. In the beginning, before you send [your permit extension request], when you email them you request the form [known as the template] and when they send it you go out and print it, and fill it in. And then you go to the police station, get your affidavit of proof of address, and then…you take your expired paper, you scan and then you send to Home Affairs. (respondent 107, 30 May 2024)

He understood the online system's process and followed the instructions to the letter. Another respondent explained that the online system "reduces stress, it reduces the crowds, but it's not being done effectively" (respondent 110, 14 May 2024). The online system's inconsistent responses were a major cause of concern for many, and she recalled hearing someone emailing over 20 times hoping to get the auto response (respondent 110, 14 May 2024).

Respondent 113 recalled getting an auto response, but that a substantive reply took about two months to come through:

> Yeah, so I keep on sending it because after the auto respond, that was it. But still I waited, but nothing came so I kept on sending, sending, sending that email. I sent it almost every week, maybe like five times. Yeah, every week I would send it; every week or so; it seems like five times. So those messages would

> pile up. So I stopped them after, like, uh, another four weeks. And…then I received it. (respondent 113, 5 June 2024)

This demonstrates the uncertainty generated by the digital system, which does not allow for any interactions with officials throughout the renewal process. Interviews with community groups and NGO staff revealed similar challenges experienced with the system, with the predominant issue being slow turnaround times and an opaque system. The waiting that is synonymous with the DHA therefore remains, but is intangible—the limbo is experienced digitally. This kind of waiting with no end in sight was a source of frustration and concern for many.

6.2. The Effects of Bureaucracy: From Analogue, to a Pandemic Pause, to a Digital System

While for some this online system may have seemed a simple-enough approach, the new system had a "hard launch" with no pilot implementation, phasing-in process, or assistance for those less technologically proficient. Given the timing of its implementation as a crisis-driven workaround, the online system could not be introduced slowly. A researcher who works closely with migrants was critical of the timing of the implementation of the online system. She noted:

> Home Affairs, they took advantage of Covid to digitise things. And the question we ask is how many migrants are able to read and write? We know that when there is a crisis somewhere, the most vulnerable pay the price….Not everybody is techno-literate. (migration researcher respondent, 21 November 2023)

The digital system required learning and sometimes assistance from others. The aspects with which people needed help were several, as a spokesperson for a community organisation outlined: "Knowledge of language, the knowledge of the online thing and also the lack of a good phone. Like, the lack of a good device to apply" (Congolese Civil Society respondent, 24 June 2024).

The challenges span the applicants' ability to read and understand formal English, their technical know-how not only of how to send an email with attachments but also how to do this in the format that the DHA required, as well as having access to the technology to do this—a smartphone with email and decent camera for document scanning purposes. One respondent stated that in providing assistance with the online system, they came to understand that many did not know they had an email application on their phone or understand how to attach documents (Somali Association of South Africa respondent, 21 June 2024).

The online system, while on the surface just a number of email addresses, required a structured interaction that seemed to become knowable only through trial and error. A respondent recalled that she discovered, from an NGO that assisted her with her application, that "you cannot write 'dear DHA' in the email" (respondent 110, 14 May 2024). She explained that many people simply don't know how to apply and often have some computer skills, but not to the specifications that DHA requires; the online system's rigidity did not accommodate deviations. One respondent, an NGO worker, detailed how attaching multiple PDF documents, as opposed to a single PDF, could result in the system not picking up the attachment (NGO respondent, 28 June 2024).

Other respondents ran into trouble with the system further into its use. The system was supposed to send an automatic response as proof of receipt of all emails. Many, however, did not receive this automatic response and so sent their extension requests repeatedly—with the effect of further overwhelming the system. The recourse for lack of hearing back from the DHA was not clear. A respondent pointed out that "there is a big difference because if you apply online, and they didn't reply to you…you can't see anyone. You can't complain, you can't say anything. Once the paper [email] goes, it goes quiet, went quiet. You get nothing" (respondent 104, 23 May 2024).

And while the email system alleged to make renewal simpler, another respondent reflected on the irony of not being able to engage with the process of the online extension:

> Do this to this and then send it to this email. And then they'll respond. But that's the funny part, most of the time they don't respond, when you email them they don't respond. So it might take you a while to see it, the results. (respondent 113, 5 June 2024)

The challenges with the online system lie in the rigidity of the structure of the emails and how they should be sent, and the lack of a mechanism to check on the progress of an application, other than sending it again. Those who had submitted extension requests but heard nothing back were, in effect, stuck. We return to this point later in the article, where we turn to the spaces in which asylum seekers and refugees sought assistance with the system.

