Moving methods online
Researching digital language practices
Jannis Androutsopoulos and Andreas Sætær

Introduction
Digital media is a key element in theorizing superdiversity, and digital language practices have been a core part of language and superdiversity research from the very start. This chapter discusses methods for digital language research in the language and superdiversity paradigm. It has three aims. First, we describe the historical and theoretical background of digital language research in sociolinguistics. Second, we focus on practices of blended data collection across online and offline contexts. Third, we reflect on how social and communicative aspects of superdiversity, especially transnational mobility and proliferation of mobile media, impact on research methods and motivate the development of new research designs. We identify four relevant themes: the role of mobile media for transnational trajectories, the consequences of polymedia for linguistic repertoires, practices of transmodal interaction, and the circulation and recontextualisation of semiotic resources. Against this backdrop, we examine how digital interaction contributes to a sociolinguistic process that is central to language and superdiversity research, i.e., enregisterment. We conclude with summary guidelines for online research in the sociolinguistics of superdiversity.

Historical perspectives
The term digital language practices covers language practices both "in" and "around" digital media. In a narrow sense, the term refers to written and spoken language practices that are accomplished with networked devices in various genres and modes of digital communication (Herringer and Androutsopoulos 2015). In a broader sense, it refers to language practices that are in some way contiguous to digital communication, for example, social interaction around a smartphone or other digital device (Jones et al. 2015). This second reading of the term is historically more recent, and its spread reflects the changing understanding of digital language practices in sociolinguistics, which originally focused on written language produced and received through computer keyboards and screens and was progressively broadened to cover language practices both on- and offline. In this broader sense, digital practices "always transverse boundaries between the physical and the virtual, and between technological systems and social systems" (Jones et al. 2015: 3). This is a productive starting point for sociolinguistic research on digital language and superdiversity, but also complicates methods of digital language data collection and analysis, as discussed below.

The evolution of digital language practices is jointly shaped by the development of technologies for interpersonal and public communication on the one hand and the social penetration of internet use on the other. The pre-web internet era until 1993 afforded mainly new tools for interpersonal written communication. Early research on digital communication coined notions such as "virtual community" and classifications of digital modes and genres, which still persist (Angouri 2016; Herringer 2004; Herringer and Androutsopoulos 2013). The early web of the 1990s witnessed new technologies of information storage and unidirectional communication, such as corporate websites and personal homepages. In the 2000s, web 2.0 technologies simplified the production and distribution of online content and facilitated mass-scale cultural participation. In today's social web, users contribute, consume and interactively negotiate content on platforms that are largely controlled by global corporations and provide users with a range of affordances for the enactment of local and translocal practices (Kyöllä 2016). Part of this development is the proliferation of semiotic resources and technologies of discourse production and reception. While digital interaction and self-presentation in the pre-web and early web era were almost exclusively text-based, today's social web affords a rich array of multimodal resources and multimedia tools for verbal interaction. The common experience of embedding, viewing and commenting on videos on social networking sites illustrates how interpersonal interaction and multimedia viewing are being fused together (given sufficient broadband). At the level of social penetration, the digital enclaves of internet access in the early 1990s paved the way for today's ubiquitous online access, where especially the younger generation of the population is literally "always on" (Baron 2006). This development was boosted by mobile communication devices. Text messaging (SMS) was already widespread since the late 1990s, but the advent of smartphones since 2007, the iPhone launch year, boosted the ability to interact, consume, and respond to digital content on the move. As a consequence, being online has today an entirely different meaning than 20 years ago. Unlike earlier perceptions of a gap between "the internet" and "real life", digital communication is now an integral part of everyday communication. This development is clearly linked to the rise of polymedia (Madianou and Miller 2012, 2013), i.e., the constant availability of a range of mediational tools for interpersonal communication, each with specific semiotic affordances, participation formats and symbolic meanings. Implications of these issues for research methods are discussed below.

