

Digital polycentricity and diasporic connectivity: A Norwegian-Senegalese case study

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Abstract

Digital communication remains largely unexplored in sociolinguistic research on diaspora and language. In this paper, ethnographically collected data from Norway-based families of Senegalese heritage are explored to identify how family members use digital media to engage with diaspora concerns and projects, and how this engagement shapes their multilingual practices online. We re-contextualize the concept of polycentricity (Blommaert et al.) from the physical setting of a neighbourhood or region to complex ecologies of digital media, and identify four ‘centres’, that is, distinct orientations for participants’ digital language and literacy practices, in which linguistic choices are associated with diaspora discourses, genres, and imagery. Each centre constrains the deployment of linguistic and semiotic resources in ways that are related both to historically rooted sociolinguistic hierarchies and affordances of digital media. The findings support a key claim in language and diaspora research, that is, the fine-grained patterning of linguistic resources in diaspora communities. They also underscore the need to extend the empirical scope of a sociolinguistics of diaspora from co-present to mediated interaction, and to explore the interplay between the two.

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KEYWORDS

Arabic, digital diaspora, digital multilingualism, French, polycentricity, polymedia, social media, Wolof

In memory of Jan Blommaert (1961–2021)

1 | INTRODUCTION AND THEORETICAL BACKGROUND

Following an understanding of diaspora as constituted in communicative practice and of language as a key resource for diasporic connectivity, this paper proposes to transfer the notion of polycentricity (Blommaert et al., 2005) from the physical setting of a neighbourhood or region to a complex ecology of digital media. Based on ethnographically collected data from Norway-based families of Senegalese heritage, we coin the notion of ‘digital polycentricity’ to explore how participants use digital media to engage in a range of discourse practices that are related to their multiple diasporic identities, in each case mobilizing different resources from their linguistic repertoires. We begin by reviewing current discussions of diaspora and language, emphasize the constitutive role of digital technologies in the production of diasporic communities and then introduce the notion of polycentricity and its adaptation to digital language practices. After presenting the study’s participants and methods (Section 2), four digital diasporic centres are examined (Section 3), each associated with specific patterns of linguistic and semiotic practice. Implications of the findings for a sociolinguistics of diaspora in a digital age are discussed (Section 4).

Common in the interdisciplinary diaspora literature are ‘core feature’ definitions, which attempt to break down the multitude of diasporic configurations to a few constitutive elements. Following Brubaker (2005), three core elements of diaspora are (a) its transnational dispersion, (b) homeland orientation, and (c) boundary maintenance from the majority population. Brubaker rejects an essentialist use of the term ‘diaspora’ to refer to counted and quantified groups based on nationality or ethnic background, and proposes to think about diaspora as a category of cultural practice, thereby focusing on those parts of a population that are ‘committed to the diasporic project’ (Brubaker, 2005, pp. 12–13). Thinking of diaspora as a category of practice shifts the focus from socio-demographic characteristics to communicative practices of diasporic engagement, which may grow or diminish over space and time.

This non-essentialist understanding ties in well with recent scholarship on diaspora and language (Canagarajah & Silberstein, 2012; Reiter & Rojo, 2015; Rosa & Trivedi, 2017). For example, Rosa and Trivedi (2017) suggest focusing on the role of language in processes of diasporization rather than on seemingly stable diaspora groups with fixed linguistic repertoires. Canagarajah and Silberstein (2012) claim that diaspora identities and relationships are constructed and negotiated through linguistic and semiotic practices, and advocate a pluralistic view of linguistic practices in diaspora groups. Far from limited to a full-fledged use of a heritage language, such practices may rely on different proficiency skills, including receptive language skills, and interact with semiotic resources that include the body and media (Canagarajah, 2012; Reiter & Rojo, 2015). Diaspora identities are tightly interconnected to other social identities that people orient to and perform linguistically, and diaspora practices may co-exist with practices that point away from diaspora. A more limited body of work has explored the role of multilingual and multimodal resources in diasporic practices online (cf. Androutsopoulos, 2006; Jacquemet, 2005; McLaughlin, 2014). This research illustrates how multilingual practices in transnational and diasporic settings are intertwined with the multimodal repertoires and semiotic resources

afforded by digital media, and how language choices in, for example, chat messages or forum discussions index locally produced identities, thereby contesting essentialist language and ethnicity linkages. Both of these lines of scholarship on diaspora and language are framed by, and contribute to, post-structuralist approaches in sociolinguistics, placing emphasis on fluid language practices, ideologically constructed language boundaries, the integration of linguistic signs with larger set of semiotic and material resources, and the impact of global semiotic flows on local practices of appropriation and re-contextualization (Androutsopoulos & Juffermans, 2014; Arnaut et al., 2016; Pennycook, 2017).

