jfml Journal für Medienlinguistik
Journal for Media Linguistics

Discussion Paper 4 (2019):
submitted on 22.08.2019

Reviews and comments at: http://dp.jfml.org/2019/opr-artamanova-androutsopoulos-smartphone-based-language-practices-among-refugees

Smartphone-Based Language Practices among Refugees:
Mediational Repertoires in Two Families

Olga Artamonova & Jannis Androutsopoulos

1 Introduction

In 2015, approximately 890.000 refugees, mostly from Syria, Albany, Kosovo, Afghanistan, and Iraq, were registered in Germany.[1] Media reports from this period repeatedly discuss smartphone usage among refugees, and the image of these newcomers who seemed to enjoy apparently easy access to mobile devices sparked outrage among certain segments of the German society. Here are some headlines and excerpts from these media stories:

> *Handys sind für Flüchtlinge kein Luxus*
> 'Cell phones are not a luxury item for refugees'
> (Sueddeutsche.de, 11.08.2015)

> *Das ist der Grund, warum so viele Flüchtlinge ein Smartphone haben*
> 'That is the reason why so many refugees have a smartphone'
> (Focus.de, 12.08.2015)

> *Warum so viele Flüchtlinge mit ihren Handys auf dem Marktplatz zu sehen sind.*
> *‚Ich kann mir kein Handy leisten; die Asylanten haben fast alle eins und hängen wie die Chefs telefonierend den ganzen Tag auf dem Marktplatz rum.'*

1 Cf. BAMF (2016) and Bundesministerium des Innern, für Bau und Heimat (2016).

Discussion Paper

> 'Why are there so many refugees with their cell phones on the market square?'
> "I cannot afford having a cell phone; most of the refugees possess one, they hang out on the market square phoning as if they were some kind of boss"
>
> (Remszeitung.de, 24.09.2015)

> *Viber, Xavier und deutsches Gemüse. Was haben Flüchtlinge auf ihren Smartphones? Welche Apps mutzen sie? Und welche Bedeutung hat das Handy?*
> 'Viber, Xavier and German Vegetables: What's on refugees' smartphones? What Apps do they use? What do cell phones mean for them?'
>
> (Spiegel.de, 12.05.2016)

Some of these media reports were concerned with the social disapproval of 'luxury items' possessed by refugees, considering their price and non-affordability for many Germans. Other reports feature interviews with refugees and explain the various functions mobile devices fulfill for them, including translations, personal digital storage of identity documents and photos, learning German, and gaining orientation in the new country. However, given the high diversity of asylum-seekers in terms of their linguistic repertoires, educational biographies and socio-economic status in Germany, premature generalizations about their digital media use seem problematic. Our starting point for the pilot study reported in this paper is the assumption that refugees' digital media practices are interrelated with their multilingual repertoires, on the one hand, and their process of (linguistic) integration into their new social environment, on the other. In this paper, we focus on two explorative research questions: First, how is smartphone usage by asylum-seekers related to their linguistic choices in written or spoken language? Second, how does their smartphone usage relate to informal learning of German?

The paper is organized as follows. We first discuss research findings on the interdependence of forced migration and digital media, and introduce the notion of mediational repertoires (section 2). We then outline our fieldwork, access to data (section 3), and technique of visual representation of mediational repertoires (section 4). Against this backdrop, a detailed

Discussion Paper

Discussion Paper

66 analysis of the mediational repertoires of two asylum-seek-
67 ing-families from Syria and Afghanistan is provided (section
68 5), followed by findings on informal language-learning prac-
69 tices by our informants (section 6). We conclude (section 7)
70 by summarizing our findings and exploring possibilities for
71 further research on the interrelation of language, digital me-
72 dia, and integration processes.

73 2 Smartphones, mediational repertoires, and informal learning

74 Unlike media stories, academic research on how asylum-
75 seekers and forced migrants use their smartphones is still
76 scarce. Harney (2013) carried out research on how African
77 refugees in Italy use their mobile phones and emphasises
78 their dual function of connectivity and self-protection from
79 potential risk such as police raids. Wall et al. (2015) carried
80 out qualitative interviews with Syrian refugees in a Jordanian
81 camp. Their findings show that smartphones are their key
82 medium to deal with the information precarity on the camp.
83 Smartphones enable refugees contact to left-behind family
84 members, access to relevant information, cues to assess un-
85 certain information, and access to their own representation in
86 the media. To avoid being surveyed, and to protect their rela-
87 tives and other addressees from being prosecuted by Syrian
88 authorities, these informants reported using coded language
89 in their smartphone messages (2015: 11). In another ethno-
90 graphic study, Jacquement (2017) examines how refugees use
91 smartphones after their arrival in Italy. One important func-
92 tion is in the juridical process, where an applicant's status as
93 an asylum-seeker is being determined in court. Refugees
94 draw on documents saved on their smartphone and video
95 clips they recorded on their refuge route in order to prove
96 their identity claims. They also use their smartphones as evi-
97 dence for claims of cultural ethnic or religious belonging (e. g.
98 symbols used as background images or other saved materials),
99 and the translation function is also important before court
100 and elsewhere.
101 In a three-year ethnographic study on media practices of
102 asylum-seekers in Germany, Witteborn (2015) explores the
103 processes of information sharing, transnational grouping, and
104 political learning that her informants pursue online. She finds

that computers and mobile phones were highly important for the refugees in order to establish connections, for job-seeking, dealing with daily routines of schooling and health care, and maintaining socio-cultural and religious networks and family communication outside Germany. In contrast to the present-day situation where refugees' media practices are highly focused on smartphone, Witteborn's fieldwork from 2011 to 2013 documents the importance of computers in the accommodations, whereas mobile phones were still expensive and unavailable to refugees due to their unstable stay permit. Witteborn also mentions that around forty percent of her informants used Skype and almost fifty percent used Facebook (2015: 352), thereby exploring the opportunities of these media to present themselves in ways that downplayed, or indeed erased, their stigmatized asylum-seeker status, highlighting instead other identity aspects (2015: 357–358).

A main finding of these studies, which also holds true for our informants, is the importance of mobile devices at various stages of the refuge and asylum-seeking process. For example, one informant told us that map applications on mobile phones were the only opportunity they had to verify the claims of the human trafficker regarding their current territory. Should a trafficker attempt to deceive them by saying they were already on Greek soil, a map application with GPS tracking was the only way to verify this. Our informants also report that after having secured asylum in Germany, smartphones remain crucial for a variety of purposes, including language learning, contacting people from one's own community, and receiving news from their homeland. There is a remarkable overlap here between these few studies and research on transnational family communication among migrants, which also suggests digital media have become indispensable tools for transnational family lives (Thomas/Lim 2010: 188, Madianou/Miller 2012). The insight that polymedia (i. e. the availability of various media channels for interpersonal communication) transform the experience of migration (Madianou 2014) seems therefore valid for refugees and asylum-seekers as well.

From a sociolinguistic viewpoint, such extreme cases of forced transnational displacement highlight two key points about language in the context of global social mobility. First, they reinforce the suggestion that language remains a central

resource for digital literacy (Jones/Hafner 2012). The term ‘language’ does not refer here to a specific historical language, such as Arabic or German, but to ‘languaging’, i. e. communicative practices by which speakers (and writers) draw on their entire linguistic repertoire for purposes of meaning-making (cf. Madsen et al. 2016). Language practices are crucial to both key dimensions of mobile communication: human-computer-interaction (i. e. practices of interactivity with the digital device) and human-to-human interaction (i. e. digitally-mediated interaction with human interlocutors in spoken or written language). In both, language is bound by the affordances and constraints created by smartphones (Hutchby 2001, Bucher/Helmond 2018) at the level of hardware and software. In other words, the ways smartphone users deploy their linguistic resources is closely related to the design of the device itself (e. g. the size of its keyboard and screen, which create conditions for typing and reading or watching) as much as to the design of the software applications they might decide to install on a device (each application enables particular communicative practices, but not others).