Digital media have been crucial to the theorising of superdiversity from the very beginning. Even before the notion of superdiversity was coined, cultural anthropologists emphasised the impact of communication technologies on transnational relationships and migrant subjectivities. Appadurai (1996) describes the impact of the rapid flow of mass-mediated images on the creation of new diasporic public spheres. Vertovec (2004: 22) argues that "nothing has facilitated global linkage more than the boom in ordinary, cheap international telephone calls", which enable "families whose members are relocated through migration to conduct the same everyday discussions in real time across oceans". Compared to the analogue media discussed by Appadurai (1996), digital communication technologies complement the media capacity to store cultural productions by historically new affordances of determinantalized interaction, individualised self-presentation and large-scale participation in cultural and political discourses. Building on this backdrop, the language and superdiversity research programme (Blommaert and Rampton 2011) identifies digital communication as a crucial accelerator of global human and semiotic flows, which creates unprecedented scale of transnational connectivity and mobility. Likewise, Blackledge and Creese (2010) observe how digital communication makes available semantic
resources across boundaries, which are adapted to local linguistic repertoires of migrant families, adding new layers of indexicality to their communicative practices.

These programmatic observations are empirically fleshed out in a growing body of research, including two special issues of *Discourse, Contact & Media* (Androustopoulos and Staehr 2014; Leppänen et al. 2015). Androustopoulos and Jüfermanns (2014) distinguish three research themes on the role of digital language practices in superdiversity. A first theme is how digital spaces enable the formation of virtual communities among migrant and diaspora populations. Web discussion forums and ethnic portals, in particular, have been described as sites where the nexus of multilingualism and identities is displayed and negotiated (Androustopoulos and Staehr 2006; Heyd 2014; McLaughlin 2014). The second theme concerns the various practices of self-presentation and interaction that digital media afford individual users, practices that are often linked to mobility and the reconceptualization of globally circulating semiotic resources into local repertoires. The third focal theme is about the wealth of semiotic resources made available by the web for practices of cultural production and participation and the ways in which these resources are experienced and recontextualized in situated action (Androustopoulos 2015; Leppänen and Häkkinnen 2012; Schreiber 2015; Varis and Wang 2011). We return to these issues of circulation below in terms of their implications for research methods.

**Core issues and topics**

It is important to contextualize this research in the tradition of digital language studies in sociolinguistics and applied linguistics. Digital superdiversity research draws widely on data collection and analysis methods which were developed in computer-mediated discourse analysis since the late 1990s (for overviews see Herring 2004; Herring and Androustopoulos 2015). These are, in turn, rooted in traditions and principles of ethnography, understood here both as a set of research methods and an epistemological approach to the production of knowledge (Datambi 1997; Rampton et al. 2004; Varis 2016). A principle of ethnography as method is triangulation, i.e., the reliance on a range of data sources in order to gain complementary perspectives on the communicative processes under investigation (Karruba and Charalambous, this volume).

In particular, the digital data collected and analysed by the researcher is complemented by observation of digital practices and elicited speech events such as interviews or focus group discussions involving the participants. We use the term "mixed methods" to refer to strategies of collecting and analysing data from different sources within a single research design. Mixed methods designs were developed in the turn from medium-related to user-related approaches in the sociolinguistics of computer-mediated communication, as researchers realised the need to engage with actors and sites of digital discourse (Herring and Androustopoulos 2015). However, the research considered here displays a cline of ethnographic orientations ranging from the application of single elements of the ethnographic method to ethnography as an epistemological approach (Varis 2016).

Methods of digital data collection can be typified in terms of their orientation to digital language data as opposed to data collected with participants (Androustopoulos 2013). These can be thought of as end-poles on a continuum that enables varying degrees of engagement with participants while taking into account the affordances of the respective meditational tools. At one end of this continuum, researchers focus on the collection of written digital data with any complementary participant observation or contacts to participants. In practice, this approach draws on procedures of automated digital data collection, e.g. by means of scripts or web crawlers, which can download very large sets of digital data based on predefined searching criteria (Eisenstein 2015; Heyd 2014). A drawback of this approach is that communicative contexts are treated in terms of predefined factors or variables rather than being investigated. By contrast, research in the superdiversity paradigm typically draws on online participant observation, either in advance of or parallel to the collection and processing of textual data. The main aim of ethnographic observation online is to gain an understanding of how people interact, how discourse activities unfold and how digital spaces are related to one another. In the framework of discourse-oriented online ethnography (Androustopoulos 2008, 2013), observation includes a range of researcher practices, such as surfing around the websites that are relevant to the focal users, following online trajectories of people, topics or artefacts; and exploring the resources for participation that are available to regular participants. Ethnographic observation is particularly typical for public web spaces of multi-party discourse such as discussion forums, which probably are the most intensively researched digital sites in the language and superdiversity literature. For limited-access digital spaces, such as personal social networks, researchers must negotiate legitimate access with the participants. However, even in the absence of further contact and engagement with participants, the insights offered by online observation facilitate the interpretation of linguistic analysis. It is by systematic observation that researchers learn to identify elements of the communicative culture of an online community, such as intertextual references, running gags, the usual pace of activities, typical ways of saying and doing things and so on (Kytölä and Androustopoulos 2012).

