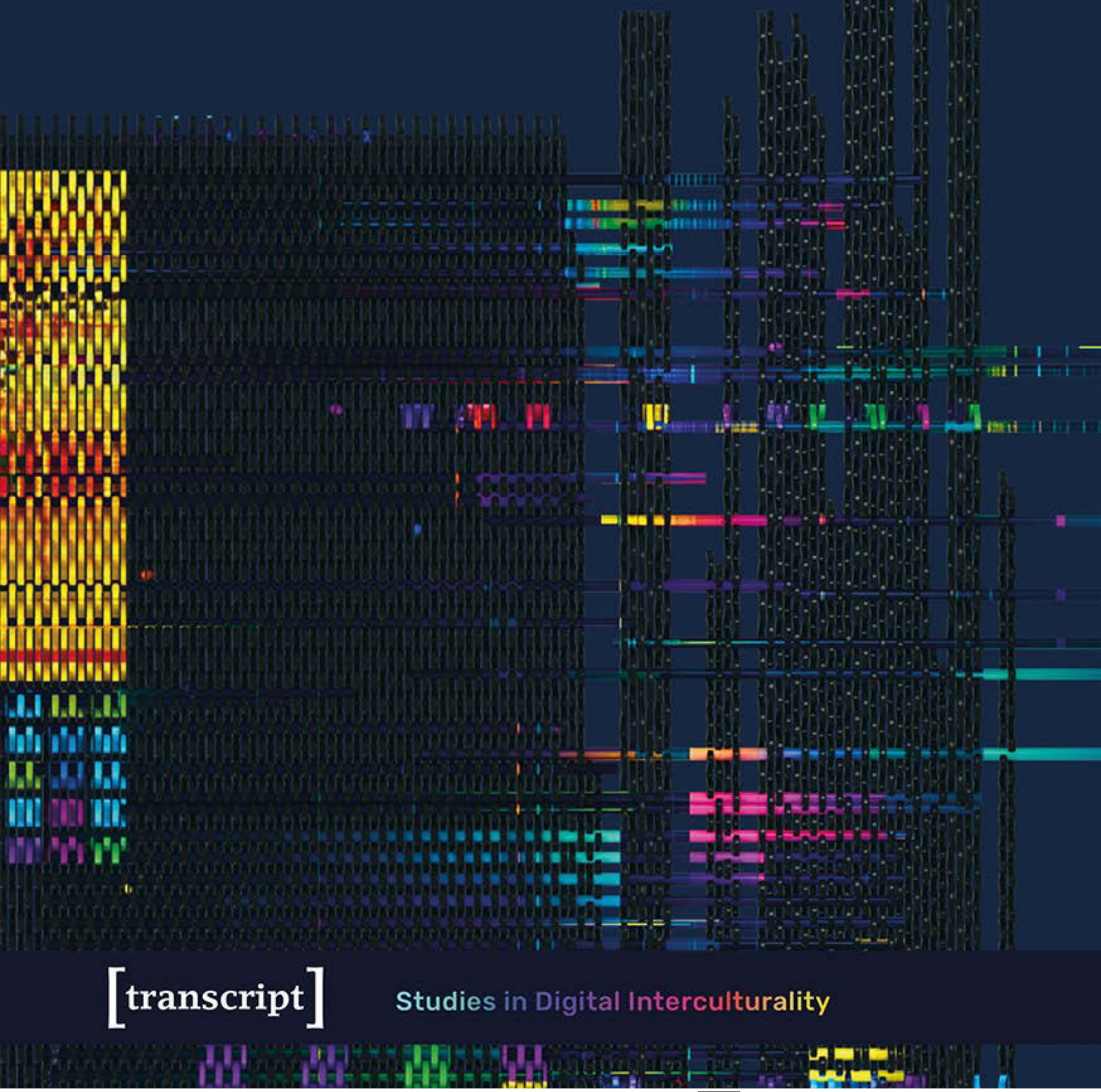
Milene Oliveira, Luisa Conti (eds.)

EXPLORATIONS IN DIGITAL INTERCULTURALITY

Language, Culture, and Postdigital Practices



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Studies in Digital Interculturality

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Editorial

As cultural boundaries blur and virtual and physical spaces merge, interculturality and digitalization mould our everyday world. We believe these entangled concepts should be viewed together. Our interdisciplinary book series is dedicated to the idea of a scholarly Intercultural Communication, informed by the perspectives of critical Digital and Internet Studies: **Studies in Digital Interculturality**. In this series we wish to publish thematically relevant monographs, anthologies, dissertations, and edited volumes of the highest quality.
The series is edited by Luisa Conti, Fergal Lenehan, Roman Lietz and Milene Oliveira.

Milene Oliveira is a lecturer in Applied Linguistics at Newcastle University, UK. She earned her PhD in Applied Linguistics from the University of Potsdam in 2018, where she also led the BMBF-funded project Digital Communities and Online Intercultural Competence (2020–2024). Her research explores digital intercultural communication, interactional sociolinguistics, English as a lingua franca (ELF), and business communication.
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Milene Oliveira, Luisa Conti (eds.)

Explorations in Digital Interculturality

Language, Culture, and Postdigital Practices

[transcript]

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Contents

Acknowledgements 7

Introduction

Interculturality and postdigital communicative practice
Building interdisciplinary pathways between intercultural communication, sociolinguistics, and related fields
Milene Oliveira and Luisa Conti 11

Part I: Conceptualising interculturality, digitality, and language: Past, present, and future

Towards a posthumanist interculturality
Theory development in intercultural communication research
Dominic Busch 41

The colonial roots and continuities of AI language culture
Britta Schneider and Bettina Migge 77

Part II: Understanding postdigital practices in a changing world: Language, technology, and culture

Story-formatting on social media
Ways of telling, teller identities, and audience engagement
Alex Georgakopoulou 111

The use of language technologies in forced migration
An explorative study of Ukrainian women in Austria
Jenia Yudytska and Jannis Androutsopoulos 135

'Living at the limit'
Sociotechnical affordances and unlearning colonial gender and sexuality
Daniel N. Silva 167

Sustainability communication between globalisation and localisation
A comparison of corporate websites in the oil & gas industry
Nadine Thielemann and Zlatoslava Savych 195

Part III: Contextualising digital interculturality: Between connectivities and exclusions

Digital interculturality
Understanding postdigital reality through a new conceptual lens
Luisa Conti, Fergal Lenehan, Roman Lietz, and Milene Oliveira 231

Appendix

Authors 261

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This volume emerged from sustained intellectual collaborations, shaped throughout by mutual trust and shared curiosity. It is rooted in the *ReDICo 2024 Encounters: Interdisciplinary Perspectives on Digital Interculturality*, a scholarly series which also included a PhD colloquium, held in collaboration with the *German Association for Intercultural Studies* (IKS), to whom we extend our sincere thanks for their collegial partnership. The *Ayôsol Collective*'s performance *Ausländerbehörde, uma cachaça, bitte!* on the eve of the colloquium offered a powerful impulse for our collective reflections, and we are grateful for their original and provocative contribution.

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Introduction

Interculturality and postdigital communicative practice

Building interdisciplinary pathways between intercultural communication, sociolinguistics, and related fields

Milene Oliveira and Luisa Conti

Abstract *This introductory chapter sets the stage for a volume that brings together perspectives from sociolinguistics, discourse analysis, and intercultural communication studies to explore the complex interplay between digital and intercultural practices. Grounded in discussions from the ReDICo Encounters series, the chapter reflects on how digital technologies shape communicative practices and interculturality in ways that challenge existing theoretical and methodological frameworks. We argue for an integrated approach that draws on the strengths of both sociolinguistics and intercultural communication, particularly in the context of what we term postdigital communicative practice—i.e., the practices shaped by the interweaving of online and offline modes of interaction. The chapter introduces key concepts, outlines methodological considerations, and proposes the use of data sessions as a means of fostering interdisciplinary dialogue. It also offers an overview of the chapters in the volume, highlighting the diverse ways in which contributors investigate the cultural, social, and linguistic dimensions of digital communication.*

Keywords *Postdigital Communicative Practice; Interculturality; Digital Interculturality; Sociolinguistics; Intercultural Communication; Digital Communication*

1. Introduction

Throughout the last decades, we have experienced, sometimes viscerally, how digital technologies shape the way we access information, communicate, construct identities, form relationships, and engage with interculturality. From social networking sites to video-sharing platforms and instant messaging apps, digital spaces have become arenas where intercultural encounters take place, social and cultural meanings are negotiated, and norms are established. We have thus witnessed how digital practices, defined as assemblages of actions, digital technologies, social goals, and social identities (Jones et al., 2015, p. 3), have become intermingled with intercultural practices, in which a myriad of cultural references, norms, and modes of expression operate simultaneously.

Sociolinguistics, discourse analysis, and related fields have made foundational contributions to understanding how digital practices contribute to identity work and reveal underlying language ideologies and power relations. Intercultural communication studies have, in turn, critically examined the concept of culture itself, frequently challenging essentialist leanings and instead highlighting the potential for dynamic and context-sensitive perspectives. This edited volume emerged from the ReDICo Encounters, a series of scholarly sessions that combined presentations and discussions, seeking to bring scholars from these fields into dialogue. The series aimed to explore and experiment with methods of integrating diverse perspectives to enhance and deepen our understanding of practices that are both digital and intercultural, and that, therefore, potentially require more comprehensive epistemological and analytical frameworks than those provided by sociolinguistics or intercultural communication studies alone. We hope this volume will serve as a valuable resource for a broad readership, including researchers and students in language-related disciplines (such as sociolinguistics, discourse analysis, applied linguistics, and others) and intercultural communication studies who are interested in how digitality impacts the ways we communicate and 'do' culture.

This introductory chapter is organised in the following way: In Section 2, we explain what we mean when we refer to intercultural communication and interculturality. In Section 3, we examine the notion of communicative practice, as described and well-researched in sociolinguistics and linguistic anthropology, and demonstrate how language, society, and culture intersect in communicative practices. In Section 4, we turn to what we call 'postdigital communicative practice,' i.e., practices where the online and offline perspectives intersect, again highlighting the interplay of language, society, and culture, but now influenced by digital technologies. In both Sections 3 and 4, we ask how our understanding of sociolinguistic processes can be meaningfully connected with conceptualisations of culture and interculturality as part of our effort to foster dialogue between sociolinguistics (and related disciplines) and intercultural communication studies. In Section 5, we point to existing methods for researching intercultural communication streams and digital communicative practices and propose the organisation of data sessions as an analytical exercise that supports the kind of interdisciplinary analysis of postdigital intercultural practices we have in mind when we call for a coming together of sociolinguistics and intercultural communication. In Section 6, we introduce the chapters and provide an overview of what readers can expect from the multifaceted contributions to be found in this volume.

2. Intercultural communication and interculturality

The concept of 'culture' has been at the core of scientific discussions and disputes. Our joint project ReDICo (Researching Digital Interculturality Co-operatively) has based its theoretical undertaking, to understand 'digital interculturality' (Conti et al., forthcoming; see also Conti et al.'s chapter in this volume),[1] on Bolten's theory of interculturality, which acknowledges the multiplicity of *Lebenswelten* comprised in the notion of 'culture'. In this vein, Bolten (2015, p. 118) defined culturality as "familiar multiplicity" (*vertraute Vielfalt*). Thus, culturality denotes a situation in which individuals act within a field of action that is known and familiar to them; that is, they know the conventions of behaviours and thoughts and can easily make sense of words and actions employed and performed by other individuals in that same field of action. Interculturality, by contrast, is defined as "unfamiliar multiplicity" (*unvertraute Vielfalt*) (Bolten, 2015, p.118). According to this definition, interculturality occurs when individuals find themselves in a situation where the frames of reference are strange (see Schütz, 1944) and cannot be immediately grasped. However, given that individuals endure in this new field of action, culturality will progressively emerge as unfamiliarity gives way to familiarity (see also Conti, 2023).

Bolten's theory also acknowledges that interculturality can be experienced from structural or processual perspectives (Bolten, 2012, 2020). The structure-oriented perspective presupposes a view of culture marked by a high degree

1 Digital interculturality has been defined as "an interdisciplinary field that deals with intercultural practices, as well as intercultural discursive developments, methods, and theories related to the digital space" (Conti et al., forthcoming, n. p.).

of spatial specification and boundedness. Discourses around national or regional cultures are often connected to the structural perspective, which regards cultures as containers (Bolten, 2012). The process-oriented viewpoint implies a dynamic understanding of culture, as reflected in the actual processes taking place in interaction, whether working jointly on a particular task, as in the workplace and other institutional settings, or establishing rapport with conversational partners. The theory also acknowledges that there is no correct or false perspective and that "every perspective retains a certain level of validity" (Bolten, 2014, p. 1). In this context, the closer one zooms upon a particular cultural field of action, "the more differentiated and multifaceted the relationship networks (local culture, group culture, couple culture, etc.) will be deemed to be" and "the further one zooms away, the more undifferentiated and homogeneous such a field will appear (organizational culture, ethnic culture, national culture, etc.)". Analytically speaking, Bolten (2014, p.1) then argues that one should avoid a loss of orientation ("One cannot see the woods for the trees"), as well as the dangers of essentialism and stereotyping as in, e.g., seeing a homogenous area of forest but failing to recognise the individual trees. Thus, both perspectives, the structural and the processual one, may be deemed relevant.[2]

There are several other theories of culture and interculturality (see, e.g., Holliday, 1999, on big vs. small cultures, see Busch's chapter in this volume) as well as models that attempt to describe intercultural processes, i.e., changes in perception of social situations resulting from intercultural contact (e.g., Bennett, 1986, 2017).[3] However, it has been argued that, due to a disciplinary basis in business studies, management studies, and psychology, the field of intercultural communication has not paid enough attention to linguistic aspects. Piller (2012, p. 9) writes that "[f]or a linguist, a large part of the intercultural communication literature makes surprising reading. Part of the surprise results from the limited to nonexistent attention to language, as if (...) languages were a negligible aspect of communication". This is unfortunate because, in fact, language-related disciplines, such as sociolinguistics, have a sophisticated apparatus for describing the relationship between language and society, and ultimately also culture, from both structural and processual perspectives. In the

2 See Bolten's 2020 critique of scientific debates regarding the notions of inter- and transculturality.

3 For descriptions and critique of models of interculturality and intercultural competence, see e.g., Bolten (2020); Rathje (2007); and Schröder (2024, pp. 9–89).

following, we review some of these notions that have come to shape how sociolinguists, linguistic anthropologists, discourse analysts, and scholars in related disciplines explain the interplay between language, society, and culture. At first, we will focus on conceptual notions that have been developed out of research with physically co-present communities. Later, in Section 4, we will proceed to examine how these notions have been adopted in studies of digital practice.

3. Language, society, and culture as offline communicative practice

Linguistic theory has experienced significant shifts throughout the decades. An important and influential trend was Noam Chomsky's framing of linguistics as a science of linguistic 'competence' (Chomsky, 1965), i.e., a speaker's mental knowledge of the rules of a language and their ability to generate and understand grammatically correct sentences. 'Competence' is thus abstracted from actual language use and assumes an idealised speaker-hearer in a homogeneous speech community. Modern sociolinguistics, according to Blommaert (2018, p. 22), emerges as a reaction to that: "the abstract language designated as the object of linguistics was countered by situated, contextualized 'speech' and such speech had to be understood in terms of a dialectics of language and social life".

Thus, sociolinguistics—understood here as an umbrella term encompassing other language-related disciplines, including linguistic anthropology (see Coupland, 2001)—paved the way for a focus on communicative practice described as the socially and culturally embedded ways people use language in everyday life. According to Hanks (1996), communicative practice consists of three interwoven elements: (a) formal structure, (b) activity, and (c) ideology. Formal structure refers to linguistic forms and conventions and comprises, for example, syntax and lexis in language in use. Activity refers to what people accomplish, or try to accomplish, interactionally—e.g., negotiating, apologising, engaging in small talk, and teaching—and the social roles performed by speakers in such interactions. Finally, ideology refers to values, beliefs, and power relations that shape how language is perceived and used, for instance, which language, with which linguistic features, are considered legitimate and which ones are marginalised; thus, ideology is embedded in cultural norms and social practices, and it has a bearing on speakers' judgments, expectations, and positions concerning language and communication.

This and other influential descriptions of communicative practice (see Silverstein's Total Linguistic Fact, 1985) came to shape the study of languages in productive ways as language started to be examined as much more than a bundle of lexical items and syntactic rules (formal structure) and began to be looked at as a social phenomenon influenced by interactional settings (activity) and socially shared norms and beliefs (ideology).

This multilayered understanding of language is connected to sophisticated analytical notions and frameworks within sociolinguistics and linguistic anthropology which enable us to understand and describe sociolinguistic processes that occur when people interact with each other in real-world situations. In the following, we will explain the notions of contextualisation, indexicality, enregisterment, chronotopes, scales, and language ideologies as they have proven highly influential in the description of meaning-making and meaning negotiation in communicative situations. This list is not exhaustive, but it addresses concepts mentioned in some chapters in this volume and aims to ensure a shared conceptual foundation among readers from diverse disciplinary backgrounds.[4]

'Contextualisation' refers to the process by which speakers use verbal and non-verbal cues to signal how their utterances should be interpreted in a given social situation. It serves as a foundation for interaction, guiding speakers and listeners in producing and interpreting utterances through linguistic and non-linguistic cues (Gumperz, 1982). These cues, such as prosody, discourse markers, and code-switching, contribute to the construction of meaning within a specific interactional frame. A well-known example comes from Gumperz's (1982) analysis of interactions at a cafeteria in an airport in the UK, where communication breakdowns occurred between South Asian staff and British customers. In one case, it was noted that the intonation used by Indian and Pakistani staff members when asking customers if they wanted some gravy ("Gravy?", p. 173) was perceived as rude by the British customers, who were likely to interpret it as a command rather than a polite offer. However, in the servers' cultural background, such intonation is neutral and appropriate. Gumperz argued that the lack of expected contextualisation cues, such as rising intonation or hedged phrases ("Would you like some gravy?"), led to misinterpretation of intent. While the literal message was clear, the social

4 For more encompassing discussions of conceptual 'nuggets' in sociolinguistics, see Coupland, 2016, p. 10; Blommaert, 2018, pp. 19–40).

meaning (i.e., politeness, friendliness, service orientation) was misunderstood due to differing contextualisation cues by the South Asian staff and the British customers.[5]

Crucially, contextualisation is closely connected to 'indexicality', the phenomenon that explains how linguistic features (such as words, prosody, or communicative styles) come to signal broader social meanings, including identities, stances, and ideological positions (Silverstein, 1985). Through repeated use, these indexical relationships become sedimented, shaping how particular speech patterns are perceived within or beyond specific communities. For instance, the use of formal titles may index respect or social distance, while saying 'y'all' can signal a Southern U.S. identity. In his study of multiethnic urban areas in London, Rampton (1995) observed how white working-class youth adopted elements of Punjabi, Caribbean English, and Creole to index stances of coolness, defiance, or solidarity in peer-group interactions. Indexicality is thus a dynamic sociosemiotic process through which language choices signal identity, group affiliation, and social positioning in particular interactional moments.

The process of social recognition and entrenchment of indexical relationships is encapsulated in the notion of 'enregisterment' (Agha, 2003), which describes how linguistic forms acquire social salience and become associated with social identities, ideologies, and context. Once enregistered within a given social order, these linguistic features are available for performance, parody, or authentication, reinforcing or contesting social hierarchies. Using the prestige register of spoken British English Received Pronunciation (RP) as a central empirical case, Agha (2003) showed how linguistic forms (such as accents) acquire and circulate cultural value through enregisterment. He demonstrated how RP came to be constructed as a socially recognised marker of elite status, authority, and education and how this recognition is sustained and transformed through media, institutional practices, and everyday interactions. In this vein, Agha (2003) argues that "cultural value is not a static property of things or people but a precipitate of sociohistorically locatable practices, including discursive practices" (p. 232).

Understanding enregistered linguistic forms requires situating them within 'chronotopes', which link communicative practices to specific historical moments, spatial imaginaries, and interactional expectations. Based on

5 For a short overview of Gumperz's work in German, see Oliveira (2023); for English, see Oliveira (2023a).

Bakhtin (1981), Blommaert (2015) described chronotopes as "invokable chunks of history that organize the indexical order of discourse" (p. 105), given their capacity to "invoke and enable a plot structure, characters or identities, and social and political worlds in which actions become dialogically meaningful, evaluated, and understandable in specific ways" (p. 109). For instance, referring to Stalin in Western Discourse can evoke a Cold War chronotope, where Stalinism is equated with the enemy and the Stalinist leader is characterised by dictatorship, violence, and totalitarianism. Similarly, images of Che Guevara can serve to reframe current acts of social activism within a historical tradition of leftist rebellion, establishing an indexical connection to that past (Blommaert, 2015, p. 111). Chronotopic frames, thus, make us aware that language users evoke multiple temporal-spatial orders in discourse and everyday communicative practice, engaging in an ongoing display and negotiation of stances and social identities.

'Scales' offer a helpful way to understand how language use is shaped by broader social hierarchies (Blommaert, 2015). Not all language resources circulate freely or are treated equally. Instead, they are subject to social processes that assign them different degrees of value and legitimacy, depending on the context in which they are used. This means that certain ways of speaking or writing may be considered more "appropriate" or "prestigious" in particular institutional, national, or global settings, while others may be overlooked or marginalised. Blommaert (2007, p. 6) illustrates this through the example of a student telling their supervisor, "I'll start with a chapter reporting on my fieldwork", to which the supervisor replies, "We start our dissertations with a literature review chapter here". In this moment, the supervisor shifts from the immediate, personal context (the student's plan) to a broader institutional norm about academic writing. This shift represents a 'scale jump'—a move from the local and situated to a translocal, generalised level, where conventions that are valid across a wider academic field are invoked. In this way, the notion of scales helps us trace how language practices travel across contexts, how they gain or lose value, and how their meanings change depending on their position within local, national, or global structures.

Finally, 'language ideologies' refer to understandings about the nature, structure, and use of linguistic forms that are socially embedded and politically positioned (Gal, 2023; see also Silverstein, 1985). These shared understandings about language use and language varieties often influence one's perceptions of languages and their speakers as more legitimate or better suited for certain purposes than others (Da Costa et al., 2014, p. 359). Examples of language ideologies discussed in the literature are ideologies of language hierarchy—according to which certain varieties are considered more legitimate than others (e.g., national languages vs. dialects)—and language purism, which naturalises the idea of pure and bounded languages and marginalises linguistic diversity (Weber & Horner, 2017, pp. 16–20).

Thus, sociolinguistics and related disciplines have developed a pretty robust analytical apparatus for describing how the three dimensions of communicative practice—formal structure, activity, and ideology—interact and undergo semiotic processes that are in place not only within well-established speech communities and communities of practice but also in intercultural contexts. In this vein, if we want to shed light on how individuals transform (or attempt to transform) unfamiliarity into familiarity—i.e., interculturality into culturality—it seems crucial to understand the processes that invariably influence their interaction with the unknown. Therefore, differing sets of contextualisation cues and indexical relations—pointing to differently enregistered linguistic and communicative resources—may be in place due to speakers' unique socialisation trajectories. Besides this, invoking shared chronotopes and performing scale operations (e.g., scale jumps, as exemplified above) may likewise prove more challenging in situations where some linguistic and communicative resources cannot be assumed to be shared (Blommaert & Rampton, 2011; Mortensen, 2017). Finally, the power of language ideologies cannot be dismissed: the very choice of language and the use of certain syntactical, prosodical, and lexical features by speakers in intercultural encounters are embedded in centuries-long conceptualisations of what linguistic and communicative resources are considered appropriate and legitimate. This is crucial for understanding asymmetrical power relations in gate-keeping intercultural encounters, such as asylum-seeking (Blommaert, 2009; Reynolds, forthcoming), schooling (Rampton, 1995, 2006), and other types of gate-keeping encounters (Gumperz, 1982).

