

Selected Papers of #AoIR2019: The 20<sup>th</sup> Annual Conference of the Association of Internet Researchers Brisbane, Australia / 2-5 October 2019

# MAPPING THE MIGRANT DIGITAL SPACE, METHODOLOGICAL CHALLENGES AND PRELIMINARY RESULTS

Ahmad Kamal IT University of Copenhagen, Denmark

Luca Rossi IT University of Copenhagen, Denmark

# Introduction

The relationship between migrant population and digital technologies has been the subject of a growing body of research over the years, and the proliferation of social media has offered a new source of insights. This paper, based on the ongoing research activities of the project [omitted], presents an effort to study migration-related social media resources, which we define as *Migrant Digital Space (MDS)*, across four European countries (Greece, Germany, Denmark and Sweden). The paper will first describe the process and challenges of "mapping" MDS before proceeding to show how the collected data variously reflects critical incidents offline, thereby suggesting that the data could serve as a useful resource to study the interplay of human movement and ICTs, as well as serving to illuminate hidden aspects of Europe's recent history of migration which, reaching a peak of influx of migrants in 2015, acts as a background for the paper.

### Background

Most studies of online migrant's activity rely on interviews or surveys (e.g. Galis & Summerton, 2018; Gillespie et al, 2018) to identify relevant online sites, user preferences, and the afforded benefits. Other studies focus on the online representation of migrants (e.g., Siapera, Boudourides, Lenis & Suiter 2018), or are aimed at settled/second-generation migrants (e.g., Kok & Rogers, 2017). Compared to the more established topic of digital diasporas, such as the *e-Diasporas Atlas* (Diminescu, 2012), the number of studies of peoples-in-transit or newcomers working primarily with online

Suggested Citation (APA): Kamal, A. & Rossi, L. (2019, October 2-5). Mapping The Migrant Digital Space, Methodological Challenges And Preliminary Results. Paper presented at AoIR 2019: The 20th Annual Conference of the Association of Internet Researchers. Brisbane, Australia: AoIR. Retrieved from http://spir.aoir.org. data is relatively small. The goal of this project was to move beyond the analyses done so far by mapping a large segment of MDS based largely on online data.

## Mapping the Migrant Digital Space

We define Migrant Digital Space as the set of online resources available to migrants (or to people interested in migrations). Within this perspective MDS is composed by a diverse set of entities: Facebook pages, twitter account, hashtags, YouTube channels etc. The selection of the specific entities to include in the MDS was based on a mixmethods approach and the actors that ended up composing the final selection belongs to four sets:

An initial set of entities were already known to the researchers do to previous research activities (references removed for review). A second set of entities identified through interviews that the researchers with migrants in Germany, Greece, and Denmark. The third set of entities was created through keyword searches (Greek, English, and Arabic) on Google search and major social media platforms (Facebook, Twitter, YouTube, Vimeo, Instagram). The possible candidate entries were then selected by examining a subject's title, profile information (where applicable) and scanning recent content and comments. This was done to establish that the entry was public (and impersonal), relevant and active. A four set of actors was "snowballed" from the third set of actors as "platform-recommended resource/page/profile etc."

This approach led to the identification of 714 different resources (detailed in Table 1) composing our exploratory mapping of the Migrants Digital Space, with Facebook being the largest source (due both to its popularity but also in reaction to changes in Facebook access [see Bruns et al. 2018]). These resources have been manually

Resource	Count
Facebook Group	42
Facebook Page	505
LinkedIn	1
Twitter Account	110
Twitter hashtag	29
Vimeo	2
website	5
YouTube Channel	20
Total	714

al. 2018]). These resources have been manually inspected and for each the research team has manually identified a set of attributes: the type of actor behind the resource (e.g. NGO, single individual, informal group, state agency), the offline location of the actor and the main language used online. Moreover, the research team has used API based methods to collect all the available data produced from each resource (e.g. all the tweets written by Twitter accounts, all the posts and comments written on Facebook pages, the comments on YouTube videos etc.).

Table 1: Resources making up MDS

Several limitations must be noted with respect to this mapping. First, a map of MDS will never be based on a representative sample due to the impossibility of sampling an unknown population (i.e., the full list of

online migrant resources is actually impossible to know). Second, of the resources that *are* known to the researchers, many cannot be included in the sample, whether due to access barriers (e.g. Facebook groups) or ethical concerns (e.g. Facebook user data).

With these limitations in mind, the sampling of MDS presented here must not be considered a representative of the actual MDS space, but rather a non-probabilistic and exploratory.