Observation of and contact with participants are often interleaved, but not necessarily so. Researchers of public digital discourse often do not contact the users behind the data (see papers by Heyd 2014; Karruba et al. 2014; McLaughlin 2014). Depending on the kind of platform and the social network or community investigated, users can be contacted at different stages of the research process. In spaces of unrestricted access, regular observation and textual analysis of digital discourse typically precede, and inform, the selection of participants — by criteria such as their frequency of participation or their role in the online community — who are then invited to participate in an interview or focus group discussion. In limited-access spaces, contact with participants must precede access to the data, so that interviews or questionnaire elicitations can be carried out even before systematic linguistic analysis. As a rule of thumb, the more the researcher engages with contexts and actors, the more attention to research ethics is required when it comes to eliciting informed consent, protecting speaker anonymity and making sure that people's digital practices and relationships will not be distorted due to researcher activity (see Locher and Bolander 2014; Spiliotis and Tagg 2016; and resources provided by Association of Internet Researchers Ethics Working Committee, http://aoir.org/ethics).

There is no a priori limitation to the elicitation instruments that can be used when working with participants. Surveys or interviews can be carried out among members of a forum alongside collecting their digital data. Media diaries can be administered to collect (self-reported) information on media and language choice (de Bres and Franzius 2014). Reassembling playback sessions familiar from linguistic ethnography (e.g. Rampton 2005), digital researchers can experiment with various formats of retrospective confrontation, e.g. discuss data excerpts with participants or invite them to compare their language use on and offline. In research among Copenhagen school students, Staehr (2014a, 2015, 2016) and Madson et al. (2016) combine a qualitative analysis of online data with interviews to show how enregisterment and social categorisation are carried out in on- and offline talk in complementary ways.

In conclusion, the combination of digital data with observation and/or participant contacts — "blended data" — has become standard practice among sociolinguists of digital language, and the techniques outlined above are used in several individual variants.
which goes to show the creative potential of online research methods (cf. Angouri 2016; Angouri and Tseliga 2010; Bolerander 2013; D'arcy and Young 2012; Scargant et al. 2012; Spiioi 2011).

Turning briefly to data analysis, we observe that research of digital language practices in the superdiversity approach tends to focus on qualitative microanalysis. In line with recent theoretical trends in sociolinguistics that are associated with the notion of languaging, the ideolo gical character of linguistic boundaries is emphasised, and quantifications that rely on an enumerative approach to language are questioned (Pennycook 2016). In poly- 
languaging research (Jorgensen et al. 2011), social media interactions are analysed alongside spoken-language ones, the rhism being that young, urban speakers draw on a plurality of linguistic resources, which go well beyond conventional associations of language and ethnicity. Poly-languaging analysis operates at the level of linguistic features as a basic unit of analysis and integrates linguistic microanalysis with the analysis of metalinguistic discourse. Instead of trying to assign linguistic features to a single discrete language, poly-languaging analysis reconstructs the multiple indexical associations of linguistic features and their trajectories across social spaces. A combination of on- 
line and offline ethno-idiography with linguistic microanalysis forms the method's backbone here. Translanguaging research departs from the assumption that language practices encompass the "full range of linguistic performances of multilingual language users" (Wei 2011: 1223). The notion of translanguaging is particularly relevant to the research discussed here, because it encompasses various semiotic modalities of digital language: its predominantly visual representation, the layers of indexical meaning that can be brought about by hypermodernity in spelling and typography, and the co-occurrence of written and spoken linguistic features and various other semiotic resources in the course of a social media interaction (cf. Androustoupolou 2015; Hillewaert 2015; Schreiber 2015; Source 2015). Here, too, ethnic and cultural elements in data collection and analysis are indispensable to uncover the semiotic complexities of digital language practices. In terms of mixed-methods analysis, Androustoupolou (2013, 2015) proposes to complement the predominantly qualitative microanalysis with selective quantification, for example regarding language choice in relation to addressivity, participation framework or communication mode (cf. Scargant et al. 2012). This provides a "bird's eye view" by which to contextualise the selection of data for qualitative microanalysis.