The second point about language is the flexibility of linguistic repertoires under conditions of intense (forced) mobility. Recent sociolinguistic scholarship suggests that transnational mobility and digitally-mediated communication may impact on individual linguistic repertoires in diverse ways (Androutsopoulos/Juffermans 2014, Deumert 2014, Blackledge/Creese 2017). Linguistic repertoires become more flexible, less constrained by community norms and traditions, more individualized, and more fragmented. They become enriched by (fragmented) resources, which may originate in the global circulation of digital content and exchanges or in the spatial trajectories that people move through (Androutsopoulos 2014; Blommaert/Backus 2013; Busch 2015). Taking this to the present study, we ask whether smartphone-based language practices in conditions of forced migration are characterized by repertoire stability or rather fluidity and growth. In the present case, such growth is especially related to the role of German, i. e. the majority language that forced migrants are confronted with and under pressure to acquire in order to move on in the new country.

188 To examine the close and complex relationship between
189 language practices and their technological conditions, we
190 draw on the notion of 'mediational repertoire', recently de-
191 veloped by the second author in research on multilingual dig-
192 ital communication in migrant families (Lexander/Androutso-
193 poulos forthc., Androutsopoulos/Lexander in prep.) This no-
194 tion pulls together the concepts of linguistic repertoire (dis-
195 cussed above) and mediational means (Scollon 2001).
196 Scollon's notion of mediational means posits that all commu-
197 nicative action is mediated, and that "mediated action is car-
198 ried out through material objects in the world (including the
199 materiality of the social actors – their bodies, dress, move-
200 ments) in dialectic interaction with the habitus" (Scollon
201 2001: 4). Adapting this to interpersonal communication, a me-
202 diational repertoire can be thought of as a socially and indi-
203 vidually structured configuration of semiotic and technologi-
204 cal resources that are available for communication. It com-
205 prises modalities of language (speaking, writing, or signing),
206 sets of digitally-available, pre-figured pictographic and multi-
207 media signs (e. g. emojis, memes, animated gifs, video clips),
208 and sets of software applications (e. g. smartphone apps such
209 as WhatsApp or Telegram), as well as patterned co-selections
210 of linguistic and media resources to conduct communication
211 to particular (types of) addressees. A mediational repertoire
212 can thus be thought of as an augmented, or extended, ap-
213 proach to a linguistic or semiotic repertoire, an extension that
214 seems necessary in view of current communicative practices.
215 When people communicate via smartphones, their linguistic
216 choices pattern together with their choice of software apps.
217 Examining languages in isolation therefore becomes increas-
218 ingly meaningless. What is important to people's digital com-
219 munication is, first, the range of semiotic sign-sets they have
220 at their disposal (including additional signs besides typed-in
221 ones, such as emojis, gifs, memes, which are weaved together
222 with linguistic signs into language-based utterances), and, sec-
223 ond, a range of software applications which, once installed
224 and 'opened', provide a grid for interactivity (e. g. Google
225 maps) and interaction (e. g. via WhatsApp). The figures pre-
226 sented below, 'mediagrams' (cf. section 4), are a technique
227 that aims to represent visually such multi-faceted patterns of
228 language, modality and media choice for interpersonal inter-
229 action and human-computer-interactivity.

This approach forms the backdrop to briefly examine relationships between smartphone-based practices and informal language learning in post-refuge conditions. Sociolinguistics scholarship on repertoires (notably Blommaert/Backus 2013) theorizes informal learning as a key impact on the dynamic structure of linguistic repertoires in a globalized world. We suggest this holds true for forced-migration processes, where learning is often fragmented and transient. People might learn a few words in the local language to get by while attempting to move on. Once the opportunities to settle are given (for example for Syrian asylum-seekers in Germany) language learning becomes of paramount importance and, in the ideal-case scenario, institutionally supported. In reality, the role of informal learning based on digital sources becomes immediately obvious. As discussed in the empirical part of this paper, our informants draw on various smartphone-based activities for learning German, such as YouTube language tutorials or the use of Google Translate. Indeed, even the setting of people's language preference on their smartphones could be considered a learning activity. For example, using a certain app in the German language because an Arabic version is simply not available, is a necessity, but also increases exposure to German on a regular basis. Using German language apps can therefore be considered an outcome of language learning, but also itself a part of the learning process.

Little research is available on such informal learning by means of digital media. Chik (2018) explores practices of out-of-class learning by which people carve out time in their daily routine for learning a foreign language. She investigates foreign language acquisition within Stebbins' concept of 'serious leisure' (Stebbins 1994, 2015). Drawing on a study of the self-managed out-of-class learning of three students at the undergraduate level, Chik highlights several paths of independent, personalized language learning and links them to the affordances of each digital space. Online-sites of incidental language-learning include gaming, watching series, reading news online, participating in social media communities such as Flickr/Youtube (see also Barton/Lee 2013). Generally speaking, the learners of the out-of-class language training are free to design and manage their "portable learning space" in a highly individualized and therefore unpredictable way (Chik 2018: 57). As will become evident below (section 6), multiple

Discussion Paper

similarities can be identified between Chiks' (2018) results and our own field observations.

3 Explorative ethnography and data collection at a residence site

This paper is based on explorative ethnography carried out from August 2017 to January 2018 in Hamburg, Germany's second largest city. It involved participant observation in an asylum-seeker residence site that was mostly used by families with children. Access to the field was enabled through the first author volunteering to teach a German-language class to adult residents on the site. Although the residents of the site as a whole originated from various countries and continents, most participants in the German classes offered by the first author were from Syria and Afghanistan. The course was offered for six months and was attended each week by four to ten residents with various fluency levels in German. Active observation was therefore possible at two sites: within the classroom where the German class was held, and on the residence site as a whole, which comprises several apartment buildings, a shared laundry room and shared leisure time room.

All class participants were adult learners who either had no legal claim to attend an official integration course[2] due to stay permit restrictions or were waiting for their integration course to start in the future. This learner group was highly diverse in many regards. Some participants (like Omar, discussed below) were largely illiterate, some could read but not write, and some were literate in several languages. These varying degrees of literacy were closely related to the participants' widely differing educational biographies. Some had never attended any type of school, some had to quit school at some point due to socio-economic or political reasons, while others had completed some type of professional training. Most participants could speak several languages and dialects from their respective home country as well as (fragments of) languages they acquired on their forced-migration route. Some were also competent in foreign languages such as

2 These are organized by the German state and include language and literacy classes as well as cultural training courses.

308 French or English. However, as the teacher of the volunteer-
309 ing German classes (i. e. the first author) does not speak any
310 of the residents' first languages, most classroom interaction
311 involved some form of translingual practice (Canagaraja 2013)
312 that included features of German, English, Arabic, Farsi,
313 Pashtu, and Kazakh. The last one, which happens to be the
314 first author's second language, shares some common lexis
315 with some Farsi dialects and therefore was a useful asset for
316 building a trustful relationship within the group. In addition,
317 classroom communication was facilitated by the students' and
318 teacher's mobile phones, which were regularly used to
319 searching for specific terms, pictures, translations, and even
320 socio-historical and political facts, such as the celebration of
321 *Reformationstag*[3] in order to discuss with students the impact
322 of Protestant reformation on modern European societies.

323 The refugees' situation in terms of internet access was pre-
324 carious. There was no internet access on the entire residence
325 site. Most residents therefore depended on public and private
326 Wi-Fi hot-spots in cafes and other places in order to access
327 their online applications and social media platforms. At the
328 same time, most informants and other asylum-seekers on this
329 residence site had a mobile phone, most commonly a
330 smartphone, which they used frequently. Even the first short
331 conversations with site residents and the start of fieldwork
332 quickly suggested that mobile phones are indispensable com-
333 munication tools for all basic 'migration needs'. For example,
334 the residents learn German online with the help of various
335 apps. They rely on Google maps and similar online map ser-
336 vices to gain orientation in their new urban environment.
337 They search the web for jobs, doctors, and permanent ac-
338 commodation. They use phone or WhatsApp calls and mes-
339 sages to communicate with state authorities, lawyers, and
340 their children's schools, as well as to stay in touch with family
341 members and friends in their home countries and worldwide,
342 and to create new contacts in Germany. Not least, they use
343 their cell phones for emergencies. These communicative
344 practices are not entirely specific to recent asylum-seekers.
345 Rather, the overall impression gained from ethnographic
346 fieldwork is that site residents perform the same activities on

3 I. e. Reformation Day, a public holiday in the federal state of Hamburg on 31 October.

Discussion Paper

347 their phones as many other migrant groups do. However, one
348 important difference here is the fact that non-permanent res-
349 ident status makes it very difficult to open a cell phone con-
350 tract in Germany. As long-term mobile phone contracts re-
351 quire proof of permanent residence, most residents rely on
352 overpriced pre-paid SIM cards they buy in call shops or su-
353 permarkets. Most of the residents find themselves in this pre-
354 carious situation, experiencing a high pressure to integrate
355 socially and linguistically, while not having stable means of
356 communication.
357 Three types of data were collected during this six-month
358 ethnography, i. e. ethnographic fieldnotes, guided audio inter-
359 views, and short video recordings of selected informants who
360 demonstrated their mobile phone usage. Fieldnotes include
361 the ethnographic descriptions of the observations on site and
362 in the classroom. Guided interviews were carried out with
363 nine informants, i. e. five males and four females, three from
364 Afghanistan and six from Syria (see Table 1).