4. Language, society, and culture as postdigital communicative practice

Communicative practice has undergone dramatic changes in the last few decades as the media through which interaction takes place have evolved in unprecedented ways. From telephones to mobile phones and smartphones, from desktop computers to laptops, from video-conferencing applications such as Skype (recently discontinued) and Zoom to messengers and apps featuring video calls such as WhatsApp and Facetime, the media affordances available in different types of hardware and software have impacted the way we communicate to one another. These technologies have also impacted the reach of communication. Whereas in the past, the telephone was used to communicate with friends, family, or institutions, today's digital technologies—such as apps, software, and social media—enable both focused and unfocused interaction (Goffman, 1963)[6] with virtually anyone, including countless individuals we may not know personally and will likely never meet. However, throughout these developments, some strands within language-related disciplines have remained largely committed to what is considered the prototypical form of social interaction: face-to-face communication within physically co-present speech communities or communities of practice, often in dyadic formats. This scenario is changing, and scholars have increasingly acknowledged that the complexity of communicative practice has taken on new dimensions with the growing integration of digital technologies. Jones et al. (2015) make the point that

> [d]igital technologies have made (...) aspects of context much more complicated. They have altered our experience of the spatial and temporal aspects of context by creating complex 'layerings' of online and offline spaces. They have altered our experience of social contexts, allowing us to participate in a wide range of different kinds of synchronous and asynchronous social gatherings with different configurations of participants (Jones, 2004). And they have altered our experience of the 'context of culture' by enabling new and complex global flows of cultural products and ideas. (Jones et al. 2015, p.9)

Thus, digital communication reshapes sociolinguistic processes, influencing how communicative practices emerge, gain meaning, and circulate across online spaces. The sociolinguistic processes described in Section 3 above gain new nuances when examined in their connection to postdigitality, a notion that

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6 In the original reference, focused interaction refers to situations in which individuals engage in a shared activity or conversation and maintain mutual attention, such as in meetings or dialogues. In contrast, unfocused interaction occurs when individuals are co-present in the same space but do not directly engage with one another, as in passing on the street, while still managing social cues like eye contact or body orientation (Goffman, 1963).

stresses how the online and offline dimensions of life cannot be seen as separate but are instead deeply entangled and mutually constitutive (Cramer, 2014; see also the chapter by Conti et al. in this volume). In this vein, the process of enregisterment in digital spaces (Blommaert, 2018) plays a crucial role in shaping online linguistic repertoires. Internet slang, emojis (Beißwenger & Pappert, 2022; Logi & Zappavigna, 2023), and graphic cues (Androutsopoulos, 2023), for instance, become recognisable as part of specific registers, indexing particular identities, affiliations, and communicative norms. The same is true for online storytelling, a major trend on social media, which follows specific patterns (or 'formats', see the chapter by Georgakopoulou in this volume) and thereby communicates certain stances, positions, and social identities. However, this process is not isolated; it is also shaped by algorithmic effects (Blommaert, 2018, p. 55; Maly, 2023). As linguistic forms gain enregistered meanings, their indexical associations are further reinforced or disrupted by platform algorithms, which largely determine their visibility or marginality. For instance, the strategic use of hashtags, emojis, or specific linguistic markers can index political stances (Silva & Maia, 2022) or belonging (Zappavigna, 2014; Zappavigna & Ross, 2024). Still, algorithms mediate whose voices are amplified and which linguistic resources become dominant (see Conti et al.'s chapter in this volume).

The circulation of enregistered and indexicalised linguistic resources across digital platforms also highlights the role of scales in global digital communication. This process, for instance, leads to certain features—e.g., language varieties or communicative styles—gaining popularity and acquiring new indexicalities overnight. At the same time, globally circulating discourses, memes, and communicative norms are locally recontextualised, acquiring new indexical meanings within different cultural settings (on local recontextualisations, see Thielemann & Savych in this volume). This scalar movement of language interacts with chronotopic framings in online discourse (Blommaert & Varis, 2015; see also 'mobile chronotopes' in Lyons and Tagg, 2019) as digital users situate linguistic practices within temporal and spatial frames. For example, narratives about the "early internet" or futuristic AI-driven communication construct specific chronotopes that shape users' perceptions of authenticity, linguistic change, and digital identities.

Within these shifting linguistic landscapes, multimodal communication (Page, 2022) further illustrates the complexity of digital discourse. To navigate multiple communicative contexts and audiences, online users switch between languages and linguistic varieties, platform-specific vernaculars, and multimodal resources, such as GIFs, memes, and emojis. These instances of digital language use are not merely a matter of individual choice, but they are embedded within broader enregistered practices, indexical associations, and algorithmic constraints. A meme, for instance, may carry specific enregistered meanings within a digital community while also acquiring new indexical values as it scales across different digital spaces and chronotopic framings.

Against this backdrop, the understanding of what a community is gains brand new shades. While a community of practice has been characterised by the sharedness of objectives and communicative resources, other forms of community—e.g., light communities and transient communities and groups (Blommaert & Varis, 2015; Lønsmann et al., 2017; Pitzl, 2018; Oliveira et al., 2024)—have begun to be discussed and rendered in analytical and conceptual terms. These are communities where indexicalities cannot be assumed to be shared (Mortensen, 2017), a phenomenon that is especially relevant in intercultural contexts.

It is also interesting to observe how the digital sphere, which often grants users anonymity, has been a space where language ideologies—which frequently remain hidden in everyday communication—are given full disclosure in online discourse. Szabla and Blommaert (2019) have demonstrated how, in a *Facebook* discussion, users orient to local digital community norms by explicitly referring to community rules, especially when they perceive these rules as having been violated. The discussion contains several tokens of situated digital-community norms referring to legitimate rules in this community or on the platform/social media as a whole; however, it also includes comments that reveal “a higher-scale context” in which language ideologies are at play, for instance when a user accuses the author of a Facebook post of illegitimate use of the Polish language: “Fucking great journalist who makes spelling mistakes…” (p. 22).

Taken together, these interconnected notions and processes illustrate what postdigital communicative practice looks like: while the three dimensions described by Hanks (1996)—formal structure, activity, and ideology—are still in place, they are constantly influenced by a blend of digital affordances, multimodal practices, and algorithmic effects. This understanding of postdigital communicative practice embedded in the online-offline nexus[7] provides

7 The online-offline nexus refers to the inseparable and dynamic relationship between online and offline social life. In this sense, digital communication is not understood as a separate realm but deeply intertwined with offline contexts—shaped by and shaping

a useful background for examining digital intercultural practices. These practices indicate an omnipresent confrontation with interculturality, as described above, which involves unfamiliarity with, for example, new digital technologies, platforms, and digital communities. This confrontation may, in turn, trigger renewed strategies to create culturality—i.e., new routines of action (Gröschke & Bolten, 2013) and new belongings in affinity spaces (Gee, 2007; Dovchin, 2020; Zappavigna, 2014) and light communities (Blommaert & Varis, 2015).

Amidst all this, generative artificial intelligence (GenAI) and language technologies have shaken the foundations of postdigital communicative practice, as acknowledged in both the intercultural communication (Zhu et al., 2024) and the sociolinguistics literature (see the discussion article by Kelly-Holmes, 2024, and commentaries on the Journal of Sociolinguistics). Some empirical work suggests that postdigital communicative practice has been significantly impacted by language technologies and AI tools, for instance, in interactions with voice assistants such as Alexa (Leblebici, 2024) and in contexts of migration (see the chapter by Yudystka and Androutsopoulos in this volume). There is also a growing awareness about the potential implications of interactions with GenAI and large language models in terms of cultural change and the amplification of existing cultural biases (Jones, 2025; Schneider, 2022).

Thus, as individuals engage with new technologies, platforms, and digital communities on a daily basis, their interactions with interculturality and their search for culturality are ubiquitous. In this vein, engaging in postdigital intercultural communicative practice means undergoing the above-described sociolinguistic processes while attending to the dynamics of intercultural encounters in the digital space, such as repeated experiences of uncertainty and a constant search for "culturality". Building on these considerations, the following section proposes bringing the analysis of interculturality and postdigital communicative practice together through interdisciplinary work.

5. Analysing interculturality and postdigital communicative practice

Intercultural communication is an interdisciplinary field (Piller, 2012) that has traditionally drawn on a wide range of research methods (see Zhu, 2016, Ed.),

social identities, power relations, and communicative practices (Blommaert & Maly, 2019).

some of which overlap with certain orientations in sociolinguistics. Examples are ethnography (Jackson, 2016), (critical) discourse analysis (O'Regan & Betzel, 2016), and conversation analysis (Brandt & Mortensen, 2016), among others.

Within sociolinguistics, research methods that consider the online-offline nexus have gained prominence in recent years. An early example is Androutsopoulos' discourse-centred online ethnography, which aims to "combine the systematic observation of selected sites of online discourse with direct contact with its social actors" (Androutsopoulos, 2008, p. 2). Another example is Georgakopoulou's use of 'technography' as a methodological approach that examines the interplay between technological platforms and storytelling practices, particularly within social media contexts (Georgakopoulou, 2024). This methodology integrates corpus-assisted narrative analysis to track media affordances and the directives platforms impose on storytelling practices, emphasising the co-construction of narratives through platform design and user interaction. Zappavigna's social semiotic analysis of ambient affiliation in social media corpora, strongly informed by systemic functional linguistics, is another case in point (Zappavigna, 2014; Zappavigna & Ross, 2024). Similarly, the body of research under digital discourse analysis (Vásquez, 2022, Ed.) examines the interplay between language use, social practices, identities, and ideologies across platforms and modalities.

In recent years, digital ethnography has gained traction within and beyond the field of sociolinguistics. This research method, we argue, is potentially productive for a fruitful investigation of interculturality and postdigital communicative practice in specific digital settings, such as social media. Digital ethnography has been defined as a research method "interested in the ways in which people use language, interact with each other, employ discourses, and construct communities, collectives, knowledge, and identities, through and influenced by digital technologies" (Varis & Hou, 2019, p. 230). Digital ethnography studies usually take into account both screen data and user data (Heyd, 2023, p.250), where screen data means that online observation and participation are achieved through discourse analysis of digital communities. User data refers to an ethnographic approach, incorporating participant observation, interviews, and field notes, where users' offline surroundings and practices are taken into account.

Because digital ethnography is a method employed in various disciplines, including anthropology, sociology, business studies, and communication studies, it "offers the perspectives and benefits of transdisciplinary work" (Heyd, 2023, p. 249). Thus, we argue that digital ethnography is a research method well-positioned to aid the analysis of postdigital *and* intercultural communicative practices.

When deploying any of the methods mentioned in this section, conceptual and methodological questions remain about how to account not only for sociolinguistic and semiotic processes but also for the phenomenon of interculturality. If we want to take postdigital intercultural communicative practice seriously, analysts must scrutinise and account for both (socio)linguistic processes and experiences of interculturality. Attending to both entails addressing the challenges of interdisciplinarity in general and the specific issues involved in the convergence of sociolinguistics (and related disciplines) and intercultural communication more specifically.

The general constraints to interdisciplinarity involve different epistemologies, terminological mismatches, methodological tensions, and collaboration struggles. Moreover, the fields of sociolinguistics and intercultural communication already entail a significant level of interdisciplinarity in themselves, which has been associated with challenges in terms of visibility and recognition. For example, Sommier et al. (2021, p. 12) have argued that "trapped between the looming legacy of cross-cultural communication and the grand aura of cultural studies, intercultural communication sometimes struggles to establish itself" (on the history and epistemologies of intercultural communication studies, see Busch's chapter in this volume).

Despite the challenges involved, we propose that the study of postdigital intercultural communicative practices can significantly benefit from a close examination of both sociolinguistic and intercultural processes. Pragmatically, this can be achieved through interdisciplinary dialogue, such as the kind of collaboration proposed by Rampton and van de Putte (2024) in their effort to bridge memory studies and interactional sociolinguistics. The authors outline two *modes* of interdisciplinary engagement (see also Rampton et al., 2014): In mode 1, focal problems or research questions emerge within a specific discipline, but researchers encounter bottlenecks that require engagement with alternative analytical and conceptual frameworks. In mode 2, by contrast, the problem or research question arises first and is then addressed by a multidisciplinary team that brings together diverse areas of expertise. As Rampton et al. (2014, p. 6) note, mode 2 interdisciplinarity requires "quite a high tolerance for ambiguity", and it is crucial "not to commit too quickly to the specification of the key methods and dimensions of analysis".

However, how do we bring modes 1 and 2 of interdisciplinarity to life in our everyday practices as researchers, usually confined to the *modus operandi* (or culturality!) of our own fields and academic communities? Rampton and van de Putte propose data sessions as incubators of interdisciplinarity. In laying out how an interdisciplinary data session works, they explain that a "data-bringer" shares a short excerpt (around three minutes) of verbal interaction—usually transcribed and accompanied by audio or video—with a small group of around fifteen people. After a brief contextual introduction, the group listens to or watches the recording multiple times. Participants then spend 15–20 minutes analysing the transcript individually, followed by 60–90 minutes of group discussion. The focus is on open-ended questions such as "What is happening here?" to allow diverse interpretations to emerge. Importantly, the data-bringer remains silent during this discussion and only shares their own analysis in the final 10–15 minutes, reflecting on how the group's insights align with or challenge their original interpretations. This practice is inspired by conversation analysis, whose data sessions focus on the here-and-now of interaction. However, in interdisciplinarity-oriented data sessions of the kind proposed by Rampton and van de Putte, "although the 'facticity of recorded data' is something to check back to throughout a session, interpretations usually go far beyond the structures and processes of interaction itself, and the openness to different interpretative logics allows scholars of interaction, memory, and other traditions to learn from each other" (Rampton & van de Putte, 2024, p. 17).

Therefore, we argue that bringing intercultural studies and sociolinguistics into dialogue through data sessions—potentially incorporating diverse modes of data such as social media posts, comment threads, or TikTok videos—offers a productive means of exploring epistemological alignments and analytical complementarities. During the ReDICo 2024 Encounters, we had the opportunity to experience the potential of such interdisciplinary engagement in a 90-minute data session facilitated by Ben Rampton. In this session, participants analysed excerpts from video-mediated interactions in English as a lingua franca, recorded within a virtual intercultural game environment (see Oliveira, 2024; Oliveira et al., 2024). The discussion was enriched by the contributions of PhD students, early-career scholars, and senior researchers from various universities, who gathered at the *Friedrich Schiller University of Jena* in March 2024. This particular ReDICo Encounters session was organised in collaboration with the *University Association for Intercultural Studies in German-speaking Countries*, which regularly brings together doctoral candidates through colloquia held at different venues across Germany and Austria.

6. Structure of this volume

During the editorial process, we encouraged contributors to reflect on how digitality and interculturality are featured in their theoretical reflections and empirical studies. The contributions to this volume address these complex issues and, at the same time, lay the groundwork for further empirical examinations, as well as theoretical and epistemological reflections, regarding postdigital intercultural communicative practices.

Part 1, *Conceptualising Interculturality, Digitality, and Language: Past, Present, and Future*, comprises two chapters that are complementary in tracing theoretical and epistemological developments in the study of intercultural communication and language. In Chapter 2, Dominic Busch outlines theory development in intercultural communication, which is of crucial importance for a field where theory building has been largely neglected. This outline leads to an incursion into epistemology and ontology, with the author arguing that the disentangling of epistemology and ontology in intercultural theory-building can aid our understanding of the notion of culture in sets of theories categorised within two paradigms: the *difference approach* and the *newness approach*. In short, the difference approach, which presupposes the primacy of epistemology over ontology, outlines the notion of culture as a "gap-filler" between empirical perception and what theories can claim. In contrast, the newness approach rejects this gap by acknowledging the intertwinement of epistemology and ontology and thus of culture and lived experiences. Busch situates posthumanism within the newness approach. According to the author, this approach "may help to open up new horizons in intercultural communication research," and we argue that it may prove productive in further explorations of the entanglement between (post)digitality and interculturality (see also Lenehan, 2025).

While Busch puts intercultural communication theory into perspective in Chapter 3, Britta Schneider and Bettina Migge review language ideologies from colonial times and compare them with current discourses on AI language technologies. The authors conclude that these technologies "represent a continuation of colonial endeavours from the Global North." The chapter makes us acutely aware that "we are currently confronted with a reordering of sociolinguistic realities" and makes the case that the current "digital turn follows a well-trodden and historically shaped path". Thus, the two chapters in Part 1 provide a much-needed overview of how the present or the here-and-now of communicative practice and intercultural communication are entangled in past societal configurations, discourses, and epistemologies. While

Schneider and Migge's chapter highlights the importance of examining the past to create more equitable futures with respect to conceptions of language and language practices, Busch entertains the potential of posthumanism to experiment with the 'radically new' in intercultural communication research and radically change the field in the years to come.

Following these two chapters, we enter Part 2 of the volume, *Understanding Postdigital Practices in a Changing World: Language, Technology, and Culture,* which contains empirical studies focusing on various aspects of postdigital communicative practices. The authors examine Gen-Z social media practices, the communicative practices of forced migrants aided by language technologies, corporate communication across websites, and activism education mediated by video-conferencing technology. In Chapter 4, Alex Georgakopoulou builds on the ethnomethodological concept of 'format'[8] to analyse positioning in stories on social media, including *Snapchat, Instagram, TikTok, Facebook*, and *Weibo*. The author uses the so-called technographic method to examine both the here-and-now and the historicity of semiotic choices featured in these stories. She demonstrates how specific formats and storytelling approaches—both in terms of telling and engaging with others' stories—are tied to self-presentation strategies. Using examples from *TikTok*, the author illustrates the processes of reconfiguration and repurposing of stories across different platforms. These processes attest to the power of creating and engaging with stories as postdigital communicative practice. Because storytelling formats on social media often transcend linguistic and cultural boundaries, these stories feature as a focal phenomenon to be explored for a better understanding of interculturality and postdigital practices. In this vein, the author observes how "the tension between the drive for homogeneity" in story-formats and "users' individual creativity and agentive power" raises questions about "the future of storytelling and storytellers, especially in an era increasingly dominated by *GenAI*, which is only going to increase the drive for replication".

In Chapter 5, Jenia Yudytska and Jannis Androutsopoulos explore how forced migrants, with limited knowledge of the language of their new community, use language technologies (LTs) to address everyday communication challenges. Through interviews and video-recorded re-enactments with six

8 A format is a recognisable pattern or structure of interaction that people use to make sense of everyday social encounters, for instance, typical ways in which telephone conversations start and end (see Garfinkel, 2002).

Ukrainian women in Austria, the authors examine their strategies to overcome linguistic barriers despite limited resources, highlighting the vital role of their co-national community—facing the same struggles simultaneously—in facilitating these strategies. The authors demonstrate that both LTs and human translators are crucial for exercising agency, illustrating not only the experiences of using each resource individually but also their integration through the 'human-in-the-loop' strategy, where individuals are incorporated into workflows reliant on LTs. The study reveals that participants often prefer untrained, ad-hoc interpreters over technology in complex communication situations. However, this reliance on others might burden those assisting, particularly as these helpers typically offer their support without compensation, considering the precarious living conditions of the refugees. While acknowledging that migrants are "at the forefront of adopting digital technologies for interpersonal communication", the authors go further, emphasising the dual pressures they face: the urgent need to communicate effectively and the mental strain imposed by language barriers, which can compound the trauma of forced migration.

The challenges faced by forced migrants described in Chapter 5—linguistic marginalisation, precarious living conditions, and the enduring trauma of displacement—find a compelling resonance in Daniel N. Silva's analysis in Chapter 6, albeit in a different socio-political context. While Silva focuses on youth in Rio de Janeiro's favelas who have grown up within systems of structural exclusion, both cases show how marginalisation—and forms of empowerment—are mediated and negotiated through language. Silva's chapter centres on a Google Meet-based workshop in which young, marginalised participants engage in the *un*learning of colonial, gendered, and racialised norms that sustain the imaginary of (in)securitisation, which frames them as existential threats. The digital space functions here not as an abstract or disembodied medium but as an affective and relational setting, intimately tied to participants' lived realities and embedded in broader regimes of violence, exclusion, and surveillance. It is within this postdigital entanglement of online and offline worlds that the workshop creates a dialogical space where participants reflect on their positionalities, share experiences of structural violence, and co-produce knowledge. Digital tools thus play "a key role in this epistemic transformation" by exposing "the ideological foundations of gendered and racialised oppression", according to Silva. Through multimodal practices, participants articulate the intersections of race, gender, sexuality, and militarisation, thereby challenging and reframing entrenched systems of oppression like patriarchy, racism, and LGBTQI+phobia. At the heart of this process lies what Silva describes as the affective and epistemic labour of "living at the limit," where speaking, sharing experiences, and connecting under duress becomes both a survival strategy and a form of resistance.

Chapter 7, by Nadine Thielemann and Zlatoslava Savych, adds another dimension to the second part of the volume by shifting the focus to the corporate sphere and analysing postdigital sustainability communication in the oil and gas industry. Based on a comparative analysis of corporate websites from companies in the United States, Austria, Poland, and Russia, the authors examine how global sustainability discourses emerge from the interplay between international standards and local sociopolitical contexts. Corporate communication in this context must negotiate the demands of global frameworks—such as sustainability reporting standards and stakeholder expectations—while simultaneously responding to nationally specific regulatory, cultural, and political conditions. This negotiation is evident in linguistic and communicative choices, particularly how language (English vs. national languages) influences the visibility, reach, and legitimacy of sustainability narratives. These dynamics are further shaped by the affordances of the medium: corporate websites, as predominantly one-directional (Web 1.0) platforms, are not designed for dialogue but for strategic message control. They define who is addressed, which narratives are foregrounded, and how sustainability is framed—thereby functioning as tools of communicative boundary-setting. In examining how companies frame the Triple Bottom Line (economic, environmental, and social sustainability), the chapter shows that while all firms link sustainability to shareholder value, significant rhetorical differences persist. U.S. companies emphasise diversity and inclusion,[9] Russian and Polish firms emphasise corporate philanthropy and patriotism, and the Austrian company shifts between these two orientations. Interpreted through the lens of glocalisation, these patterns reveal how corporate sustainability communication is shaped by both global convergence and local differentiation—offering insights into the cultural hybridity that characterises corporate discourse in the digital realm, which is also embedded in particular historical discourses. Furthermore, the authors argue

9 During the final revision of this chapter, completed in May 2025, we were compelled to reflect on how unfolding geopolitical developments—such as the return of Donald Trump to the U.S. political scene—can rapidly reshape the trajectory of digital corporate discourse.

that "sustainability communication in the digital age is not merely a replication of global best practices but a dynamic process shaped by the intersection of global trends, local demands, and the unique affordances of digital media."

Offering sociocultural insights into meaning-making within postdigital communicative environments, Part 3—*Contextualising Digital Interculturality: Between Connectivities and Exclusions*—turns to the concept of digital interculturality as developed over four years of joint interdisciplinary research within the joint project *Researching Digital Interculturality Co-operatively* (ReDICo). Thus, in Chapter 8, Luisa Conti, Fergal Lenehan, Roman Lietz, and Milene Oliveira argue that intercultural communication in postdigital societies must be reconceptualised in light of the infrastructural, algorithmic, and economic architectures shaping digital platforms. The chapter outlines how these architectures are not neutral but actively reproduce historically developed power asymmetries through processes of *digital colonialism*. It explains how "[t]hese asymmetries are not external to the epistemic architectures of the AI-infused internet, [but] they are constitutive of it." These layers profoundly shape how communication, interaction, and understanding unfold within digital environments, significantly influencing wider societal transformation processes. Digital interculturality, as framed in the chapter, is not an additional layer to 'traditional' intercultural exchange; it constitutes the very condition of living in postdigital societies. Communication is no longer separable from the technological systems that mediate it, and cultural meaning is co-constructed through processes of algorithmic visibility, platform governance, and digital normativity. Drawing on the contextual dependency of meaning, the authors argue that, therefore, an expanded understanding of context is needed, one that includes not only social and spatial but also infrastructural and computational dimensions. Moreover, they insist that this transformation calls for a shift from static, identity-based models of intercultural competence to more critical, processual, and infrastructural literacy, capable of grappling with how cultural forms are rendered (in)visible, amplified, or suppressed. The chapter highlights the paradoxes of digital life: while digital platforms foster connectivity and the emergence of hybrid, fluid identities, they also impose (new) exclusions, standardisations, and forms of soft coercion. The authors argue that understanding the complexity of these dynamics and rethinking the internet as a cultural infrastructure is an urgent and necessary task for fostering more equitable forms of (post-)digital interculturality.

This volume ultimately reflects the very scholarly event that inspired it: an encounter of diverse theoretical, empirical, and epistemological perspectives—an engagement that is neither simple nor seamless but both challenging and necessary. We invite readers to engage with all chapters, even when they traverse unfamiliar conceptual terrains, disciplinary conventions, or bodies of literature. Levels of familiarity with textual organisation and references will naturally vary. Still, it is precisely in confronting the unfamiliar (or, in other words, the 'intercultural') that the potential for new insights emerges. We thus hope the volume encourages readers to remain open to new connections—whether they resonate now or spark reflection in the future.

