

Digital placemaking and the datafication of forced migrants

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Abstract

The article conducts a conceptual discussion of digital placemaking practices related to forced migration. The literature has demonstrated that displaced people engage in digital placemaking to create belonging and to actualize aspirations. Simultaneously, state and suprastate actors expand digital data practices, which construct forced migrants as categories in digital place, thereby configuring their access to physical locations and to socio-legal positioning. This article argues that the digital data practices of both state and suprastate actors, such as biometric registration and metadata tracing, appropriate digital placemaking practices by forced migrants and dissect migrants' subjectivity into data fragments that become agentic in shaping how the people access physical territory, identities, and resources. The article highlights opportunities for researching forced mobilities, place, and technologies. These opportunities include the study of nonhuman actors in placemaking processes, exploring the locus of agency in digital placemaking, and studying the intersections between embodied and digital placemaking practices.

Keywords

Biometrics, digital data practice, digital placemaking, forced migration, metadata, migration, mobilities, social media

Introduction

A predominant logic of globalization, mobility is tightly linked to its governance and eventually to the question of how people who move through space, such as forced migrants, build a sense of place (Braidotti, 2007; Lehnert and Lemberger, 2014). Forced migrants (referred to here as *asylum seekers* and *refugees*¹ or *the displaced*) are a vulnerable population when settling in a new place

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because of their history of persecution and protracted journeys, in addition to limited material and social resources and cultural differences (Bloch and Dona, 2018). Nonetheless, the displaced create physical, social, and symbolic place through embodied and digital practices, a process which is shaped by political actors. Critical migration researchers have emphasized that migrants' sense of place should be studied in relation to practices of the state, the receiving societies, and the normative grammars of racial origin and poverty associated with migration (e.g. Bojadžijev and Karakayalı, 2006; Lehnert and Lemberger, 2014; Mezzadra and Neilson, 2013).

This article offers a conceptual discussion of how digital practices by state and suprastate actors create physical, social, and symbolic place for forced migrants in the European context.

The article uses Philippsen's definition of place as both a physical and symbolic location, 'such as a position in a social hierarchy, a physical setting, or the niche properly occupied by a thing, person, or idea' (1992: 22). People speak from a sociocultural, economic, and political place. In doing so, they engage in 'membering' (1992: 14), which refers to social grouping processes based on premises that are self-avowed or imposed. In other words, place is created through practices, referring to repeated ways of acting across time and space (see Shove et al., 2012).

A solid corpus of empirical evidence shows that forced migrants build physical location as well as sociocultural and political belonging on their own terms by engaging with digital media and embodied sociality (e.g. Alencar, 2019; Gifford and Wilding, 2013; Leurs 2017; Smets, 2019). Previous studies have highlighted that placemaking after settlement is a multiscalar and multi-dimensional process (Hoellerer, 2017; Kordel and Weiding, 2019). The feeling of being at home in a physical and social place (Yuval-Davis, 2006) is evoked through everyday practices (Brun and Fábos, 2015), such as participation in the social life of a community and being recognized for this participation. Both inclusion and exclusion experiences are important markers of whether a displaced person, or migrant in general, feels attached to a country, city, or community (Anthias, 2009; Benson, 2016; Leung, 2008). Participation and shared experiences are key in making migrants feel at home and part of a group (Radford, 2017; Wernesjö, 2015).