365 **Table 1:** Informants' data

	Pseudonym	Gender	Country of origin	Age	Stay in Germany (in years)
1	Ebrahim	M	Afghanistan	17	3,5
2	Sarina	F	Afghanistan	56	4
3	Omar	M	Syria	52	3
4	Elayla	F	Syria	17	4
5	Kadira	F	Syria	44	4
6	Sabira	F	Syria	25	2
7	Yusuf	M	Syria	48	3,5
8	Mustafa	M	Syria	36	5
9	Miran	M	Afghanistan	15	2

366 The age of the informants varies from 15 to 56, three are
367 school students (Ebrahim, Elayla and Miran).[4] Two inform-
368 ants highlighted in grey (Sabira and Miran) were recruited
369 outside the accommodation: They are friends of the inter-
370 viewed residents. The average stay of the informants in Ger-
371 many on the time of the interviews was 3 years. Interviews'
372 topics covered the informants' linguistic repertoires, their
373 media usage in Germany and their homeland, their communi-
374 cation networks and language choice, and language-learning
375 practices. At the end of each interview, informants were
376 asked to demonstrate the smartphone apps they use most fre-
377 quently in their current daily routine.

378 **4 Mediational repertoires and mediagrams**

379 To represent relationships between language and media
380 choices in our informants' smartphone-based practices, we
381 draw on a visual representation technique termed 'media-
382 gram' (Lexander/Androutsopoulos, forthc.). A mediagram is a
383 visual representation of the co-patterning of language, lan-
384 guage modality and media choices in digitally-mediated com-
385 munication. The idea and term are inspired by sociograms, a
386 social network visualization method (Hoang et al. 2006) that
387 has been widely adapted in sociolinguistics for research on
388 linguistic variation and change (Sharma 2017). Similar to the
389 use of sociograms in social-scientific research generally, me-
390 diagrams are a graphical representation of qualitative data
391 aimed at making patterns visible and at presenting infor-
392 mation during the data-gathering process (Huagan et al. 2006,
393 Tubaro et al. 2014). The design of mediagrams orients that of
394 sociograms for 'ego' networks (or personal networks), which
395 represent social relationships between a core informant (ego)
396 and relevant partners (alters) by means of a circular layout
397 and 'ego'-centred graphic pattern (Sharma 2017). However,
398 mediagrams differ from other versions of sociograms in the
399 kind of information they represent and the graphic means de-
400 ployed to this aim. Their main focus is on networks of com-
401 municative connections enabled by mobile devices. Shapes,

4 Pseudonyms are used throughout this paper.

402 layout, and colour are deployed to represent different lan-
403 guages, language modalities, and mediational tools (i. e. soft-
404 ware apps).
405 For the purposes of this paper, mediagrams are compiled
406 based on information reported in the interviews in order to
407 represent the following types of information. Based on a cir-
408 cular layout, each informant is represented in the center of a
409 mediagram, their interlocutors (as reported in the interview)
410 radiating in distinct nodes. Our scheme distinguishes between
411 Germany-based interlocutors and those abroad. All address-
412 ees are identified by their social relationship to *ego* and their
413 country of residence, if abroad. Against this backdrop, colors
414 and layout structure are used to represent language choices:
415 each reported language is given one color, and all languages
416 reported by an informant are arranged in a pie graph around
417 the 'ego' node, with the size of each slice signifying the im-
418 portance of each language in the interviewees' report about
419 their smartphone-based language practices.[5] Our informant is
420 connected to all reported interlocutors by lines, which signify
421 the reported modality of language by line type: continuous
422 lines are for written, dotted ones for spoken language use,
423 and a 'Morse' pattern signifies both modalities are being used
424 in a particular dyad. Each application is represented by its re-
425 spective (trademark) icon. Non-interpersonal practices,
426 where our informants interact with software rather than with
427 other humans, are listed separately and also coded by lan-
428 guage choice.

429 **5 Linguistic choices and smartphone apps: comparing two families**

430 The following mediagrams, based on the guided interviews,
431 summarize the interdependence of three key notions: lan-
432 guage selection, medium/program selection and the address-
433 ees. In order to explore this interdependence, two families of
434 different origins were selected: one Syrian and one Afghani
435 family. Our analysis explores the complexity of their language

5 As discussed in Lexander/Androutsopoulos (forthc.), the decision to represent distinct languages by distinct colors is not without problems. The apparently bounded delimitation of languages promoted by this design is theoretically unfortunate, but practically unavoidable. Our decision follows a pragmatic reasoning, namely, to make language repertoires visible and analyzable. This representation does not stand for an essentialist view on multilingualism.

acquisition and general integration processes practiced on smartphone. It seems important to point out that our decision to compare families rather than individual users is not random, but enables to explore the role of older children and adolescents in refugees' communication practices. Most of the parents in these families were not fluent enough in German or English to participate in the interview, therefore their teenage children translated and explained our research goals to their parents and helped to set up the interview appointments. As in many other migrant families, teenage children mediate between their parents and various institutional authorities (school, doctors, migration office). and even act as German language trainers to their parents. Therefore, studying refugees' language and media practices needs to take into consideration the family network adult refugees they rely on in order to get by in their new sociolinguistic environment.

5.1 The Syrian family

The Syrian family consists of the father, Omar, the mother, Kadira, and their daughter, Elayla, who was a high-school student during fieldwork. Elayla also acted as an interpreter in her parents' interviews. This family has lived in Germany for four years.

Figure 1 shows Omar's mediagram. His meditational repertoire is quite distinct compared to all other informants considered in this paper. Most of the practices he performs on his phone are carried out in spoken Arabic. His preferred software apps are regular phone-calls and WhatsApp, which he also uses to do phone calls. This limitation is explained by Omar's educational biography, more specifically the fact that he only had three classes of school education and therefore has great difficulties reading. Regarding Omar's learning of German, his daughter, Elayla, reports that her father used to have a phone application for learning numbers and letters, which he however stopped using after a while. Elayla explains some strategies Omar uses in his daily communicative routines while in Germany (see appendix for original excerpts and transcription conventions):

Discussion Paper

473 **Excerpt (1):** Omar (interpreted by Elayla)

474 218: E: He can write in Arabic • but very little • and also
475 when he writes, he makes mistakes • he knows many streets
476 even though he cannot read the name of the (bus/train) sta-
477 tion properly • but when he hears its name pronounced and
478 he sees one thing in that street • then he can keep it in his
479 head • therefore he knows a lot of streets in Germany this
480 way • even when I'm looking for a doctor's office for exam-
481 ple • and I say let's google it • he says• just follow me, I know
482 the address • he's got a kind of computer in his head

483 Unlike her husband, Kadira has a broader meditational reper-
484 toire (Figure 2). One of its most distinct features in her media-
485 gram is the range of German-speaking interpersonal contacts.
486 Kadira mentions at least six contacts in the interview, two of
487 which, namely a teacher and her mentor, are external to the
488 residence site. Kadira also communicates in German within
489 her two sons and her daughter, Elayla, who explained in her
490 interview that she puts pressure on her mother to actively use
491 the German language (see *below*). Kadira also speaks English,
492 which is explained by the fact she attended school for 11
493 years and has a higher literacy level.