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Part I: Conceptualising interculturality, digitality, and language: Past, present, and future

Towards a posthumanist interculturality

Theory development in intercultural communication research

Dominic Busch

Abstract *Intercultural communication research has sometimes been criticised for being under-theorised, and particularly in the 1980s there were several attempts to strengthen what could be called 'intercultural theory'. But just as these efforts were beginning, the discipline's core premises were coming under increasing scrutiny: What is culture? Can there be any analysis at all of a phenomenon that is so abstract from the outset? If we have to admit from the start that culture is a man-made black box, will we not always be going round in circles? How is it possible for us to find out anything new at all? Theorising the issue seemed to bring out even more contradictions. This chapter is an attempt to trace the development of this dilemma. Accordingly, the concept of culture has been navigated into a situation of epistemological crisis. In order to escape this impasse, theories have been put forward that attempt to widen the epistemological scope of human perception: human beings and cultural researchers can only grasp the world by interpreting it. Our perceptions of the world are discursively constructed, and we participate in cultural discourses. While this approach may have placed intercultural communication research on a more solid theoretical footing, findings based on these approaches could no longer be said to be new, and empirical approaches very often seemed much more fruitful. The recent awakening of poststructuralist and, more precisely, posthumanist thought in social theory seems to address exactly these weaknesses by reintroducing and reconstructing the role of ontology in social and cultural theorising. Theorising in this way supports research to find bases on which exploring the radical new is supposed to be possible. This chapter attempts to trace and explain these stages, periods, and perspectives within intercultural research.*

Keywords *Posthumanism; Cultural Theory; Circularity; Epistemic Violence; Ontology*

1. A theory perspective on intercultural communication research

More than ten years ago, I wrote a book chapter, the title of which might translate as 'How does the theoretical concept of diversity affect social action?' (Busch, 2011). Of course, this was meant to be a provocative and rhetorical question, to which my chapter would answer that such a relationship is complicated and that different answers compete in research. But if we ask ourselves what kind of theory is behind something like a research field of intercultural communication, then perhaps this title could already provide a core statement: In our language, we have terms for phenomena such as culture and diversity that are themselves somehow based on the assumption that, firstly, they exist, secondly, that their relevance lies in the fact that they have an impact on people's social behaviour, and, thirdly, that the task of research is to explore this relationship in more detail.

A discourse-theoretical perspective may soon deflect this question in a complicated way, but for the purposes of this initial observation it can be summarised as follows: Humanity has created concepts such as culture and diversity and all the presumed effects associated with them over a long period of time—mostly in order to consolidate and strengthen strategically desired, powerful structures. The discursive construct of culture that has been created in this way is such that even attempts to mitigate the negative social consequences of it only serve to reinforce its existence. It is thus guaranteed to continue to exist indefinitely (Busch, 2021). This would be an example of a theoretical explanation of the phenomenon of intercultural communication with the help of a (neighbouring) (social) theory, in this case, discourse theory. Such an approach could also be described as deductive, because in this case an existing theory is applied to intercultural communication as a concrete individual case.

In contrast, this article will make a reverse, inductive, attempt to determine the role of theories in the field of intercultural communication. It will ask what role, in the ongoing development of the field of intercultural communication, the study of theories and theoretical foundations has played. This exploration will reveal an epoch around the 1980s when authors even within the discipline warned against the neglect of theory-building in intercultural communication research and therefore called for more efforts in this area. At the same time, however, social theory from both within and outside the discipline was increasingly questioning the role of culture in theorising. This chapter will trace this debate and prepare for a more in-depth reflection on it, also considering fundamental questions about what social theories are and what their roles and functions are. A disentangling of epistemological and ontological aspects of intercultural theorising may show that the concept of culture has long been used as a kind of gap filler between what theories claim and what empirical perception can produce—a gap that has at the same time been considered inaccessible to human perception. Poststructuralist thought, in short, claims that this gap does not actually exist, and that we are actually always living in the world we are studying. Posthumanist approaches also relativise the role of human beings in their world in relation to their material and organic surroundings. Taken together, intercultural communication research seems to have recently rediscovered a way of thinking and theorising that even helps and encourages the perception of the radically new. This chapter will trace this long and complex journey from the supposed crux of cultural theory to a recent form of more inclusive theorising that may help to open up new horizons in intercultural communication research.

2. What is a theory, and what is the purpose of a theory in intercultural research?

Especially in the 1980s, a number of arguments for theories in intercultural research are found in the literature, as well as works that are described as theories by their authors. William B. Gudykunst, in particular, argues for the urgent need to develop theories for studying intercultural communication. In his view, there have already been a number of approaches to the conceptualisation of culture, but these have had little to do with communication (Gudykunst, 1983, p. 13). Specifically, Gudykunst notes a prevailing "'antitheory' perspective" (1983, p. 14) in intercultural research, which favours more empirical research. Indeed, Gudykunst concludes that de facto many fields of research were at best just beginning to translate their findings into theories. If we look at the discipline of communication from the perspective of Kuhn's model of paradigm shifts (1962), communication can at best be described as being in a 'preparadigmatic' stage, that is, the discipline still hosts more than one general competing theory. By comparison, research on intercultural communication was even less developed, according to Gudykunst (1983, p. 14). It was still in an 'aparadigmatic' stage, where any form of paradigm would have to be developed. A general definition of theory can be found in Georg Ritzer's (2005a) *Encyclopedia of Social Theory*. In it, Markovsky (2005) writes about "theory construction":

> Theories are repositories of general knowledge. Through testing and refinement, scientific theories change over time in ways that lead them to provide increasingly accurate explanations for ever-widening ranges of phenomena. Their accumulated wisdom far exceeds the ability of common sense to explain the complex world around us. (p. 830)

Markovsky points out, however, that in the social sciences, for example, many approaches are labelled as theories that in fact do not meet these requirements. They should rather be described as "quasi-theories" (Markovsky, 2005, p. 831). These are typically just loose ideas, propositions, concepts, or observations. For intercultural research, Gudykunst (1993) takes a pragmatic stance, arguing that theories should be logically consistent, that they should provide a plausible explanation for a given phenomenon, that all levels of analysis should be addressed, and that they should ultimately be able to be applied (p. 34). In a similar vein, Spitzberg and Changnon (2009) stress that researchers should not "lose the proverbial forest in the trees" (p. 5) when developing theories. Theories should at least have the core concepts in place, and they should have something like a logical proposition at the heart of them.

Halualani and Nakayama point out that theories, especially in the field of intercultural research, are always themselves both culture-specific and positioned in an intercultural perspective. However, the specific context studied and the theorising done within that context are interdependent and influence each other (Halualani & Nakayama, 2010, p. 9).

From a philosophy of science perspective, these contextual factors can also be described as 'meta-theoretical assumptions' that guide theory building. For Gudykunst (1993), for example, the classical components of epistemology and ontology are part of these assumptions (p. 35). Kim (1988) adds that these meta-theoretical assumptions also provide guidance as to whether a theory is more concerned with understanding or prediction (p. 15). The more familiar term 'paradigm' is also used to refer to such meta-theoretical assumptions, although there are many different definitions as well. Ritzer (2005b) writes about them:

> A paradigm is a fundamental image of the subject matter within a science. It serves to define what should be studied, what questions should be asked, how they should be asked, and what rules should be followed in interpreting the answers obtained. (p. 543)

Gudykunst and Nishida note that the classics in this regard, Burrell and Morgan (1979), distinguish between subjectivist, i.e., interpretive, and objectivist, i.e., positivist understandings (Gudykunst & Nishida, 1989, p. 18). Lincoln and Guba (2011) also list epistemology, ontology, and methodology as components of paradigms, which they refer to as "basic beliefs" (p. 168). They later add that axiology is actually part of it as well (Lincoln & Guba, 2011, pp. 167–169). Arneson (2009a, 2009b) defines epistemology and ontology for the *Encyclopedia of Communication Theory* (Littlejohn & Foss, 2009). Epistemologists ask "whether and to what extent knowledge is based on the existence of phenomena and/or on human perceptions. Their goal is to provide a general basis that would ensure the possibility of knowledge" (Arneson, 2009a, p. 349). This includes the question of whether people are assumed to be able to access and perceive their environment directly, or whether this can only be done through reconstruction and interpretation. Culture is often understood to be precisely this process of perceiving and constructing the world (Demerath, 2002). And Arneson (2009b) writes about how "[o]ntology [...] considers the nature of being, the philosophical investigation of being. [...] With respect to human communication theory, ontology is the study of what it means to be human" (p. 695).

Indeed, ontology was originally concerned with naming entities. As examples of common ontologies in communication studies, Arneson (2009b) cites "realism, nominalism, and social constructionism" (p. 695). According to Mendoza, ontological assumptions in intercultural contexts are often explained as belonging to (cultural) identities. And these are ultimately essentialising, political, and often constructed as unquestionable, which is precisely what should be confronted with "radical suspicion" (Mendoza, 2005, p. 238). From the perspective of intercultural research, ontological reasoning emerges first and foremost as "naming", as Jackson II and Moshin (2010, p. 348) resume with reference to Fanon (1967). Thinking about ontological foundations therefore always runs the risk of essentialising and fixing phenomena that are in fact artificial constructs. Seen from this angle, talking about ontologies runs the risk of laying the groundwork for cementing difference and discrimination (Jackson II & Moshin, 2010, pp. 348–349).

An intercultural comparative perspective relativises these assumptions about the concepts of epistemology and ontology. Chen and An (2009, p. 204) present a schema in which Western and Eastern assumptions about epistemology, ontology, axiology, and methodology are juxtaposed, and all these components of paradigms can themselves be relativised for their cultural specificity (Miike, 2010, p. 193). As with theories, intercultural research also assumes that the discipline's self-image of diversity must also apply to dealing with different paradigms "by encouraging interculturalists to understand the diverse lines of our history in an intercultural way" (Kulich et al., 2020, p. 62).

3. Predictions or openness for something new?

As noted earlier, Kim suggested that theories—and, by extension, all research—can serve different purposes, which can basically be divided into predicting and understanding. Research can be designed to anticipate what will happen in the future, with these options for future outcomes grounded in a study's theory. Alternatively, research can be designed to be as open as possible to whatever may be discovered—in the present observation or in future developments. In other words, as an alternative to predicting, research can also be designed to find out something completely new and unforeseen.

The call for more theories was certainly also motivated by research policy. Kim (1984) argues that "there have yet to emerge coherent conceptual paradigms of intercultural communication" (p. 13). For her, part of theorising is "using common terminological currencies" (Kim, 1984, p. 13). Wiseman and Van Horn (1995) go further, arguing that without theories it would not be clear what to study at all (p. 2), a position that, as we shall see, was later explicitly rejected. From the point of view of the time, however, Gudykunst (1983) in particular was not only interested in explanations but above all in predictions (pp. 14–15). Kim (1984) also confirms that the aim was to "describe, explain, and/or predict intercultural communication phenomena in a number of social contexts" (p. 14).

In fact, at that time there were several prominent approaches that were primarily concerned with the prediction of people's behaviour in different cultures and in intercultural contact situations. These include, for example, Ting-Toomey's face negotiation theory (1988, p. 231), but also models with cultural dimensions such as individualism-collectivism (Gudykunst & Lee, 2002, pp. 26–27). At the turn of the millennium, Gudykunst (2000) still affirms the goal of testing "theoretical predictions about […] behavior across cultures" (p. 295). Even in cases where intercultural research draws on the findings of neighbouring disciplines that have a wide range of exploratory and descriptive approaches in their portfolios, intercultural research tends to cherry-pick the predictive ones. For example, intercultural research has drawn on linguistic approaches in its models for predicting differences in speaking behaviour, emphasising, for example, categories such as indirectness (Bond et al., 2000) that Edward T. Hall had earlier rooted in intercultural communication research.

On the other hand, the field of intercultural communication has always identified with a self-image of discovering something new. This has helped the field in its strategy to set itself apart from the existing disciplines. Terence Jackson, for example, writing for the field of cross-cultural management, argues that Hofstede has indeed created something radically new by exposing the cultural roots of Western positivist management research and thus its limited scope. Hofstede has created a counter-narrative so to speak, and Jackson (2021) calls for this to continue in the field and for the discipline to find its role in constantly creating new narratives (p. 175). As Jackson (2021) writes: "Good social science scholarship does not relate to the status quo. In producing new knowledge it disrupts what we previously 'know' about what we know about" (p. 178).

However, finding the new is not without its challenges, and on closer inspection it becomes clear that intercultural research, like classical social research, has usually seen the new in terms of difference, i.e., something is identified as 'new' in that it is described as being different from something that already exists. In the strongest sense, however, something truly new should be new and autonomous in itself, not referring to or comparable with something that already exists. Gudykunst seems to have already identified the dilemma or challenge. In his early discussion and plea for more theories in intercultural research, he states that there are three ways to create new theories: either develop the theory from the subject matter of the discipline itself, import it from a neighbouring discipline, or break down a theory from a more general superdiscipline to the specific subject area (Gudykunst, 1983, p. 16).

Gudykunst argues that the best strategy for advancing the discipline would be to develop theories from within. On the other hand, as Ting-Toomey (1984, p. 230) later criticises Gudykunst's volume, most intercultural theories are in fact imports from neighbouring disciplines. Kim (1984, p. 14) confirms this for the field as a whole.

Indeed, this is still the case today with the classic intercultural theories that describe themselves as such. For example, the best-known approaches are imported from psychology, such as Gudykunst's uncertainty reduction theory (1985), which he later developed into anxiety-uncertainty management theory (1993). Other examples of imports from psychology include Tajfel's social identity theory (1982), Ting-Toomey's face negotiation theory (1988), or Stephan and Stephan's integrated thread theory (2000). Sociology is another potential provider of theories, such as Bourdieu's theory of social capital (1984).

4. The difference approach

The hypothesis of this chapter is that intercultural research has long understood its search for the new in 'foreign cultures' as a search for something that is new in the sense of being different from one's own or from what is already known. This may be because intercultural research, as a discipline, was still strongly tied to the traditional understandings of the nature and purpose of theories discussed above. It may also be that this view of the new as nothing more than different has hindered intercultural research from producing more convincing results—an effect that may have cast a less than promising light on theorising as an approach to intercultural research in the past. This section will therefore explore these pitfalls and subsume them under the rubric of what here will be termed the 'difference approach'. In a subsequent section (Section 5), this difference approach will be contrasted with what can consequently be referred to here as the 'newness approach': Recent applications of theories from poststructuralism, and posthumanism in particular, to intercultural research may have opened up new perspectives and new ways of exploring something genuinely new beyond difference. This may ultimately return theorising to a more promising position and role in intercultural research.

While theory fulfils its traditional and stable role in the difference approach, designed to make predictions rather than to discover something radically new, imported theories remain more or less outside the core concepts of intercultural research, leaving this core open to be filled with something new. The notion of culture could therefore still be defined as something open and changeable, fuzzy, and in flux. In fact, the concept of culture occupies a somewhat undefined middle position between a given field of empirical observation on the one hand and a stable theory on the other. In this constellation, culture even incorporated the new and the open—but still somewhat confined by theories.

In this strategy, culture is defined by and defines a gap towards external theory. This construct will also be called the 'two-world approach' later on. In order to distinguish more clearly between the two strategies of searching for differences and searching for the new, the difference-oriented approach is analysed in more detail below.

4.1 The functionalist paradigm and circular definitions

Indeed, the first definitions of intercultural communication were often circular. The very first *Communication Yearbook* of the *International Communication Association* included a section on intercultural communication, and Tulsi B. Saral (1977) provided an overview of intercultural communication theory and research, followed by further contributions under similar titles by Prosser (1978) and Saral (1979). Yet the definitions of intercultural communication collected by Saral appear to be tautologies. We are told, for example, that "communication is intercultural when occuring between peoples of different cultures", or that "intercultural communication obtains (*sic*) whenever the parties to a communication act bring with them different experiential backgrounds" (Saral, 1977, p. 389). In other words, the discipline is still very much convinced of the existence of its own basic premises.

After all, from the very beginning, the discipline has talked about theories of intercultural communication without really looking at the phenomenon itself. Instead, it has pursued an application-oriented approach. Authors continue to speak, as a matter of course and without further definition, of intercultural theory (Liu, 2016; Vande Berg & Paige, 2009, p. 419), culture theory (Bhawuk, 1998), theories of intercultural communication (Panocová, 2020), or intercultural communication theory (Eguchi & Calafell, 2020, p. 6).

4.2 External theories were the necessary frameworks for designing 'culture' as intangible

Aside from the problem of congruent theory and object of research, intercultural research is often faced with the problem that culture is defined as something that is itself virtually incomprehensible, or is located within a sphere that is in itself particular by virtue of its incomprehensibility. Examples of this self-referentiality can be found repeatedly in intercultural communication research. For example, Edward T. Hall, under the influence of Sigmund Freud, placed the cultural in the human unconscious and thus has rendered it inaccessible (E. T. Hall, 1959, pp. 59–62, as cited in Rogers et al., 2002, p. 6). The idea of understanding culture as context in the ethnography of communication in the sense of Gumperz and Hymes (1972) can also be interpreted as a strategy in which culture bridges the gap of the intangible. Bourdieu's approach to cultural capital in the truest sense of the word borrows from economics and sociology, and the 'communities of practice' approach provided by linguistics (e.g., Corder & Meyerhoff, 2007) receives its cemented theoretical pillars from sociological group theory. If we assume that this difference approach always borrows an existing theory and confronts it with a selected empirical setting, this will automatically lead to situations in which the theory does not fit perfectly with the empirical observation—a gap that these approaches have tried to fill with culture as a flexible filler. From a philosophy of science perspective, this scheme would leave and rely on a gap between its assumptions about epistemology and ontology. Difference approaches to intercultural research share epistemological assumptions about human perception and human understanding of the world on the one hand, and they share ontological assumptions about what humans and their world are like on the other. The two assumptions will never fully coincide, leaving a gap that is not even perceived by humans. Again, it is culture that fills the gap in these models, confirming its character as something dynamic, flexible, and in flux. Moreover, the external theories help to avoid the circular definitions mentioned above.

4.3 'Culture' prevents epistemological crises

The difference approach in intercultural research also helps to avoid epistemological crises. The latter term refers to situations in which empirical observations, following a set of given epistemological assumptions, no longer produce the expected results—or provide access to the ontological world at all. The notion of crises in this context was introduced by Thomas Kuhn (1962, pp. 66–91), who said that they occur more or less regularly in academic research, and that they usually lead to a major paradigm shift that will then readjust the epistemological-ontological fit.

Philosopher Alasdair MacIntyre derives an alternative notion of paradigm shift from the work of Michael Polanyi (1966), known for his concept of tacit knowledge. In Polanyi's view, people always have much more knowledge at their disposal than they can consciously articulate. Such tacit knowledge always precedes scientifically validated research and description, according to Polanyi. In other words, we cannot use science to find out more than what we already suspect. We cannot ask or look for anything else. In contrast to Kuhn's view, in which epistemological crises occur almost abruptly or surprisingly, for Polanyi epistemological crises are rooted in academic discourse and emerge as slowly developing processes. Seen in this light, epistemological crises are even necessary pillars of any academic reflection—and thus rooted in cultural and social traditions (MacIntyre, 2006, p. 16).

As we have seen in the previous considerations, culture per se is also often defined as something that is unconscious to human beings—and yet it is obviously something that exists and is somehow felt, or to which certain perceptions are attributed that cannot be classified in any other way. Accordingly, it seems plausible that culture is used as something unconscious in order to explain or substantiate aspects that are assumed to be unconscious.

It could also be argued that culture has always found its way into the disciplines when it was no longer possible to explain something with one's own theory. But this was not surprising, it was expected. And the solutions, in this case culture, do not come as a surprise either, but can only be what has already been anticipated. In this respect, even with paradigm shifts, we cannot go beyond our existing cultural knowledge of the world. If we find gaps between theories and the empirical world, we will not be surprised and we will fill them with our notions of culture.

This gap between epistemology and ontology has a long tradition. Jessica Moss (2021) has recently traced the distinction between the two worlds of 'episteme' (truth/knowledge) and 'doxa' (beliefs/experiences) in Plato, with Plato distinguishing between the two worlds of thinking and experiencing, which are in dialogue with each other. As Beitz (n.d., p. 21) has recently shown for Kant and Hegel, among others, a distinction between theory and empirical experience—and a natural gap between them—has a long tradition in European philosophy.

To this day, research builds on this tradition when it comes to discovering something new. More precisely, in the gap between theorising and the non-scientific world, the new has its pre-organised place in these models. In some cases, it is 'culture' that incorporates this 'newness' and that is located in this gap. For this approach to work, it is important that this gap for the new between theory and the empirical world is actually maintained. Authors should not, for example, bend theory towards the empirical world to make it fit. It is in this sense that Karl Popper argued that theories must remain open to falsification. For this to happen, however, theories must remain unchanged. They should not simply be changed in their definition and thus supposedly made to fit again if there are signs of falsification (Popper, 1959/2005, pp. 60–61). In this context, the use of methods is to ensure that theories remain what they are, rather than being bent to fit reality.

According to this difference approach, discovering something new is relatively easy and can be done at almost any point and in any place, because whatever you look at, there will always be a gap between theory and the empirical world. For cultural research, this means that 'culture' can be discovered at any point. The only thing is that the results of this approach may be less spectacular and more or less easy to achieve. In this sense, in the field of intercultural management research, Bonache (2021, p. 40) has recently referred to this research strategy as "gap-spotting". Ironically, this seems to be even more valued in the discourse of the field than a courageous and open-minded approach to the world.

Certainly, there are some rhetorical strategies that can be identified in the communication of the field of intercultural communication that have fuelled this image of the identification and filling of gaps. Over several decades, authors in the discipline have repeatedly claimed that intercultural communication is a young and emerging field (Grosskopf & Barmeyer, 2021, p. 182; Jahoda & Krewer, 1998, p. 3; Leeds-Hurwitz, 2014, p. 17; Saral, 1977, p. 389). In spite of this, it has since become a "complex field" (Braithwaite, 2018, p. 47; Snow, 2018, p. 59) which, instead of falling into an epistemological crisis, can actually take pride in having already survived and undergone a number of paradigm shifts. Both diachronic and synchronic overviews of the existing literature continue to reflect these different paradigms. Scollon and Wong Scollon (1997), for example, distinguish between a "utilitarian discourse system" (p. 111) in the discourse of research and their understanding of "interdiscourse communication" (p. 15). Zhu (2016) alternatively takes a more epistemological stance and lists a "positivist paradigm" starting a row of an "interpretive paradigm", a "critical paradigm" up to a "constructivist paradigm", and a "realist paradigm" (pp. 6–16). While these authors argue that intercultural research has so far survived almost every paradigm shift, it could also be argued that these are still paradigm shifts and that cultural research under one paradigm no longer has much in common with cultural research under other paradigms. Leaving that aside, it is still remarkable that the notion of culture is still included. From the perspective of the 'difference approach', this pertinence of culture is not surprising. Since all these paradigms operate on the basis of providing a gap between theory and empirical experience, 'culture' can easily continue to fulfil its role—and is even urgently needed—in filling the epistemological gap.

4.4 Challenges for the notion of culture under the difference approach

Let us assume that these paradigm shifts mentioned above did not challenge or bring the concept of culture into crisis anyway, then we may ask: Are there any other challenges anywhere in social theory that did so? And if so, what were they?

4.4.1 Moving to the macro level: politics and identities

Originally, intercultural research was limited to and focused on interpersonal, face-to-face interactions. The aim was "to study interpersonal interactions" (Sarbaugh & Asunción-Lande, 1983, p. 54) and "interpersonal relations" (Rogers & Hart, 2002, p. 2; Spencer-Oatey, 2000). For culture to become something that people perceived as part of their identity, and thus to move from Edward T. Hall's understanding of culture as something that people were unconscious of to a notion of culture as part of people's conscious identity, social discourses and individuals had to begin to perceive aspects such as ethnicity, race, gender, and class as something uniquely their own (Zaretsky, 1995, p. 245).

This allowed national movements around race and ethnicity on the one hand, and movements around sexuality and gender on the other, that had previously been separate, to come together.[1] This also led to a repositioning of the spheres that previously were considered private such as culture but also the family. What had previously been a private matter was now becoming a public and political issue—and not in the form of persons but in the form of identities (Zaretsky, 1995, p. 246). This new notion of culture as (public) identities was difficult to accept and integrate into cultural research within its existing epistemological assumptions, which still assumed that culture was the traditional unconscious gap-filler, by definition beyond what people could epistemologically perceive.

4.4.2 Power, postcolonial theory, and culture as conflict

Building on poststructuralist and power theories, postcolonial theory argued that it was not cultural differences that determined social relations, but power imbalances that were only argumentatively disguised and legitimised by cultural differences. This kind of consideration was also only made possible by thinking on a more general level than the purely interpersonal level that had previously prevailed (Bhabha, 1994; Said, 1978; Spivak, 1988). Within cultural

1 Zaretsky (1995) would later describe how, together, they had become quite powerful.

studies, culture was at best seen as a social conflict (S. Hall, 1992). The move away from the micro-level suddenly brought into view dimensions and influences that challenged the interpretive primacy of the concept of culture.