In a practice-based theorizing of diaspora, technologies of interpersonal and mass communication – from private letters to video tapes to smartphones – are viewed as a key resource for diasporic connectivity. Processes of cultural circulation and consumption that were formative for 20th century diaspora groups, such as access to homeland news and culture, are replaced by the web, whose importance for the formation and maintenance of diasporic and transnational networks is well documented (Appadurai, 1996; Brinkerhoff, 2009; Diminescu, 2008; Jacquemet, 2005). The rise of mobile and social media in the last decade has speeded up this process, facilitating migration and transnational mobility in the first place (Leurs, 2015; Madianou, 2014; Marino, 2015; Vincent, 2015). While early diasporic networks were hosted on public web forums and portals, smartphone-based messenger apps enable the formation of limited-access groups ‘below’ the level of general public. The findings of this paper, too, show how migrant users pursue diaspora engagement by traversing networks of interconnected sites and applications (chatgroups, Facebook pages, video channels), thereby scale-shifting between various degrees of publicness and privacy. The on-going diversification of interpersonal media is fruitfully theorized with the concept of polymedia, which originates in ethnographies of transnational communication between migrant workers and their families (Madianou, 2014). A polymedia analysis examines how media choices become associated with different interlocutors, genres and semiotic choices, e.g. the decision to communicate via voice or text. In sociolinguistics, this line of thinking coincides with a shift of interest from language use in single modes of digital communication towards more complex digital ecologies, and to the interplay between digital and co-present practices (Androutsopoulos & Stæhr, 2018; Tagg & Lyons, 2018). The notion that a media choice may gain affective and social meaning parallels the indexical meaning of language or style choice, and invites us to explore the interplay between the two. This interplay between linguistic and media choices is relevant to the families studied in this paper who make selections from their rich linguistic and media repertoires as they engage in diasporic communication.

This paper examines how Norwegian-Senegalese families draw on their linguistic resources within complex digital ecologies to engage in transnational diaspora practices. To theorize the configurations of semiotic resources, media spaces, types of audiences, and formations of knowledge that are apparent in our data, we draw on the notion of polycentricity, originally developed in ethnographic research on multilingualism in a migrant neighbourhood in Ghent, Belgium (Blommaert et al., 2005). Polycentricity is a theoretical metaphor, grounded on the notion that linguistic practices are shaped by multiple sociolinguistic norms or authorities, that is, ‘centres’. Blommaert et al. (2005) linked these normative centres to particular sites in urban space, such as a school, mosque or corner shop. Thus, a neighbourhood is viewed as ‘a patch-work of very different spaces, places and activities, often functioning as centres imposing or offering particular interactional regimes to their users’ (Blommaert et al., 2005, p. 213). A centre offers a language-ideological model to which speakers orient more or less consistently in their situated selections of language, genre, or wording for a given encounter. Speakers can shift across centres within a speech event, resulting in heteroglossic discourse (Stæhr, 2016). In Blommaert’s work of globalization and superdiversity, polycentricity is linked to the notion of orders of indexicality (Blommaert, 2007, 2010). Various points of orientation within a polycentric environment are viewed as interconnected parts of a sociolinguistic hierarchy, in which registers of language are ranked in terms of value or adequacy (Blommaert, 2010, pp. 37–41).

Work on multilingualism, migration and globalization that uses polycentricity as an analytical category seems to take two directions. The first focuses on polycentric languages, exploring their usage and status in different social arenas, often translocally distributed ones. For example, various registers of Sámi in Finland take on different indexical values in education, tourism, the media, and rural environments, all of which constitute ‘multiple, simultaneous, and sometimes conflicting points of navigation’ for Sámi speakers (Pietikäinen, 2010, p. 86). Portuguese is valued differently as a migrant language in France, as opposed to a national language in Portugal (Keating et al., 2015). In this reading, a centre ascribes different functions and values to (registers of) a given language. A second reading focuses on speakers’ polycentric practices in various social spaces, charting out how individuals or groups orient to multiple centres of authority. For example, classroom and playground constitute distinct centres for elementary school children (Karrebæk, 2016), likewise school and online communication for young adults (Li & Juffermans, 2015). Both lines of polycentricity analysis share an emphasis on the ideological stratification of linguistic repertoires, the spatial dimension of communicative events, and the link between polycentricity and superdiversity (Arnaut, 2016; Li & Juffermans, 2015, p. 33). Some of this work examines digital communication as one among several centres (Li & Juffermans, 2015), or as a discourse site where speakers’ orientations to various centres may be displayed to audiences (Koven & Simões Marques, 2015). Closest to our approach is Stæhr’s (2016) study of a social media network, Facebook, as polycentric in itself, in which participants draw on written-language variation to index a mainstream and youth-cultural orientation, respectively. This analysis, supported by our findings, offers evidence against the assumption that a social media platform would constitute a centre in its entirety (Blommaert, 2013).

Against this background, this paper coins the term ‘digital polycentricity’ to explore language practices in complex digital environments. A centre is thereby defined not by its physical materiality, but by the way diasporic connectivity is organized. We study how digital media users orient to various centres as they traverse digital spaces and mobilize features from their semiotic repertoires to engage with different discourses and practices, in diaspora and beyond.¹ We argue that an analysis of digital polycentricity contributes to a sociolinguistics of diaspora in the digital age by centring on the relationship between multilingual repertoires and digital environments. We also aim to contribute to sociolinguistic work on multilingualism and digital communication, whose scope is often limited to public forums and social media platforms (Schreiber, 2015; papers in Androutsopoulos & Juffermans, 2014; Arnaut et al., 2016). Aiming to overcome this limitation, our analysis asks how people navigate digital ecologies as they engage with diasporic concerns, and how their multilingual practices pattern together with other selections at the level of sites, content, genre, and semiotic means (e.g. emojis, memes, shared videos etc.). Our findings challenge the assumption that a diasporic ‘homeland orientation’ leads by necessity to homogenous linguistic choices, and show how patterned linguistic, pictorial and media choices provide resources for diasporic connectivity and identity performance.