494 **Excerpt (2):** Kadira (interpreted by Elayla)

495 178 E: in contrast to my father, my mother is always online •
496 she surfs online because she can read better than he does •
497 she can read both German and Arabic very well, but he
498 can't, therefore he cannot do that much on the Internet

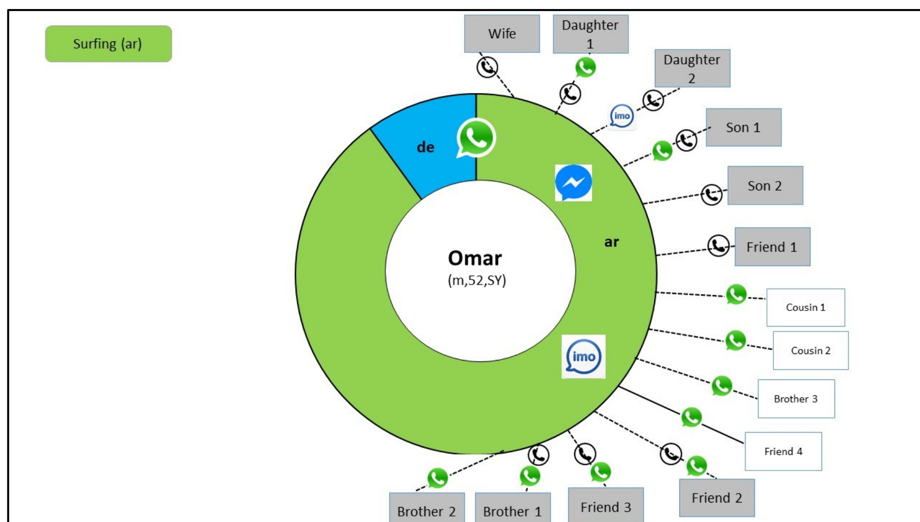
499 Kadira also learns German on her phone with the help of her
500 children. Her daughter, Elayla, reports that her mother learns
501 German online every day for at least one hour. Kadira also
502 uses German to surf the web and translate from Arabic to
503 German via Google Translate. She highlights the importance
504 of this ability when it comes to a critical situation such as a
505 hospital emergency:

506 **Excerpt (3):** Kadira (interpreted by Elayla)

507 36 E: my mother wants to say, that she had been alone in
508 the hospital last week and that she had used this program
509 [Google Translate], so that the doctors could understand her
510 well.

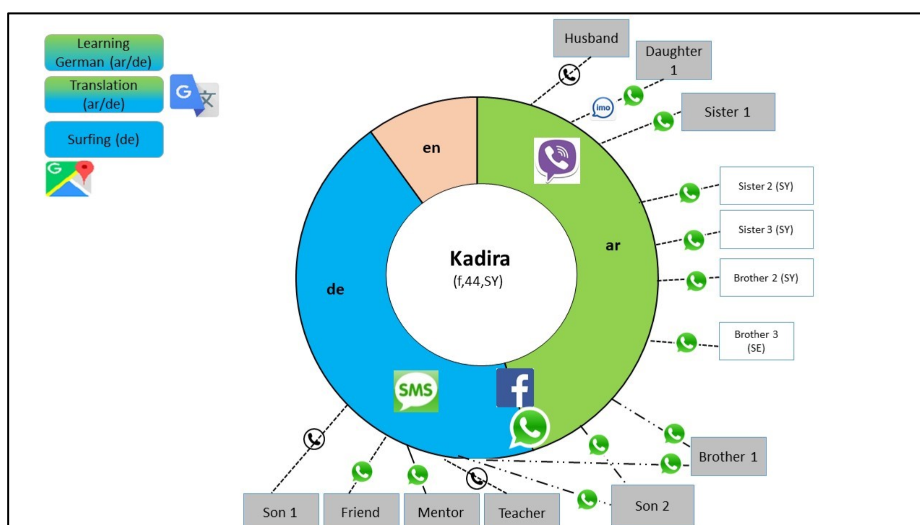
Discussion Paper

511



512 **Figure 1:** Omar's mediagram

513



514 **Figure 2:** Kadira's mediagram

515 Like her husband, Kadira prefers the spoken mode and
516 WhatsApp. She also uses other apps such as Facebook, SMS-
517 Messaging, Viber, and Imo, which are not part of Omar's rep-
518 ertoire. Kadira touches in her interview upon the lack of
519 wireless internet access on their accommodation site, empha-
520 sizing the importance of internet access for her younger chil-
521 dren‘s language-learning:

522 **Excerpt (4):** Kadira (interpreted by Elayla)

523 340 E: She says, that she finds it bad that we do not have the
524 internet at home and that we cannot use Youtube for learn-
525 ing German. My younger brothers also want to watch the

Discussion Paper

526 children series in German, but they can't because we don't
527 have any internet.

528 As for Elayla, one obvious characteristic of her mediagram
529 (Figure 3) is that she has almost no contacts outside of Ger-
530 many. An exception to this are her friends abroad whom she
531 stays in contact with via Facebook, thereby using English as a
532 lingua franca. These are mostly people she met on her way to
533 Germany. Elayla's linguistic repertoire is more diverse than
534 that of her parents. She speaks German, English, Arabic,
535 Kurdish, and Turkish at different proficiency levels. It is most
536 remarkable that even her family language turned to be Ger-
537 man, which she reports as being one of her two most fre-
538 quently used languages along with Arabic. She even tries to
539 use some German with her father, whose German knowledge
540 is quite limited. Besides German, she uses Arabic and English
541 in both the spoken and written mode.
542 Elayla is enrolled in a German high-school (*Gymnasium*)
543 where she has to communicate in German to her teachers
544 and classmates. She expressed a high commitment to improv-
545 ing her German, which she prefers to other languages in her
546 linguistic repertoire. In the extract below, Elayla refers to her
547 preference of German in her interaction with an Arabic-
548 Kurdish speaking friend of hers.

549 **Excerpt (5):** Elayla

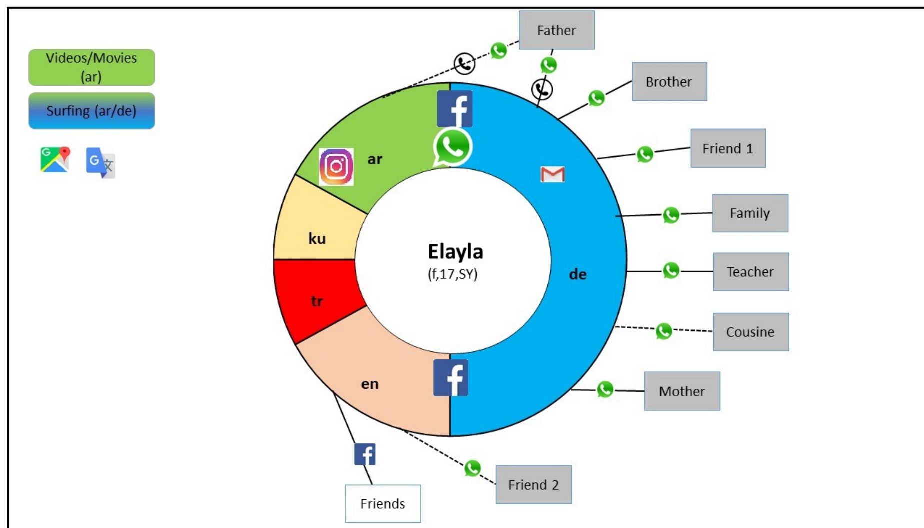
550 164 E: She is a best friend of mine. And we always write
551 each other messages over WhatsApp. We speak German.
552 And I send her a lot of written messages. She can speak
553 Kurdish and Arabic. But we only speak German. So that we
554 don't make our German worse.

555 Along with German and English, which are mandatory lan-
556 guage-subjects at school, Elayla also learns Turkish, which is
557 offered as a foreign language along with French and Spanish.
558 Her interest in this language was raised long before coming to
559 Germany:

560 **Excerpt (6):** Elayla

561 17 E: I can speak a bit of Turkish. And I can also understand
562 it, but I cannot read and write it. I can sometimes use it. [...]
563 I've learned a lot of Turkish songs and I keep singing them

564 all the time. When I was in Syria, my sister and I used to
565 watch a TV series in Turkish. Well, dubbed in Arabic.