Approaches from cultural studies with Stuart Hall's understanding of culture as conflict are taken up in intercultural research by Halualani and Nakayama (2010), for example. Approaches to intercultural research based on a power-critical paradigm (Chuang, 2003) see its origins as relevant to their own discipline, for example, in van Dijk's (1993) critique of racism. Writers within the power-critical paradigm have often argued that the notion of culture has often been used in both social and academic discourse as nothing more than a disguise for differences that are in fact power differences. This logic adopts Kuhn's understanding of paradigm shifts, according to which a new paradigm completely replaces an older one, with no chance of more than one paradigm existing in parallel (e.g., Tanno & Jandt, 1993)—a line of argument that had clearly challenged the role and persistence of culture as a concept.

4.4.3 Critical Realism

For a long time, the two-world approach between epistemology and ontology meant that research was limited to acknowledging that researchers can only ever interpret the world but never directly access it. For the social sciences, this insight could even be seen as an achievement, as it was a significant step forward from positivism, a paradigm that had assumed that people had direct access to their world, i.e., that they could measure and describe it in an objective and neutral way. Accepting that what people see will always be subject to their interpretation was, by contrast, a paradigm shift that Bachmann-Medick (2008, pp. 86–87), for example, has called the 'anthropological turn', because it was in anthropology that this insight was first recognised and from where it spread to other disciplines.

Ejnavarzala (2019) provides a summary on the assumed relationship between epistemology and ontology and its development in the history of science. There is a long tradition of positivist-empiricist theories of knowledge as well as interpretive approaches (Ejnavarzala, 2019, p. 96). In the paradigm of critical realism, which goes back to Roy Bashkar (1989), Ejnavarzala (2019) identifies a third way that has recently emancipated itself from this (p. 97). This approach involves an epistemological middle ground that assumes, on the one hand, that people are indeed trapped and limited in their perceptions, but that, on the other hand, there is a fixed reality that is independent of them.

Karin Zotzmann (2016) explains why this matters when it comes to intercultural research. Critical realism recognises that people interpret their world and make these interpretations the basis of their actions. At the same time, there is a real world of given structures, and these structures may differ from what people interpret. Zotzmann argues that recent intercultural research has been dominated by de-essentialising approaches, i.e., attempts to avoid the idea of clear and fixed structures and cultural boundaries. Instead, culture should be seen as something that is in constant flux and not confined to borders. According to Zotzmann, this leads to the paradoxical situation that writers who want to argue against cultural essentialist approaches are in fact those who need to talk about them even more. Zotzmann (2016, pp. 80–81) concludes that structural boundaries do exist—even if they are man-made—and also that a completely de-essentialised understanding of culture is not really helpful, because then the term would only signify something that it should deny. In other words, the concept of culture itself is experiencing an epistemological crisis: It still points to something that researchers do not really want to see. This is where critical realism accepts both perspectives, it "decouples ontological and epistemological questions" (Zotzmann, 2016, p. 82) and thus also avoids an epistemological crisis—a task that 'culture' has so far been used to help with as a gap-filler.

Critical realism supports the insight that culture is always both structure and agency. Among other things, this is how concepts such as Spivak's strategic essentialism work (Jones, 2013, p. 241). As a result, culture can no longer be seen as the mysterious gap-filler that bridges the space between theory and human experience of reality. Apart from this, critical realism brings with it a strong handicap for earlier notions of intercultural competence, since the realist structural side of critical realism claims that people will not be able to fully understand and even change their worlds anyway. In other words, even the management of culture is no longer fully in people's hands. Later intercultural research has indeed found a way out of this dilemma by moving the locus of 'culture' from interpersonal interaction to people's heads and minds. If we see 'culture' as a mindset inside each individual, we no longer have to wrestle with the dilemma of whether and how culture is the invisible buffer between our theoretical assumptions and the real world. Examples of this strategy in intercultural research include Kim's (2015) concept of intercultural personhood, where interculturality is seen as a certain mindset, and Holliday and Amadasi's (2020) concept of decentring, where people are advised to take a sideways position in the face of cultural essentialisations in the real world—creating their own new notion of culture in their minds.

4.4.4 Epistemic violence

The 'writing culture' debate, and the subsequent accusation of cultural researchers of epistemic violence, is another way—alongside the critical realist approach—of demonstrating how easily the epistemic gap for culture can collapse in intercultural theorising. The 'writing culture' debate in cultural anthropology in the 1980s (Clifford & Marcus, 1986) epitomised the insight that what is said to be culture in research is still a deliberate human choice. In other words: It may be that there would be no such thing as culture at all if researchers did not keep writing about it and thus cementing it. For our two-world-difference approach, in which culture is placed as a gap-filler between epistemological reasoning and ontological perception, this would mean that this gap-filler is also nothing but a human construct, and therefore part of theory-building prior to empirical observation.

The notion of epistemic violence casts another, power-critical, light on the fact that cultural researchers create their own object of study: By writing about people who are presumably from other cultures, writers claim the right to define who these people are without giving them a chance to define themselves or speak for themselves. This is seen as a violent act, as the people observed have no chance of changing this relationship. As late as 2020, Bernadette Calafell warns that intercultural studies—a discipline that should know better—still seems to be comfortable with the continued practice of epistemic violence (Calafell, 2020).

The concept of epistemic violence was first introduced by Spivak (1988, p. 280) when she discussed Foucault's concept of 'episteme' in *Madness and Civilisation* (Foucault, 1988, pp. 251, 262, 269; Spivak, 2008, p. 310). Spivak (1988, p. 281) points out that Foucault, in *Power/Knowledge* (Gordon & Foucault, 1980, p. 82), spoke of episteme as including "subjugated knowledge", i.e., the knowledge of peripheral and marginalised groups, which was repressed. Spivak argues that Foucault should apply this to the postcolonial context but does not. Thus, he remains Eurocentric in his understanding of 'epistemes'. What happens in colonial and postcolonial contexts could also be called epistemic violence in this sense. Indigenous knowledge does not stand a chance and is systematically denied in a science based purely on Western epistemes. As far as qualitative research is concerned, this means de facto that it is no longer possible to carry out simple interpretive research (Marker, 2003). Authors such as Smith (1999) and Mignolo (2012) therefore argue that there is a need for decolonisation of scientific methods.

5. The newness approach

If epistemic violence is to be avoided in research, the traditional assumptions of Western epistemologies must be abandoned in favour of a postcolonial approach. Given these basic prerequisites, we must above all abandon the primacy of knowledge over being, the material and the body. Similarly, the assumption, prevalent in both positivist and interpretive approaches, that we can best perceive our world by being there and present in a given situation, needs to be abandoned (Derrida, 1978, pp. 278–79, as cited in St. Pierre, 2019, p. 4). Even more, we will have to give up the assumption that the best way for us to perceive our world is through our immediate presence. Instead, perception may be better achieved through feeling our bodies as they are embedded in our world and nature. This breaking away from epistemological primacy and the exploration of ontological presuppositions is a recent figure of thought for which Rosi Braidotti found the term "new materialism" (Deleuze, 1968, p. 4, as cited in Braidotti, 1991, p. 112). This later became the name of a whole new paradigm that also laid the foundations for new approaches to analysis, such as postqualitative inquiry (Lather & St. Pierre, 2013, pp. 629–630).

The new focus on ontological aspects first of all challenges the human-centredness of existing ontologies. Thus, there is a particular openness to the resulting and necessary new direction of research. In the new so-called postqualitative research that builds on this, Lather and St. Pierre (2013, p. 629) find a programmatic description of this direction of research in Spivak, who spoke of the need to research "the new new" (Spivak, 1999, p. 68). Accordingly, researchers have had to rethink what they are looking for (decolonising epistemology) and, at the same time, rethink the ways and methods of approaching this new knowledge.

These considerations have been possible as a result of, and in conjunction with, a general ontological turn in the social sciences. Previously, it was assumed that there are different cultures and perspectives, but only one reality, one nature. There are many cultures, one ontology. The ontological turn wants to break this up and say that there are many cultures, but also many ontologies and realities (Heywood et al., 2017, p. 2). There are even cultures that believe that people all have the same (cultural) perception, but that only the (physical) condition of people/living beings is different, so they have different perceptions because of their different bodies. The classical view would be that of cultural relativism, i.e., that all people have different cultural perceptions, but that the world is the same. The opposite would be natural relativism: everyone has different bodies and thus different perceptions of different worlds (Heywood et al., 2017, p. 3).

The 'difference approach' discussed in the previous section would therefore be even more complex because there would now be not only one but two terms that would be under research, culture and ontology/the human body. In contrast to what in the upcoming sections will be discussed as the search for the 'new new', this dilemma here could be termed as a search for the 'different different' (thanks to Milene Oliveira for this idea): How can cultures be described in terms of their differences if there are also differences in assumptions about where these differences lie and what constitutes them? Does the difference really lie in the (different) views of the world or somewhere else (Heywood et al., 2017, p. 4)? If cultural researchers must be prepared to encounter not only different cultures but also different ontologies and assumptions about the role of human beings in their material and organic world, then researchers will have to try more than ever to break free of their given assumptions about the world, i.e., they would have to be even more prepared to face the radically new, which can no longer be based on their existing knowledge of the world and then called 'other'. More specifically, this double openness of both culture and ontology as variables would mean that researchers would have to be prepared to experience and to acknowledge phenomena that do not make sense against the background of their own categories (Heywood et al., 2017, p. 5). Heywood et al. (2017) illustrate this with the example of a researcher meeting a subject who points to a tree. It may be that the researcher's view of the tree is that it is a thing, but it may also be that the subject's view of the tree is that it is a ghost. Traditionally, the researcher's conclusion might then have been that this subject has a 'spiritual belief'. After the ontological turn, however, researchers need instead to ask themselves how they can change their own conceptual schemas so that it makes sense for them to think that the tree is a ghost (Heywood et al., 2017, p. 5).

For social research, this means that we need to stop comparing and differentiating, and instead start "registering the 'making indeterminate' out of the 'call of the other'" (Lather, 2022, p. 32). In other words, when we are faced with something that might be new to us, we should not try to figure out how it is different from what we already know. Instead, we should acknowledge that this newness is actually speaking to us and calling us to perceive it as something that we must acknowledge will remain indeterminate for us. In fact, the ontological turn makes it possible to "make a science out of indeterminacy" (Lather, 2022, p. 32), i.e., we get the chance to integrate the indeterminate as a legitimate variable in our models. Instead of placing ourselves above the world, we as researchers will then meet the world "half-way", in the words of Barad (2007b), Lather (2022, p. 32) resumes. This is a much more direct way than according to the old "two-world approach", which distinguishes between a researcher's world of theories and the world of human experience. The proponents of the postqualitative approach are convinced that, without such a renewed awareness of ontology, nothing new can be discovered: "if you don't have an awareness of the ontological underpinnings of your work, you can't actually engage in the production of the new" (MacLure, 2023, p. 213). The engagement with ontology also sets in motion all the other components of a paradigm (MacLure, 2023, p. 213).

5.1 The new: Deleuze's immanence

French poststructuralism reverses the two-world approach even further. On the one hand, in contrast to the two-world approach of the previous logical-empirical paradigm, we must actually speak of a one-world approach and, at the same time, this includes an endless number of worlds. Nevertheless, researchers and what they perceive will always necessarily have to be part of the same world.

St. Pierre (2019, p. 4) reports that, for Foucault, it is only by talking about themselves that people become what they are. Foucault concludes that there must also be phenomena that have not yet been talked about, and this is what he calls 'immanent'—already there but not yet addressed. The French philosopher Gilles Deleuze would also speak of the virtual, of all that is possible. Only a part of it is in fact in existence, which is the actual. But the virtual and the actual have to be thought of as being fundamentally of equal value. The immanent is therefore not the other (because then it would be outside the model, as a contrast, as a comparison). It is simply something new, something radically and individually other, something that cannot be grasped by comparison. Elisabeth Adams St. Pierre (2019, p. 5), among others, derives the concept of immanence from Deleuze's (1997) notion of 'planes of immanence' (French: 'plan d'immanence'; Deleuze, 1995).

This immanent 'new' as something that has always been there, at least virtually possible, but never addressed and talked about, will by definition be something that human beings will never be able to grasp with mere reason; they will only be able to experience and feel it. The new comes to people through force, it happens to them, not the other way round. If human beings were to try to grasp it, they would be injuring it and at the same time they would be destroying it. What this means for St. Pierre is that even the methods of qualitative research should no longer be used because they do not fit into the ontology on which the rest of the paradigm is based. Qualitative research is always about categorising, abstracting, coding, and ordering. These are all principles that would require the assumption of a second world. They would no longer be immanent. Human beings are not capable of actively thinking a thought. Instead, it is the thought that comes to the person. The most a person can do is feel it (St. Pierre, 2019, p. 8).

Guiliana Ferri (2020) applies this paradigm to intercultural research. Ferri reads fictional literature and allows herself to be influenced by it. This helps Ferri to take a standpoint from which she can identify points where both authors and the characters they write about experience their worlds in an immanent way. On a third level (after the protagonists and the writers about their protagonists), Ferri (2020) takes care to transmit this immanent newness in her own writing about these literary works. She finds one such example in Audre Lorde's (1982) narration *Zami: A New Spelling of My Name*. In it, the author describes her own biography as a permanent becoming, in which traditional oppositions of majority and minority, gender and political orientation dissolve, and in which becoming is in fact manifested as a "desire" instead of a static rational distinction (Ferri, 2020, p. 413).

The role of language has recently been somewhat marginalised in social theory and thus in intercultural research. Access to the world through language is seen as too indirect and obstructive. Newer paradigms claim that people should be able to experience more of their world if they could access it without going through language. New materialism also rejects a linguistic dimension (Barad, 2007b). In postqualitative inquiry (St. Pierre, 2019), language is considered to be too anthropocentric and too westernised. In the sense of decolonisation, it is a pre-linguistic approach that should be chosen.

5.2 Foundations for posthumanist research in intercultural communication: The example of Donna Haraway

Donna Haraway criticises the ontological implications of the concept of the Anthropocene epoch proposed by Paul J. Crutzen and Eugene F. Stoermer (2000). The Anthropocene replaces the previous geological epoch, the Holocene, which began when the last Ice Age ended. The Anthropocene is characterised by the fact that the earth as a planet has been significantly and irreversibly shaped by human impacts, such as industrialisation and the subsequent environmental damaging. However, Haraway argues that the term Anthropocene gives too much prominence to humans and their capabilities. They have done damage to the planet, but they are unable to undo it.

Karen Barad (2007a) therefore claims that we should start a new era as soon as possible that she terms as "posthumanism" (p. 136). Haraway (1997), on the other hand, does not find the term Anthropocene appropriate because, more precisely, it is capitalism that is responsible for humanity's misery (p. 3). She therefore prefers to speak of the "Capitalocene" (Haraway, 2016a, p. 102), which for her should best be followed by the "Chthulucene" (Haraway, 2016b, p. 2), an epoch in which human beings feel and act in a responsible way with regard to the earth that they have damaged. Haraway is therefore looking for terms to describe an ontology that adequately discerns the limits but also the possibilities of humanity within its environment. Haraway is also primarily concerned with overcoming the anthropocentric perspective. However, she is also interested in what the paths to a future worth living might look like.

It is the interconnectedness and biological kinship of everything with everything that, for Haraway, ontologically constitutes the scope of human agency, and which we should therefore make use of. In her chapter "The Camille Stories" (Haraway, 2016c), Haraway takes the metaphor of 'humus' and 'compost' for the embeddedness of humans into their natural environment literally and creates several versions of a fictional narrative in which humans form new life forms with animals, such as butterflies in compost, and in this way shape a future.

All in all, ethnography inspired by new materialism is characterised by a new practice of representing people as embedded in their nature, and thus also by a metaphorical transfer to the nature of human relations. In intercultural research, for example, Vanessa Meng describes the forging of relationships in the sense of Haraway's concept of kinship and makes the activist potential of Haraway's ideas tangible in a project of "grassroots aesthetic education as worldmaking within a diaspora Chinese community in the United States" (Meng, 2023, p. 62).

Similarly, Arias Galindo et al. (2023) report on an arts-based community project in Mexico that aimed to bring together different cultural groups and improve social cohesion among them. In this art project, Haraway's idea of 'making kin' explicitly served as the theoretical basis and inspiration for the participants to realise their narratives on film (Galindo et al., 2023, pp. 548–549). Haraway's concept of creating new kinships in a decolonial world of compost also serves here as an ethical orientation and as opening up possible spaces for creating new worlds.

5.3 Foundations for posthumanist research in intercultural communication: The example of Karen Barad

Karen Barad introduces the concept of 'intra-action' as a replacement for the traditional concept of interaction and as a way of fitting individual action into a new ontology of posthumanism and, in particular, Barad's concept of agential realism, described below.

In the 1920s, Danish physicist Niels Bohr gained new insights into theoretical quantum physics that contradicted previous assumptions of scientific epistemology and ontology. Barad (e.g., 2007b, pp. 97–109) reviews Bohr's papers on this topic, published in 1987 in three volumes as *The Philosophical Writings of Niels Bohr* (1987a, 1987b, 1987c). As a particularly vivid example of these findings, the so-called two-slit experiment in its (then only theoretical) experimental set-up shows that electrons are either particles or waves but never both at the same time. The result depends on how the experiment is set up and whether and how the electrons get observed at all. Bohr concludes from this that electrons do not exist as particles or waves before the experiment and without being observed, but that this concretisation into observer and object only occurs during the observation (Barad, 2007b, pp. 97–109; see also de Freitas, 2017, pp. 742–743).

Bohr and Barad believe that these logics are scalable and applicable to all areas of the world. It is therefore also true for social research that subjects and objects of research only emerge through observation and are not pre-existent. Barad refers to this emergence of subject and object in observation as intra-action. In terms of the theory of science, this is where epistemology and ontology merge. They cannot exist without each other. Barad (2007b) uses the concept of "agential realism" (pp. 136–141) to describe the insight that an object to be observed is inextricably linked to the subject observing it and does not exist without it. Conversely, it also produces and shapes the observer in the first place.

Barad sees the method of reflection, which in a Cartesian sense emphasises human perception and processing, as the traditional epistemological approach to the world of science. Barad's substitute for this humanistic approach is the phenomenon of diffraction. Bohr's experimental apparatus, conceived as an epistemological tool, in this specific case produces a scattering, a diffraction. The matter interacts with the apparatus and with the observer and, through this diffraction, creates a subject and an object that are related to it. A description must therefore focus primarily on relations, which is why Barad also refers to relational ontologies (Barad, 2007b, pp. 71–91, as cited in Bozalek & Zembylas, 2017, p. 112). In one of his essays, Rodney Jones (2013) writes about "[c]ulture as both wave and particle" (p. 241) and draws a parallel with Barad: culture, too, can refer to both structure and human agency in a critical realist sense.

The effect of clothing is a particularly good example of the phenomenon of intra-action with the material. On the one hand, clothes and disguises are made by people. On the other hand, they change the way people perceive themselves and are perceived by others, i.e., only when they are observed. For instance, Dare (2020) highlights this effect and phenomenon at the example of the 2017 Women's Marches in the US. Participants knitted and wore pink woollen hats to protest against Trump's misogynistic statements: From Barad's point of view, not only the knitted hats, but also the bodies of these women did not exist as such before someone observed them during their performance. After all, the whole protest does not come into being, but through observation (Dare, 2020, pp. 178–179). Rodney Jones points out that the example of clothing goes back to Georg Simmel (Simmel, 1905/2003, as cited in Jones, 2013, p. 238). First, people create clothes to express their individuality, and then suddenly the clothes are there, providing a structure for something given (Jones 2013, p. 238). Barad's idea of intra-action thus highlights the conditions and consequences of a critical realist view in all its complexity.

As an example from intercultural research, Allen and Quinlivan (2017, p. 187) describe a situation in a sexuality education class in an Australian school where the didactic goal is the radical recognition of each student as an individual. At first glance, this may seem to be the state of the art in contemporary diversity education, but in its strongest sense it would actually require the children to radically perceive their situation and their co-individuals without interpreting and categorising them. However, Allen and Quinlivan's empirical example of a culturally homogeneous Australian classroom with a single Afghan student shows that all the protagonists are in a dilemma, that they are not at all able to perceive each other without categorisation, and even more: that the didactic setting and constellation does not even help to support such an attempt. As soon as a single child has an appearance, skin colour and/or clothing that the other children do not associate as familiar with their own experiences, this child will not be able to do anything to prevent being categorised as foreign by the other children. In fact, these majority children will be aided in their categorisation and othering by the fact that they are surrounded by a material world, i.e., their classroom, which fully represents their own familiar and traditional life-world.

6. Posthumanist interculturality

It has only been possible to sketch here in broad strokes the development from theory building on the epistemological basis of logical empiricism to an ontological opening in research on intercultural communication. It is by no means linear and is connected with many facets and debates in the academic discourse. With regard to the ontological turn, Pedersen (2012), for example, suspects that it is nothing more than a rhetorical trick: The ontological turn does not really imply a structural change, but instead a gradual change of a perspective that always has existed. Thus, although its proponents reject this very label, postqualitative research could ultimately be understood simply as a method (Wolgemuth et al., 2022). And the ontological turn would then be, at best, an instrument with which the range of methods used in cultural anthropology could be extended. Moreover, there would be no reason not to equate ontology with culture (Pedersen, 2012). In this way, a new level of insight would by no means be achieved.

Furthermore, social research authors may claim to have a one-world approach to epistemology and ontology, but this does not necessarily mean that they will succeed in putting it into practice. For example, Busch and Franco (2023) have pointed out that many publications in the field of intercultural communication claim to use poststructuralist and posthumanist approaches, but then fail to do so, or only do so partially. One can also question the originality of the results of the studies: Representatives of posthumanist research usually argue that the focus is on relationships. However, relational approaches have existed before, and for them an ontological turn may not even be necessary. Last but not least, there are doubts about the feasibility of some of the claims of poststructuralist and posthumanist research. For example, MacLure (2023) points out that as soon as we put our observations into words—either in our everyday lives or as writing researchers—we will reframe those observations as interpretations from our own perspectives. Consequently, what would be needed is an approach that operates prior to language or a non-linguistic approach (MacLure, 2023)—which might be challenging to put into practice.

Nevertheless, this review shows a clear paradigmatic development in intercultural communication research. In order to pursue the goal of discovering the new and shaking up classical disciplines, which has been mentioned since the beginning of the discipline, more and more steps towards a conceptual opening have been taken. What was developed in research on intercultural communication based on poststructuralist and posthumanist assumptions can also be described as a theory of posthumanist interculturality.

A theory of posthumanist interculturality describes the perception of a context as new in the sense that the new is not the other or the different, but what is immanent in our worlds. Access to this newness is made possible in both research and practice by perceivers reflecting on and abandoning their epistemological and ontological assumptions and allowing aspects of these dimensions to affect them anew. Interculturality is itself in a permanent state of crisis (Holliday, 2012, p. 45), in which the new can come to us, rather than the earlier assumption that epistemological crises are special cases that need to be repaired quickly.

Cultural research therefore remains possible and useful because it can draw our attention to possible points of entry into this space of the uncertain and the indeterminate in all its stages. The state of crisis, in which there is no horizon on which expectable answers to expectable questions can be found, becomes a fruitful normal state against the background of a posthumanist perspective that questions and opens up both its epistemological and ontological premises in the sense of a new materialism and an ontological turn. In the tradition of Gudykunst, it can be seen here that, until today, debates on theoretical aspects have been the main drivers of change and development in the field. Moreover, the posthumanist turn may have helped to rehabilitate the reputation and perceived use and contribution of theory to intercultural research. This does not mean, however, that this has been a linear process. What has been traced here is one discourse, although many older positions and perspectives in the discipline exist and are supported by authors. Research is a discourse and it is the discourse that develops it further.