In European media discourse, the tropes of victimhood and threat have turned into powerful discourses of symbolic bordering (Chouliaraki, 2017; Chouliaraki and Georgiou, 2019; Chouliaraki and Zaborowski, 2017). Georgiou (2018) emphasized that although migrants gain mediated visibility in Europe through representations of their experiences, those representations neither change the order of political recognition nor change the public perception of migrants as a threat. Eberl et al. (2018) demonstrated, for example, that the trope of threat has been static over time in the European media. Immigration and integration were the third most negatively connoted topic in political news coverage in European print media. If migrants are represented, they are legally positioned as criminals, particularly in the United Kingdom. The tropes of victimhood and threat are repeated on social media. Ozduzen et al. (2020) depicted the overtly negative portrayal of Syrian refugees in Turkey through an analysis of Turkish Twitter. During everyday events, 85% of tweets expressed overt racist attitudes toward Syrians, which increased to 95% during the invasion of Northern Syria by the Turkish state; hence, the victim–threat narrative emerged again. Places of leisure were regarded as inappropriate for Syrians because they countered the narrative of Syrians-as-victims who may suffer but cannot enjoy themselves. While the tropes of threat and victimhood are still dominating the media landscape in Europe, social media also serve as a space to create collective memory. In her study of collective memory spaces on YouTube, Horsti (2017) showed that news images and user-generated content were meshed and recirculated, building a commemorative space on forced migration on the platform (also see Horsti, 2019).

Humanitarian organizations in particular must resist negative media frames to elicit support for refugees. The feminized notion of the needy and poor refugee must be affirmed to emphasize that forced migrants are not threatening (Hyndman and Giles, 2011), which has been accomplished through still and moving images (Chouliaraki, 2013) and recently through humanitarian virtual reality films (Gruenewald and Witteborn, 2020). At the same time, humanitarian organizations have increasingly collected data about forced migrants to improve their efficiency in providing help in crisis situations, a move which could result in new forms of repression (Madianou, 2019).

In addition to traditional and social media as well as humanitarian organizations assigning a physical, social, and symbolic location to migrants, states use digital data practices to control migration routes and to position the migrant in a legal place. Digital data transform ‘individuals into traceable and sortable objects’ (Adey, 2004: 507) which can be exchanged and circulated through digital networks. Digital data practices position forced migrants as a category and member of a group, such as *refugee* or *asylum seeker*. This positioning shapes whether and how forced migrants can access resources and build a life for themselves. Digital data practices are understood here as an iteration of digital placemaking practices. Digital placemaking practices are repeated acts across time and space, mediated through technological devices, networks, and numerical entities that create and augment a digital, physical, social, and symbolic location for individuals and groups of people.

Maitland (2019) maintained that the datafication of migrants’ movement amplifies existing legal and political categorizations of *asylum seeker* and *refugee* and that the digital self-presentation of the displaced should be seen in relation to the data practices of political actors. Similarly, in their analysis of European Union (EU) border protection, Broeders and Dijkstra (2016) argued that migration processes are increasingly datafied because of the security concerns of nation states. Increasingly, technologies of registration and visualization govern mobilities of forced migrants and shape their opportunities to create meaningful social relations (Düvell and Vollmer, 2011). Migrants do not have control over how these data practices function (Pollozek and Passoth, 2019). Fingerprints are saved in the European Dactyloscopy (EURODAC) database and become data fragments used to identify and authenticate asylum seekers who enter and move within the EU (Maitland, 2019). Data laws enable law enforcement in Germany and other countries, such as Norway and the United Kingdom, to access migrants’ social media for identification and flight narrative verification (Brekke and Staver, 2019).

Although previous studies have shown that media and public discourses limit placemaking for forced migrants, and there is a body of research demonstrating that forced migrants use digital technologies to create place (e.g. Smets, Leurs, Georgiou, Witteborn and Gajjala, 2019), there is room to explore how migrants’ physical, social, and symbolic placemaking is configured by digital data practices by state and suprastate actors. This article illustrates two practices: biometric fingerprinting at the external borders of Europe and metadata tracing in Germany. These practices point to at least three challenges in the forced migration and media literature: how to account for nonhuman actors in migrants’ placemaking processes; how to study the intersections of embodied and digital practices; and how to understand migrant agency if data become actors themselves. In the following, the article highlights digital placemaking practices by forced migrants before turning to a discussion of how suprastate and state actors shape forced migrants’ physical, social, and symbolic placemaking through digital data practices.