566

567 **Figure 3:** Elayla's mediagram.

568 Remarkably, Elayla's mediagram includes some apps that her
569 parents don't use, namely email and Instagram. Being a stu-
570 dent, Elayla must have an email account in order to send and
571 receive school documents and weekly assignments. Insta-
572 gram, on the other hand, is one of the most popular social
573 media platforms in Elayla's age group. Elayla also uses her
574 smartphone for watching videos and movies in Arabic, and
575 surfs the Internet in two languages, German and Arabic.
576 Summing up, this Syrian family shows a wide range of
577 smartphone-based practices with clear intergenerational dif-
578 ferences. All three family members use their smartphones to
579 browse the web, look up information, keep up contact with
580 other people, entertainment (e. g. watching videos), and vari-
581 ous language-related practices such as everyday-purpose ma-
582 chine translation and learning German. While both parents
583 are mainly limited to the use of one (Omar) or two (Kadira)
584 languages and a strong preference for the spoken mode, the
585 daughter displays a multilingual repertoire, which is shaped
586 by her forced-migration experience (friends in Turkey) and
587 her media practices (e. g. Turkish series, Facebook communi-
588 cation in English). While both parents actively maintain con-
589 tact to family members who remained in Syria, Elayla does
590 not maintain any contacts to Syria, perhaps due to her young
591 age of forced migration. Omar's case exemplified the close

Discussion Paper

Discussion Paper

592 relationship between illiteracy and smartphone usage, espe-
593 cially when it comes to metalinguistic practices and more
594 specifically language learning. Having had only three classes
595 of school education, Omar strongly prefers spoken-language
596 applications and avoids text-messaging.

597 5.2 The Afghani family

598 The second family consists of a mother, Sarina, her son,
599 Ebrahim, and two more sons who were not interviewed. The
600 family has been in Germany for four years. Ebrahim attends
601 high-school and Sarina stays at home.
602 Sarina speaks Farsi and learns German in a class offered on
603 the accommodation site. Most of her communication is per-
604 formed in Farsi. Like the Syrian parents discussed above, Sa-
605 rina remains in contact with her family and acquaintances
606 abroad. Some of them still live in Afghanistan, others have
607 migrated to other European countries, e. g. Netherlands or
608 Sweden. Sarina uses two main apps, WhatsApp and Viber, for
609 most of her media interactions, thereby both speaking and
610 writing. In her interview, Sarina told us she installed Viber
611 long before WhatsApp and keeps using this app out of con-
612 venience. To communicate with her sons, Sarina draws on
613 both German and Farsi. Her only German-speaking contact is
614 her mentor, an elderly German woman, who helps her buy
615 groceries and gain orientation in Hamburg. The mentor com-
616 municates with Sarina only through WhatsApp text messag-
617 ing. Along with the German courses offered by the first au-
618 thor on the resident site, Sarina also learns German online
619 (see section 6).
620 Sarina also reads the news in both languages and uses
621 Google Translate, the machine translation app, on a daily ba-
622 sis. When surfing the Internet, Sarina also uses both languages
623 interchangeably. She loves to watch YouTube cooking shows
624 in Farsi and to then try out the recipes. Sarina also showed us
625 a smartphone application called “Muslim Pro” which Muslims
626 use for conducting their prayer sessions.[6] It provides infor-
627 mation about prayer times and draws on the smartphone

6 The Facebook page of ‘Muslim Pro’ has more than 1.308.992 subscribers (as per 25 April 2019), see https://www.facebook.com/muslimpro.

user's GPS (geo-positioning coordinates) to identify the position of Mecca. It also offers some prayers in Arabic, transliterated into the Latin alphabet with a German translation.

Sarina's son, Ebrahim (Figure 6) was 17 years old during fieldwork. His linguistic repertoire includes Farsi, German, Turkish and English, with German and Farsi being his most frequently-used languages. WhatsApp is the app he uses most. Ebrahim uses certain apps for communication with particular speakers. For example, he uses email for communication with school teachers, while Viber is reserved for interaction with his mother.

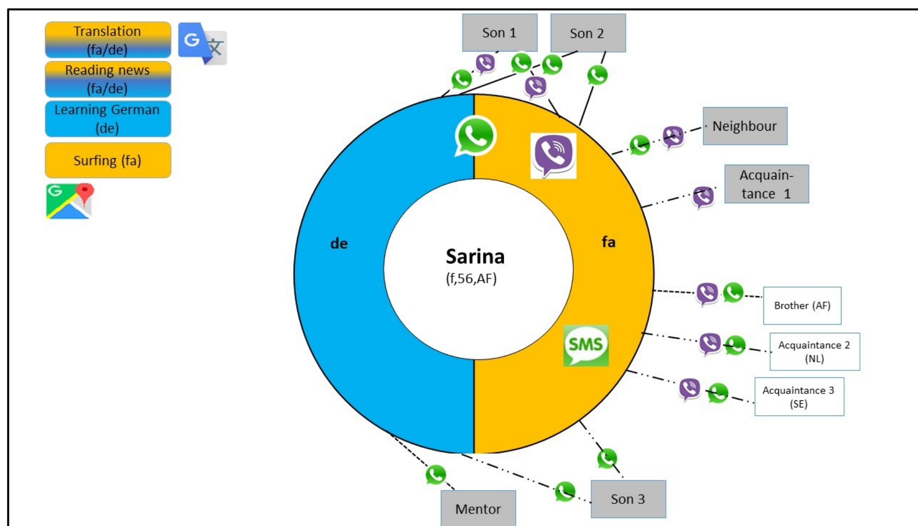


Figure 4: Sarina's mediagram

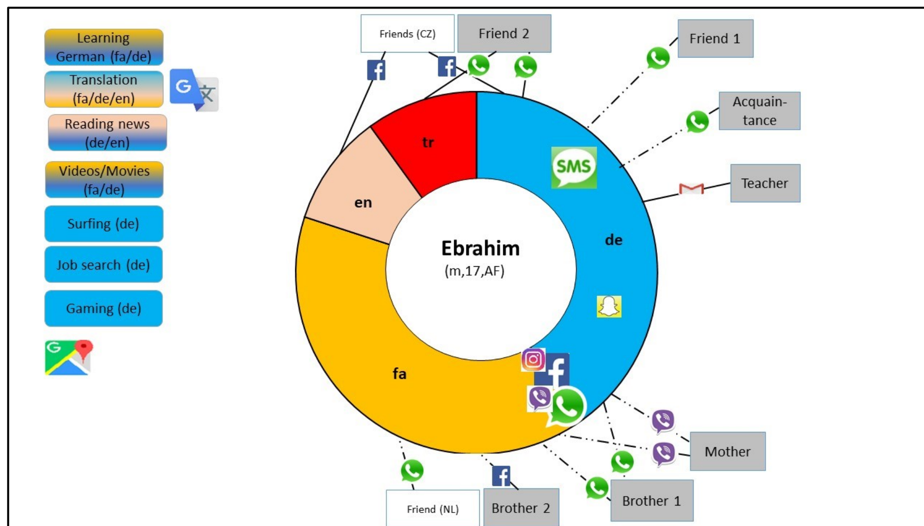


Figure 5: Ebrahim's mediagram

Discussion Paper

Like Elayla, Ebrahim's mediagram is more diverse and complex than that of his mother. Not only does he speak and write more languages and uses more apps, but he also maintains more contacts in his daily communication. Like Elayla, Ebrahim maintains no contacts to Afghanistan, his country of origin. His connections abroad are friends in other EU countries (Netherlands and Czech Republic), which he mostly contacts via WhatsApp or Facebook. Both Elayla and Ebrahim use Facebook for communication with friends abroad and do so mainly in English. Ebrahim's repertoire also includes Instagram, where he uses both his main languages, German and Farsi. Additionally, Ebrahim mentions Turkish as one of the languages he uses on WhatsApp with one of his friends in Germany:

Excerpt (7): Ebrahim

> 47 E: I can understand Turkish a bit and I can also speak some. Not a lot. I learned it from my classmates. In my class there are 24 students and 18 of them come from Turkey. That is why. They taught me the languages a bit.