Appendix

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The colonial roots and continuities of AI language culture

Britta Schneider and Bettina Migge

Abstract *AI language technologies such as large language models (LLMs) and machine translation have become part of everyday life but we are rarely concerned with the cultural histories and epistemological backgrounds of these tools. In this chapter, we discuss the parallels between concepts of language in technology settings and discourses about language in the history of European colonialism. We compare and sketch historical links between colonial language ideologies and language ideologies found in contemporary AI language culture and study the socio-political and epistemological parallels in colonial times and the AI age. We base our discussion on previous linguistic anthropological work that has studied language and colonial discourse and compare it with discourses on language found in scholarly texts from computational disciplines, in texts published by commercial language technology companies (e.g., Microsoft, Meta AI, OpenAI, Google) and in what can be known about the design of computational devices and LLMs. Our discussion adds to an understanding that AI language technologies in many respects represent a continuation of colonial endeavours from the Global North. This also shows that the interplay of material technologies and language plays a decisive role in establishing and distributing human ideas, orders, and power.*

Keywords *Colonial or Missionary Linguistics; Language Ideologies; Standard Language Cultures; Language Technologies; Cultures of Computation; Commercialisation; Digitalisation; Self-learning Algorithms*

1. Introduction

AI language technologies, such as large language models (LLMs), have become part of everyday life, but we are rarely concerned with the cultural histories and epistemological backgrounds of these tools. In this chapter, we discuss the parallels between concepts of language in technology settings and discourses about language in the history of European colonialism. As sociolinguistic and anthropological scholars interested in the role of language in social life—that is, in what we refer to as 'language culture' in our title—we both had no background in computation when we became involved in a project on *Language in the Human-Machine Era* (COST Action CA19102, n.d.).[1] We were keen to learn about the discourses and cultural concepts on language in the field of computational linguistics and machine learning technology and thus read scholarly articles and invited scholars and experts to give talks about these topics, which we jokingly referred to as our project of upskilling. From the very beginning, we were struck by the parallels between concepts of language in technology settings and discourses about language in the history of European colonialism. In computational texts and talks, for example, we frequently encountered the colonial trope that technologies will 'help' underprivileged communities by providing access to Western cultural practices. Clearly, the desire to include communities worldwide in digital spaces and AI technology practices is not (only) based on humanitarian goals but is part of global digital surveillance capitalism (Zuboff, 2019). Overall, there are similarities in how globally dominant actors, from historical European colonisers to current AI practitioners, exploit language to secure their position of dominance, while at the same time understanding this as a form of human progress. So, what is being packaged as new or revolutionary in AI is not necessarily all new but based on old models and motivations, and we believe that there is value in looking beyond our narrow current field of vision (also discussed in Keane, 2024).

In our exploration of the socio-political and epistemological parallels and historical links between language ideologies in colonial times and those in the AI age, we consider whether and how work on language in the digital and imminent human-machine era differs from earlier work in the colonial era, and ultimately whether such work has "left its colonial roots far behind" (Errington,

1 This research network, which ran from October 2020 to October 2024, focused on "the emergence of new types of language technology that mark a shift from the 'digital era' to the 'human-machine era'" and its aim was to facilitate a dialogue between commercial and academic technology designers, (socio-)linguists, and a wide range of practitioners using language technologies (https://lithme.eu/). The authors facilitated a Working Group dedicated to researching language ideologies, belief, and attitudes in this context.

2008, p. 150). Our aim is to raise awareness of the fact that we are currently confronted with a reordering of sociolinguistic realities, and we believe that it is useful to compare such reordering with another period of major change, which also shows that the digital turn follows a well-trodden and historically directed path. Given the increasing pressure in academia to provide 'solutions' and 'impact', which we have experienced not least in our interactions with computational sciences, we do not discuss concrete societal implications in this article but believe that critical knowledge of historical and current colonial forms of thought and action is in itself an important addition to academic and social debates.

The role of language in colonial enterprises is an established topic in linguistic anthropology referred to as colonial or missionary linguistics (Deumert & Storch, 2020, p. 3). It emerged following Fabian's (1986) monograph on linguistic description in Central Africa. The aim of this field is to critically examine the linguistic concepts and practices developed in the age of European colonialism that have crucially shaped our understanding of linguistic research and of what we understand as 'languages' – both in the colonies and in 'metropolitan' contexts. The history of colonial linguistics illustrates that linguistic epistemologies and practices are deeply intertwined with concepts of society, community, and personhood, and that constructions of language play a central role in legitimising political practices that legislate human difference (Errington, 2008). The study of such intertwined concepts of language and of society is based on the tradition of 'language ideology research' (Irvine & Gal, 2000; Woolard, 1998). In this tradition, the term 'language ideologies' does not refer to socially biased ideas about language. Instead, it is used to talk about epistemological concepts regarding language, the study of which involves, for example, the question of how the notion of 'languages'[2] as assumed 'things in the world' (and with it, ideas like words 'having meaning', see e.g., Silverstein, 2014) comes into being in culturally conditioned epistemologies. One traditional focus of this research field lies in critically reflecting epistemologies of Western linguistics, including in colonial histories (e.g., Deumert & Storch, 2020; Errington, 2001a, 2001b; Gal & Irvine, 2019). We follow this tradition in our own use of terminology.

What we observe in conceptualisations of language in cultures of computation—such as machine translation, the building of writing systems and key-

2 We use single quotation marks to indicate that these are assumptions or concepts that are controversial and to indicate that we do not align with these views.

boards, or data corpus construction for LLMs—has strong parallels to colonial traditions. Languages are conceptualised as given, object-like homogeneous entities that are understood as representing territorially-bound ethnic groups and thus serve to systematise and order human diversity. They are also conceptualised as tools that impact human thought and practices. In order to control them in the interests of the dominant groups (colonising, technology-enhanced, or technology-driven regimes), they are subjected to processes of shaping or standardisation. These processes are driven and justified by related specific moral discourses on appropriate language behaviour and on 'enlightening' and 'helping' subordinate 'others' in both settings.

Our discussion is based on linguistic anthropological work that has studied language and colonial discourse. It compares and contrasts it with discourses on language found in scholarly texts from computational disciplines, in texts published by commercial language technology companies (e.g., *Microsoft*, *Meta AI*, *OpenAI*, and *Google*) about the aims, functioning, benefits, and use of language technologies that they build. These include public and commercial machine translation tools, interpersonal communication tools such as *WhatsApp*, social networking tools such as *Facebook*, *Instagram*, keyboards, smartphone settings, chatbots, or voice assistants. We also consulted publications about what can be known about the design of computational devices and LLMs. This adds to an understanding that AI language technologies are not autonomous and agentive actors but part of cultural histories and practices in which the interplay of material technologies and language plays a decisive role in establishing and distributing human ideas, social orders, and power hierarchies.

2. The role of language in colonial and in digital culture

In this first section, we give a brief overview of the different approaches to language in the cultural contexts we focus on, that is, colonialism and AI. Colonialism has been defined as "the transformations wrought by high modern empire" through violence and displacement (Bayly, 2016, p. 2). It entails "a relationship of domination between an Indigenous (or forcibly imported) majority and a minority of foreign invaders" (Cheyfitz & Harmon, 2018, p. 271). Being convinced of their own cultural and moral superiority, the latter make decisions affecting the former in line with the interests of distant political centres. The term 'colonial' is commonly used to refer to Western empires. Colonialism

> produced unprecedented change and novelty, including massive and profoundly destructive material transformations and the constitution of a new kind of person: a colonial subject with a 'colonised mind', painfully if never fully subordinated by the coercions and 'othering' effects of the coloniser's power-knowledge. (Bayly, 2016, p. 2)

We treat colonialism as the time between the 15th century when Portuguese 'explorations' commenced until the 1960s, when most former colonies had gained formal political independence.

In the colonial era, an interest in language was bound to practices of economic interest, imperial conquest and religious conversion (Pennycook, 1998). Thus, the author of the first grammar book of a European vernacular language, Antonio Nebrija, stated in 1492, "la lengua fue siempre compañera del imperio" [language was always the companion of empire] (Cheyfitz & Harmon, 2018, p. 270; Nebrija, 1492). Later on, European colonial conquest developed into a form of mercantile capitalism, in which private financiers, that is, corporate companies employed or licensed by national states, took the initiative to establish trade and economic exploitation beyond European boundaries (Heller & McElhinny, 2017, p. 135). Already in this sense, there are interesting parallels to the current context where large technology companies pioneer global digitalisation, often financially supported by state actors (Crawford, 2021, Chapter 6). Historical colonial exploitation was legitimised by religious civilising arguments, namely by spreading the word of God to 'save' non-European souls. The control of communication to subordinate and coerce the 'other' was central in establishing European colonial power (Fabian, 1986).[3] The unified colonial vocabularies, texts, and language systems developed by Europeans created images of unified colonial subjects and territories that could be ruled and transformed in the image of the coloniser (Cheyfitz & Harmon, 2018, p. 272).

Research on colonial linguistics often focuses on the contribution of missionaries to the fixing (transforming speech into writing) and dissemination of languages and their prime aim to convert people to Christianity (Deumert & Storch, 2020; Errington, 2008; Schmidt-Brücken et al., 2015; Warnke et al., 2016). There were also other actors such as scholars from other disciplines (e.g.,

3 Note that we do not distinguish between American and European colonial desires in this article, as the colonial ideologies of Anglo-U.S. and European discourses are not different in kind and emerged at roughly the same time. The current American dominance in technology may be regarded as colonial also towards European contexts, but we here do not focus on European specificities in that sense.

geographers, anthropologists, lawyers), administrators, travellers, adventurers, explorers, and "passionate autodidacts in philology" (Gal & Irvine, 2019, p. 247) who formed an ad hoc scientific community. It engaged in committing linguistic practices to paper, systematising them, and also disseminating them to interested audiences in the metropolitan centres (Gal & Irvine, 2019). Outputs like word lists, grammars, and dictionaries can also be described as the "[r]eduction of speaking to lines of text, inaccessible for speakers of the language and focussing on grammatical orders" (Deumert & Storch, 2020, p. 9). The work of missionaries and these others was enabled by commercial entities who brought them there and supplied them, and national administrations that were at quite a distance from where the work took place (Errington, 2008, p. 4). At the same time, these actors and their work also enabled the work of commercial and state actors and it was not easily possible to separate the three. According to Errington (2008, p. 14), academic comparative philology served as an additional midwife in the construction of languages by giving "ideological and intellectual support" to the project of creating print-literate forms of local languages in the colonies. The discourses and activities concerning language in colonial settings thus have to be understood against the background of religious, economic, and political aspirations, supported by conceptual academic ideas that predominated and interacted with non-academic discourses on language at the time.

Today's AI language culture is similarly based on the interest of commercial and state actors, interwoven with academic epistemologies and the desire to explore new cultural spheres.[4] AI language technologies are based on digitalisation, the application of machine learning and the availability of large masses of data through the Internet (see Katz, 2020, for a critical discussion of the term 'Artificial Intelligence' and its emergence). The original purpose of digitalisation and computation was to automate and simplify mathematical calculations and "to capture the knowledge expressed through individual and collective behaviours and encode it into algorithmic models" (Pasquinelli, 2023, p. 2). Until the mid-20th century, programming was primarily conceived of as a rather dull and therefore feminised activity, similar to the work of a secretary (Ensmenger, 2015). During the 1960s and 1970s, "male computer experts were able to successfully transform the 'routine and mechanical' (and

4 Traditional religious motivations play no role in contemporary AI discourses, even though it would be worthwhile to study the moral and transcendent underpinnings of these discourses in more depth (see Keane, 2024).

therefore feminised) activity of computer programming into a highly valued, well-paying, and professionally respectable discipline" (Ensmenger, 2015, p. 38). Home computers became available in the 1970s and 1980s (Ceruzzi, 2003), while connecting computers became possible in the late 1960s with the so-called ARPANET, a technological development that was co-created by the U.S. Ministry of Defence and U.S. American university research labs (Couldry & Hepp, 2017, p. 48). Due to its military origin, some refer to the internet as "weapon of empire" (Tarnoff, 2022, p. 12), which became an "electronic shopping mall" (Tarnoff, 2022, p. 18) during the 1990s. In 1991, the U.S. government handed over internet operations to commercial providers (Couldry & Hepp, 2017, p. 49). A lot of early computing and internet pioneers had a more playful and experimental approach to technologies, and many believed that the internet would allow for a more democratic, more liberal, and more just society (Bunz, 2012). Digital communication allowed for easy communication and the emergence of new forms of public space. However, digitalisation and online publics in the hands of monopolist private companies are today discussed as major threats to democracy (Noble, 2018; Pasquinelli, 2023, p. 251; Zuboff, 2019).

The search engine developed by *Google* was a core element in developing computer networks into a capitalist infrastructure in which money could be earned—*Google* became one of the most influential and successful companies worldwide by inventing digital and globally spread forms of advertising and marketing (Couldry & Hepp, 2017, p. 50). Once smartphones could access the internet, personalised tracking of individuals became possible (Couldry & Hepp, 2017, p. 51). The data collected is used for personalised advertising but can also be exploited for other purposes, by *Google* but also by other companies and governmental actors (Crawford, 2021, Chapter 6). Overall, the internet developed from a "closed, publicly funded and publicly oriented network for specialist communication into a deeply commercialized, increasingly banal *space for the conduct of social life itself*" (Couldry & Hepp, 2017, p. 50, italics in original). Digitalisation and the emergence of online culture can be understood as a development in which adventurous and curious individuals, the interests of capitalist actors, and governmental desires for establishing power by expanding and controlling markets came together in transforming the world—a cultural context that is not too dissimilar to colonial histories.

While the mathematical procedures to conduct machine-learning have existed for several decades (Katz, 2020), it was only in the 2010s that extremely large amounts of data, namely those that had been collected online via computers and smartphones, and processing units that were able to process them (so-called 'GPUs', Graphic Processing Units), allowed for a wider popularisation of such tools (Bommasani et al., 2021, p. 4). Even though the development of machine learning is not interested in language per se, language data has become a core focus—besides images, language is the kind of data that is mostly available on the web and is taken to represent human thought, desire, and culture. The publication of the machine-learning text generating language model *ChatGPT* in 2022 caused worldwide public debates, surrounding questions on the supposedly super-human abilities of the tool (Heaven, 2023), the end of academic education as we know it (Marche, 2022), or the possibly drastic changes to job markets (Toh, 2023).[5]

To build a large language model (LLM) like *ChatGPT*, a self-learning algorithm (a set of calculations, in the case of LLMs, matrix multiplications, see Castelle, 2023) analyses a very large text corpus to detect statistically likely word embeddings, a procedure referred to as 'training'. Once 'trained', the algorithm can make predictions about word sequences. The input of a large number of standardised texts—i.e., texts in which similar word sequences occur—is what makes prediction work well (Schneider, 2024; see Brown et al., 2020 on source and size of training data used by *OpenAI*, the *Microsoft* funded company that released *ChatGPT* in 2022). This means that the existence of standardised languages and centuries of producing standardised written text allow an algorithm to detect statistically likely word sequences. As we will discuss below, standard language cultures are embedded in histories and epistemologies of European modernity, colonialism, and literacy, but are also the foundation of the language culture of AI.

Artificial text generation is based on LLMs. These produce written text that is grammatically coherent and is often interpreted as being equal or even superior to human linguistic abilities. However, as illustrated above, LLMs are word prediction techniques. They are "systems which are trained on string prediction tasks: that is, predicting the likelihood of a token (character, word, or string) given either its preceding context or […] its surrounding context" (Bender et al., 2021, p. 611). LLMs have mostly been developed by computational scientists rather than linguists and have no access to grammatical structures or semantic meaning—still, the output is, at least on the grammatical side, often more convincing than the output of previous grammar-based efforts of

5 Note that there is also a critical counter-discourse to these grand narratives (see the 'AI Hype Wall of Shame' at https://criticalai.org/the-ai-hype-wall-of-shame/).

linguists to make computers 'understand' language (on linguistic approaches, see, e.g., McShane & Nirenburg, 2021). On the content level, the output of statistically likely strings of words is problematic: it can be (and often is) factually wrong, a phenomenon referred to as 'hallucination' (Bang et al., 2023). Despite the fact that LLMs were not developed per se for standardising or shaping language, they already have been shown to impact language practices, including structures, meanings, and understandings of language (see, e.g., Shaitarova et al., 2023; Vanmassenhove et al., 2019; Virtanen et al., 2019), and to lead to linguistic homogenisation (Liang et al., 2024).

The creation and design of LLMs is grounded in commercial capitalist motives and, as enormous computing resources are necessary to build a model, there are currently only few commercial actors who have the capacity to create LLMs from scratch (Bender et al., 2021; McIntosh, 2019). These are most notably *Meta*, *Google*, *OpenAI/Microsoft*, and several Chinese firms. At the same time, a large number of different actors participate but also counter developments of digital commercialisation and monopolisation. Computational scientists who work in academia and in smaller or larger companies are not necessarily actively supporting the capitalist endeavours of digital monopolies but their work may tacitly contribute to the better functioning of digital tools (see a myriad of papers dedicated to this topic).[6] Yet, critical work also abounds and there are large communities that support open source tools and conferences that discuss social biases and problems as digital and AI tools become more and more popular.[7]

Traditional linguists who focus on grammar description, the creation of balanced language corpora (i.e., corpora that consist of oral, written, formal, and informal language), and traditional fieldwork for data collection are mostly sidelined in this development, as it is above all computational scientists and computational linguists who contribute to the field, often with little training in other areas of linguistics, such as critical and socially oriented approaches. The commercially-driven interest to gain and maintain customers and thus to increase the performance of technological products and the number of languages they work in (e.g., keyboards, auto correction, machine translation, chatbots, etc.) has raised interest in sociolinguistics from the computational side (personal communication with technology developer; Nguyen et al., 2016). What are presented as insights from sociolinguistics are seen as

6 https://arxiv.org/

7 E.g., https://huggingface.co; https://facctconference.org/

helping to improve data quality and data modelling (Grieve et al., 2024). Overall, discourses and activities concerning language in computational settings are influenced by economic and political aspirations, embedded in specific cultures of value (mostly capitalist ones, in this case), and supported by conceptual academic ideas reminiscent of missionary linguistics traditions. The unifications, systematisations, and orders established in previous linguistic and colonial linguistic work are partly reproduced and partly reconfigured. We discuss several levels of links, similarities, and differences between colonial and AI language culture in the following.

3. Comparing colonial and AI language activities and theories

3.1 Language and power relationships

European colonialism was based on economic desires and on constructions of superiority, racial hierarchy, cultural hegemony, and the civilising and religious mission of the colonisers (Pennycook, 1998; Said, 1978). Colonialism was a desire to rule the world. Europeans imagined a "scale of human progress" (Gal & Irvine, 2019, p. 247) and saw themselves on top of that scale. The economic exploitation and brutal subjugation, involving the enslavement, carrying off, and killing of millions between the 14th and 18th centuries, were legitimised through narratives of 'civilising' via European culture and of 'saving of souls' by bringing Christianity to the colonies (see Section 2 above). In subsequent periods, European empires carved up, for example, the African continent at the Berlin Conference in 1884 and in the 19th and early 20th century governed large parts of the world.

In order to exploit resources in the colonies and to widen their markets, Europeans aimed to access and order the colonies, relying on their own cultural and linguistic models. These were shaped by modernist concepts that regard the world as ordered by natural laws and that approach social categories—among them nations, ethnicities, and languages—as quasi-natural and essentialist (Bauman & Briggs, 2003b; Williams, 1999, p. 11). Colonisation therefore not only meant a territorial, physical, and bodily subjugation and exploitation but also dominance on the cultural and conceptual level:

> For settlers to possess the lands which they fondly constructed as 'vacant' they needed to map them, to name them in their own language, to describe

> and define them, to anatomize the land and its fruits, for themselves and the mother country, to classify their inhabitants, to differentiate them from other 'natives,' to fictionalize them, to represent them visually, to civilize and to cure them. (Hall, 2000, pp. 24–25, as quoted in McElhinny & Heller, 2020, p. 135)

In terms of social order, Europeans "were unable to break from their ideological heritage" and "implicitly believed their concept of ethnicity to be the natural order and not merely one convention amongst others used to make sense of the world" (Harries, 1989, p. 90). They therefore relied on "their own system of ethnic classification and accepted without question that Africans [and other colonised people] should use the same distinctions and concepts" (Harries, 1989, p. 90). What is today referred to as 'methodological nationalism'—the assumption that nation-states, with bounded, homogenous cultural and linguistic groups are the 'natural' way of organising human difference (Schneider, 2019; Wimmer & Glick Schiller, 2002)—was conceptually transposed to all regions of the world. Language ideologies that understand language as an index of ethnic and national communities were similarly seen as a 'natural' way of approaching human difference. Transforming language practices into writing through data collection procedures and into 'languages' through the production of dictionaries and grammar books was a way to tame, reify, and regularise colonial worlds (Deumert & Storch, 2020; see also next section). The practical need of translating the Bible into indigenous languages (especially in evangelical contexts; Gilmour, 2007, p. 1763) for the purposes of religious legitimisation of colonial exploitation encouraged the imagination and creation of territories ordered along ethno-linguistic lines. Since, for purely practical reasons, one linguistic repertoire had to be decided on as the language for Bible translation, this repertoire then came to be understood as the language of the specific territory (see, e.g., Durston, 2007, who discusses this process in the case of Quechua).

The development of AI technologies, in its ideological underpinnings and constructions of culture, is clearly different from the colonial endeavour. The brutal histories of slavery and exploitation have no equivalence and the cultural context is not framed in open statements about racial superiority. Rather, technologies are described as supporting individuals and communities to become integrated into markets and public spaces, and to profit from technological progress in various ways (Bapna et al., 2022; Costa-jussà et al., 2022). The political-ideological framing, at least currently and in Anglophone publications, draws on democratic, (neo)liberal and egalitarian ideals, which can also be inferred, for example, from the many publications from non-commercial academic authors but also from commercial actors that discuss biases and stigmatisation of minorities as a problem (e.g., Bolukbasi et al., 2016; Crawford, 2017; Sun et al., 2019, among others). Note that it is not always easy for a newcomer to distinguish industry publications and academic publications and often researchers from both the industry and from academia work together, also because only industrial actors have access to the data, algorithms, and computational supports (e.g., cloud credits) of companies which are essential for carrying out research. This observation already hints at some of the social hierarchies and exclusive tendencies that, despite discourses that value democracy, are implied in the field. Commercially-funded, non-peer reviewed content that fuses with academic knowledge has been referred to as the "manipulation of academia to avoid regulation" and some criticise that "the majority of well-funded work on 'ethical AI' is aligned with the tech lobby's agenda" (Ochigame, 2022, p. 54). This overlap between academic researchers and industry is actively encouraged in academia because it promises association with major discoveries and financial support for institutions.

Without saying that this would be comparable to colonial racism, there are obvious constructions of superiority, evolutionary ideologies, and stark power hierarchies in digital societies. Digital technologies are culturally associated with modernisation and progress, with the apparent neutrality of mathematics (Golumbia, 2009; Svensson, 2022), and with specific constructions of masculinity (Ensmenger, 2015; Wajcman, 2010). The ability to design code and to build and understand technology is associated with social authority. Making technologies accessible to as many people as possible is now typically discussed in terms of 'helping' others and industrial publications present the distribution of technology as a welfare activity (e.g., Bapna et al., 2022; Costa-jussà et al., 2022). Discourses of 'help', 'harm', and 'philanthropy' are regularly directed at communities with a colonial history and construct hierarchical relationships between communities. Furthermore, and this is probably even more crucial, access to technologies and their distribution to communities worldwide is a double-edged sword. While it does allow for many opportunities such as entry to digital public spaces, entertainment or ease of communication, companies do not build technologies out of philanthropic intentions—even if they like to present it that way.

Technology development is, at least in the western world, embedded in capitalist markets, in which companies give priority to economic profits.

Access to the data of customers is today an asset on this market and data is often referred to as 'the new gold' as "[p]ersonal data create economic and social value at an increasing pace, and personal information is used today in many different situations for numerous purposes" (García-Gasco Romero, 2021, p. 171). The creation of AI technology is one of these purposes. Observers speak of a 'race' between the five U.S.-based Big Tech companies (*Meta*, *Microsoft*, *Amazon*, *Apple*, and *Google*) to dominate AI on a global scale (Weise & Metz, 2023). Domination here is not of a traditional political kind but is, first of all, based on economic desires—global commercial actors are interested in data as data analysis allows them to make predictions on consumer behaviour, for example, in customised advertising (Rushkoff, 2019, p. 68). Yet, access to human behaviour through data collection and surveillance (Zuboff, 2019) is obviously a very powerful tool and therefore also of political interest. Governmental actors have funded AI development from its very beginning, first and foremost the U.S. *DARPA* (*Defense Advanced Research Projects Agency*; see Crawford, 2021, p. 184), and algorithmic intervention on social media platforms has played a tacit (illegal) role in democratic elections (Meredith, 2018). In China, algorithmic surveillance prediction is already used to control and form human behaviour in public and private spaces (Deng, 2023; Pei, 2024). Crawford observes that, also in the U.S. context, state and commercial interests become increasingly merged and that digital technologies in the United States

> encompass all those parts of everyday life that can be tracked and scored, grounded in normative definitions of how good citizens should communicate, behave and spend. This shift brings with it a different vision of state sovereignty, modulated by corporate algorithmic governance, and it furthers profound imbalance of power between agents of the state and the people they are meant to serve. (Crawford, 2021, p. 209)

A discourse of 'helping' is entangled in this fusion of state and commercial actors—the U.S. department's algorithmic warfare programme, for example, is based on *Microsoft* technologies and its motto, depicted on its logo, is 'Our job is to help' (Crawford, 2021, p. 190).