In order to provide an example of the multi-layered structure of digital practices, we briefly turn to a particular aspect of how language and superdiversity relationship. Metalinguistic reflexivity, i.e., speakers' cognitive and discursive attention to their own and others' communicative conduct. Coupland (2009a: 45) argues that the conditions of late modernity, i.e., mobility, diversity and globalisation, prompt increased sociolinguistic reflexivity. When faced with less predictable relations between signs, social categories and contexts of communicative action, people are becoming increasingly reflexive of their own and others' communicative conduct.

As far as digital language practices are concerned, metalinguistic reflexivity is additionally boosted by the conditions of asynchronous production and reception of digital discourse, as well as the orientation to an anticipated audience, which shapes a lot of social media discourse (Androustoupolou 2014a; Meredith and Stokoe 2013). Semiotic actions in digital mediated release act, such as pressing a "send" or "enter" button. This temporal gap between composition and release creates a zone of reflexivity, which includes practices such as proof-reading and editing. However, reflexivity in digital discourse is not limited to linguistic signs, but extends to all semiotic resources of digital expression. Consider here the digital practices around selfies: the few seconds of posting and photo-taking can be a site of reflexive actions such as change of body posture, choice of facial expression, adjustment of the camera angle etc. A second reflexivity zone after taking the photo includes activities such as photo-cropping and editing; the application of filters, devising a caption etc. In addition, the persistence that characterises digital data (Bollier 2011), i.e., their accessibility for shorter or longer periods of time after the termination of the interactional event they originated in, enables people to revisit and reflexively re-evaluate their own and others' self-representations. As a consequence, reflexivity can be seen as a basic trait of digital communication both during and after the completion of an interactional episode. Social networking platforms exploit this trait by developing features that allow users to mutually draw attention to semiotic artefacts and interactions. Social networking practices can therefore be viewed as a constant stream of contemplation about one's own and others' tactics of self-representation and their degrees of interactional success, for example as evidenced by the number of "likes" and comments that a given contribution has attracted. From this viewpoint, being online means being constantly encouraged to reflect on the semiotic details of communicative conduct in front of, and for the sake of, an audience.

Returning to the strategies of data collection discussed in this section, certain aspects of metalinguistic reflexivity can be read off the digital traces of people's online actions and are thus accessible to online ethnography and digital data analysis. An example is the editing of contributions, which remains visible to others in many platforms (Facebook included); another example is explicit metapragmatic discourse, for example regarding politeness online (Angouri and Tseliga 2010). However, certain layers of reflexivity require offline observation and thus a far-reaching researcher engagement. An example is Jones' study of photographic posing, post-processing, publishing and commenting (Jones 2000). When eliciting data directly from users, researchers can employ techniques that prompt participants' metalinguistic reflexivity, such as confronting them with excerpts from online sites they are familiar with, including their own writing online or prompting them to visualise their language and digital media practices.

**New debates**

Having become standard practice in digital language research, mixed-methods approaches to blended data collection provide building blocks for the study of digital language practices in conditions of superdiversity. Recall how our understanding of superdiversity focuses on two interrelated developments: transnational mobility and digital mediation technologies. An outcome of their interplay is a proliferation of communicative practices that cut across boundaries of all sorts - across modalities of language, communication technologies, online and offline spaces, national and linguistic borders. New approaches are needed to address these developments, and this section starts by identifying four digital practices which call for new approaches:

a) the role of digital media for transnational trajectories;

b) the relation of polymedia to linguistic repertoires;

c) the emergence of transmodal interaction; and

d) the circulation and appropriation of semiotic resources.