Unlike Elayla, who gained interest in Turkish through her fondness for Turkish soap operas and learns standard Turkish as a foreign language at school, Ebrahim experiences spoken Turkish in his direct surroundings and thereby learns bits of the language informally. Some of his classmates have a second- or third-generation Turkish background and are Turkish/German bilinguals. Ebrahim does not attend an 'integration class'.[7] He learned German on his smartphone, has now successfully passed that stage and attends regular school classes. In the following excerpt, Ebrahim reports about his first experience in a German school while attending the German integration class.

Excerpt (8): Ebrahim

> 185 E: On the first day of school my teacher got disappointed. All the students had to start with the ABC and I could already speak some German. She asked me why I

7 In Hamburg, refugee children who have arrived in Germany recently and need to learn German to attend a regular school are first sent into a so-called 'integration class' that is mainly oriented towards learning the German language and usually lasts for a year.

> could speak so well. At that point I had been in Germany for two months. I told her that I had learned German by myself but without any grammar.

Some of Ebrahim's smartphone routines are monolingual (in German), e. g. online-gaming, job and apartment search, while others are bilingual (in German and Farsi) such as learning German, doing translations, reading news and watching videos or movies. Being the most competent speaker of German in his family, Ebrahim is responsible for all communication with relevant institutions. He also has a part-time job, which he mainly arranges via phone communication:

Excerpt (9): Ebrahim

> 117 E: Because I work part-time in a hotel, my boss calls me and I also have to call him back. I also hasve to arrange multiple appointments on the phone for my mother. For her doctor appointments or some apartment offers that we receive. We always have to contact them on the phone to confirm the appointment.

To sum up, we see several similarities in both families' linguistic and media practices. The parent generation maintains consistent contact with relatives and friends in their countries of origins, whereas the children's main communication partners are located in Germany, and while the parents stick to smartphone software they are already familiar with, their teenage children explore a variety of new apps. An important difference between the parents and their children is their competence in German. Elayla and Ebrahim became literate in their first language in their respective home country, they already learned English in their past school experience, and now attend the German school with mandatory integration courses. Their exposure to languages and literacies is much greater than that of their parents, and their fluency in German is prompted by a number of German-speaking friends and acquaintances they interact with, while their parents' communication is mainly limited to their monolingual community (both at the residence site and online). With their competence of German, the children arrange appointments for their parents and search for jobs and apartments. Most of these activities are carried out on the phone in spoken German.

Discussion Paper

717 **6 Learning German on the smartphone**

718 The discussion so far indicates the importance of
719 smartphones for language-learning practices among our in-
720 formants (and asylum-seekers generally). Learning German in
721 the context of seeking asylum is not 'leisure time', but a ne-
722 cessity that is nurtured by real demands. Similarly to Chiks'
723 students, our informants organize their learning in a highly
724 autonomous way (Chik 2018). They choose the time, place
725 and content of their "lessons" individually and profit highly
726 from access to relevant content via portable media. However,
727 unlike the learners studied by Chik (2018), most of the adult
728 asylum-seekers in this residence (excluding the students and
729 adults who attend so-called integration courses) are not enti-
730 tled to paid-for German language courses. Therefore, infor-
731 mal resources are highly important to them. There are obsta-
732 cles to accessing such resources, however. First, some resi-
733 dents are completely illiterate and, being unable to read and
734 type, they cannot surf the Internet. They are almost unreach-
735 able by any media learning opportunities and rely on state lit-
736 eracy courses. Second, the lack of Internet provision has a
737 negative impact on the learning efforts of many residents.
738 Since neither a computer room nor a free hotspot are availa-
739 ble, they are left to their own devices with regard to gaining
740 Internet access. Third, since no official support and guidance
741 to language-learning opportunities on the Internet exist, ver-
742 nacular knowledge about such opportunities is passed on
743 among networks of site residents and their acquaintances,
744 with more experienced asylum-seekers sharing their re-
745 sources with newcomers.
746 In the interviews, our informants presented to us a wide
747 range of digital resources for language learning across various
748 platforms and formats. Remarkably, they seem to rely less on
749 commercially successful software (e. g. *duolingo*) than on am-
750 ateur-produced learning materials (such as video tutorials),
751 language technology (online dictionaries and machine trans-
752 lation, most specifically Google Translate), and self-help
753 online networks.[8]

8 For example, a Facebook group by the name of *Arab Hamburg*, with more than 100.000 followers, features information on language-learning support as one among its several topics (see https://www.facebook.com/3arab.Hamburg).

754 In the short videos we filmed at the end of the interviews,
755 the two members of the Afghani family, Sarina and Ebrahim,
756 presented to us their favorite German-learning resources. Sa-
757 rina showed us (aided by her son) a German-learning channel
758 on YouTube, *Almani Be Farsi*, that specifically caters to
759 speakers of Farsi. Owned by an Afghani teacher who also
760 produces the content, this channel features around 450 vid-
761 eos, all of them produced in the last few years. Mostly target-
762 ing beginner levels (A1 and A2), these videos are organized in
763 playlists by grammatical categories, with a few videos on ad-
764 ditional topics such as 'German culture'. The language of in-
765 struction is Farsi throughout. The video he demonstrated to
766 us in the interview covers elementary greeting patterns. The
767 first line reads 'salam = hallo', and the speaker voice repeats
768 the German greeting a few times to teach its intonation. In-
769 terestingly, while Ebrahim searched YouTube for us by typ-
770 ing in the Farsi script, the Farsi-language items on this screen
771 are Latinized (transliterated), and we speculate this is the case
772 in order to appeal to speakers who might be illiterate in Farsi,
773 but are now becoming alphabetized while in Germany.[9]
774 Ebrahim reported having himself used these videos to
775 learn German back in 2014, when his family arrived in Ger-
776 many. Having no access to language classes at their first resi-
777 dence site, they were told about this video series by other
778 residents. Ebrahim recalled having watched 'around forty of
779 these videos' again and again, writing done the German words
780 and practicing their pronunciation, until he had learned
781 enough words and could speak a little bit himself. In his short
782 video during the interview, Ebrahim first showed us the
783 home-screen of Google Translate, where the list of his 'fre-
784 quently used languages' features Persian, English, German,
785 and Turkish. He critiqued that the machine translations are
786 not always good, then moved on to open another messenger
787 app, Telegram, where he is member of a group chat orga-
788 nized by one of his German-language teachers. He showed us
789 the message stream, full with meme-like images with refer-
790 ence to German, some of them explanations of grammar or
791 vocabulary. He zoomed on one image with German phrases
792 for 'agree with' (*zustimmen*) and pronounced one of them. He

9 Most of our informants are able to read and/or transliterate various languages (Arabic, Farsi, Pashtu) in their respective scripts and transliterate them into the Latin alphabet.

793 then opens another Telegram chat, a machine translation tool
794 by the name of *@translategerman_ bot*, where users can paste
795 in words and have them translated. He demonstrated its us-
796 age by typing in a Farsi word, upon which he received a list of
797 German noun and verb equivalents, each with a Farsi transla-
798 tion. He reported being quite competent in handling this tool
799 and demonstrated the opposite direction too, typing in the
800 German word *Regierung* to receive Farsi equivalents. 'With
801 these two apps I can learn quite well', Ebrahim said in con-
802 clusion. He then guided us through the various input options
803 for Google Translate, including finger-writing on the screen,
804 producing an audio message, and scanning a written docu-
805 ment, and performed the latter skillfully with the interview
806 consent form he signed for us.