In the western world, the financial realisation of AI language technology is therefore not only in the hands of 'the Big Five' but co-funded by public institutions, including universities, and by funders from the financial sector, the oil and pharmaceutical industries, real estate, and others (Katz, 2020). The interest in AI language technologies by some of the most powerful economic and political actors shows their political and economic relevance. The race of very few powerful actors to rule the world, to exploit global markets, and to control and influence human thought and behaviour is indeed reminiscent of the colonial endeavour.

And again, language plays a central but often hidden role in gaining access to, ordering and governing the world, in this case, in the form of digitised language data. Modernist concepts of language developed in the age of colonialism prevail also in computational contexts—as mentioned above, language is typically understood as appearing in orderly categories and structures, and as indexing territorially-based national or ethnic and monolingual communities. There are, however, also important differences as the different technological affordances of writing/printing and of digital online media bring about different theoretical approaches to language and different practices of materialising language. These will be discussed in the following.

3.2 Language theories and epistemologies

3.2.1 Concepts of language in European colonialism and in missionary activities

Language theory in general is dominated by concepts that have been developed by Europeans. As Deumert and Storch observe, "[c]olonial ideologies about language are rooted in a longue durée" (Deumert & Storch, 2020, p. 12), in which, since at least the beginning of the fourteenth century, language has been constructed as "codifiable, structured, and bounded" (drawing on Bonfiglio, 2013). The ability to create shared meaning interactively via sign-making practices (as identified in theories of languaging, see, e.g., Love, 2017; Makoni et al., 2020) became increasingly understood as springing from bounded systems, tied to specific (homogenous) peoples and territories. This epistemological framing of language had various effects. In European contexts, the claim to have 'a language' was taken as a sign for a culture to be 'real' and as having roots in a distant past, which until today serves to legitimate political autonomy. Gal and Irvine discuss the case of German, where the construction of a unified German language played a crucial role in political emancipation and the formation of the German nation-state in the late 19th century (see also Barbour & Carmichael, 2000; Gal & Irvine, 2019, Chapter 9).

In colonial settings, the imagination and mapping of languages as 'natural objects' "out there to be discovered" was seen as a way for "plotting histories and relations among peoples" (Gal & Irvine, 2019, p. 248). The description of linguistic practices thus served to produce "colonial categories of social difference and […] models of and for ethnocultural identities" (Errington, 2001a, p. 23). Europeans projected their monolingual concepts of ethnic culture and territory to contexts which were often shaped by much more complex relationships of language and social affiliation, in which multilingual resources were, for example, understood as linked to social rank, religion or occupation (e.g., Irvine, 1989). European colonists and missionaries thus (mis-) construed the linguistic repertoires they observed as an expression of traditional monolingual cultures, "locations in a distant past, but also their relations to some perduring place" (Errington, 2001a, p. 27). Linguistic diversity was interpreted as a result of migration and/or conquest and multilingualism as a possible sign for the 'unruliness' of a speaker (Gal & Irvine, 2019, Chapter 9). At the same time, language was key to accessing the minds and thoughts of colonial subjects, and translation became a central strategy to influence and convert them. Through the documentation of linguistic repertoires and the subsequent translation of the Bible into the resulting languages, which for the first time appeared in Roman alphabetic script, missionaries in particular contributed to the construction (or invention) of languages as territorially and ethnically grounded entities. In doing so, they co-constructed new ethnolinguistic groupings and new language-based socio-economic stratifications in which literate converts had the highest status (Errington, 2001a, p. 24).

The understanding of languages as naturalised stable entities, emerging from stable and timeless cultures, also brought about the idea that linguistic differences express a scale of civilisation. During the 19th century, languages were increasingly described as 'organisms', which also contributed to understanding linguistics as a 'natural science' (Arens, 1969). The 'family tree of languages' was invented (Schleicher, 1869, as cited in Arens, 1969) and describes linguistic and cultural relationships in a framing of enduring and purist family relationships, with 'parents' and 'brothers' and 'sisters' (Irvine, 1995), ignoring processes of intercultural contact and colonial realities that had brought about creolisation (Irvine, 1995). In such naturalised imaginations of language and culture, European languages were placed high on an evolutionary scale. Particularly European written languages were described as 'rational' and therefore superior. A concept of language as ideally serving for context-free and logical discourse, linked to logocentric ideologies in which words have stable and definite meanings and are understood to refer to a non-linguistic outside, prevailed in intellectual circles in early European modernity (Bauman & Briggs, 2000; 2003a). Such imaginations of language as 'rational' excluded women, the working classes, and the colonial Other (Bauman & Briggs, 2003b) because rationality was conceptualised as a property of educated white men who were also the main agents in the public domain where rational thought and debate were conceptualised to take place.

On the grammatical level, it was morpho-syntactic differences that were seen as indexical of civilisational scales. Because Latin was taken as the reference model, and because all the terminology used to describe grammar derived from the description of Latin, the analysis of the morpho-syntax of other languages was biased and skewed towards Latin. Wilhelm von Humboldt, for example, studied typological differences of languages and interpreted more synthetic languages—languages in which grammatical information is expressed via morphological processes within a word—to be more expressive and complex than analytic languages in which grammatical information tends to be expressed in individual words (von Humboldt, 1836). Grammatical forms were also seen as 'window' into the human mind and, in contexts of colonial racism, specific grammatical forms, and particularly more analytic forms, were taken as sign of the inferior cognitive capacities of non-European speakers—"[i]t thus became customary to speak of primitive languages, in the same way some races were considered evolutionary inferior to others" (Mufwene, 2015, p. 453).

Although Latin was regarded as ideal and as an underlying reference for grammatical descriptions, the constructions of hierarchy in colonial language theory had an effect on the perception of other European languages. The fact that colonialism not only produced culture and language in the colonies but co-constructed imaginations of European culture is one of the important insights of postcolonial theory (Said, 1978). Thus:

> [i]f one of the central aspects of colonial discourse has been to construct the native Other as backward, dirty, primitive, depraved, childlike, feminine, and so forth, the other side of this discourse has been the construction of the colonizers, their language, culture and political structures as advanced, superior, modern, civilized, masculine, mature and so on. (Pennycook, 1998, p. 129)

European languages, and, over time, above all English, became markers of their speakers' "'progress', 'enlightenment' and 'enrichment'" (Gilmour, 2007, p. 1765).

These Euro-American developmentalist ideologies have had enduring effects on language policy in postcolonial nations. Overall, 20th century global language policy mostly reproduced ideas of territoriality and of language as referential, 'rational' tool. Corpus and status planning for non-European languages has also been carried out with ideals of homogeneity, efficiency, and simplicity in mind. An underlying teleological ideology often assumes that any language strives towards the ideal end form of an official and standard written language that can be used for academic purposes (Errington, 2001a, p. 34). This language should then fulfil the role of a 'neutral' "voice from nowhere" (Gal & Woolard, 2001) in the national or ethnic context where it is understood to originate.

Thus, the work of transforming languages into writing, which is then understood as an indexical representation of an ethnic and territorially-based group is still ongoing. And until today, missionary work that aims to spread Christian religious beliefs continues to play an important role in this context. Crucial here is the *Summer Institute of Linguistics* (*SIL*)[8] which was established in the United States in 1934. It provides "linguistic, anthropological and sociolinguistic expertise to aspiring Bible translators" (Kamusella, 2012, p. 71) and is closely connected to *Wycliffe Bible Translators*,[9] whose goal is to disseminate Christianity through translation of the Bible into as many languages as possible. *SIL* shapes conceptualisations of language particularly in the Global South in several key ways. It offers training in the different activities that are part of this process, ranging from language and culture description, literacy development, academic publishing, translation practices, Bible study to publishing and dissemination of its products.[10] Its impact is non negligible in that it has trained and supported over 5000 missionary linguists from the Global North and the South and impacted more than a 1000 languages, mostly in the Global South (Errington, 2008). According to its own figures, its current activities are impacting more than "855+ million people, 1341 communities and 98 countries".[11] *SIL* is also active in the technology-enhanced development of written codes out of oral language practices: "SIL software supports fieldwork in linguistics and anthropology by streamlining collection, analysis and archiv-

8 http://www.sil.org
9 https://www.wycliffe.org/
10 https://www.sil.org/about/discover
11 http://www.sil.org/

ing of language and culture data".[12] Finally, *SIL* also has a leading role in systematising linguistic diversity through its coordination, editing, and publishing of *Ethnologue*, "the single largest, most widely cited compendium of knowledge of global linguistic diversity" (Errington, 2008, p. 153).

Although *Ethnologue* was initially developed by *SIL* to guide and provide background for its own Bible translation activities, the *International Organization for Standardization* first "invited SIL to develop an ISO 639–3 standard to cover all the world's languages" and subsequently made *SIL* its code registration and allocation agency:[13]

> This code allocation is the actual uniformized world-wide registration of languages that amounts to their de facto international recognition. It also appears to be de jure (though not overtly articulated as) recognition in light of international law, insofar as the International Organization for Standardization creates and maintains elements and procedures of this law. (Kamusella, 2012, p. 72)

ISO-codes are used to implement different languages into computing systems. This means that the colonial, missionary activities of transforming interactive practices of meaning-making into writing are brought into a further reification in digital culture.

3.2.2 Concepts of language in AI culture

The above observations show that there is a direct link between colonial linguistics and digital language culture (although openly racist language theories have been abandoned). In technology settings, as in European colonialism, language is imagined as deriving from ethnically homogenous groups that can be orderly mapped in territorial space. Accounts of language entail the idea that a 'fully developed' language profits from a standard writing system and efforts are made to create writing systems where these do not exist yet. Languages for which a certain degree of normalisation cannot be achieved are usually denied inclusion into AI processes such as machine translation (Costa-jussà et al., 2022, pp. 12–18). In contrast to colonial times, there is no discourse that describes distinct languages or grammatical forms as 'more or less developed', instead linguistic diversity is generally described as 'wealth' (van Esch et al.,

12 http://www.sil.org/about/discover/technology-language-development

13 http://www.iso.org/iso-639-language-code

2019). However, evolutionary ideologies and teleological concepts are still common, but they are reconfigured in relation to the affordances of digital systems.

Languages that are embedded in computational systems are typically referred to with ISO-Codes. It is common in digital culture to equal language (as a general human phenomenon) with datafied language, that is, language that has been rendered into machine-readable text.[14] Only datafied language can be used for documenting and predicting user behaviour or for training AI systems. An understanding of language as digital data is common-sense so that the fact that language is based on meaning-making practices that humans produce can be easily forgotten. This can be shown in the following short passage from a text by *Stanford's Center for Research on Foundation Models* (*CRFM*): "[…] we highlight the role of people as the ultimate source of data" (Bommasani et al., 2021, p. 7). The wording displays the theoretical grounding of widespread discourses on language in contemporary AI culture. Readers are reminded that 'people' are the 'source of data'. It is typical in computational publications that language is not discussed as human interactive praxis but as a data source.

In contrast to colonial times, languages are not distinguished based on their typological characteristics but based on the size of their data sets. These become a central marker of differentiation and 'development'. Depending on the size of written and datafied text corpus, languages are therefore approached on a scale from 'high-resource' to 'low-resource' (e.g., Bommasani et al., 2021; Costa-jussà et al., 2022). There are long lists of languages, ordered according to the number of words that have been datafied (Bapna et al., 2022). Unsurprisingly, 'low-resource languages' are typically languages with colonial histories (but also other minority languages or those simply not aligned with administrative units such as states). These languages are described as in need of 'help'. A prominent paper by *Meta*, the company that owns *Facebook*, *Instagram*, and *WhatsApp*, carries the title *No Language Left Behind* (*NLLB*; Costa-jussà et al., 2022) and discusses ways to include 'low-resource languages' into

14 Datafication consists of extracting information from the flow of social life, identifying it with imagined social categories and fixing such relationships. It is part of the ideology of 'dataism' (Bode & Goodlad, 2023), which broadly assumes that data represents human behaviour and that quantification and its agents are objective. In linguistics, datafication has involved collecting of oral practices via recording and transforming it into writing. This process has been instrumental in conceptualising "language as referential code and languages as 'natural', given objects that are systematically and neatly structured (e.g., Pennycook 2004)" (Erdocia et al., 2024).

digital technologies. Promotional videos of the inclusion of these languages into *Meta*'s technologies celebrate linguistic diversity—and its datafication as welfare and 'support' (for a more detailed discussion, see Schneider, in press). Such discourses reproduce missionary relationships but also colonial language ideologies that understand languages as systemic entities, ordered according to ethnic communities. They also construct new hierarchical social relationships based on access to technology, in which large U.S.-based technology companies are the unquestioned leaders.[15]

In the provision of language technologies for 'low-resource languages', there is an important emphasis on classifying and ordering languages for validating those that are targeted for inclusion in AI, which reproduces the colonial idea of language as worthy if written and adds the criterion of 'written in Wikipedia'. To obtain a list of 200 lesser-used languages for developing machine translation, the above-mentioned *Meta* (*Facebook*) consortium (Costa-jussà et al., 2022, p. 12) created "a preliminary list of over 250 possible language candidates" based on the following considerations:

> First, we considered all languages with a Wikipedia presence. [...] Next, we solicited lists of languages spoken in various regions by native speakers, focusing particularly on African languages—a category of languages that have historically been underrepresented in translation efforts [...]. We then examined language coverage in multiple existing datasets in the natural language processing community, paying focused attention on training datasets without accompanying evaluation datasets. Finally, we considered [...] the approximate number of native speakers and other community-level variables relevant to our work. Next, for each of the language candidates, we partnered with linguists from various specialized language service providers to understand if each of these languages has a standardized written form [...] because having a reliable, high-quality evaluation dataset is critical to accelerated experimental progress. (Costa-jussà et al., 2022, pp. 12, 16)

Once the languages were selected for intervention, *NLLB* cross-referenced, that is, compared, the information with existing language regimes from the Global North such as the ISO codes and those from *Glottolog*, which are developed and administered by a group of typological linguists.[16] Both sets of codes reproduce a colonial enumerative and differentiation approach, focusing

15 At least in western settings and here not discussing the case of China.

16 https://glottolog.org/

on identifying (inventing?) bounded languages, and mapping them in space and time. Technology companies also apply additional metrics. For example, *Meta* classifies languages by recording their web support—whether they are supported by *Google Translate* and *Microsoft Translate*, the types of scripts in use, their resource-level, i.e., "if there are fewer than 1M publicly available, de-duplicated bitext samples with any other language within our set of 200 languages" (Costa-jussà et al., 2022, p. 17), and by assigning them a unique name "due to formatting limitations".

In these techno-colonial discourses and enumerative logics, it is no longer Latin that serves as reference model but English plays a hegemonic role. The data set for English is by far the largest for all languages in the world. Currently, more than half of the language data appearing on the web is in English. As machine learning is above all based on web-scraped online data, machine learning language technologies work best in Standard English (which is also true for voice technology, Markl, 2022). Languages typologically different from English are discussed as a technical problem (e.g., Costa-jussà et al., 2022, p. 79). Monolingual data that entails stylistic and genre variation is treated as 'clean' and 'rich', while non-monolingual data is referred to with the metaphor 'dirty' and it thus requires 'cleaning' (see also, e.g., Kreutzer et al., 2022). The hierarchical metaphorical framing of English is depicted vividly in the following quote:

> English data is not only orders of magnitude more abundant than that of lower-resource languages, but it is often cleaner, broader, and contains examples showcasing more linguistic depth and complexity. (Bommasani et al., 2021, p. 25)

Besides the very large English language dataset, the perceived 'cleanliness' of English is based on the fact that it is the unmarked medium of communication for global, expert and academic (human to human) interaction in technology and academia. It thus has been criticised that English is often equated with 'language' in general in digital culture. The critical computational linguist Bender therefore proposed the so-called 'Bender Rule', which suggests that speakers at computational sciences conferences should explicitly mention the language they are talking about, based on the observation that the equation of English with 'language' often goes unnoticed (Bender, 2019; Schneider, 2022). Technological innovation is typically first developed for products that serve English-speaking markets, which means that users whose language has not been integrated into the systems often use English-language products, but also users who are keen to always use the newest update of a tool (Leblebici & Schneider, 2025). This means that the dataset for English is expanding even more. Finally, English terms are used in almost all programming languages. The dominance of English in the world of computation has the effect that languages other than English are sometimes discursively constructed as one category—the above-mentioned Stanford research paper, for example, uses the term 'non-English languages' (Bommasani et al., 2021) and thus constructs an English-non-English binary.

4. Conclusion: Global tech colonialism and how to overcome it

Although AI-driven language technologies emerged in a context that is different from colonial times, this paper argues that they reproduce colonialist legacies at several levels. While couched in a discourse of 'helping' and 'change for a better future', big tech companies exploit language data in order to make monetary profits: technologies are first and foremost commercial products. Like their colonial forefathers, big tech companies are also not interested in understanding language and its use or their speakers per se. In fact, human interactive practices and linguistic traditions are not seen as an expression of culture or identity but as a data source. These data sources are seen as a resource for developing powerful and profit-making tools to manage people. This is done through refashioning everyday language practices into data, which is enabled by processes of ordering, homogenisation, fixing, and alignment according to models based on European cultural concepts of language and practices that emerged during colonial times. Local visions of language and culture are marginalised or even completely stamped out through processes of alignment with digitally powerful languages, English first and foremost.[17]

The social hierarchies that existed during colonial times also continue, though in a partially reconfigured manner. As in colonial times, languages from the Global South are positioned as needing 'development' to enable the 'development' for their speakers, in this case their integration into the commercial and knowledge economy championed by companies of the Global

17 Due to space constraints, we have not discussed these in detail here. For further insights into non-European language concepts, see, for example, Schneider (2021) and Migge (2020).

North. Decisions to 'technologically develop' a language generally do not originate with speaker communities and their needs. Instead, languages are 'selected' by companies based on technological and commercial logics such as easy access to sufficiently large corpora, the existence of technologically literate speaker communities that have sufficient purchasing power and that are sufficiently unified in their use of orthographies.

Access to language technologies such as automatic machine translation has the potential to give people access to a wider range of knowledge sources, experiences, and ways of connecting with people. However, unlike the development of writing and literacy practices in the colonial era, language technologies of the digital era are much more heavily dependent on the infrastructures of commercial companies. Their development and maintenance require costly tools that are owned only by a small number of companies and who can grant and refuse access at will. They also do not share their designs and practices, and the use of their infrastructures usually requires giving up control of existing tools developed by the grassroots and subscribing, at a cost, to their tools. At the same time, the global collection and surveillance of data in ever more languages, in the hands of very few actors, is the continuation of the desire to construct a universal world order. We observe an evolutionary teleology that strives for a data set of 'N=all' and, as media sociologists critically argue: "What it exploits is our lives as human beings" (Mejias & Couldry, 2024, p. 33). Overall, the dominance of U.S. corporations in global technology provision and data politics means that "[o]ur era is attempting to bring back into fashion the old myth that the West alone has a monopoly on the future" (Mbembe, 2021; see also Birhane, 2020).

At the time of writing this text, there is still little public awareness of the political and economic relevance of language as data, and of the colonial ideologies embedded in digital and AI infrastructures. Colleagues from or working on the Global South are taking the lead here and critically discuss the power of language data (e.g., Birhane, 2020; Markl et al., 2023; Miceli & Posada 2022). Several initiatives aim to put data collection in public hands, with Maori activists being a prime example. The Maori community has refused to allow global companies to collect their language data and has produced its own data sets. They argue that "Our data would be used by the very same people that beat that language out of our mouths to sell it back to us as a service […]. It's just like taking our land and selling it back to us" (Hao, 2022).[18] All in all, this does not mean that we should stop using technology or that the development of language technology should come to an end. It means that, in a democratic society, the infrastructures that frame and shape public life and discourse should be in the hands of those who use them, not in the hands of a monopoly of capitalist corporations.

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18 See also Coffey (2021); for more initiatives, see https://rising.globalvoices.org, https://commonvoice.mozilla.org/ca

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Part II: Understanding postdigital practices in a changing world: Language, technology, and culture

Story-formatting on social media

Ways of telling, teller identities, and audience engagement[1]

Alex Georgakopoulou

Abstract *Stories on social media platforms, more than any other communication mode, have increasingly become designed, curated features, so that users are faced with menus of choices, pre-selections, and templates, when posting a story. Connected with this is an attested, unprecedented speedy development of normative, typified, sought after and replicable stories on different platforms, despite the fact that the users involved in such processes, more often than not, do not know of one another but instead partake in transient acts of communication. In this chapter, I draw on the ethnomethodological concept of formatting, as reworked by the late Jan Blommaert for the contextual study of communication online, and synergise it with small stories and positioning analysis. My focus is on stories as a sociotechnical engineered feature on all major social media platforms (e.g., Snapchat, Instagram, Facebook, Weibo, and TikTok). Based on the technographic method, I will first show how I have extended the notion of formatting in my work so as to examine the historicity of semiotic choices in stories. I will then tease out specific ways of telling formatted stories in their links with specific modes of tellers' self-presentation, in particular that of 'authenticity'. The formatted practice of sharing-life-in-the-moment shows power and continuity across platforms, partly by being reconfigured and repurposed. I will illustrate this with a focus on TikTok short form videos and their formatted modes of audience engagement. Finally, I will discuss the implications of story-formatting for the role of culture in stories.*

Keywords *Story-formatting; Ways of Telling-sites-tellers; Sharing-life-in-the-moment; Reconfiguring – Repurposing; TikTok Short Form Videos*

1 An earlier version of this chapter (in particular, Sections 1–4) entitled "(Un)complicating Context: The Case of Formatted Stories on Social Media" is forthcoming in the Jan Blommaert Festschrift (Arnaut et al., in press).

1. Formatting in the contextual study of online communication

Jan Blommaert's (et al.) chapter entitled "Context and Its Complications", in De Fina & Georgakopoulou (eds.) *The CUP Handbook of Discourse Studies*, (2020, pp. 52–69), discusses eloquently the ways in which online environments and the rise of social media have altered the constitution of context, and, in effect, should lead analysts to a complete overhaul of their conceptualisation of context, as this had been developed in relation to face-to-face environments. Blommaert et al.'s claim was that, despite the profound changes affected by online social life to the realities of "social structure" and to "the range and modes of everyday activities" (p. 52), analysts seem to be stuck in a sociological imagination that treats as the default of communication:

> dyadic, unmediated, spoken, face-to-face interaction in shared physical time and space and between persons sharing massive amounts of knowledge, experience and sociocultural norms within a sedentary community (an offline conversation between similar people, in short) (Blommaert et al., 2020, p. 54)

In such a scenario, various aspects of context are more easily retrievable by both participants and analysts than in online contexts.

Blommaert's proposal in all his work on online context and communication was not to completely turn our backs on 40+ years of (sociolinguistic) work on context. Instead, he urged analysts to "reimagine and refashion tools and approaches or fall back on reasonably robust tools and approaches that do not carry that bias of anachronism or that can be refashioned so as to be free of it" (Blommaert et al., 2020, p. 65). In the spirit of this, he 'reimagined' formatting, a concept that originated in the interactionist tradition, in particular in ethnomethodology (cf. Cicourel, 1974, 1992; Garfinkel, 1967). Formatting refers to the recognition of particular social actions and their features as something typical. Blommaert saw formatting as an integral part of the ethnographic tradition of studying language-as-action, in a sociology of emerging order as opposed to reproduction. Formatting allows analysts to both describe and account for the unprecedented speedy development of norms and the recognisability of what is 'typical' in online environments, despite the fact that the participants involved routinely do not know of one another but instead partake in transient acts of communication.

Garfinkel had seen recognisability as the key to understanding the social nature of interaction, insisting that it should not be equated with sharedness of norms, assumptions, and worldviews. In Garfinkel's work, it was recognition of the joint potential of specific modes of action that gave such action modes the character of "congregational work" (2002, p. 190). Blommaert rightly saw Garfinkel's work on formatting as an ideal conceptual and explanatory account of how users can generate a firm social order with recognisable roles and identities on social media, even via ephemeral participation in specific modes of action.

Using data from a *Facebook* update, Szabla and Blommaert (2019) showed how the process of formatting goes through the stage of 'recognising' an activity as typical of a specific situated interaction and then 'framing' it as one that imposes and enables specific forms of interaction, that is, 'orders of indexicality' (see the introduction to this volume for further details). They also demonstrated how tracking these stages of formatting allows analysts to move beyond the often researched micro-macro dichotomy for the identification and analysis of different types of context, and instead to look at how (plural and scaled) contexts come to bear in a situation in a sort of "evolving 'synchrony'" (Blommaert et al., 2020, p. 59): A process that "hides layers of nonsynchronous resources and folds them together into momentary and situated instances of making sense. We call this process synchronisation because the highly diverse resources that are deployed as context are focused, so to speak, onto one single point in social action" (Blommaert et al., 2020, p. 59).