Digital placemaking by forced migrants

The body of literature on migration and digital placemaking has demonstrated that transnational migrants use social media to create a sense of past, present, and aspirational future. Brun and Fábos (2015), for example, proposed that home was an everyday practice that reflects and constitutes values linked to the sense of home in a sociopolitical and historical context. In the technology and migration literature, scholars have repeatedly called for decentering technology and researching digital connectivities in intersections with embodied practices. According to Diminescu (2008), the connected migrant, as a shift from the rooted migrant, engages with digital practices in grouping processes, which exist in the intersections between the digital and the embodied. Researchers on the hotspots of refugee settlement outside Europe have strengthened the argument that digital performance needs to be studied in its intersections with embodied practices. They have pointed to existing digital gaps that have forced refugees in Kenya, Turkey, Brazil, and Southeast Asia to depend on embodied types of sociality that are powerful in social and cultural reproduction (Alencar, 2019; Jack, 2017; Kivikuru, 2013; Smets, 2019; Twigt, 2018).

In the early migration and technology literature, there is an emphasis on migrant-as-agent and technology-as-helpmate to strengthen the digital nation and thereby construct transnational migrants as modern, networked subjects (Larkin, 2013). Eritreans were shown to use digital forums as a place to strengthen democracy in Eritrea (Bernal, 2006), and diasporic Turkish Kurds engaged with digital networks to reinforce transnational collective identities (Van den Bos and Nell, 2006). By the example of Indian emigrants and their descendants, Gajjala and Oh (2013) and Hegde (2016) highlighted the importance of popular culture in transnational ties and how the sharing of popular culture online strengthened the cultural, national, and religious positioning of diasporic members. Diasporas, in other words, use the Internet as a location to build a cultural and political home and to intensify collective identity ties.

More recently, digital placemaking in the European context has been linked to new forms of resistance and solidarities, to affective relationalities, and to surveillance (e.g. Gillespie et al., 2016; Harney, 2013; Leurs and Smets, 2018; Ponzanesi and Leurs, 2014).

A body of literature has evolved concerning the functional aspects of technologies used by the displaced. In particular, a utilitarian approach to social connectivity has emerged since 2015 (Awad and Tossell, 2021). Mobile phones and digital networks have assisted displaced people to create a sense of home and carve out collective cultural places of belonging (Witteborn, 2012). Moreover, phones are instrumental tools for overcoming information precarity (Awad and Tossell, 2021; Wall et al., 2017) and for mastering challenging tasks, such as orienting in a physical place (Zijlstra and Van Liempt, 2017; see Borkert et al., 2018 on information strategies and the technical navigation of complex activities). Likewise, Kaufmann (2018) examined the localized appropriation of digital technologies by refugees in Vienna, illustrating that the people made sense of a new urban place through digital navigation. In another study, Alencar (2018) demonstrated that asylum seekers used digital platforms only in basic information searches after their arrival in the Netherlands, although they were aware of the plethora of information about settlement.

Moreover, the affective dimension of digital placemaking has been emphasized, with copresence and emotional labor being some examples (Awad and Tossell, 2021; Harney, 2013; Leurs, 2017; Witteborn, 2015; see Hjorth and Lim, 2012 and Madianou, 2016 for other social and migrant contexts). People gained hope when talking with family on the mobile phone, creating an affective place of emotional safety while interpersonal stresses produced through digital connectivities made people question the new physical and cultural place they found themselves in.

In summary, a large body of literature illustrates the role of digital technologies in mobilizing sociocultural and physical location for displaced people. The research has highlighted not only the importance of digital practices in shaping a sense of physical and social place but also the ways in which digital and embodied practices are intertwined. However, studies have emphasized that the migrant's agency in placemaking has been only partially successful because the creation of a sense of place through technology has been usurped by larger symbolic regimes of ordering, which pay tribute to migrant individuality without offering real sociopolitical recognition (e.g. Chouliaraki, 2017, cited in Mattelart, 2019; Georgiou, 2018). State and suprastate actors, such as the institutions of the EU, also shape migrant placemaking. They identify and authenticate migrants in predictive decision-making, potentially delegating placemaking to an imagined realm of endless aspiration. In the European refugee context, biometric data practices and the tracing of digital metadata by immigration and law enforcement agencies are examples of how migrants are constructed as data categories and assigned a digital, physical, and socio-legal location. These practices will be discussed in the following sections.