807 **7 Discussion and conclusions**

808 In conclusion, the smartphone usage of the refugees we inter-
809 viewed for this study seems broadly comparable to that of
810 other migrant groups who also draw on a range of software
811 applications to manage their daily routines and maintain
812 transnational family communication. One distinct aspect of
813 refugees is their sole reliance on a smartphone for distant
814 communication and information retrieval. Unlike the earlier
815 study by Witteborn (2015) whose informants spent their
816 online time predominantly in front of a computer, most of the
817 informants in our study do not possess a computer or a laptop
818 and therefore manage their online activities exclusively on a
819 smartphone. Their digital literacy skills with smartphones
820 could be explained by the fact that many adult refugees al-
821 ready possessed a smartphone before being forces to migrate,
822 and that smartphones were already essential on their escape
823 route.
824 Both interviewed families demonstrate a wide range of dig-
825 ital literacy practices in their daily lives, involving various
826 languages and apps. Older family members in both families
827 use their smartphones to stay in touch with relatives and
828 friends abroad, especially in their home countries, whereas
829 their children's contacts are mostly located in Germany or
830 EU. The Syrian and Afghani parents report different educa-
831 tion biographies, from a completed middle school to three

Discussion Paper

832 classes of primary school. This affects their digital practices,
833 leading to specific mode and language choices, as in the case
834 of Omar, whose reading skills are quite poor, resulting in him
835 sticking to spoken Arabic when telephoning or making
836 WhatsApp calls. By contrast, both adolescents attend a regu-
837 lar school in Hamburg and learn German there. Another dis-
838 tinction between the generations in both families is found in
839 their linguistic repertoires. Both adolescents are multilingual
840 with high competence in at least two languages, i. e. their first
841 language and German. Both are eager learners of additional
842 foreign languages. They learn English as a mandatory course
843 in school and on top of that Turkish (Elayla in the foreign lan-
844 guage course at school, Ebrahim through daily interaction
845 with Turkish speakers). And while the parents rely on a few
846 well-tried software apps to get by, their children try out a
847 much larger number of apps. In terms of smartphone-based
848 language-learning practices, our explorative study suggests
849 that since the members of this refugee community cannot al-
850 ways rely on the official German courses due to their uncer-
851 tain legal status, they develop sharing practices, by which
852 software and weblinks are passed on from earlier refugees to
853 newcomers. By sharing online learning sources such as
854 YouTube channels, Facebook pages and language-learning
855 apps, community members create a customized learning
856 portfolio. However, such learning practices rely on stable in-
857 ternet access, the lack of which, according to our informants,
858 is one of the greatest obstacles not only for the acquisition of
859 German, but also for their further social integration.
860 We conclude with a note on the role smartphones might
861 play in social integration processes. Early large-scale integra-
862 tion studies focused on language acquisition being the main
863 indicator for a successful integration in a host country (Hei-
864 delberger Forschungsprojekt 1975, Deppermann et al. 2018).
865 However, our findings suggest that language acquisition
866 among refugees is closely related to their digital practices.
867 Furthermore, smartphone affordances enable their owners to
868 manage the daily routines that are essential upon arrival in a
869 new country: using Google Translate for daily conversations
870 and research, searching useful information about local doc-
871 tors, looking for jobs and apartments, finding travel routes on
872 Google maps, communicating with schools and teachers,
873 reading and sharing news, documenting important events,

874 and staying in touch with the old and new networks. In our
875 view, three suggestions seem to follow up from the fact that
876 language learning and digital practices are closely linked to
877 one another: first, a prerequisite to successful social integra-
878 tion is not just learning the dominant language, but also being
879 digitally literate and thereby able to manage everyday tasks
880 with digital tools; second, supporting language-learning cru-
881 cially depends on providing adequate internet access; the
882 precarity of access we found in this residence site is a major
883 drawback in this regard. Third, unlike their legal status sug-
884 gests, both young and older refugee informants are not bound
885 to one single physical, geographical or communication space.
886 These interact internationally, managing family and friends'
887 networks all over the globe. Their communication space is
888 characterized by multilingual practices, co-created by inter-
889 actants active in the virtual and physical spaces. This poly-
890 centric environment (Blommaert et al. 2005) has emerged in a
891 natural way, reflecting the life paths of the forced migrants
892 being co-present in multiple communities and being situa-
893 tionally more or less intensively integrated in one or the other
894 community of practice at a time.

895 **References**

896 Androutsopoulos, Jannis/Juffermans, Kasper (ed.) (2014): Digi-
897 tal language practices in superdiversity. Guest-edited Spe-
898 cial issue, *Discourse Context & Media* 4–5.
899 Androutsopoulos, Jannis (2014): Moments of sharing: Entex-
900 tualization and linguistic repertoires in social networking.
901 In: *Journal of Pragmatics* 73, 4–18.
902 Androutsopoulos, Jannis/Lexander, Kristin V. (in prep.):
903 *Snakke wolof, skrive fransk - the interplay of mode, lan-*
904 *guage and media choices in transnational family commu-*
905 *nication*.
906 Barton, David/Lee, Carmen (2013): *Language Online. Investi-*
907 *gating Digital Texts and Practices*. London: Routledge.
908 Blackledge, Adrian/Creese, Angela (2017): Translanguaging in
909 Mobility. In: Canagarajah, Suresh (ed.): *The Routledge*
910 *Handbook of Migration and Language*. London:
911 Routledge, 31–46.

912 Blommaert, Jan/Collins, James/Slembrouck, Stef (2005): Poly-
913 centricity and interactional regimes in 'global neighbor-
914 hoods'. In: *Ethnography* 6 (2), 205–235.
915 Blommaert, Jan/Backus, Ad Backus (2013): Superdiverse Rep-
916 ertoires and the Individual. In: de Saint-Georges, In-
917 grid/Weber, Jean-Jacques (ed.): *Multilingualism and Multi-*
918 *modality. Current Challenges for Educational Studies.* Rot-
919 terdam: Sense, 11–32.
920 Bucher, Taina/Helmond, Anne (2018): The Affordances of
921 Social Media Platforms. In: Burgess, Jean/Poell,
922 Thomas/Marwick, Alice (ed.): *The SAGE Handbook of So-*
923 *cial Media*. London/New York: Sage, 233–253.
924 Bundesamt für Migration und Flüchtlinge (BAMF) (2016): *Das*
925 *Bundesamt in Zahlen 2015: Asyl, Migration und Integra-*
926 *tion*. BAMF: 22, URL: https://www.bamf.de/SharedDocs/
927 Anlagen/DE/Publikationen/Broschueren/bundesamt-in-
928 zahlen-2015.pdf?__blob=publicationFile.
929 Bundesministerium des Innern, für Bau und Heimat (BMI)
930 (2016): *890.000 Asylsuchende im Jahr 2015.* Pressemittei-
931 lung vom 30.09.2016. URL: https://www.bmi.bund.de/
932 SharedDocs/pressemitteilungen/DE/2016/09/asylsu-
933 chende-2015.html.
934 Busch, Brigitta (2017): Expanding the Notion of the Linguistic
935 Repertoire: On the Concept of *Spracherleben* - The Lived
936 Experience of Language. In: *Applied Linguistics* 38 (3),
937 340–358.
938 Canagarajah, Suresh (2013): *Translingual Practice: Global*
939 *Englishes and Cosmopolitan Relations.* London/New York:
940 Routledge.
941 Chik, Alice (2018): Learning a language for free: Space and
942 autonomy in adult foreign language learning. In: Murray,
943 Garold/Lamb, Terry (ed.): *Space, place and autonomy in*
944 *language learning*. London: Routledge, 44–60.
945 Deppermann, Arnulf/Cindark, Ibrahim/Hünlich, Da-
946 vid/Eichinger, Ludwig (ed.) (2018): Flüchtlinge in Deutsch-
947 land: Sprachliche und kommunikative Aspekte. Themen-
948 heft, *Deutsche Sprache* 3/2018.
949 Deumert, Ana (2014): *Sociolinguistics and mobile communi-*
950 *cation*. Edinburgh: University Press.