In Blommaert's reimagining of formatting, there is scope for spelling out the methodological steps of an ethnography of online communication that identifies and documents recognisability processes. There is also scope for the exploration of the possibilities for alliances with other practice-based ways of analysing communication.

In the remainder of this chapter, I show how I have drawn on formatting as a conceptual apparatus for the description and accounting of the links amongst affordances, discourses, and practices that result in the development of typical, recognisable, normative, replicable, and sought after stories on (different) platforms.

I focus my empirical exploration on stories as a sociotechnical, curated feature on all major social media platforms (e.g., *Snapchat*, *Instagram*, *Facebook*, *Weibo*, and currently *TikTok*). Multi-modal stories are the single most prevalent type of posting across platforms, having rendered social media as storified environments par excellence. What I have described in previous work as small stories (Georgakopoulou, 2007) have formed the basis of the creation of 'formatted types of storytelling' (story-formats) on social media. This means that certain stories and ways of telling them become recognisable, normative, and sought after on platformed environments. The formats, I argue, are powerful enough to be 'repurposed' within a platform, so as to suit different types of user and content demands, as well as being 'reconfigured' across different platforms, so as to suit different affordances.

Below, I will first present the technographic method, as a 'reimagined' ethnographic method, that I employ to document stories as formatted activities. Technography allows me to explore stories as socio-technical activities, on the intersection of affordances, discourses, and practices. It also allows me to capture the historicity of storytelling modes and to document in real time their continuities, shifts, and reconfigurations. This aids the work of identifying the synchronisation processes of different scales in specific acts of communication. Based on the technographic method of identifying the interplay between social media affordances (including algorithms) and users' practices, I will present key aspects of a particular formatted practice of storytelling that I call 'sharing-life-in-the-moment'. I will show the links of this practice with specific modes of tellers' self-presentation, in particular, that of 'authenticity'.

I will then illustrate the current reconfigurations of the formatted practice of sharing-life-in-the-moment with a focus on *TikTok* short form videos, which represent the latest 'pivotal' phase of platformed storytelling design (Georgakopoulou, 2017, 2024b). I will show that authenticity is being reconfigured as relatability through sharing-the-moment practices. Formatted modes of audience engagement routinely do recognisability and validation of the story's framing as a relatable account.

By bringing together formatting processes with small stories research modes of analysis, I forge an alliance that shows the potential of the concept of formatting for enriching the analysis of language and identities, including positioning analysis, one of the gold standards of examining identities in storytelling, in a way that suits online contexts. Going forward, it can provide a way for assessing the role of cultural identities in online storytelling.

2. Technography as a method for the study of story-formatting

My starting point in the contextual exploration of stories on social media has been that a key parameter of context that needs to be factored in is that of media 'affordances', that is, of the perceived possibilities but also constraints for action that online environments offer to users (Barton & Lee, 2013, p. 3). For contextual sociolinguistic work on social media, three "high-level affordances"[2] (Bucher & Helmond, 2018, p. 240) pose specific challenges: (a) context collapse, the result of the, often unforeseen, audiences that may tune into a specific post, (b) amplification and scalability of content, and (c) distribution and recontextualisation of content (see Blommaert et al., 2020; Georgakopoulou, 2017; Marwick & boyd, 2011). Jones (2004) notably talks about 'polyfocality' online, the intricate layering and expansion of multiple co-occurring contexts in online discourse. Based on these affordances alone, we begin to see that sharedness that hinges on users' physical proximity, regular interactions or stable community becomes a rare commodity on social media. At the same time, the amplification and scalability of content combined with the promotional machinery that platforms have at their disposal, result in the development of recognisable and normative scripts for social action at an astonishing speed, a point which Blommaert often stressed in his work including in the Handbook chapter (also see Georgakopoulou, 2021).

To study stories as socio-technical activities, I have specifically developed and adapted for narrative analysis the 'technographic' approach (cf. Bucher, 2018, pp. 60–62). Bucher talks about technography as an extended ethnographic method that allows the analyst a reverse engineering, so as to capture the technological workings of platforms. In Bucher's work, technography is closely associated with tapping into interviewees' own representations of how platforms work, including their algorithmic imaginary vis-à-vis different platforms. But by bringing technography together with small stories research, I have been reworking it as a more multi-layered, methodologically integrational framework, that cuts across qualitisation and quantification (for details, see Georgakopoulou, 2024b).

Technography has involved a systematic real-time and time-critical tracking of the triptych of 'discourses', 'affordances', and 'practices', for stories, which I consider essential for a thick description of context. In Silverstein's

2 There are numerous 'low-level', platform-specific affordances, too, that, as I will show below, should be established through contextual work.

terms (1985), this facilitates the examination of the 'total linguistic fact'. 'Discourses' (often referred to as 'capital D discourses') encompass widely circulating ideologies, views, and theories about what stories are and how they should be designed and used. These are mainly evidenced in the platforms' own design affordances, but they are also articulated in the proliferating promotional texts by influencers, media, launching documents, and so on, as well as in instances of users' own metapragmatic reflexivity, which abound in online contexts (Deschrijver & Georgakopoulou, 2023). 'Affordances' comprise high-level, low-level but also users' perceived affordances, as these are revealed through their practices. Affordances cover a wide range of design features and capabilities, including interface metrics and analytics, tools, images, filters, and numerous invisible and opaque metrics, such as algorithms (Georgakopoulou et al., 2020). Finally, users' communicative 'practices' encompass the diverse, multi-semiotic ways of telling at various levels: for instance, visual choices, language choices, story genres, practices of distribution of stories, and so on.

These interconnected facets of communication draw on previous practice-based approaches, for instance Hanks's (1996) forms, activities, and ideologies and Scollon and Scollon's (2004) nexus analysis, and my previous heuristic of 'ways of telling-sites-tellers' (Georgakopoulou, 2007, 2022). As such, they provide possible points of entry into the study of communication and the opportunity for prioritising certain questions and angles, depending on what emerges as crucial at a specific point of the research. That said, no facet, examined on its own, suffices for a thick approach. The task for the analyst is, regardless of what their point of entry is, to forge links amongst these facets. Technography, like previous forms of ethnography, is not aimed at producing exhaustive accounts. Its inductive nature has meant that there were times in my research when my point of entry into a thick description were affordances, others when it was users and their practices, and still others, when it was the platforms' discourses about stories.

In the spirit of discourse-centred online ethnography (Androutsopoulos, 2008) and blended ethnography (e.g., Tagg & Lyons, 2021), technography works with multiple data-points and methods. But in contrast to earlier versions of online or digital ethnography (for a critique, see Varis, 2016), it also shifts its focus from affordances to practices or discourses and vice versa, when necessary. In this way, it seeks to cut across the distinction between platform-centred and participant-centred research, instead making it possible to use both as anchor points for observations and data collection, at different points in research, and for different reasons.

Technography allows us to identify the design facilities, tools, and functionality of stories. To uncover platforms' discourses about stories and the values in their design, I have employed corpus-assisted discourse analytic methods, as one facet of the technographic approach to stories. Corpus methods allow us to retrieve any hidden meanings and associations, by seeking out patterns of occurrence in a body of texts (see Taylor & Marchi, 2018).

I see the links between affordances, discourses, and practices, in the spirit of any practice-based approach to communication, as mutually feeding rather than as unidirectional and deterministic. That said, the claim is that, in social media environments, we cannot conceive of stories outside of a 'contingently obligatory' even if not 'logically necessary' relationship with technologies, to borrow Deleuze and Guattari's (1993) conceptualisation of the concept of 'assemblage'. The emergent relationship that arises from a connection between stories and technologies, exactly as quantum physicists have claimed vis-à-vis sub-atomic particles when entering relationships of 'entanglement',[3] reveals itself at tiny scales. As we will see, the entanglement of stories with discourses and affordances is evidenced in the types of stories but also in tiny, micro-level semiotic choices that include linguistic features in captions, emojis, visual choices, camera placement and angle, and so on.

My initial questions in the study of stories online, drawing on ethnographic, practice-based perspectives on everyday life storytelling in conversational contexts, were mostly to do with how_face-to-face everyday life storytelling gets reconfigured and adapted in connection with affordances for story-sharing. Similarly, I was interested in exploring how users, as more or less agentive actors, engaged with and navigated affordances.

It was the result of my real-time technographic study and the evidence of a speedy creation of norms about posting stories online that I had to shift my questions to in the examination of how shared evaluations and ways of storytelling develop online. In particular, I set out to explore, as part of the recognisability of stories:

- What becomes amplified, widely available and what/who (types of lives, identities, subjectivities) gets silenced? What becomes normative/recognisable, how, and why?

3 https://en.wikipedia.org/wiki/Quantum_entanglement

- What are the implications of socialisation into a specific type of 'autobiography' for the target group of Generation Z?

It was at this point that formatting provided a valuable interpretative lens for the links amongst affordances, discourses, and practices that result in the development of typical, recognisable, normative, replicable, sought after stories on (different) platforms. Yet, formatting is part of a social interactional tradition and to combine it with a practice-based small stories perspective, I saw it fit and necessary to extend its remit. In particular, in my work, it is not just social actions that get formatted but also recurrent story practices ('story genre', 'story types'). As I will show below, sharing-life-in-the-moment is an overarching formatted story practice supported by specific story-types.

In addition to these points, as explained above, technography allowed me to complement the synchronic focus of formatting on specific, here and now contexts of communication with the 'historicity of typification'. This longitudinal angle on formatting is a way of bringing in scaled contexts onto the here and now of communication, allowing us to move beyond the often critiqued, narrow conceptualisation of context as 'co-text'.

3. Analysing stories as multi-semiotic practices

To micro-analyse stories, I have postulated a heuristic (Georgakopoulou, 2007) that explores the connections of three separable but interrelated layers of analysis: (1) 'ways of telling' (i.e., semiotic resources), (2) 'sites' (social worlds of the stories' tellings and tales), and (3) 'tellers' (in the broad sense of communicators). In online discourse, this dictates a combined focus on online postings and various types of engagement with them, including transposition across media and sites, without, however, pre-determining what from each of the multi-layered ways of telling, sites, and tellers will be of analytical importance and how their relations will be configured in different stories and media environments (2017). Recognising the multi-modal nature of stories, I have been bringing together the analysis based on this heuristic with multi-modal analysis as it has been reworked and adapted to online discourse (e.g., Jewitt, 2017; Page, 2018). I have specifically been documenting any recurrent and iterative choices across different modes as well as links across levels. In particular, I have focused on if and how any verbal patterns in the captions of photographic or video stories enter any salient, recurrent interactions with sound-tracks, visual, video, and embodied modalities, in a spectrum of aligned-disaligned relationships across them.

To forge links between the ways of telling, sites, and tellers of stories-in-context, I draw on positioning analysis in its connections with small stories (Bamberg & Georgakopoulou, 2008). With positioning analysis, I establish how characters are presented in the tale world, their relations, evaluative attributions, activities, and overall placement in time and place ('Level 1'). For a multi-modal story, an analysis at this level may include visual aesthetics, graphemic choices, emojis, linguistic choices in captions, but also camera placement, type of photograph, and so on. I also look into how a story is locally occasioned and distributed. Who participates and how? Who ratifies, legitimates, or contests which part of the story? Who co-authors, what, and how? How is self positioned vis-à-vis actual, intended, and imagined audiences? ('Level 2').

Finally, I am interested in what aspects of the key character(s), events, and narrated experience are presented as generalisable and holding above and beyond the specific story? ('Level 3'). How is self positioned as a continuous entity above and beyond the here and now of this storytelling? What kinds of identity projects and circulated storylines are invoked as shared, promoted, or spoken against and resisted, and how?

Overall, positioning analysis examines how moral and evaluative scripts shape a teller's identity, serving as recognizable signals of self-presentation in response to 'Who am I?', a question inherently addressed in storytelling.

4. Story-formatting and/as sharing-life-in-the-moment

The tracking and analysis of links amongst affordances, discourses, and practices, as described above, has led me to document 'story-formatting' as hinging on a story's design, the directives (i.e., prompts) to users about what types of stories to tell and how, and the authorisation of these, that is, the promotion and naturalisation of specific stories by specific users (for details, see Georgakopoulou, 2022). Influencers, I have found, play a key-role in this. The analysis of story design, the platformed directives, and their authorisation in a study of influencers' *Instagram* Stories (see Georgakopoulou 2021, 2022) have shed light on the scaled, non-synchronous contexts that come to bear on the synchrony of joint social actions, as described by Blommaert et al. (2020). Part of recognising and framing specific acts of communication as typical involves in this case users' prior awareness, exposure, and familiarity with specific affordances and design aspects and what their indexicalities are. It also involves recognition of certain participation roles as being more in line with platformed directives that in turn ensure users' popularity and visibility.

A nexus of these three processes of formatting—which my corpus-assisted analysis (Georgakopoulou, 2019) of *Snapchat*, *Instagram*, and *Facebook* Stories (as a feature), combined with the aforementioned micro-analysis of influencers' stories has uncovered—is to be found in the practice of 'sharing-life-in-the-moment'. The present tense temporality is at the heart of the formatting of sharing-life-in-the-moment. It was in fact one of the first connections between affordances, discourses, and practices that I uncovered in my targeted tracking of the evolution of storytelling facilities on major, Western platforms (see Georgakopoulou, 2017). Sharing-life-in-the-moment brings together recognisable multi-semiotic ways of telling, evaluative scripts, and discourses about who the teller is, and specific ways of using affordances, as I have discussed in detail in previous work (Georgakopoulou, 2016, 2021, 2022). Briefly here, the key constituents of sharing-life-in-the-moment as a storytelling practice conducive to presenting the teller and their lives as authentic, real, raw, spontaneous, non-rehearsed are as follows:

- Linguistic/textual markers of immediacy in captioning;
- Showing, eye-witnessing narration;
- Amateur aesthetic, non-polished visual content;
- Discourse and affordances for doing 'imperfect sharing' through stories;
- Users' metalinguistic framing of sharing-life-in-the-moment as 'authentic' (see Section 6 below).

In terms of the multi-modal arrangements of stories, sharing life-in-the-moment presents particular, formatted inter-modal densities, in the ways in which different semiotic modes work together to establish recognisability of the activity. In Jewitt's (2017) terms, modal density refers to the amount of space a particular mode occupies and to how specific signs in different modes are ordered. Certain modes can be privileged in specific acts of communication, in terms of frequency of use and of functions they serve. In this case, inter-modal density refers to formatted connections amongst different modalities. To be specific, story captions seem to tell, evaluate, and assess the point of the story, while the pictures and videos show, record, enact, and perform it. In captions, there is also an added level of formatting, that of the use of the present tense in temporalised (here and now or on a habitual basis), conventionalised linguistic formulas: for instance, 'currently at the beach' (caption of an *Instagram* Story) or 'when your mum goes on her weekly shopping' (from a *TikTok* video).

My analysis of how positioning Level 3 emerges from the above choices has shown that the inter-modal density of captions, visual, and video elements for depicting everyday life as it is unfolding, is conducive to constructing an authentic teller, a teller who invites us to be eye-witnesses of their life, allowing us access to the behind the scenes, unfiltered realities (see Georgakopoulou, 2022, 2024a). The authentic becomes equated with the real and the raw on *Instagram* Stories and, on *TikTok* short form videos, as I will discuss in Section 6 below, with the relatable.

5. Repurposing and reconfiguring story-formats

Blommaert et al. (2020) stressed that formats should not be imagined as closed boxes with transparent orders of indexicality, generally known to all participants. Instead, their indexical order is evolving and contingent upon the congregational work performed by participants. Multiple forms of action can therefore emerge within the same format and be coherent to the participants (Blommaert et al., 2020, pp. 63–65). Blommaert et al. showed this dynamic nature of formatting in specific acts of communication, synchronically. I have been able to document the evolution of story-formatting over time and across platforms, in the historicised way that the method of technography offers. I have specifically documented two connected types of evolution: 'repurposing', which is mainly user-driven and pertains to expanding the content within a specific format and strategising self-presentation in relation to algorithms and affordances, and 'reconfiguring', which is mainly platform-driven and involves enhancing, evolving the affordances, and tailoring formats to specific algorithmic environments.

To take each separately, using data from the same influencers during the pandemic, in a comparative study of their stories, I found that rather than abandoning norms and practices of sharing-life-in-the-moment to show an authentic self on *Instagram*, they repurposed them (Georgakopoulou, 2024a). This mainly involved adapting and re-casting the algorithmically preferred format of sharing-life-in-the-moment to promote new content suited to the new realities of a pandemic, particularly the physical distancing and confinement in home settings. In doing so, tellers further consolidated and enhanced present tense, moment-based stories, and textual, visual, and video resources in them for depicting the here-and-now of their everyday lives and in turn their selves as authentic. For instance, I noted an increase in the use of amateur aesthetic visual modes, including 'ugly selfies', as resources for producing the ordinariness of users' lives at the same time as building a sense of co-presence for their followers. The analysis overall has shown the power, continuity of formatted stories alongside the flexibility of existing formats for repurposing. Below, I will illustrate the current reconfigurations of the format of sharing-life-in-the-moment with reference to my latest study of *TikTok* short form videos. *TikTok* exploded in popularity during the pandemic and has since been the platform par excellence for creating and engaging with stories in short form video that represent the latest pivot in storytelling design facilities on platforms, that I have identified in my real-time technographic tracking (Georgakopoulou, 2024b). The pivots have to do with affordances to users for sharing the moment in the format of small stories, increasingly visually and multi-modally, and with more sophisticated and multi-layered facilities.

6. Reconfiguring story-formatting: Spotlight on *TikTok* videos

TikTok, formerly known as *Musical.ly*, boasts over 1 billion users worldwide, offering a platform that is characterised by camera-first communication, music, dance moves, trends, and memes. Its unique, recommendations algorithm-driven nature sets it apart, shaping users' experiences and promoting user-generated content through the 'For You Page'. The data on which this discussion is based are part of a bigger, ongoing project, in collaboration with Ruth Page (Georgakopoulou & Page, forthcoming) that explores the video trend in *TikTok* which uses the phrase 'When your/my mum …' to tell stories of (presented and taken up as) recognisable and relatable family experiences, from the point of view of 'children' (young people) in such families. We investigate how, with what semiotic resources and micro-plots, the roles and relations of different family members are created and contested by young adults from different cultural contexts, and for what identity projects. Also, what scenarios are presented as de/valued, un/expected, surprising, normative, by whom, and how. Our focus on family life as shared by adolescents was prompted by the fact that young people form a key demographic of *TikTok*.[4] *TikTok* videos of family life have been a major trend since the days of the pandemic, when domestic life provided accessible micro-plots, as part of the obligatory (due to lockdowns) move away from the 'on the go', aspirational content stories (Georgakopoulou & Bolander, 2022).

For our project, we have so far downloaded 100 videos with *Web Data Research Assistant* in an *Excel* spreadsheet with their meta-data (for instance, numbers of views, likes, comments, date of uploading). 50 of these videos are captioned as 'when your/my mum …' and the other 50 *as* 'when your/my dad …'. We have also included languages beyond English (French, Italian, Spanish, Greek), since technographic observations had suggested a replication of this and other trends across languages and cultural contexts.

To aid positioning analysis, in particular at Level 1, as discussed above, our coding so far has included verbal patterns in the captions added to the video ('annocaps') and the *TikTok* templates, alongside a multi-modal micro-analysis of video, sound, and visual choices. In addition, we have coded all hashtags used in the videos' description and any metalinguistic formulations either in the descriptions or in the annocaps that frame the activity as 'authentic' (e.g., 'real', 'relatable'). Finally, we are also in the process of micro-analysing sampled, top comments especially with a view to establishing if and how they do recognisability of the storytelling as 'real' and/or 'relatable'.

Our analysis so far suggests that storytelling in the videos is still built on the moment, still in the present tense, following then the format of sharing-life-in-the-moment. But there is an extension from sharing 'my' moment to sharing 'a' moment, indicating a shift towards temporally unspecified or habitual content and to generic stories, often in second person narration, for instance, 'when you have to call your mum's phone because she lost it again'. The format of present-tense moment-based scenarios on *TikTok* thus remains powerful, providing users with the ability to offer relatability of stories. This works well with the recommendation algorithms of *TikTok* and the 'For You Page' (FYP) which signal a move from poster-based to post-based algorithmic prioritisations. As Abidin (2020) explains, on *TikTok*, the nature of fame and virality has shifted and tends to be based on the performance of users' individual posts which can then be picked up and catalogued for the For You Page. The searchability that specific uses of sound memes, phrasing in captions, descriptions, images, and so on creates on *TikTok* pushes stories toward memefication. This

4 2 in 3 adolescents in the US report using TikTok on a daily basis (Macready, 2024).

is further attestable in the creation of trends. Our cross-linguistic data show a wide distribution and replicability of these present-tense, moment-based formats, across languages and cultures. The replicability includes direct translations in the captions of the conventionalised formula 'when my/your', depictions of the same scenario involving a parent and a child, the same type of description for the story (often referring to the story as relatable), the same visuals and lyrics, and the same type of comments, mostly validating the relatability of the story. Consider the following example (1) for instance of an annocap in English and its direct transportation in a Greek annocap:

> Example 1:
> when my mum forgets the one thing I asked for from the grocery store
> όταν η μαμά μου ξεχνάει το ένα πράγμα που της ζήτησα από το σούπερ μάρκετ

The two videos are also highly similar in visual terms: they show a young man looking in despair through shopping bags on a kitchen counter for 'that one thing'.

We note then an astonishing extension of the formatting of such stories, becoming productive in specifying and deriving broader trends as well as in enregistering (Agha, 2007) specific 'characterological figures' as specific types or personas, with specific evaluative and moral attributions, for instance the 'toxic', 'overprotective', 'controlling' mother. The formatted practice then of sharing-life-in-the-moment is extending by developing multiple indexical orders, inclusive of specific audiences while excluding others, aligning with sociolinguistic typification processes.

6.1 Formatted modes of participation

My technographic study of story-formatting has also brought to the fore specific, formatted modes of audience engagement with the stories and their tellers, which cut across different types of posting and platforms (Georgakopoulou, 2016), from comments on *Facebook* status updates and selfies to comments on *YouTube* videos and currently *TikTok* videos. In particular, I have identified two key modes of the audiences showing alignment with the stories and/or their tellers (idem), which I have called 'ritual appreciation' and 'knowing participation'. Both these modes, from a formatting point of view, perform recognisability of the communicative purpose of the stories and the tellers' self-presentation in it, in particular, that of doing authenticity. Both modes, in situated interactions, can present a spectrum from validating the teller, tale, or telling to invalidating and disaligning with it. 'Ritual appreciation':

> involves positive assessments of the post and/or poster, expressed in highly conventionalised language coupled with emojis. These semiotic choices often result in congruent sequences of atomised contributions, which despite not directly engaging with one another, are strikingly similar, visually and linguistically (Georgakopoulou, 2016, p. 182)

Doing alignment through 'knowing participation', on the other hand, "creates specific alignment responses by bringing in and displaying knowledge from offline, preposting activities" or any other experiential knowledge "specific to the post or poster" (Georgakopoulou, 2016, p. 182). My claim has been that certain storytelling activities can be expected to provide heightened opportunities for audience alignment, directing them to one or another mode.

To return to *TikTok* videos, framing stories as real and relatable, a routine practice in the videos' description, is directive to audiences doing either ritual appreciation of relating with the experience reported or knowing participation, which brings in, in more expanded terms, their own experience. This is done with metapragmatic, conventionalised references for instance, 'for real', 'relatable'. Consider a sample of comments below (Example 2 and Example 3) on a video annocaped as 'when your mum scrolls your phone', as typical of ritual appreciation:[5]

> Example 2:
> **Sila**
> Nah bruh fr that's how my mom be
> 2023–11-21
> 4

> Example 3:
> **Billy**
> Most relatable thing I seen all day
> 2023–11-25
> 3

5 Despite being publicly available, all visuals have been eliminated here and user-names or any other identifying information have been modified.

We note from these recurrent, replicable examples across languages[6] that conventionalised language use involves not just individual words (e.g., 'I relate', 'relatable', 'for real', often abbreviated as 'fr' and repeated) but also phrases that include a reference to the commenter's mother (e.g., 'that's how my mum be', 'my mum'), as a way of validating the authenticity of the video's micro-plot.

Knowing participation in this case involves bringing in storytelling in more expanded terms, through, for instance, second stories. In conversation analysis (Sacks et al., 1974), second stories refer to highly thematically similar stories as a preceding one, by means of which an interlocutor shows alignment with it and affiliation with the teller. In this case, a second small story involves producing a particularised account which serves as providing evidence for the relatability and truthfulness of the video's micro-plot. This can be done in various ways: by keeping to the habitual, generic action presented in the video but adding some kind of detail to it, as in the following example (Example 4), where the/a mother is presented as a speaking subject, justifying the checking of their child's phone:

Example 4:
Bilal
bruh I swear they always using that "I paid for it" line

In other cases, a second story may temporally specify a mother doing what the video may present in generic, temporally unspecified terms. In this way, the commenters construct a specific world in which the account holds and in which actions have sequenced results.