A first theme for research on superdiversity and digital practices is how digital resources enable people to plan and accomplish trajectories of transnational mobility. Digital tools are essential to the global increase in transnational mobility. For example, people accessing and navigating unknown spaces can draw on interpersonal information provided by phone calls and text messages as much as on information collected on travel-related websites and online maps. These processes are scaled (Blommaert 2010) in the sense that they play out on different orders of spatial distance and in different social processes of mobility. We see them operating
with, for example, tourists who visit a country, newcomers to a global city and refugees who flee towards the European North. In Germany, several media reports in 2015 and 2016 brought to public attention the importance of smartphones in helping refugees to chart their trajectories, communicate back and plan ahead. From a sociolinguistic viewpoint, these practices are likely to require multiliteracy and multilingual skills, which can vary in the course of a transnational trajectory. Upon arriving in a new environment, mobile devices are likely to be important in terms of connecting refugees with families and relatives in the country of origin as much as establishing connections in the new social environment or helping others accomplish their trajectory. A recent video report on the British news site <https://theguardian.com> presents the story of Mohammed Abu Amar, a Syrian refugee who runs a "makeshift 24-hour helpline from his flat in Hamburg, guiding scared refugees fleeing the violence in Syria across the water to Europe" (Samu et al. 2016). This video report shows Amar receiving phone calls from refugees, checking online maps to identify their location and giving them advice on how to move on. Amar is video-connected to his interlocutors and at the same time receives their text messages. There is a striking lack of research on the role of digital devices in planning and managing transnational trajectories, but there are of course considerable difficulties in gaining access to the highly sensitive data required for the study of such practices. It is remarkable that journalism seems one step ahead of academic research in bringing these stories to the attention of the wider public.

A second research theme is the impact of polymedia on linguistic repertoires. Polymedia theory examines the practices and meanings of media choice for interpersonal communication (Madianou and Miller 2012, 2013). From a sociolinguistic angle, a relevant question here is how media choice relates to sociolinguistic polycentricty, i.e., the existence of different normative orientations to language use and language use in a particular social setting. We know from everyday experience that certain types of social interaction are paired with certain media choices on the one hand, and certain language styles or communicative registers on the other. For many young people, for instance, email is associated with institutional interactions with adults (such as employers or teachers) and rather formal registers of writing, whereas WhatsApp is associated with peers, private topics and informal registers of writing. Understanding such associations requires multi-site research by which to document people’s media choices, their respective styles of writing and their metalinguistic reflexivity on these associations. Focusing on transnational and migrant contexts, a sociolinguistic perspective on polymedia examines the impact of media choices on multilingual repertoires. Two working assumptions here are that generations within a family differ in their language-and-media choices for interpersonal interaction, and that certain media choices enable the establishment of participation frameworks in which people can practice certain resources from their linguistic repertoire.

A third area of interest is transmodal interaction, i.e., the unfolding of communicative activities across different semiotic materialisations and meditational tools. The proliferation of communication technologies enables interaction to be carried out in distant modalities of language (speaking and typing) and/or meditational tools (phones and keyboards), so that written (visually perceived) and spoken (aurally perceived) utterances can complement each other in the sequential accomplishment of an activity. For instance, it is common that interaction among friends is initiated on social networking sites and continue in face-to-face encounters or vice versa. Equally common is the experience of, say, receiving an urgent text message and immediately calling back, or receiving an email from a colleague next door and going to her office to discuss matters face to face. As these examples suggest, transmodal interaction is not necessarily limited to transnational communication. In either case, it is difficult to document systematically,

Wirtz (2013) discusses an episode of multiple transmodal interaction among young adolescents who are simultaneously gaming, talking on Skype and interacting with physically co-present interlocutors in their respective locations. The two participants in her study are simultaneously logged into a multi-player online game, a private chat channel with other gamers and a Skype group chat with other gamers. They also share a Skype connection, and one of them also talks on the phone with his father during the event. Wirtz documents this “interaction hybrid” as she terms it, by logging all activities on participants’ computers and filming their activities in front of the screen, thereby obtaining a rich set of transmodal data. Wirtz’s research shows that transmodal interaction can reach a high degree of complexity as it enables multiple participation frameworks to be sustained simultaneously. It also suggests that the study of transmodal interaction can promote cross-fertilisation between digital language research and multimodal interaction analysis.

A fourth theme is the global circulation and local appropriation of semiotic resources in digital language practices. Even when speakers are not themselves physically mobile, semiotic resources can travel globally, eventually entering local repertoires where they can take on new indexical meanings (Androutsopoulos 2010; Blommaert 2010; Pennycook 2007). The role of media in the diffusion of semiotic resources across speech communities is well known from the pre-digital era (Androutsopoulos 2014b: 18–25). New in the age of cultural globalisation are the multiplication and increased speed of this diffusion process and the multimodal structure of semiotic resources. Video-sharing and social networking sites are key nodes in the digital circulation of semiotic fragments relating to global popular culture. Several researchers have shown how features associated with hip-hop and other popular discourses are recontextualized in various genres and speech communities (Jönsson and Madianou 2014; Leppänen and Salla 2012; Schön 2015; Varin and Wang 2011). In terms of methods, this research draws on systematic observation of digital activities, discourse and multimodal microanalysis of digital data and, occasionally, interviews and other forms of direct engagement with participants. Drawing on blended on- and offline fieldwork, research by Staehr (2014b) shows how Copenhagen secondary school students draw on semiotic elements that are associated with the fictional notion of Illuminati, including lexical items, pictorial signs and body postures in their everyday interactions in school, Facebook timelines and school yearbooks.