Discussion Paper

951 Harney, Nicholas (2013): Precarity, affect and problem solving
952 with mobile phones by asylum seekers, refugees and mi-
953 grants in Naples, Italy. In: *Journal of Refugee Studies* 26 (4),
954 541–557.
955 Heidelberger Forschungsprojekt (1975): *Sprache und Kommu-*
956 *nikation ausländischer Arbeiter*. Kronberg: Scriptor.
957 Huang, Weidong/Hong, Seok-Hee/Eades, Peter (2006): How
958 People Read Sociograms: A Questionnaire Study. In: *APVis*
959 *'06 Proceedings of the 2006 Asia-Pacific Symposium on*
960 *Information Visualisation* 60, 199–206.
961 Hutchby, Ian (2001): *Conversation and technology: from the*
962 *telephone to the Internet*. Cambridge: Polity Press.
963 Jacquement, Marco (2017): Sociolinguistic Superdiversity and
964 Asylum. In: *Tilburg Papers in Culture Studies* 171. URL:
965 https://www.academia.edu/31144096/TPCS_171_Sociolin-
966 guistic_superdiversity_and_asylum_by_Marco_Jacque-
967 met.
968 Jones, Rodney H./Hafner, Christoph A. (2012): *Understanding*
969 *digital literacies: a practical introduction.* London:
970 Routledge.
971 Lexander, Kristin Vold/Androutsopoulos, Jannis (forthcom-
972 ing): Working with mediagrams: a methodology for collab-
973 orative research on mediational repertoires in multilingual
974 families. Accepted, In: *Journal of Multilingual and Multi-*
975 *cultural Development*.
976 Madianou, Mirca (2014): Polymedia communication and me-
977 diatized migration: an ethnographic approach. In: Lundby,
978 Knut (ed.): *Mediatization of Communication*. Berlin: de
979 Gruyter, 323–348.
980 Madianou, Mirca/Miller, Daniel (2012): *Migration and New*
981 *Media: Transnational Families and Polymedia*. London:
982 Routledge.
983 Madsen, Lian/Karrebæk, Martha/Møller, Janus (ed.) (2016):
984 *Everyday languaging: Collaborative research on the lan-*
985 *guage use of children and youth*. Berlin: de Gruyter Mou-
986 ton.
987 Scollon, Ron (2001): *Mediated discourse: The nexus of prac-*
988 *tice.* London: Routledge.
989 Sharma, Devyani (2017): Scalar Effects of Social Networks on
990 Language Variation. In: *Language Variation and Change*
991 29 (3), 393–418.

992 Stebbins, Robert A. (1994): The liberal arts hobbies: A neglected subtype of serious leisure. In: *Loisir et Société/Society and Leisure* 17, 173–186.
995 Stebbins, Robert A. (2015): *The interrelationship of leisure and play: Play as leisure, leisure as play*. London: Palgrave Macmillan.
998 Thomas, Minu/Lim, Sun Sun (2010): On maids, mobile phones and social capital—ICT use by female migrant workers in Singapore and its policy implications. In: Katz, James E. (ed.): *Mobile Communication and Social Policy*. Trenton, NJ: Transaction, 175–190. URL: https://www.academia.edu/12367053/On_maids_mobile_phones_and_social_capital_ICT_use_by_female_migrant_workers_in_Singapore_and_its_policy_implications.
1006 Tubaro, Paola/Casilli, Antonio A./Mounier, Lise (2014): Eliciting Personal Network Data in Web Surveys through Participant-generated Sociograms. In: *Field Methods* 26 (2), 107–125.
1010 Wall, Melissa/Campbell, Madeline/Janbek, Dana (2015): Syrian refugees and information precarity. In: *New media & society* 19 (2), 240–254. URL: http://journals.sagepub.com/doi/pdf/10.1177/1461444815591967.
1014 Wandruszka, Mario (1979): *Die Mehrsprachigkeit des Menschen*. München: dtv.
1016 Witteborn, Saskia (2015): Becoming (im)perceptible: Forced migrants and virtual practice. In: *Journal of refugee studies* 28 (3), 350–367.

1019 Appendix 1: Transcript conventions

•	minimal pause
(unverst.)	unclear word/phrase
((2S))	measured pause, 2 seconds.
[...]	omitted word/phrase

1020 Interviews were transcribed with the EXMARaLDA software.

Discussion Paper

Appendix 2: Original interview excerpts in German

Excerpt 1 (Elayla)

> 218 E: er schreibt arabisch • aber ganz wenig • so • auch wenn er schreibt macht er Fehler er erkennt die Straße und dadurch auch wenn er nicht • also also er kann die Haltestelle nicht richtig lesen aber wenn er einmal hört und ein Sache in dieser Station guckt dann merkt er • dann bleibt es in seinem Kopf dass es das ist er kann ganz viele Straßen in Deutschland auch wenn ich ein Arzt suche sag ich zu ihm warte • wir suchen das bei Google • er meint zu mir • komm, ich kann das komm hinter mir einfach • so ein Computer im Kopf

Excerpt 2 (Elayla)

> 178 E: der Unterschied von meinem Vater und meiner Mutter ist immer online • also sie sucht so bestimmte Sachen weil sie lesen besser als • ihn kann • • also sie kann ganz gut deutsch und arabisch lesen aber er zu wenig deswegen kann man im Internet nicht so viel

Excerpt 3 (Elayla)

> 36 E: sie will sagen, dass sie letzte Woche alleine im Krankenhaus war und dann hat sie das [Google-Übersetzer] benutzt, damit sie mit dem Ärzten sich gut um/verstehen kann.

Excerpt 4 (Elayla)

> 340 E: Sie sagt, dass so schlecht is, dass wir kein Internet zuhause haben, dass wir mehr im Youtube was Deutsch, also mehr auf Deutsch lernen oder so. Meine kleineren äh Brüder wollen immer auch so solche Fernsehn auf Deutsch gucken. Also solche Programme für Kinder und so. Aber ich kann das nicht an, also... Einschalten wenn ich kein Internet habe.

Excerpt 5 (Elayla)

> 164 E: Eine Freundin. Sie is meine beste Freundin. Und ja, wir schreiben immer • äh auf/ über Whatsapp. Wir sprechen Deutsch. Und äh ich schick ihr • oft so schriftlich. Sie kann Kurdisch und Arabisch. Aber wir reden nur Deutsch. Damit wir nicht unserer Deutsch • also schlechter machen

Discussion Paper

1057 **Excerpt 6** (Elayla)

1058 17 E: Äh türkische Sprache kann ich n bisschen sprechen, •
1059 äh auch ähm gut verstehen, aber schreiben und lesen kann
1060 ich nicht. Äh benutzen manchmal. Ich lerne in der Schule
1061 Türkisch. • • Wir haben große Kurse in der Schule und wir
1062 können auswählen was wir lernen möchten. [...] Ich hab
1063 ganz viele Lieder auf Türkisch gelernt und ich singe die im-
1064 mer. Aber als ich in Syrien war, wir haben, ich und meine
1065 Schwester immer ähm Serie auf Türkisch gesehen. Aber die
1066 haben also auf Arabisch gesprochen. Das ist übersetzt halt.

1067 **Excerpt 7** (Ebrahim)

1068 47 E: Türkisch kann ich bisschen verstehen ja ((2s)) also
1069 sprechen bisschen • • ganz kleines bisschen • • das hab ich
1070 von meinem Mitschüler gelernt also da wo ich jetzt zur
1071 Schule gehe da sind • äh • wir sind 24 Leute • • also äh • ich
1072 hab 23 Mitschüler • und • äh • 18 von denen kommen aus
1073 der Türkei und deshalb • • die haben mir • so ein bisschen
1074 beigebracht

1075 **Excerpt 8** (Ebrahim)

1076 185 E: da wo ich • in der Schule war • erster Tag und Lehre-
1077 rin • ich war in einer (unverst.)-Klasse • • da wo die Leute •
1078 die müssen von Anfang also von ABC • äh ja • aber da
1079 konnte ich schon Deutsch • und Lehrerin war • äh also war
1080 ein bisschen enttäuscht • Sie hat mich gefragt • Wie kannst
1081 du so gut Deutsch? • Ich war damals so • zwei Monate in
1082 Deutschland da hab ich gesagt • so hab ich • also selber
1083 Deutsch gelernt • ohne • konnte das ohne Grammatik

1084 **Excerpt 9** (Ebrahim)

1085 117 E: Anrufe • weil ich • ich arbeite • also ich mach Neben-
1086 job • arbeite in Hotel • und mein Chef ruft ruft mich manch-
1087 mal an • und ich muss da anrufen und ich mach viele Ter-
1088 mine für meine Mutter • also vom Arzt oder • wir bekom-
1089 men immer Wohnungsangebote von Baugenossenschaft • da
1090 muss ich immer anrufen • und sagen dass ich zur • dass •
1091 dass wir immer eine • so Zusage sagen also muss man per-
1092 sönlich anrufen