2 | THIS STUDY

This article is based on a 3-year project on multilingualism and digital communication in four Senegalese-Norwegian families. All families have Norway as their permanent place of residence and were recruited through the second author’s contacts in Norway’s Senegalese community.² The following information was valid during fieldwork in 2017–2019:

- Family 1: Father has lived in Norway for 16 years; the mother joined him 10 years ago. Both are of Wolof origin from the north of Senegal. They have a teenage son, born in Senegal, and two younger children, born in Norway. They live in one of Norway’s biggest cities.

TABLE 1 Digital data by informant, platform and audience

Participant	Dyadic chats	Group chats	Facebook profiles
Mother 1 (M1)	✓		✓
Father 1 (F1)	✓		✓
Son 1.1 (S1.1)	✓		✓
Father 2 (F2)		✓	
Father 3 (F3)	✓	✓	✓
Mother 4 (M4)		✓	✓
Daughter 4.1 (D4.1)	✓		✓
Daughter 4.2 (D4.2)	✓		✓

- Family 2: Father was born in Senegal and moved to Oslo in the 2000s; mother is born in Norway without Senegalese ancestry. They have two young children, born in Norway.
- Family 3: Father originates from the south of Senegal and lives in Oslo since 2009. His adolescent daughter, also born in Senegal, moved to live with him a few years later.
- Family 4: Mother was born and raised in Senegal and has lived in Oslo since the late 1990s. Her two oldest children were born in Senegal, two younger children in Norway.

The Senegalese parents (Fathers 1–3, Mothers 1 and 4) have been living in Norway for several years, with no intention to return to Senegal anytime soon. They are all employed and their children visit Norwegian schools and higher education institutions. There are only very few Senegalese in Norway, and opportunities for co-present exchange with other Senegalese are limited, as participants reported in interviews.³ All family members travel to Senegal periodically, some maintain business projects there, and all use media to maintain family and friendship bonds in Senegal and abroad. Linguistically, all Senegal-born parents speak and write Wolof (Senegal's main vernacular language, spoken by the majority of the population), French (Senegal's official language, dominant in school instruction and formal literacy) and Norwegian. In fieldwork interviews, some parents (except Fathers 1 and 3) also reported proficiency in Arabic, and all but Father and Mother 1 reported using English. Their children have in general less familiarity with French and more with English (which is widely used in Norway), with their knowledge of Arabic depending on each family's religious orientation. The languages used at home are overwhelmingly Wolof and Norwegian, with other languages (especially French, English and Senegalese regional languages such as Fula) depending on family.

Fieldwork followed a multi-sited ethnographic procedure. At least three meetings with each family were arranged from 2017 to 2019, and a summer retreat in 2018 brought all families together for focus-group discussions. In initial interviews, family members discussed their linguistic repertoires and media use for communication with family and friends. They then shared digital data samples of various sizes from their smartphones and tablets (Table 1). On this basis, we compiled 'mediagrams', that is, visual representations of each participant's language, modality and media choices towards identified interlocutors (Lexander & Androutsopoulos, 2021). Initial findings were contextualized in follow-up interviews, and informants' feedback was added into the dataset. Although the following analysis mainly relies on digital data from the corpus, these are supported by interview information.

Data for this article come from eight informants (Table 1). It includes long message threads from six dyadic chats and three group chats. Seven informants also offered Facebook 'friend' status to the fieldwork researcher, enabling us to examine their personal profiles in terms of diaspora discourses and the semiotic resources associated with these. Collected ethnographically and within boundaries

participants defined for themselves, this dataset is unbalanced by individual, and amounts of data per person are rather small. However, it enables comparisons of individual language use in various media channels and to various addressees or audiences. Multi-channel datasets of this kind are rare in the literature (cf. Tagg & Lyons, 2018). The various platforms and applications used by the informants (especially WhatsApp, Facebook Messenger, SMS) differ in terms of the participation formats they afford. Dyadic chats are by definition limited to one particular pair of interlocutors. Group chats are small groups whose members, whilst not always mutually acquainted, share a joint purpose, origin or interest. Facebook profiles are open to larger audiences (in this data, a few hundred 'friends' per profile) and shaped by the presence of different social relationships in the audience (e.g. relatives from Senegal and work colleagues from Norway). They thus constitute a public arena for a wide array of topics and discourses.

3 | CENTRES OF DIGITAL DIASPORIC PRACTICE

All informants use digital media for informal interaction with family members and friends, in Senegal and elsewhere. Media consumption related to Senegal, such as jointly watching shows on satellite TV or YouTube, is also important. Their orientation to a 'real or imagined 'homeland' as an authoritative source of value, identity and loyalty' (Brubaker, 2005, p. 5) is evident in digital literacy practices such as their choice of profile images and their sharing of photos and videos from Senegal (Tsagarousianou, 2016). At the same time, these four families fit well into a culturally 'hybrid' view of diaspora, as emphasized in diaspora scholarship and discussed below.