Biometric fingerprinting

Biometric fingerprinting is one of the multiple practices in the process of registering asylum seekers. Biometric fingerprinting is a digital identification and verification practice based on the extraction of biological identifiers of a person, such as thumb and index finger markers. Other practices include collecting data on country of arrival or gender and assigning an identification number to digital data files of persons seeking asylum (Pollozek and Passoth, 2019). Pollozek and Passoth (2019) showed that forced migrants are made governable through datafication, referring to Haggerty and Ericson's work on data doubles. Haggerty and Ericson (2000: 606) talked about 'data doubles' as reassembled abstractions of human bodies and lives from discrete data flows. These data doubles assign forced migrants a digital location, a process which both enables and constricts the migrants' creation of physical and social place through its bureaucratic and legal implications.

The fingerprint creates a digital place for the displaced person in form of a 'niche properly occupied by a thing' (Philipsen, 1992: 22). This niche occupied and created by the fingerprint has material implications, such as authenticating the forced migrant to access EU territory and resources. In other words, the migrant is represented in a digital place by its data double, which is tied to a physical niche (Philipsen, 1992) that the migrant is allowed to access (e.g. country, refugee camp, or assigned accommodation). The biometric fingerprint, in combination with other data, is also linked to the social niche the person can occupy. This niche is characterized by legal rights and obligations, such as the right to food assistance and health care, the right to be mobile, and possibly the right to settle down. The digital location containing biometric evidence is key for verifying the identity of a person and the rights and obligations linked to his or her legal status. Through an identification number, Europol and EU member state police have access to this digital location of the migrant and the data pool authenticating the person as having particular rights and obligations (see Pollozek and Passoth, 2019). In sum, the migrant is assigned a digital identity through biometric markers and this identity saved in a digital location shapes the material and symbolic position of the person.

From the perspective of the state, the forced migrant is a potential security threat and therefore requires the extension of data practices in locating the migrating person and archiving his or her existence in digital networks for verification and authentication. Security is one reason that the European Commission (EC) has strengthened the datafication of borders and migrants.

Fingerprinting is key in locating, verifying, and authenticating forced migrants when they move through geographical space, a claim that was supported by the recent *New Pact on Migration and Asylum*, which was introduced by the EC on September 23, 2020.

The *Pact* is an amendment to previous proposals in which the EURODAC system of biometric registration gains renewed importance in preventing the mobility of unauthorized forced migrants. EURODAC, which was established in 2003, is a centralized EU database that includes the fingerprints of every person who seeks asylum in the EU (European Commission, 2013). In the past, EURODAC was a main pillar of the Dublin System, which ensured that people seek asylum at their first port of entry, do not enter the EU in unauthorized ways, and do not apply for asylum in several countries. The key achievements were the improved efficiency of data gathering and protection as well as crime detection, prevention, and investigation (European Commission, 2013). Asylum seekers have the following data registered in the EURODAC database: fingerprints, date of fingerprint, member state origin, gender, reference number used in the member state of origin, or date of arrival if transferred from another member state (see <https://www.datatilsynet.dk/english/eu-fingerprint-database-eurodac>). In 2016, facial images were added (European Commission, 2016: 5), which were announced as the ‘precursor to introducing facial recognition software in the future’.