Against this backdrop, the following case study shows how a combination of online and offline ethnographic fieldwork informs the analysis of enregisterment. To provide necessary theoretical background, enregisterment is the process by which clusters of linguistic signs are socially recognised by a given population as belonging to a specific cultural model (Agla 2007: 81, 190; Johnstone et al. 2006; Madianou 2015). Semiotic features are discursively linked to specific speaker stereotypes and expectations about linguistic conduct in certain types of situations. Enregisterment has been widely discussed in sociolinguistics, including digital discourse (e.g. Androuutsopoulos 2014; Barton and Lee 2013; Squires 2010). Digital language has itself been enregistered, at least since the 1990s, by means of metalinguistic labels such as “chat speech”, “text speech” and “netspeak”, which index metalinguistic discourses that frame digital language as determined by digital technologies and therefore being distinct from language in other everyday contexts (Squires 2010). For example, “netspeak” is defined as a type of language “displaying features that are unique to the internet […] arising out of its character as a medium which is electronic, global and interactive” (Crystal 2001: 18). Barton and Lee (2013: 80) suggest that features enregistered as “netspeak”, such as acronyms, emoticons and playful punctuation, make their way into offline language use and are re-indexicalised by
young people who are familiar with digital culture. In this shift of indexical associations, re-enregisterment, linguistic features originally perceived as “internet language” enter other registers of public or private communication. However, we believe the role of digital language in enregisterment goes far beyond this association of a few highly iconic features with digital communication technologies.

The case study reported here shows that features of an urban youth style are enregistered in online talk and suggests that oral and offline language practices are quite similar in terms of how they contribute to the on-going enregisterment of a particular speech style, labelled “street language” by the participants. The case study draws on data collected in fieldwork with an ethnically diverse group of Copenhagen adolescents who attended an urban school from 2009–2011 (Madsen et al. 2016; Stehr 2014a, 2015, 2016). A multi-sted and mobile research design was developed to capture the interplay between their online and offline language practices. The fieldwork began when the students attended 7th grade and ended when they left school aged 15–16. It included ethnographic participant observation of the adolescents in different everyday contexts: at school during the classes and breaks, in their spare time in youth clubs and on the street, and in their private Facebook networks. A Facebook profile was created for fieldwork purposes, which made it possible to follow the young people’s social media practices alongside their school and leisure time activities. The data collection included semi-structured interviews, group conversations, classroom recordings and recordings made by the students in different everyday contexts.

“Street language” is best described as a peer register, which participants themselves associate with indexical values such as toughness, masculinity, youth, pan-ethnic minority street culture and academic non-prestige (Madsen 2013). In the following analysis, we focus on the salient street language feature [g] (Stehr 2015: 34). When it appears in speech, it is referred to as “g” pronunciation and in writing as <g> spelling. In Table 9.1, an excerpt of an interview with one of the participants, we see how the feature is employed.

<table>
<thead>
<tr>
<th>Original</th>
<th>Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 And: hvad så i firkantterne</td>
<td>And: what about in the breaks</td>
</tr>
<tr>
<td>2 taler du (.) taler du</td>
<td>do you speak (.) do you</td>
</tr>
<tr>
<td>3 også integrerer</td>
<td>also speak integrately</td>
</tr>
<tr>
<td>4 der</td>
<td>then</td>
</tr>
<tr>
<td>5 is: mej (.) der [g]taler jeg</td>
<td>is: no (.) der then speak</td>
</tr>
<tr>
<td>6 sgu gadesprog mayn</td>
<td>god damn street language man</td>
</tr>
</tbody>
</table>

In this multilingual account Isam explains how he speaks street language among his peers in the breaks. He further underlines this message by a stylized (Coupland 2009b) use of street language due to the marked use of [g]-pronunciation in taler (“speak”) and the word mayn (slang for “man”). In the students’ social media interactions we find written representations of linguistic features that contain similar metapragmatic messages. In excerpt 2 below we see how the spelling associated with street language also appears on Facebook.