Delimiting the digital centres involved three analytical moves that were carried out iteratively across all collected data: (i) identifying discourses, in terms of thematic fields and audience orientations, that informants engage with in some way; (ii) identifying the media channels that informants use to produce, respond to and consume communicative acts within a given discourse; (iii) identifying informants' semiotic choices, as afforded by each channel and including linguistic features from named languages. Our analysis also considers transmedia connections across different sites (cf. Marino, 2015), for example, by following links from social networking profiles and messenger chats to YouTube videos, thereby keeping track of concomitant shifts in the deployment of linguistic and pictorial means.

3.1 | Digital spaces of informal talk

A large part of the data consists of dyadic and group-level interactions with family members and close friends who live in Senegal, Europe, Canada or China. For example, Father 1 has regular exchange with several relatives in Senegal, his sister who lives in Canada and a Senegalese friend who lives in Italy. Father 3 uses social media and messenger chats to keep in touch with friends from his native town and for small business projects there. Mother 4 is in a chatgroup with former schoolmates from Dakar. These three informants are also fond of posting and sharing Senegal-related content on Facebook. All of the adolescents who contributed digital data use messenger applications, too, to maintain contact to older and same-age family members from Senegal. Individually and situationally diverse as these exchanges may be, they constitute a centre of digital practice that is grounded on conventions of everyday talk in the Senegalese speech community. They all share a conversational character and draw on informal registers of language. For Senegalese speakers, this implies translanguaging practices that mainly draw on French and Wolof (Calvet, 1999; Lexander, 2011; McLaughlin, 2014). Depending on speaker and interlocutor, features from Senegal's regional languages and from English may also play a part.

EXTRACT 1 Father 3's hometown chatgroup ('New'/'Reg' = new/regular member) Anonymized. Typographic notation: **Wolof** | *French*

1) New:	<i>Bonsoir à tout le monde</i>
	'good evening everyone'
2) Reg:	VOICE MESSAGE IN WOLOF
	['Abdou I don't know you, but welcome here']
3) Reg:	<i>Abdou faut donner ton facebook piur que l'on tajoute au groupe facebook</i>
	'Abdou, you must give your Facebook [handle] to add you to the group'
4) New:	<i>Abdoulaye ex-mari d' Aminata je vie à Toulouse</i>
	'Abdoulaye ex husband of Aminata I live in Toulouse'
5) New:	<i>Merci Pape</i>
	'Thanks Pape'
6) Reg:	Ah ok nln hammala
	'Ah ok I know you'
7) Reg:	Boubah kay
	'very well indeed'
8) New:	😊 <i>Bravo</i>

The following two examples illustrate multilingual practices in these informal exchanges. Father 3 is member of a chatgroup for people from his native town in the south of Senegal who now live in several countries. Extract 1 illustrates a recurrent practice in this group. Completed within 10 min, this exchange starts when a newcomer from France joins in and greets in French (line 1). Another member from France posts a voice message in Wolof with welcome wishes (line 2), and then writes instructions in French about adding the newcomer to a Facebook group maintained by members (line 3). A motivation for this mode switch between speaking Wolof and writing French might be that the requested information must be given in writing. The newcomer gives information on himself (line 4), and then signs off (line 5). The regular member then switches to written Wolof for cordial greetings (lines 6–7), followed by ratification by the newcomer (line 8).

For adolescent family members, exchanges with their uncles and aunts from Senegal provide opportunities for cultural socialization and heritage language learning, notably regarding various registers of Wolof. Extract 2 shows the closing of a chat exchange between the older sister in family 4 (D4.1) and her uncle. Their exchange is shaped by conversational echoing. In lines 1 and 3, they send each other compliments and gratitude, with the 'thanks' expression cast in French and the new predication, an affective evaluation, in Wolof (*trop* is treated here as an integrated loan in Wolof). Then D4.1 wishes good night (line 4) and sends good wishes (line 5). Pre-fabricated, formulaic utterances of this kind are easier for her (and other family children in our sample) to produce in Wolof than free, idiomatic speech. She then repeats 'good night' in English, echoed by her uncle (lines 5–9, line 7 is a self-correction on 5). It would seem that her switch to English, accommodated by her uncle, indexes that the exchange is now coming to an end, also in view of these turns being much shorter than the previous ones.