Like the EC proposals made in 2013 and 2016, the 2020 proposal highlights the importance of verifying migrant identities and ensuring border security:

The screening should consist in particular of: (a) a preliminary health and vulnerability check; (b) an identity check against information in European databases; (c) registration of biometric data (i.e. fingerprint data and facial image data) in the appropriate databases, to the extent it has not occurred yet; and (d) A security check through a query of relevant national and Union databases, in particular the Schengen Information System (SIS), to verify that the person does not constitute a threat to internal security. (European Commission, 2020: 2)

The amendment of the proposal in 2020 retains the emphasis on the importance of biometric data and on registering the person in a digital place, which in turn is used in predictive modeling and evidence-based policy. According to the 2020 *Pact*, shared biometric databases and interoperable data systems make unauthorized movement even more identifiable and predictable. This predictability is also due to the increased precision with which physical place and legal identities of migrants can be identified through technologies.

Metadata tracing

Tracing metadata is another digital practice that constructs physical and social place for forced migrants. Several countries, including the United States, the United Kingdom, Denmark, Belgium, Norway (Brekke and Staver, 2019), and Austria, have legitimized the extraction of metadata from migrants’ phones and social media profiles to verify narratives of persecution, flight routes, country of origin, and ethnic group. Since 2017, to prevent asylum fraud, officials in Germany have had the legal means to access asylum seekers’ metadata, including country codes called, geolocations, languages used in text messages, and pictures (Deutscher Bundestag, 2017). Metadata are extracted through mobile forensics programs, such as Atos in Germany and Cellebrite in the United Kingdom (Meaker, 2018).

In Germany, officers at the Federal Agency for Migration and Refugees (BAMF) produce readouts of mobile phones, which include calls, their duration, country codes, and SMS messages

as well as browsing history, geolocation, login names, and email addresses, such as those used on WhatsApp and Facebook (Biselli and Beckman, n.d.). In 2017, in the first 6 months after the law was enforced, 8000 phones of asylum seekers in Germany were searched (Privacy International, 2019). After the readout, which requires the consent of the phone owner, and data compilation, the dataset is analyzed by software, evaluated, and stored (Biselli and Beckmann, n.d.).

Through geolocation, languages used, pictures posted, browsing history, or contacts called with country codes, the refugee's physical location and sociocultural and political identity can be determined. Refugees themselves produce markers of those physical and identity places on social media through their digital placemaking practices (e.g. information searches on a country, GPS navigation through a city, or posting pictures after having reached a secure location). Those markers are not always intentionally produced by the migrant, such as history of location, but gathered by the platform if the privacy settings have not been adjusted properly. These markers can be used by officials in asylum claim decisions to assign the person 'a position in a social hierarchy' or 'a physical setting' (Philipsen, 1992: 22), such as categorizing someone as rejected asylum seeker and flagging potential deportation.

In other words, the agency of forced migrants in performing aspirations on social media through depicting a prosperous, secure life in a particular place can be captured by state and suprastate actors to counter those aspirations. Asylum seekers' digital representation of family life, partying with friends, and symbolic affiliations with wealth could become moral indicators of deception, leading to negative asylum decisions (Witteborn, 2020). This claim is backed by advocacy organizations like Privacy International (2019), which cautioned that the 'standard of proof for being a "legitimate migrant"' has now dramatically expanded'. Shadow data profiles based on social networking data could become main sources for determining asylum decisions, and testimonies about persecution and flight by asylum seekers could be disregarded.

Moreover, despite the strict data privacy laws in the EU (i.e. General Data Protection Regulation), the data extracted from phones and digital platforms could be used in automated asylum decision-making. In the data practices discussed above, the focus has shifted from the agency of the migrant in creating digital, symbolic, embodied, and material place toward institutional, human, and nonhuman assemblages that position and represent the migrant as digital data in a digital place, which in turn configures human mobility and placemaking.