---

**Table 9.1 Interview with Isam**

<table>
<thead>
<tr>
<th>Original</th>
<th>Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 And: hvad så i firkantterne</td>
<td>And: what about in the breaks</td>
</tr>
<tr>
<td>2 taler du (.) taler du</td>
<td>do you speak (.) do you</td>
</tr>
<tr>
<td>3 også integrerer</td>
<td>also speak integrately</td>
</tr>
<tr>
<td>4 der</td>
<td>then</td>
</tr>
<tr>
<td>5 is: mej (.) der [g]taler jeg</td>
<td>is: no (.) der then speak</td>
</tr>
<tr>
<td>6 sgu gadesprog mayn</td>
<td>man damn street language</td>
</tr>
</tbody>
</table>

In this multilingual account Isam explains how he speaks street language among his peers in the breaks. He further underlines this message by a stylized (Coupland 2009b) use of street language due to the marked use of [g]-pronunciation in taler (“speak”) and the word mayn (slang for “man”). In the students’ social media interactions we find written representations of linguistic features that contain similar metapragmatic messages. In excerpt 2 below we see how the spelling associated with street language also appears on Facebook.

---

**Figure 9.1 Facebook post by Bashaar**

Bashaar congratulates Isam by writing Tjelukka ("congrats") on his Facebook wall. The spelling deviates from standard orthography, which is siljka. Judging from the knowledge Stehr gained about the two friends from his ethnographic fieldwork, the metapragmatic message of this post is very likely to be ambiguous. On the one hand, Bashaar communicates his affection and friendship to Isam by writing habii ("my beloved"). He thereby also establishes an understanding of the two as being part of a group of people who speak street language. On the other hand, the tjelukka spelling also indexes social identities such as “learner of Danish” and “not so smart”. It alludes to the way the two boys often make fun of how the local “pizza owner” or the owner of the green grocer shop speak, so spelling is reminiscent here of some uses of stylized Asian English in Rampton’s research (2005) and of “illegal” in Jaspers (2011). In this way, Bashaar’s post indexes solidarity, affection, linguistic creativity, reflexivity and fun (note the smiley). Together, the two examples indicate a close connection between spoken and digital written language practices.

The next excerpt shows what kind of metapragmatic knowledge we can gain about everyday language and processes of enregisterment by considering social media data.

---

**Figure 9.2 Status update by Bashaar**

Translation:

**Bashaar:**

Have shaved

**Rasmus:**

HAHAHAHAHAHA ... still have a little more shaves left

[- -]

**Fatima:**

Oh Rasmus tries to be a Perker Hahaahahaha laughing

**Rasmus:**

Yep I’m a proper sick gangstar, cough cough

---

126
Bashaar announcing that he has shaved, presumably for the first time. What is interesting here is how Fatima, an ethnic minority girl, reacts to Rashmi, a Danish majority boy, who uses the street language feature, shah ("taut") in his response to Bashaar. Fatima describes the use of shah to the social category Perker, a Danish term that refers to people from the Middle East or North Africa. She accuses Rashmi of pretending to be a Perker, thereby indexing a non-serious or playful frame (note the smiley). Thus, it appears as if Fatima evaluates Rashmi as an inauthentic user of this register. Rashmi stays in the jocular frame in his next comment where he acknowledges that he is a "proper sick gangster"—used in the stereotypical sense of a tough immigrant boy. His "cough cough" (understood as "I am not serious") further supports the frame of play. This excerpt contributes to enregisterment of "street language" features by indexing shared knowledge about the connection between linguistic features, social types and indexical values. Furthermore, the analysis of the comments shows how the legitimation of "street language" use is negotiated and how its appropriate use are ratified.