Across the available data, these informal exchanges with transnational family and friends are mainly carried out in French and Wolof, notably an urban style of Wolof interspersed with French-origin lexis. More often than not, French acts as a base language, with switches into Wolof to evaluate, qualify or index irony, aligning with well-known participant- and discourse-related functions of code switching (Androutsopoulos, 2013). As pointed out by McLaughlin (2014), the traditional stratification between French (written, formal) and Wolof (spoken, informal) still shapes digital language practices in Sene-

EXTRACT 2 Exchange with uncle from Senegal (data by D4.1)

1) D4.1	<i>Merci mais yama gueuneu Bax</i>
	'Thanks but you are better than me'
2) U4	<i>Ohhh vraiment merci contana troppp</i>
	'Oh, thanks so much, I am so happy'
3) D4.1	Contana parce que mangi wakh akh yow 😊
	'I am happy because I chat with you 😊'
4) D4.1	Mangi dem tedi, bonne nuit
	'I'm going to bed, good night'
5) D4.1	Ngou fanane ak jam, noyouлма njep ci gallé bi
	'Spend the night in peace, greet everyone in the house from me'
5) D4.1	Goos night
6) U4	Good night
7) D4.1	Good night
8) U4	Bye bye
9) D4.1	Byeeeeee

galese diaspora.⁴ An example is F1, now is in his 50s, who was educated in Senegal before the digital era and is less comfortable with writing Wolof online than many younger Senegalese. In one instance, F1 posts on Facebook a photo of his native city, and in the comment section, he code-switches between French, his own preferred choice, and Wolof in order to accommodate a friend's comment. However, younger adults such as F3, S1.1 and D4.1 use French and Wolof, features of English, and occasionally Fula and Joola (two of Senegal's regional languages) in more fluid ways. Extract 2 shows a well-attested pattern of multilingual talk, that is, sequential repetition of language choice and linguistic form to index consent and conversational harmony. Extract 1 shows a more recent practice that is popular with our informants, that is, code- and mode-switching. When a dual affordance of text and voice messaging is available, Wolof and regional languages tend to be preferred for voice messages, whereas text messages are mostly in French. This distribution accommodates adult Senegalese who may not be comfortable with writing Wolof, at the same time indexing the sociolinguistic stratification of languages in Senegal.

3.2 | Senegal's media discourse

A second centre is constituted as participants (especially the parents) engage with content from Senegal's news media online. This second centre mainly relies on receptive literacy practices: watching, reading, listening and sharing. Unlike many findings on multilingual Facebook (e.g. Androutsopoulos, 2015; Schreiber, 2015), the participants use their Facebook profiles not for sustained discussion, but mainly for viewing and sharing, only occasionally commenting. The position of Facebook in their digital ecologies is similar to television.

Senegalese politics is popular with F1, F3 and M4. During fieldwork, they followed the forthcoming presidential elections and indexed their political views by sharing media stories and commentary. For example, M4 shares videos that critique the acting president and praise one of his opponents. F1 discusses politics in texting with a friend who lives in Italy. They share screenshots and links on various topics, all written in French, and discuss them in French. One image they shared is Figure 1, left: a hand-



FIGURE 1 *Ma carte mon arme* and *Handball* (data by F1)

gun with the words ‘Republic of Senegal Voting Card’ placed on the barrel, a ballot box on the handle and the message: ‘My [voting] card [is] my gun against Macky’. F1 is also into Senegalese sports. On his Facebook profile, he shares a media report on the national women’s handball team (Figure 1, right) and comments it by drawing on emojis as an expressive resource.

All written media content from Senegal that informants share and watch online comes in French, the country’s official language. Written Wolof is entirely erased from Senegalese news media and rather exceptional even in Facebook status updates of private nature (the only status update in Wolof we found was about the death of a relative), though it does come up in comments. Some instances of spoken Wolof surface in the data in shared videos with political speeches or comedy dialogue. Content from Senegal’s media does not come up in English (except occasional English lexis in its Senegalese usage), nor Arabic (except if thematically connected to religion) or in Senegal’s regional languages. In sum, as participants orient to the Senegalese public sphere, they re-contextualize the country’s official language regime in their social media timelines and messenger threads.

3.3 | Religion

A third centre is relevant for those participants (F1, M1, F2, M4, D4.1) who engage with Muslim religious content in public and private digital sites. Religious messages and interactions in the data are multilingual and often feature a multimodal and decorative layout. A distinct resource here is Arabic, which comes both in spoken mode (e.g. sermons and recitation) and in the Arabic and Latin script, with script choice depending on channel and genre. French and/or Wolof complement Arabic, whereas Senegal’s regional languages, English or Norwegian have no share in this centre.

Recurrent in messenger and SMS chats are religious chain messages, mostly in writing and occasionally in audio. They are fabricated to circulate across transnational Francophone Muslim audiences, as indexed by the absence of individual identifiers (e.g. terms of address), an explicit request to pass on the message to others, and their linguistic composition in French with many Arabic features (religious terminology, greetings/farewells, poetry or sermons). For example, F1 received by a Senegalese friend