Conclusion

The article has outlined some theoretical challenges linked to digital placemaking, which include the importance of viewing migrant agency in relation to the agency of digital data, accounting for human and nonhuman actors in placemaking processes, and studying the intersections of embodied and digital practices. Forced migrants engage in digital placemaking, thus producing a sense of physical and symbolic location through digital devices and networks. At the same time, biometric data doubles create a digital place for forced migrants, which can be shared through interoperable systems and used for verification and authentication. This digital place is thickened through metadata markers, partially produced by migrants themselves. The symbolic markers produced through the digital placemaking practices of migrants are increasingly appropriated by the state for prediction and control of migrant movement, with biometric and other types of data gaining agency in structuring access to shelter and national territory or long-term protection. Although it is true that data are still produced by humans, such as immigration officers and the digital infrastructures provided by institutions of the EU, migrant data can or already have become part of machine

learning so that algorithms might determine asylum decisions in the future (Privacy International, 2019).


Migrants' digital place is contingent on hierarchies of representation (O'Neill, 2016; Thylstrup, 2019). The criminal migrant forcing his way into Europe is part of these hierarchies (Eberl et al., 2018). Biological identification and metadata serve to predict, control, and minimize the risk of unregulated migration and to trace the potential lie. Biometric data and metadata can be regarded as the beginning of a politics of automated migrant locatability and surveillance that shapes – if not determines – how migrants settle in a physical place and build a life for themselves. Therefore, there is a need to explore the human–nonhuman assemblages which are structuring forced mobilities. Digital data inform predictive models about migrant mobilities and intentions, which van Reekum and Schinkel (2017: 45, italics in original), based on Amoore (2013), described as follows:

Within these operations, data no longer primarily refer to individuals – as it is precisely a yet unknown, future person-on-the-move that is the target – but is linked up laterally to compose *possible* people forecalling *possible* futures.

The digital practices of displaced people, such as posting narratives of their journeys to Europe, can be read as placemaking in the sense that they position the people as survivors and thus as being in a social and affective place. Digital practices serve to maintain personal control in extremely difficult situations, such as witnessing death at sea or living in overcrowded refugee camps. However, the practice of gaining control over existential threats to one's life is in danger of being instrumentalized and even negated through predictive modeling (Amoore, 2013). Digital data practices such as the visualization of migrants' real-time movement, biometric registration, and metadata tracing will be amplified in the future also because of the pressures of evidence-based policymaking in the EU (Kingston, 2018). In overloaded asylum bureaucracies, during peak times of asylum applications, such as 2015 in Germany, and in situations where asylum seekers are interviewed by different officials (Biselli, 2017), digitized data shared on interoperable platforms might become the main source of truth about people's biographies, configuring where displaced persons can settle and how they build a place for themselves in a new country through education, work, and community participation.

The development of digital data practices linked to migration leads to the third theoretical challenge, which is the importance of studying digital placemaking practices by migrants and the state in relation to embodied practices. Forced migrants transgress established victim–threat tropes on social media and by expressing their aspirations for an imagined future in embodied interactions. This transgression is political, as social networking and information seeking serve to create physical place as well as social and affective solidarities within and across national borders, as the migration and technology literature mentioned in the beginning has illustrated. Embodied practices are important as there is the danger that personal testimonies about flight could be sidelined by evidence in biometrics, with the human voice being silenced and narrated experience being relegated to the realm of anecdotal evidence. The shift toward the materialities and symbolic affordances of digital placemaking and data practices opens up the study of their political potential. Studying this political potential helps map the conditions that shape migration as a politicized body of knowledge and practice, which structures migrants' placemaking, feeling of belonging, and participation in a society.

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Note

1. Asylum seekers are usually defined as people in the process of claiming protection from persecution, while refugees have received a positive asylum claim decision, which enables them to settle in a country, receive a residency permit, and acquire citizenship. The asylum seeker–refugee binary is a construct, however, as asylum seekers can be granted toleration status and temporary protection in some countries, and refugees can still be deported if asylum was sought on false pretexts or when causes for flight have disappeared (see <https://www.refworld.org/docid/50b740df2.html>).

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