6.3. Tangible Materialities in a Digital Age?

The materiality of asylum seeker and refugee permits is important for accessing services from both within and beyond the state. South Africa has a long and fraught history of biometric registration, the outcome of which is in part the reliance on identity documents to enable claims to be made on the state. While different in form and entitlements, asylum seeker and refugee visas act in a similar way as a means to open and maintain bank accounts and to prove identity when applying for drivers' licences, schooling, healthcare, and so on. The significance of this document became particularly apparent during participant observation at an NGO, where a variety of documents were seen, from those protected by plastic sleeves, kept safely with other documents in a document wallet, to those folded up to fit into a pocket, frayed around the edges; the permits are clearly important documents that are carried with people at all times.

Renewing their permits through the online system meant that, when successful, applicants received an email with a password-protected PDF of their extended visa. This visa had a Covid-19 watermark, but was otherwise devoid of the usual signs of a legitimate visa—the DHA's security paper, for one. The materiality of the visa is important for its use beyond the DHA, in other state and non-state environments. A respondent pointed out how, when questioned, the emailed visa became something of a challenge to officials who were not necessarily familiar with the DHA's new online system:

> The thing is, when you pull it [the printed visa] out, most of the times they'll tell you it's a photocopy, they want the original. But you tell them that it's the original, they'll never agree with you. It's like original in another way. So when they ask for it, and you try to tell them, "Okay. I don't have the printed copy here, but I have the original on my phone. Can I show you?" They will disagree and tell you it's not original, it

> is on the phone. So that's always the issue. In the banks, then they tell you they have to go verify. Yeah, but so far when it comes to using [it], I've been able to open a bank account. (respondent 113, 5 June 2024)

The respondent found that actors who require a visa, but were not DHA officials, required proof of its legitimacy:

> They keep telling you, "It is not original. That is a photocopy." Traffic department. The same thing: "That is a photocopy." They need the original, even if you tell them that that's original, it's like you're making a fool out of them. I'll just end up explaining myself that these things, they send them by email and so you have to print it, then I'll show them the email that they send me....So you have to go print it. You can't do anything else. There's no special paper that you can print on because you go [to a printing shop] to print it on A4 paper....So, most of the times, I just do a colour copy...because if you make it black and white, it will just be worse for you. (respondent 113, 5 June 2024)

Similarly, members of the Somali Association of South Africa stated that in their experience, traffic departments were generally difficult, with variability between branches. One metropolitan branch required "proof" of the document's origin, i.e., the original email from the DHA along with the visa:

> There are people that came in who lost the email that the permit was sent to them with, even if they have the copy of the permit. So the traffic department says, "No, we want the email that is proof that they sent this to you." (Somali Association of South Africa respondent, 21 June 2024)

The Somali Association were aware of people driving long distances to find traffic department branches that would assist with issuing licences to holders of digital permits. The materiality of the actual permit is now digital; but in these accounts, the tangible materiality of it is still required for everyday life. The materiality of the visa, its look and feel, contribute towards its apparent legitimacy. This new digital version of the visa does not offer institutional intersectionality or universality, but instead, demonstrates differentiated understandings of the DHA's shift to the digital and, through this change, the production of digital visas.

Here, we have shown how the online system has shifted the materiality of visa extensions. For some, this has been a welcome change; there is no need to stand in a long queue or deal with xenophobic officials. But the online system presumes technological access and digital capacity to engage with it. And, the materiality of the visas has changed, prompting new ways for migrants to prove their legal status. In the following section, we turn to the spaces where refugees learnt about and sought assistance with the online system.

7. Mundane Digital Systems, Significant Effects?

In the preceding sections we have shown how a simple, unremarkable email address, framed as a digital system, required a significant change in the practices of many asylum seekers and refugees in a very short period of time.