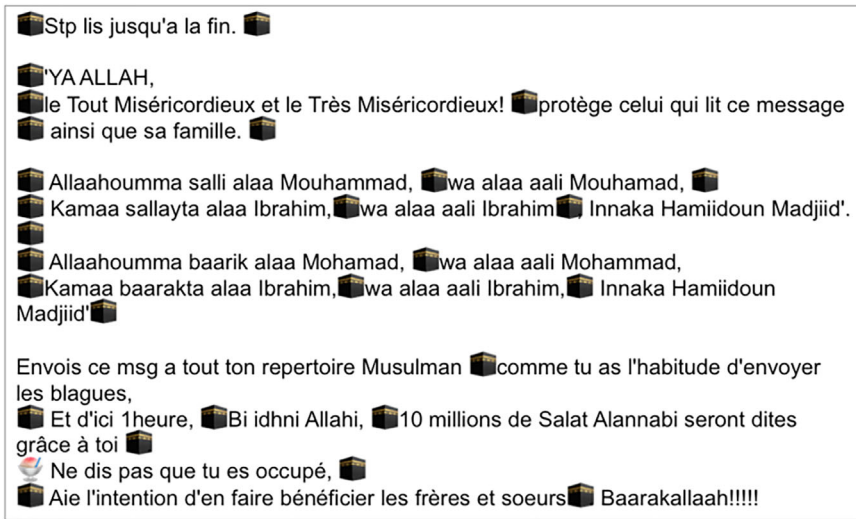


FIGURE 2 Chain message (data by F1)

from Italy a chain message about adequate behaviour during Ramadan. It is in French and includes Romanized Arabic lexis for religious terminology, for example, *ramadan*, *sourah* and *rakka*. Figure 2 shows another chain message, sent to F1 from a friend in Senegal. It starts with a request to read, in French ('Please read through to the end.'). There follows an evocation of God, in Arabic and French. The main part is a four-line chant in Romanized Arabic. The concluding instructions on how to deal with this message come in French, interspersed with religious vows in Arabic. The sign-off is again in Arabic, with expressive punctuation. All of the above is visually framed by a 'Kaaba' emoji that is repeated 28 times and works as a 'beat gesture' (Gawne & McCulloch, 2019).⁵ Neither this nor other chain messages in the data are produced in or refer to Senegal, but their frequency in the data suggests that they appeal to Senegalese Muslims.

Another fragment of religious discourse that is fabricated for transnational circulation is a 'Good Friday' video clip, elicited on M1's Facebook profile (she reported receiving 'Friday messages' from her brother who lives in Senegal). This short (01:34) clip consists of a continuous audio track (a recited Quran surah) and 36 still images, of which 20 feature text, mostly in Arabic script (17 images), then in Romanized Arabic and French (two stills each, a few images are multilingual). A selection is shown in Figure 3. Arabic characters form a large part of the clip's religious iconography. They appear on decorative plates, hearts, butterflies and text blocks. The reception status of these signs, that is, whether the viewers *read* or just *view* them, probably depends on individual viewers' proficiency in Arabic. M1 told us that she does not understand what is written there, but just looks at the pictures; however, she has sufficient receptive proficiency to recognize Arabic as such. When Arabic is meant to be propositionally understood, a French translation is provided as well (see example). This leads us to assume that much Arabic script in this and other similar clips works on a symbolic and/or iconic rather than propositional level.

A distinct niche in this religious discourse is a WhatsApp group for Norway-based Mourids, a Sufi brotherhood that is specific to Senegal, where Father 2 logs in daily. The base language for chatting here is written Wolof. Messages feature Wolof lexis that is specific to Mourids (e.g. *ziar* 'greetings', *tawfex* 'peace'), Arabic lexical borrowings (e.g. *akassa*, 'thank you', *Xassaides*, i.e. religious poems) and Arabic formulaic expressions (e.g. *Assalamou' Haleykoum'* but also *ASSALAMU ALEYKUM*).



FIGURE 3 Video-stills with linguistic signs from 'Bon Vendredi' video (data by M1)



FIGURE 4 Banner of YouTube channel *Diwaanu Xassaides TV*

Messages written in lower case feature diacritics, which are part of standard Wolof orthography but not used anywhere else in the data.⁶ This specific Wolof usage, with Mourid-specific lexis, erasure of French features and Wolof orthography, is known to index belonging to the Mourid community (Ngom, 2002), and is now carried over to digital diasporic discourse. On this ground, this chatgroup could be viewed as orienting to a distinct centre, that is, the Mourids, within diasporic religious discourse.

Many messages in this chatgroup are plain weblinks to YouTube channels by names such as *Al Mouridiyyah TV* ('Mourides' TV) or *Diwaanu Xassaides TV* (Figure 4), which cater for the transnational Mourid brotherhood. They index a digital literacy practice, by which Norway-based Mourids visit the chatgroup, and then visit YouTube channels to watch video recordings of prayers, sermons and Mourid festivities. Most of these recordings originate in Touba, the Mourid holy city, and are in Wolof. Figure 4 shows the web banner of one channel. Its name is in Latinized Arabic, and commercial information about video-recording services for community events comes in French. Most of the space is covered by excerpts from poems written in Arabic by the founder of Mouridism who is pictured to the right. Whether these are read by channel viewers or just gazed at, is again ambiguous.

3.4 | Centres beyond diaspora

Besides informal talk with transnational family and friends, consumption of Senegal's news media and engagement in religious discourse, other orientation points of the participants are evident in the data. Facebook profiles, in particular, display traces of participants' interaction with non-diasporic interlocutors in Norway and of their interest in discourses beyond diaspora.