## Testing the Map of the Migrant Digital Space

Despite its limits, this MDS map can serve functions, such as studying the interaction between offline events and online activity in the context of Europe's "Long Summer of Migration" (conventionally located between summer 2015 and spring 2016). Given the preliminary nature of the material presented here, the data analysis is restricted to public Facebook pages. The analyses (further developed in the full paper) investigate how Facebook pages *reacted* to the Long Summer. For instance, Figure 1 shows the number of posts shared on the Facebook pages in the period between July 2015 and September 2015. The data shows clearly how pages located in Germany and in the Øresund region (Sweden and Denmark) saw increased activity toward the end of August, while this peak is absent in Greece (where the mass-arrival of migrants had already occurred). Figure 2 parallels this finding, while revealing that the increase of activity was especially high in pages in Arabic, inviting various interpretations for further exploration.

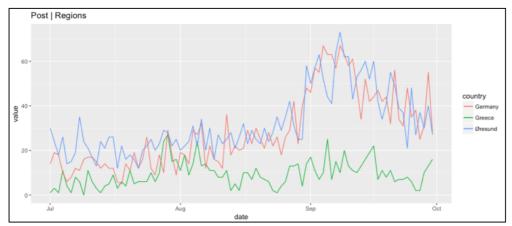


Figure 1. Number of posts on FB pages from different regions

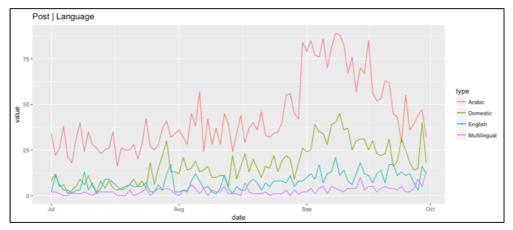
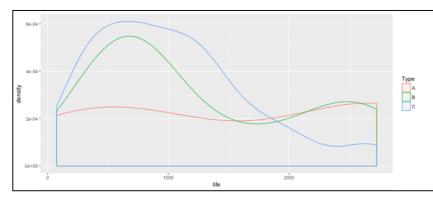


Figure 2. Number of post on FB pages written in different languages

Figure 3 presents a probability density function which shows the age (in days) of the pages in the MDS sample across different types of actors. Considering the time of the data collection (September 2018), it is possible to observe how most of the pages have been created right after September 2015, especially among type B actors (such as local NGOs) and type C actors (individuals and self-organized groups), in contrast to the Type A, fully institutional actors such as international NGOs and state agencies. One can thereby observe how the humanitarian crisis triggered a grassroots reaction manifested through the boom of younger pages from informal actors.



A final analysis can be done on the content shared by these pages at that time, as seen in Figure 4, where a tagcloud of the most frequent words used showing the centrality of borders, refugees and the need (expressed) for solidarity. Such tagclouds can be

Figure 3: Age (in days) of FB pages in the MDS

created for successive periods of time to identify shifting priorities and concerns (see Bulbul and Ismail, 2018).

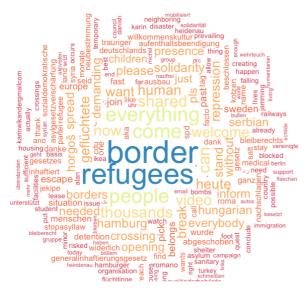


Figure 4: Wordcloud summarizing the words used during the period July-Sept 2015 on the FB pages.

### References

Bruns, A., Bechmann, A., Burgess, J., Chadwick, A., Clark, L. S., Dutton, W. H., & Howard, P. (2018). Facebook shuts the gate after the horse has bolted, and hurts real research in the process. Internet Policy Review.

Bulbul, A., & Ismail, S. H. (2018). A visual demonstration based on social media analysis of refugees in Turkey. In Proceedings of ICTACSE conference, 2018.

Diminescu, D. (2012). e-Diaporas Atlas. http://www.e-diasporas.fr

Galis, V. & Summerton, J., (2018). *We are all foreigners in an analogue world: cybermaterialalliances in contesting immigration control in Stockholm's metro system*. Social Movement Studies, 17(3), 299-317

Gillespie, M., Osseiran, S., & Cheesman, M. (2018). *Syrian refugees and the digital passage to Europe: Smartphone infrastructures and affordances*. Social Media + Society, 4(1).

Kok, S., & Rogers, R. (2017). Rethinking migration in the digital age: transglocalization and the Somali diaspora. Global Networks, 17(1), 23–46.

Siapera, E., Boudourides, M., Lenis, S., & Suiter, J. (2018). Refugees and network publics on Twitter: Networked framing, affect, and capture. Social Media + Society