The research demonstrates how the digitalisation of permit renewals fundamentally reconfigures how asylum seekers and refugees encounter the state, shifting these encounters from physical interactions at RROs to

digital mediation through the email-based system. In doing so, the system transfers bureaucratic responsibility to the service user. There is nothing remarkable about the online system itself—it is an email address, the epitome of the digital mundane (Leszczynski, 2020). And yet, in this article, we focus on the user experience of this digital intervention. For those who have some technological know-how, we see positive interconnections from digitalisation (Glouftsios & Scheel, 2021), where people can make community in new places through digital means. In this case, the change to an email address seemed to be simple, a clear and obvious step in the right direction for a state department with digitalisation projects in every other area of its mandate. We see examples of people who found the online system to be a pleasure in comparison to the previously used methods of applying to extend legal status in the pre-pandemic era. For these people, digitalisation means freedom to escape the tyranny of queuing and its associated dangers. Yet for those who are less digitally proficient, the shift to the online system is a challenge.

The execution of the online system was less than seamless. The switch to the digital mode of permit renewals, and the general lack of information on the technical practicalities, as well as low English language and digital literacy rates of asylum seekers and refugees, have implications for the effectiveness of the system and for the ways in which asylum seekers access rights. Part of this shortcoming lay in the way the state publicised—or rather, did not—the new approach. It was presumed known that there was a specific way to send the relevant information. The template, only received by email after making an extension enquiry, was rigid in its requirements but unclear in instructions. The requirements were not onerous but might be considered to be restrictive for many asylum seekers and refugees who live in precarious situations, often without permanent addresses, with limited access to digital technology and online infrastructures. The system relies upon service users—i.e., asylum seekers and refugees—having a relatively high level of English literacy, and in particular a form of bureaucratic literacy to correctly fill in and provide the requisite information. Whereas previously, service users simply reported to RROs, they are now required to possess the know-how to navigate a nascent, developing system. The system also demands access to technology and digital know-how for permit renewal. Here, the restrictive effects of a digital system (Glouftsios & Scheel, 2021) are related to the fundamental mismatch between the state's assumptions and the realities of asylum seekers' and refugees' capacity to adapt to a digital system that was implemented without an extended roll-out period.

The DHA's shift to the online system is underpinned by assumptions around digital accessibility, know-how, and technical proficiency. Whereas under the previous system, asylum seekers and refugees had to report to RROs frequently for permit renewals, the implementation of a digital system has resulted in distancing asylum seekers and refugees from the DHA geographically, where engagements have transformed into a form of intangible digital limbo involving a digital geography of multiple messages in email chains. The online system's inconsistent responses, and long gaps between sending the request and receiving a response, meant that many asylum seekers sent numerous emails hoping for service, both heightening their anxiety around their legal status and inundating the DHA's servers and staff with email messages. Ironically, the tracing effects of this digital system (Glouftsios & Scheel, 2021) are superficially the reverse—while of course the state tracks applicants through the online system, permit applicants also track the state through its silences. Incorrect template forms, forgotten attachments, emails lost to junk folders, emails not sent because of data shortages, and lack of access to a computer all result in the fortification of a digital border that, while intangible, can prove impenetrable for many.

Moreover, accessing the online system for many service users is extremely difficult, if not impossible, without the assistance of a third party. Migrant agency is seen in their interactions with intermediaries, many of which are staffed by refugees and asylum seekers themselves, who recognise the vital need for inclusion and transparency. That intermediaries could step into the breach has maintained the functionality of the online system. Without them doing this work, there would be no interface between asylum seekers and the state. This has transformed the refugee spaces of everyday life across the city, transfusing community group spaces, homes, cafes, and NGOs with regulatory aspects of the asylum system. Previously sites of social interaction, they now feature aspects of the state's regulatory functions and are spaces where service users seek assistance to renew their documents.

Many of these intermediaries have had to re-imagine and change their everyday work too, changing their setups to assist asylum seekers and refugees with interacting with the state. Civil society organisations build capacity by opening their doors to assist, compiling how-to guides explaining the system in a variety of languages such as Lingala, Somali, and Swahili, and publicising changes to the process. Through NGOs and their outputs, asylum seekers and refugees learn how to create email addresses, scan and attach supporting documents, and engage government bureaucracy to access the state through these limited digital channels. It is worth noting, though, that not every intermediary is trustworthy, and many charge fees for assisting with state services that should otherwise be free. These spaces offer opportunities for solidarity and care, exploitation and neglect. And yet it is here where asylum seekers and refugees can enact their agency and find ways to engage the state beyond the official, highly bounded, system. Without trusted intermediaries, many asylum seekers and refugees would experience even more precarious situations while trying to navigate obtaining documentation.