References to Norwegian politics, society and pop culture are absent from the participant's social media profiles. This supports Brubaker's (2005) third diaspora element discussed above, that is, boundary maintenance towards majority society, but also implies that Norwegian discourse may reach these families by other media channels, not documented here. However, traces of the Norwegian language and interaction with Norwegian people are visible in the data. In Family 1, for example, M1 goes out for dinner with work colleagues, and photos are then posted and commented on Facebook. F1 posts birthday wishes to his children on his Facebook page, in Norwegian and French (though not Wolof), and their older son receives birthday posts by schoolmates, in Norwegian, and responds in the same language. Some features of Norwegian also surface in interactions with other Senegalese diasporans, indexing their joint transnational trajectories.⁷

Even more frequent are traces of participants' engagement, even identification with globally circulating discourses of politics, lifestyle and entertainment. Our informants' participation role here is again that of a viewer and sharer rather than active speaker/writer. For example, Mother 4 posts on her profile meme-style messages about life, love and gender equality, in English or French. Father 3 shares memes and videos on issues such as meditation and environmental protection, all in English, without commenting in his own words. The oldest son in Family 1 is interested in US politics and social justice issues, and regularly shares content on these matters. A daughter in Family 4 (D4.2) follows a Facebook channel that broadcasts 'Afro Dance' videos from various countries. These videos are reminiscent of the orientation of migrant background adolescents in Sweden to imagined cosmopolitan spaces (Haglund, 2010). They come without speech, but their text captions include viewing stats, in French, dancer names, in English, and many emojis to index origin or evaluation (e.g. flags for the dancers' country of origin, fire emoji to signify 'hot').

Even though content, provenience and circulation of these shared messages differ by participant, we view them as constituting a distinct centre that lacks both a homeland and residence land orientation, and brings new discourses and different languages to the foreground. Wolof and Arabic cease to play a role, and the share of French is lessened when compared to the previous centres, perhaps due to the lack of French-language digital content on these non-diaspora topics, while Englishes come to the forefront, no doubt boosted by the Anglophone hegemony in global pop culture. Theorizing these traces as indicators of a distinct centre is grounded both in the theoretical insight that diaspora identities are multiple, and the empirical observation that these messages are contextually and sequentially adjacent to diasporic ones.

4 | DISCUSSION AND CONCLUSIONS

We briefly summarize findings on the four centres of digital diaspora identified in analysis, and then discuss the concept of digital polycentricity and conclude with implications of this study for a sociolinguistics of diaspora in a digital age. Our findings show that all participants use messenger applications for transnational interaction with relatives and friends, thereby orienting to culturally familiar patterns of multilingual talk. These interactions are shaped by frequent alternations between French and Wolof, and in some cases regional languages and English, and follow well-attested patterns of code-switching

online. Secondly, adult participants orient to Senegal's news discourse by viewing and sharing content in their social media timelines and messenger threads. Their mainly receptive engagement with Senegal's public sphere was found to reproduce the indexical order of Senegal's diglossic stratification between French and Wolof in public writing. Thirdly, some family members engage with religion online. These practices entail distinct configurations of linguistic and multimodal resources, which centre on a polymorphic Arabic (in native and Romanized script), with the choice of French and/or Wolof depending on the production and intended circulation of messages. Fourthly, several participants also engage with discourses, genres and imagery that point beyond diaspora. This fourth centre has similarities to the second one in the mainly receptive and displayed character of the literacy practices which constitute it, but differs in the indexical stratification of languages it implies, with English being more visible than French.

These findings suggest that digital polycentricity is not limited to the evaluation and usage expectation of a particular language on a particular occasion. It is best understood as a semiotic homology that weaves linguistic choices together with narrative representations and semiotic imagery, an understanding close to Blommaert's figurative description of a centre as a 'packaging of topic, place, style and people' (2010 p. 40). We also see that digital polycentricity is neither entirely 'new' nor 'old'. It reflects historically rooted, normative orientations (e.g. in the language, content and imagery of religious discourse) and new opportunities to associate and identify oneself in globalized media culture.

Our analysis further shows that a digital centre should not be thought of as a media platform or application in itself. On the contrary, global social media are inherently polycentric, that is, designed to allow for a multitude of discourses and normative orientations to flow across user networks. Nor is a digital centre a bounded online community, although centres may include such communities, such as the diasporic and transnational chatgroups that F2, F3 and M4 participate in. A digital centre is an abstraction for multi-sited patterns, which emerge as media users use the affordances of media channels to participate in particular discourses. A digital polycentric space is built on digital infrastructures, but may extend across several ones. These constrain the range of semiotic affordances that participants have at their disposal when orienting to and engaging with a centre. However, the selection of semiotic resources is not determined by platforms, but rather by centre-specific conventions (Blommaert et al., 2005, speak of 'norms'), which, in turn, echo and re-contextualize sociolinguistic hierarchies and regimes (e.g. which languages and genres to draw on when doing informal conversation, or when posting a chant in a religious chatgroup). Our modelling of digital polycentricity then entails a degree of analogy to polycentricity in urban spaces of co-present participation, as originally conceived by Blommaert et al. (2005) for migrant neighbourhoods. Indeed, digital centres may be considered extensions of urban centres (e.g. religious sites in the neighbourhood) and/or successors of older diasporic media.⁸