Conclusion
Methods for research on digital language practices are constantly changing in order to adapt to fast-paced changes in the affordances of digital technologies and the social practices of digital communication, which bring together online and offline spaces, spoken and digital discourse, body and technology devices (Tannen 2013). This chapter discussed the development and state of methods for digital language research in sociolinguistics of superdiversity and outlined a number of emerging research themes. In concluding, we propose the following key points for online research in contemporary sociolinguistics:

1. It is based on ethnography, ranging from a fully fledged ethnography in some cases to the adoption of elements of ethnographic method in others.
2. It is context-sensitive, i.e., investigates contexts of communicative action instead of taking them for granted.
3. It relies on mixed methods in data collection and analysis, and develops methods of digital language research in sociolinguistics further towards multi-sited and mobile research designs.
4. It extends the scope of analysis beyond written language and literacy and towards multimodality and polymedia.
5. It rejects a permanent separation of on- and offline arenas of communicative action instead of asking how language online resembles (or not) language offline, it examines processes of linguistic reconstruction and recontextualization between and across on- and offline sites.
6. It therefore aims to de-exist the digital language practices, emphasizing instead their integration into peoples' everyday life with language.

In a research agenda along these lines, the ethnographically informed analysis of digital communication paves the way for a multi-sited ethnography of digital literacy practices in ordinary communicative life. In current research practice, the digital textual data predominates and is complemented by user-based data, with the primary focus being on understanding language practices online. In future research, the focus could be on following speakers and their language practices across off- and online spaces, asking how digital and physical, online and offline practices merge.

We conclude by pointing out the need for constant innovation in terms of research tools. The reliance on traditions of linguistic ethnography should not make digital language researchers oblivious to the tremendous range of digital tools for online ethnography. To name but a few options, freeware such as Evernote or Zotero can be used for digital field-note taking or data chip collection, social networking sites can be used to bring together researchers and participants (D'Arcy and Young 2012; Khorovavnik and Unger 2016), while research in progress can be presented and discussed on blogs and video-sharing sites, and web-based office suites offer a platform for collaborative annotation and analysis. In addition, open-source software scripts facilitate the documentation of social media conversations, and mapping tools, which are widespread in digital humanities and data journalism, can be used to trace and visualise the movement of people and semiotic resources across boundaries. These new tools can transform ethnographic research on the relationship between language, mobility and digital devices by enabling the integration of semiotic material, such as audio-visual snapshots or short videos, into the visualisation of trajectories. However, researchers who experiment with these new opportunities of documentation and representation will need to constantly consider how to balance them with limitations imposed by research ethics.

Further reading
Covers the state of the art in digital language research from a sociolinguistic and discourse studies perspective.
An instructive collection of ethnographic case studies on digital practices across a variety of communication devices.
Introduces the notion of polymedia and examines meanings of media choice in the everyday lives of transnational families. The polymedia approach provides a suitable point of reference for a sociolinguistic perspective on multilingual repertoires and mediated communication.
A collection of research papers on language and discourse in various modes of digital communication, including social media, blogs and gaming, which offer valuable insights into the analytical challenges of working with digital discourse.

References
Androulidakis, J. (2008) "Potentials and limitations of discourse-centered online ethnography", Language and Internet 5(8).
Reflecting on the ethics of researching communication in superdiverse contexts

Fiona Copland

Introduction

Ethics as both epistemology and practice has been growing in importance in the social sciences at the same time as institutions have been tightening their requirements in terms of ethical approval processes. Many of our understandings about ethical research derive directly from medical models (Copland and Greene 2015), and these have been helpful in supporting social science researchers in developing ethical approaches to their work. Nevertheless, many institutional ethics approval processes are not a good ‘fit’ for the kind of work social sciences researchers do, and ethics committees can struggle to understand and then approve research designs that are embryonic or field work that is situated in sites where ethical issues cannot always be predicted. In addition, the focus on the ethics approval form as product may well researchers into believing that ethics are not part of the research process, and therefore they do not pay attention when ‘ethically important moments’ (Guillermin and Gillam 2004) occur in the field.

Recently, the emergence of superdiversity as a focus of research has added a new level of complexity to considerations of being ethical. Peoples from different cultural and heritage backgrounds do not always share understandings of ethics or believe that social science research should be concerned with ethics to the same degree as invasive research, such as medicine. In these contexts, ethical issues can be sites of disagreement or contestation as different groups struggle to understand either the exact nature of the issue or why the issue has been identified as problematic.

After introducing a historical perspective on ethics in social science research, this chapter will examine the ethical principles that researchers should consider both when planning their research projects and during the research process. It will then go on to reflect on the ethical decisions made by two researchers working in superdiverse contexts. Focusing on ‘ethically important moments’ (Guillermin and Gillam 2004: 62) in researching communication, it will explore the ethical issues at play and how researchers resolved ethical dilemmas. The chapter will conclude by providing some useful readings for those wishing to develop their understanding of ethics in communication more fully.