The effects of the shift to the online system are not limited to the intangible. The online system and its PDF file-issued documentation that confer legal status to individuals (Section 22 visas for asylum seekers, Section 24 visas for recognised refugees) have implications for legibility and security. On the one hand, a digital version sent by email can alleviate some of the issues associated with the previous system's A4 printed permits that were easily damaged, lost, or stolen. On the other hand, the digital versions have fewer identifiable security features and are often not recognised by other government departments or members of the public. The effects of this are decreased access to healthcare, ineligibility to sit for critical exams at schools, and other bureaucratic disjunctures between different sites of the state.

What we show through the examination of this case is the online system as a digital borderscape—a performance around bordering that is both about geopolitical territory, as Godin and Donà (2021) propose, and about who belongs when the state says they can; but in this example, bordering is performed not through state actors but instead through a digital system that, in effect, distances those applying for permit extensions online. There are variegations of permeability of the borderscape here, with possibilities for those with access to technology, with some digital savvy, and some bureaucratic know-how. The borderscape also shifts from being navigated in state spaces (and the spaces around these through queues), to the personal, to the applicant's digital device, to their own email address, entwined with everyday home life. The digital renders borderscapes as something to be navigated in intimate home spaces. And yet in doing this, the digital has a distancing effect, drawing out the time and distance between legal entitlements and their realisation.

8. Conclusion

This article has used the example of the DHA's online system for asylum seeker and refugee permit extension applications to explore the expansion of borderscapes through digital interventions, into a more personal, intimate realm. Here, we have shown how an unremarkable state tool has significant social relevance for the ways in which asylum seekers and refugees can engage the state. Through interviews with people who have used the online system, participant observation at a migrant advocacy organisation, and interviews with key stakeholders working in the field of migration in Cape Town, we have unpacked the experience of changing from in-person engagements to an online system. Through narratives from asylum seekers and refugees, we have examined the materialities produced by the online system. We trace how these both shift and are shifted by intermediaries who step in to facilitate access to the online system, which in turn enables a decision on the applicant's legal status, which is now mediated through an often impermeable digital borderscape. Through this argument, we make the case for an online system that considers the user and where and for what purposes their documentation may be required.

The online system was described by a DHA official as a "hinge" (DHA respondent, 12 September 2024), which denotes how closely intertwined the online system remains with the previous, physical version of the system. We show here how the shift to the digital continues to rely on materialities of the past. This article contributes to expanding academic discourse on the digitalisation of migration governance, drawing especially on calls to examine the digital mundane to show the effects of digital interventions, in this case in relation to migration governance. The digital shift demonstrates the dynamic and fluid nature of the border and how a change in practice can produce significant changes for refugees' livelihoods as well as in the urban fabric, producing digital borderscapes contained on people's phones, in internet cafes, civil society organisations, and in refugees' homes. This example shows quite different versions of the interconnections, traceability, and restrictive effects of digital border management systems to those in other contexts (Glouftsios & Scheel, 2021). The South African example demonstrates how a digital intervention can distance individuals from the state and displace bureaucratic administrative responsibilities onto permit applicants themselves, as well as to third parties. The political effect of this is to distance the state from the limbo experienced by permit applicants, and a mode of differential inclusion where those lacking in English and digital literacy are pushed towards illegality, where more digitally minded refugees are able to navigate the vagaries of the online system. From the perspective of the crisis of the governance of migration, the online system has transformed what was once a physical, highly visible, manifestation of the failure of governance, namely interminable queues and crowds at RROs, into the digital realm where failure and inefficiency of the state are made invisible, and can be shifted to the asylum seekers and refugees attempting to use the system.

Further research is required to better understand the state's rationale and approach to the shift towards digitalisation, particularly a digital tool that is implemented without policy guidance with some urgency during a time of crisis, but is adapted to persist beyond this crisis. In future research, we are interested in tracking and understanding how the online system evolves over time and how communities adapt to it, for better or worse.

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Conflict of Interests

During the research period, Corey R. Johnson worked at the Scalabrini Centre of Cape Town on a detention and deportation programme. This was separate from the online system work detailed in this article.

Data Availability

Due to the nature of the research, data sharing is not applicable to this article.

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About the Authors

Saskia Greyling is a post-doctoral research fellow at the University of Neuchâtel, Switzerland. She works on questions of urban governance in the South African context, with particular interest in practices of datafication and digitalisation in relation to housing allocation, public health, and migration.

Corey R. Johnson is a PhD candidate at the University of Cape Town. He has worked for over a decade in the migration sector in South Africa and is interested in the role of the border in the production of urban space.