However, digital polycentricity is more than a mirror image of a neighbourhood, and digital communication is not reducible to a substitute of embodied co-present semiotic action (Androutsopoulos, 2015). Three points must be emphasized here. Firstly, digital spaces afford a unique simultaneity in the display of multiple diaspora orientations. In social media timelines, diasporic content is adjacent to, and interspersed with messages that point to non-homeland centres, illustrating the hybrid character of diasporic identity formation. Secondly, digital polycentricity depends on receptive literacy practices, notably reading, watching, sharing, liking and clicking. Receptive practices too can be sociolinguistically relevant. Even in the absence of writing, the orientation towards a centre promotes exposure to, and engagement with, the languages and genres associated with it. For example, those reading and sharing religious messages maintain exposure to Arabic script and Arabic lexis, perhaps leading to an increase in their recognition and understanding (cf. Canagarajah, 2012 and Blommaert & Backus, 2013 on receptive skills as part of multilingual repertoires). Likewise, reading media news from Senegal transposes indexical orders from the home country to the diasporic context. Thirdly, interper-

sonal mediated interaction is intertwined with mediatized messages from or about the homeland, for example, when participants take up fragments from Senegalese mass media and share them on their timelines and in individual messages. The re-contextualization of mediatized messages for relationship management and identity display is not a genuinely digital practice (Agha, 2011; Androutsopoulos, 2017; Shankar, 2004), but possibly amplified through the circulation of digital content. In this regard, the practices analysed here are similar to other cases of global semiotic circulation beyond diaspora (cf. Androutsopoulos & Juffermans, 2014; Arnaut et al, 2016; Schreiber, 2015; Stæhr, 2016). This is also true for the high degree of individual differentiation afforded by digital media. Not all family members participate in the same digital centres. For example, Father 2 does not seem to engage with global pop culture, and Norway-born adolescents do not seem interested in Senegalese politics.

Implications of this research for a sociolinguistics of diaspora can be summarized as follows. The findings support a key claim in language and diaspora research, that is, the fine-grained patterning of linguistic resources in diaspora communities. Features from participant's rich multilingual repertoires are selected in many different ways. Wrapping it all up as 'French/Wolof bilingualism' would be too simplistic not only because Arabic, English, Senegal's regional languages and Norwegian also play a part, but also because Wolof and French come together in contextually shifting patterns. We argue that digital diasporic practices are organized in 'centres', defined by discourses and audiences to which the participants orient and whose indexical conventions they attend to. The findings support extending the scope of a sociolinguistics of diaspora to mediated interaction and addressing its interplay with co-present interaction. Diaspora today is for many people inseparable from transnational digital connectivity, and digital language use must therefore be considered an integral part of language in diaspora. Finally, this study demonstrates that digital language is not a uniform register. Rather, and this is a key insight afforded by the polycentricity concept, linguistic choices online are differentiated by the diasporic discourses participants choose to engage with.

DATA AVAILABLE ON REQUEST DUE TO PRIVACY/ETHICAL RESTRICTIONS

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

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ENDNOTES

¹ We draw on a Foucauldian understanding of discourse, as elaborated in discourse studies and sociolinguistics, that is, a formation of knowledge and power that constitutes social identities, and on notions of practice from linguistic anthropology and sociolinguistics, which emphasize the routinized and performative character of language practices (Hanks, 1996; Jacquemet, 2005; Pennycook, 2010).

- ² Written informed consent was obtained from parents and children individually, and information about the project was simplified and adapted in the form used with children. In accordance with national rules for personal data processing, the project was notified to and approved by the Norwegian Centre for Research Data. For details on fieldwork, see Lexander and Androutsopoulos (2021).
- ³ Statistics Norway (2020) counts 317 Senegalese immigrants plus 104 persons born in Norway by Senegalese-born parents. Another 16 persons are born in Norway by Norwegian-born parents of Senegalese origin, and 144 persons have one Senegalese-born parent. Since Senegalese migrants in Norway are so few, utmost care was taken to protect the participants' anonymity. All personal data in the collected material are anonymized, and potentially sensitive material was omitted from analysis, even though the participants themselves selected digital data to share with the researcher.
- ⁴ Calvet (1999) discusses multilingualism in Senegal as 'nested diglossia' (*diglossie enchâssée*) with a first-order diglossic relationship between French (H) and Wolof (L) and a second-order diglossia between Wolof (H) and Senegal's regional languages (L).
- ⁵ Such decorative and rhythmic usage of emojis occurs repeatedly in religious messages in our data.
- ⁶ For example, one message starts: *Assalamou' Haleykoum' di siar ak diégalu di bàalu akh ñép ak dilén bal*. 'May peace be with you, I greet and forgive, may all be forgiven and may you forgive'.
- ⁷ In a texting exchange between F1 and a Senegalese friend who lives in Italy and has also lived in Norway, F1 code-switches from French to Norwegian as he explains his son's schedule for that day. *Vi snakes*, his friend replies in Norwegian, 'we'll be in touch.'
- ⁸ For example, the video recordings of religious sermons that some family members watch on YouTube can be considered remediated versions of tape-recordings imported from Pakistan to Chicago in the 1990s (Appadurai 1996).

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