Example 5:
Ellie
My mom just went through all my texts and read EVERYTHING I'm getting all different kinds of belts tomorrow

In the above comment (Example 5), two temporal markers specify the micro-plot, namely 'just' and 'tomorrow'. By particularising their second story, this teller does a more agentive positioning than what is presented in the video. The mother's action of scrolling their child's phone in this case has consequences

6 In Greek for instance, the word 'relate' is used in Greek characters, as a common, ritual appreciation response.

and a possible resolution, rather than being a potentially repetitive, habitual action. This second storying then goes beyond doing recognisability of the tale toward offering a possible course of action for ensuring that it will not be repeated.

Often, second storying is done by tagging friends, bringing them in as knowing recipients, as further sources of validation for the story. The storying as a result develops in the form of a private chat between two commenters, who clearly know of one another, and are in a position to bring in the back-story. This is another formatted mode of engagement with stories which I found to be salient in comments on selfies on *Facebook* (Georgakopoulou, 2016). Consider the following example (Example 6):

Example 6:
Betty
@maryboo when she asked how David was like last week 😅😂
2023-3-10
1
Reply
Maryboo
MY MOM ASKED HOW BEN WAS BECAUSE NOW I NEVER TALK ABOUT HIM😭😭
2023-3-10
Betty
my mom saw me hanging out w david outside of school once and i told her how i liked him and now she won't stop asking 'bout him and idk how to tell her
2023-3-10

This kind of story co-construction as a response to the 'original' story of the video shows the poly-storying (Georgakopoulou & Giaxoglou, 2018) possibilities that multi-participation modes offer on social media. Different storylines can evolve by different tellers, with different—shared or not—interactional histories. Even within this poly-storying, however, there are still discernible, formatted ways of engagement with a story. The back-story in this case is adjusted to the communicative purpose of doing recognisability of the video's story as a relatable one, adding specific examples, story-tokens, as it were, to it. A story which is presented as generic needs to be understood as holding above and beyond the specific instance of storytelling, as applicable to others too in similar circumstances. In this way, formatted stories include specific audiences, ratifying them as primary recipients, the prerequisite being that they have to have experienced similar things. They therefore raise the task for the prospective recipients to do recognition and relatability, by 'saying so' or by offering their own particularised accounts.

7. Conclusion

In this chapter, I have shown how story-formatting in my technographic exploration of the evolution of storytelling facilities on social media platforms has emerged from ongoing inter-connections of discourses and affordances with users' communicative practices. Discourses surrounding the socio-technicity of authentic sharing in the moment, through present-tense, multimodal stories, have become intricately woven with (meta)linguistic markings, affordances provided by platforms, and the diverse practices of content creators. I presented the key-elements of the templatisation of form and content based on specific inter-modal densities. I also argued that the power of the formatting of stories is attestable in user-driven repurposings and platform-driven reconfigurations of it, bringing up *TikTok* trends and the evolution of stories as a short form video practice as an example. Teller identities have played a pivotal role in these formatting processes, with a notable shift in enregistering authenticity from ordinariness to relatability, with specific verbal and visual resources, particularly those signalling an amateur aesthetic, serving as emblems of 'enoughness' (Blommaert & Varis, 2011) for an authentic presentation of self. In parallel, as I showed, formatted modes of audience engagement with stories are currently mobilised and adapted to the communicative purpose of doing recognisability of stories in *TikTok* short form videos as being real and relatable stories.

A study of formatting processes within a framework of viewing stories online as socio-technical, engineered, curated activities, and not just the product of (agentive) users' 'congregation work', has allowed me to tease out the role of the social media attention economy and algorithmic prioritisations in the formatting of the overarching practice of sharing (everyday, ordinary) life in the moment. It has also allowed me to both uncover and account for story-formatting as an integral part of the social media drive for homogeneity and replicability of content.

Travelling stories face inherent challenges in crossing linguistic and cultural boundaries, requiring a nuanced approach to elicit empathy (Shuman, 2005). My study on formatting online has shown that users' contextualisation strategies involve working with media-afforded formats that transcend languages and cultures, often achieving transportability and empathy through memefication—a process of replicating experiences, responses, and language across different contexts.

As we navigate the intricate challenges of this type of formatted, cross-cultural storytelling, it is necessary to revisit the connections of storytelling with culture-specificity in the light of the collectivisation, wide distribution, and replication of story-formats. How does the tension between audience design and audience reach online shape what resources are selected and formatted as indexing culture? How do the multiple, ephemeral constellations of networked audiences who develop recognisability without (a necessary) sharedness of norms and attitudes constitute and redefine culture(s)?

On a more individual level, the democratisation of access to resources that story-formats allow certainly flattens any uneven distribution of resources amongst users, allowing for the repurposing of stories with the potential to effect changes in direction and content. This includes enabling stories to become powerful tools for activism and putting causes on the map. That said, the tension between the drive for homogeneity that story-formats have and the users' individual creativity and agentive power in achieving context expansion raises important questions about the future of storytelling and storytellers, especially in an era increasingly dominated by *GenAI*, which is only going to increase the drive for replication.

Reimagining concepts and modes of analysis from social interactional and practice-based approaches to communication, in connection with ethnographic methods, as this study has done, can be a productive way to scrutinise the ever-evolving entanglements of communication with technologies in the (post)digital era—one that is able to document continuities and shifts within a larger, historicised context.

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The use of language technologies in forced migration

An explorative study of Ukrainian women in Austria

Jenia Yudytska and Jannis Androutsopoulos

Abstract *This paper examines the interplay between digital connectivity and forced migration from the perspective of applied linguistics and sociolinguistics, exploring forced migrants' use of language technologies to solve everyday communication problems. Forced migrants must navigate life in the host country while lacking, often entirely, competency in the local language(s). They thus face, and must overcome, language barriers in a range of contexts, such as understanding an email from their child's school or explaining their ailment to a medical professional. Language technologies such as machine translation, optical text recognition, and, most recently, generative artificial intelligence can be a vital resource in such situations. Drawing on data collection among six Ukrainian forced migrants in Austria, this paper investigates the use of language technologies in forced migration.*

Keywords *Language Technologies; Forced Migrants; Machine Translation; LT-assisted Language Practices; Action Chains; Human-in-the-loop; Russian-Ukrainian war*

1. Introduction

This paper examines the interplay between digital connectivity and forced migration[1] from the perspective of applied linguistics and sociolinguistics, exploring forced migrants' use of language technologies to solve everyday

1 The terms 'forced migration' and 'forced migrant' are used here as cover terms that refer to asylum seekers, refugees, and other displaced people, regardless of their current legal status in the host country.

communication problems. Forced migrants must navigate life in the host country while lacking, often entirely, competency in the local language(s). They thus face, and must overcome, language barriers in a range of contexts, such as understanding an email from their child's school or explaining their ailment to a medical professional. Language technologies (LTs) such as machine translation, optical text recognition, and, most recently, generative artificial intelligence can be a vital resource in such situations. Drawing on preliminary data collection among six Ukrainian forced migrants in Austria, this paper investigates the use of (mainly smartphone-based) LTs in forced migration. The research design sets up three interrelated dimensions of analysis: LTs, typically arranged in individual media repertoires; communicative goals that forced migrants attempt to solve with the help of LTs; and individual skills, including language and media competencies, which constrain the ways people use LTs. The analysis first provides an overview of these dimensions and their interplay among Ukrainian forced migrants. In addition, three dimensions that seem worth exploring further are identified: (a) the combination of two or more LTs that are routinely deployed to achieve certain goals; (b) the participants' awareness of flaws and limits of LTs, and their solutions when dealing with such flaws; (c) human-in-the-loop strategies, i.e., combinations of technological and human resources within a sequence of LT-assisted actions.

2. Background: Smartphones, language technologies, and forced migration

During the 2015 European 'migrant crisis', smartphones came to serve as a vital resource for forced migrants during their transnational trajectory and upon arrival (Alencar & Godin, 2022; Gillespie et al., 2018; Latonero & Kift, 2018). In addition to being used for communication with old and new contacts, smartphones provided a means to store copies of important documents, find orientation in new locations, and access official and crowdsourced information (Gillespie et al., 2018; Kaufmann, 2016). Forced migrants also rely on commercial and grassroots digital resources for language learning (Artamonova & Androutsopoulos, 2020). The academic interest in (forced and other) migrants' growing reliance on information and communication technologies (ICTs) has led to the coinage of a novel interdisciplinary field, 'digital migration studies' (Leurs & Ponzanesi, 2024; Leurs & Smets, 2018), which explores (forced) migrants' digital practices at different stages of their migration trajectories as well as the increasing use of digital technologies by authorities for the management and surveillance of migrants. However, the smartphone-based use of 'language technologies' during and after forced migration remains underexplored as of yet.

In the early 2010s, as smartphones were still considered a 'luxury item' for Europeans, their prevalence among forced migrants was unexpected to members of the host community and led to heated public debates in host countries (Meyer, 2015). By the Ukrainian refugee crisis of the 2020s, digital connectivity came to be viewed as basic support. For example, the German federal government released an app, *Germany4Ukraine*, to help Ukrainian refugees with orientation in Germany (Bundesamt für Migration und Flüchtlinge, 2024), and authorities in Bavaria described the smartphone as 'essential for many refugees' (Bayerisches Staatsministerium für Umwelt und Verbraucherschutz, 2023). While these differences in attitude may partially reflect Europe's greater solidarity with Ukrainian forced migrants than those from other countries, they also demonstrate a growing acceptance of the crucial role of ICTs for (forced) migrants in a new country.

Forced migrants face some unique challenges when compared to other types of migrant populations, such as students or work migrants. Due to the uncertain nature of their migration, they are less likely to have acquired some competence in the host country's language while still in their home country (Kosyakova et al., 2022; Kristen & Seuring, 2021). In consequence, many must navigate their new environment without any language skills upon arrival. In addition to the resulting communicative challenges, the legal status of forced migrants is complex and the information they need to understand their rights, especially regarding social benefits and labour opportunities, is often not officially translated and can thus be difficult to access (Almohamed et al., 2020; Bergmanis & Pinnis, 2022; O'Mara & Carey, 2019). Regardless of which country takes care of the asylum procedure, its central part is typically an interview where asylum seekers are required to prove their need for refuge. The power imbalance of this speech event and its potential for miscommunication have been a major focus of linguistic research on forced migration (Blommaert, 2009; Eades, 2005; Gibb & Good, 2014; Spotti, 2019). However, this research does not consider the much more recent availability of LTs and artificial intelligence (AI) tools and their potential interplay with established asylum-seeking procedures.

While communication barriers are to some extent overcome with the help of translators and interpreters provided by the host state, the demand often exceeds the supply, especially for situations other than the asylum interview. Community and ad-hoc interpreters can help fill the gap but typically lack formal training, which can lead to further complications: the presence of an interpreter results in an assumption of clear communication, therefore incorrect translations of specialised legal or medical vocabulary may be overlooked (Berbel, 2020; Kletečka-Pulker et al., 2019). Language learning is thus highly important for eventual integration. State-provided language courses can provide an important site for socialisation and psycho-social support (Capstick, 2020). In addition, commercial language-learning apps (e.g., *Duolingo*) and amateur-produced content on social media are particularly useful learning resources, especially to forced migrants who do not (yet) have access to an official course (Artamonova & Androutsopoulos, 2020).

In this context, LT tools can provide a highly useful additional resource for solving communication problems. Since the mid-2010s, there is a high degree of interest from the field of Human-Computer Interaction in developing 'new' technologies for forced migrants (cf. Almohamed et al., 2020; Barale, 2022; Baranoff et al., 2015; Müller et al., 2020). For example, a novel app for machine translation between Ukrainian and the Baltic languages proved highly popular among Ukrainian forced migrants, with 127 million sentences translated between Lithuanian and Ukrainian within two months (Bergmanis & Pinnis, 2022, p. 275). However, as Leurs and Smets (2018) point out, such success is rare compared to the number of novel tools created. They estimate that activists developed approximately 1,500 apps for forced migrants at the height of the 2015 'migrant crisis' in Europe, but most of these were never used. Instead, forced migrants prefer to use existing technologies over niche specialised apps, for example social media which is "reliable, easily accessible, and widely used" (Alencar & Godin, 2022, p. 369).

3. Research design: technologies, goals, and individuals

Clearly, then, research on the use of LTs in contexts of forced migration and postmigration is extremely scarce in applied linguistics and sociolinguistics. Contributing towards filling this gap, this paper presents the research design and findings of a case study that involves members of the forced migrant community of Ukrainians in Austria. This section outlines the three parameters that frame this research: (a) a focus on the 'in-situ' use of LTs in terms of (b) the communicative goals these serve, thereby taking into consideration (c) the users' individual characteristics and language skills.

a) Language technologies: Our approach to LTs distinguishes between 'emic' (i.e., community-based) and 'etic' (researcher-based, encyclopaedic) categorisations. From an etic viewpoint, LTs of particular interest include: machine translation (e.g., *Google Translate*, *DeepL*) and in particular recent services that are built on artificial neural networks (Eisenstein, 2019); optical character recognition (OCR); and large language models/generative AI services (e.g., *ChatGPT*). From an emic perspective, participants understandings of what LTs encompass may vary. Some of our participants include into this category language-learning apps or draw a fuzzy boundary between various LT tools (see Section 5). While language-learning apps are not the focus of this study, participants' explanations of the role they play in their daily communicative routines provide further information of their understanding of using technology to get things done. In either case, we view LTs as (part of) a mediational repertoire (Lexander & Androutsopoulos, 2023) that forced migrants draw from in flexible and situated ways. Importantly, our interest is not in the features or exact app used, but in the technologies' affordances, i.e., the range of communicative actions enabled by technology (Hutchby, 2001), which may be perceived (or misperceived) and taken advantage of differently by various users.
b) Communicative goals: Forced migrants use LTs in their attempt to solve everyday communicative issues, often of an urgent or even existential kind. These goals are in turn linked to different participation formats, genres, and modalities of language. More specifically, participants may rely on LTs in both face-to-face and digitally mediated communication, thereby processing written and/or spoken language and addressing a variety of interlocutors. We assume that the communicative goals LTs may serve potentially include 'understanding texts' in the host language; 'producing text or speech' in the host language; and 'supporting situated, smartphone-mediated interaction' in the host language.
c) Individual characteristics and skills: Individual skills and attitudes are expected to constrain the extent to which LTs are deployed to overcome communication barriers. In our specific case, while Ukrainian women who fled to Austria after 2022 share some sociodemographic characteristics, they also differ in certain respects, which can prove decisive for the communica-

tive problems they need to solve and the ways they use LTs. For example, different competency levels in German can affect both the extent to which they rely on LTs and the ways they use LTs. Individual skills with smartphones and other information and communications technologies can play a role in terms of which apps an individual user is familiar with and how skilful they are exploring their affordances.

These three parameters are not limited to a specific community of forced migrants, but potentially encompass a much larger set of human practices with LTs. Research in digital migration studies (Leurs & Ponzanesi, 2024) suggests that all categories of migrants increasingly rely on digital resources to navigate a novel sociolinguistic environment, involving tasks such as understanding the written language around them or accomplishing short interactions with members of the host community. Anecdotal evidence suggests that some of these challenges also hold true for short-term tourists or other types of translocally mobile people. Plainly speaking, different kinds of people use different kinds of LTs (parameter 1) to deal with different types of communicative issues (parameter 2), thereby crucially depending on their brought-along skills with, and attitutes towards, language and technology (parameter 3). The interplay of these three parameters can be expected to differ across and within user groups, leading to different strategies in the use of LTs for intercultural understanding. The explorative study presented below shows how this interplay works out for a particular group of forced migrants.

4. Research context, participants, and data collection

Since the start of Russia's full-scale invasion of Ukraine in February 2022, several million Ukrainians have fled to the EU, with over 80,000 residing in Austria by January 2024 (Statistik Austria, 2024, p. 24). Unique among forced migrants in the EU, Ukrainians are beneficiaries of the EU-wide Temporary Protection Directive, which means that unlike other forced-migrant groups, they did not have to undergo an asylum procedure to receive protection. However, their residency status is temporary and prolonged yearly (Council of the EU, 2024). The living conditions of Ukrainian forced migrants in Austria are generally precarious, as the state has placed them in the category of 'Grundversorgung' (basic care), a complicated social benefits system meant to cover the most basic needs of asylum seekers until their asylum procedure is complete (Gahleitner-Gertz, 2024). Due to difficulties with language skills, childcare, and bureaucratic red tape, only a small percentage are currently working, typically under their level of qualification, and 75% claim that their current income does not or barely meets their needs (Glantschnigg, 2024). Those not yet working or unable to work risk to remain in the basic care system indefinitely. Therefore, the challenges these community members must overcome are often on the level of basic survival.

Due to Ukraine's restrictions on military-aged men leaving the country, most Ukrainian forced migrants in Austria are women and children (Kohlenberger et al., 2023). Their digital skills are presumed to be quite high, with the Ukrainian state strongly supporting digitalisation efforts (Ionan, 2022). Additionally, social media has emerged as a semi-official source of information during the war. State officials use *Telegram* to disperse information quickly (Beckerman, 2022), while grassroots mutual aid communities on *Telegram* have sprung up across Europe (Meinhart, 2022). In addition to fluency in Ukrainian and Russian (see also footnote 2 below), an early 2024 survey reports that after ca. two years in Austria, 20% describe themselves as knowing German at B1 level or higher; however, 60% claim having only minimum skills (A1/A2 level), and the final 20% no German skills at all (Glantschnigg, 2024). According to Kohlenberger et al.'s earlier survey (2023), two-thirds report speaking English. Thus, the recent arrival of a large number of people with very limited knowledge of the host language provides a suitable backdrop for a study on LT use.

For the pilot study this paper is based on, five women were recruited over the *Telegram* community for Ukrainians in the state of Upper Austria, of which the first author, Yudytska, is the primary administrator. Yudytska posted a message to gauge interest among members to discuss their everyday use of LTs, and the five participants were among those who expressed strong enthusiasm in response. One of the participants, 'Zoya', came to the interview with her husband 'Serhiy' and their baby; while 'Serhiy' primarily took care of their child, he also occasionally contributed to the interview and is therefore considered a study participant, although the data collected from him is incomplete (cf. Tables 1 and 2). Participants were compensated with 25€ vouchers for their time. They all signed a bilingual (German/Russian) consent form, allowing the use of audio and video recordings for research purposes.

Table 1: Overview of the sociodemographic characteristics of the participants. All RFV-names are pseudonyms.

Name	Age	Family in Austria	Profession or Education	Employment in Austria	German competency	English competency
Dariya	30s	Daughter (primary)	Management	Cleaner	A2-B1	Little
Valentina	50s	/	Pedagogy and law	On benefits	A1	Good
Hanna	40s	Husband, daughter (preschool)	Physician	On benefits	B2	Little
Eva	30s	Husband, daughter (primary)	Programmer	Housewife	A2	Very good
Zoya	20s	Husband, son (baby)	Economics	On benefits	A1-A2	Good
Serhiy	20s	Wife, son (baby)	*Not available*	On benefits	A1-A2	Very good

As Table 1 shows, all participants have been in Austria for under two years at the time of recording, speak Russian or Ukrainian as their first language,[2]

2 Ukraine is a linguistically diverse country, with most citizens fluent in both Ukrainian and Russian. Language preference differs by region, with the west strongly favouring Ukrainian and the south/east typically using Russian or a mixture, although there has been a shift towards Ukrainian postinvasion (Kulyk, 2024). Yudytska is a Russian-speaking Ukrainian and conducted the interview in Russian. In the recruitment message, participants were offered to use either Ukrainian or Russian, but all chose Russian. All participants come from areas hit hardest by the war, which tend to be Russian speaking. No further information about language proficiency and language attitudes was elicited.

and started learning German upon arrival in Austria. They differ in family status, employment, and proficiency in German and English.[3] These differences will be shown in the analysis to play a role in the contexts of their LT deployment and their strategies to achieve communicative goals beyond LT use. Their proficiency in German affects how much they attempt to communicate in this language as opposed to using other strategies, such as switching to English or employing LTs. However, their certified language proficiency does not necessarily indicate how much German they use. For example, Hanna has the highest proficiency at B2, which is sufficient to understand German documents, but describes struggling to 'speak', which she ascribes to being a perfectionist and not wanting to make mistakes. Proficiency in other languages is also important: Valentina, Eva, Zoya, and Serhiy all describe occasionally preferring English over LTs for communication with Austrians.

Data collection was conducted in person by the first author over the course of a week in February 2024. It took place in Russian and consisted of two parts:

a) Audio-recorded ethnographic interview (45–60 minutes): The interview adopted a semi-structured approach (de Fina, 2019). Participants were encouraged to tell short stories (Georgakopoulou, 2015) about their experiences with using LTs, including times when they encountered difficulties. LTs were approached from an emic perspective, with no steering by the interviewer towards specific technologies. Information was also elicited about the participants' living situation in Austria, current German (and English) language skills, and desire to learn German.
b) Video-recorded re-enactment of LT use (ca. 5 minutes): Following up on the interview, the participants were invited to demonstrate their use of LTs in a short video recording. Drawing on earlier studies (Artamonova & Androutsopoulos, 2020; Palviainen, 2020), we devised to this purpose a re-enactment procedure, which starts by prompting the participants to imagine making a cooking or crafting tutorial on *YouTube*. Some participants then gave advice on how to use LT apps, others presented their skilful use of different apps. The video recording focuses on the smartphone screen and the participants' hands, thus protecting their privacy. This method was chosen

3 All participants other than Zoya are enrolled in German classes; their German proficiency refers to the level of the class. At the time of recording, Zoya was not attending classes due to her childcare responsibilities but was learning along with her husband's textbook. The English levels listed are less precise, based on self-reports.

over filming actual LT use due to ethical considerations: Many of the situations where participants rely on LTs are highly sensitive in nature, and 'in situ' recordings involving a third-party researcher could risk tensions with a landlord, social worker, teacher, etc. The resulting video data provide insight into the participants' embodied proficiency with technological affordances in far more detail than a verbal explanation. Here, too, all names and locations are pseudonymised in transcription and analysis.

5. Findings

The preliminary findings reported in the remainder of this chapter are organised in three sections. The first (5.1) sketches out an overview of the relation between LTs, communicative goals, and contexts of use in the reported practices of the participants. Each participant uses a different repertoire of LTs (and language-learning resources), but similarities across participants also emerge. We then delve into chains of LT-assisted action, that is, combinations of two or more LT that are routinely deployed to achieve certain goals (5.2). The third section considers the participants' awareness of flaws and limits of the LTs they deployed (5.3), as well as their remedies when dealing with such flaws (5.4).

5.1 Overview

Table 2 below gives an overview of the participants' LT repertoires based on their reports. The first three columns list their reported LTs in a narrow sense: machine translation, OCR, and AI tools. The last two columns list related language resources they reported, notably online dictionaries and language learning apps.

4 *Google Lens* is available both as a standalone app and integrated into *Google Translate*.

Table 2: Language technologies and other smartphone-based language resources reported by the participants.

Name	Machine translation	OCR	Generative AI	Online dictionaries	Language learning tools and platforms
Dariya	- Google Translate - Gboard	- Integrated Google Lens[4]	/	/	- Duolingo
Valentina	- Google Translate - Telegram Translate - Yandex Translate	- Integrated Google Lens - Standalone Google Lens	- ChatGPT	- Google Dictionary	- Babbel - Verbformen
Hanna	- Google Translate	/	/	- Abbyy Lingvo	- Duolingo - ReWord - YouTube - Facebook - Ebooks
Eva	- Google Translate - DeepL	- Integrated Google Lens	/	/	- TikTok - Youtube - Podcasts - Textbook app
Zoya	- Google Translate	- Integrated Google Lens	/	/	- Busuu - Deutsch Grammatik A1 A2 B1 B2 - A1-Deutsch - Verben - Tobo German - Немецкий разговорник [German phrase book]
Serhiy	- Google Translate - DeepL	*Not available*	*Not available*	- Reverso	*Not available*

The participants' concept of language technologies (Russian: 'языковые технологии') is relatively fuzzy, as they do not strictly differentiate between technologies used to solve communicative problems and those used for long-term language learning, nor between digital resources such as online dictionaries and more complex technologies involving artificial neural networks. Machine translation is the most popular LT they use, and *Google Translate* stands out as the only service used by all six participants. They refer to their machine translation app(s) as 'переводчик' (translator); in Russian, the same word applies to both human and machine translators and interpreters, and the apps brand themselves as such (*Google переводчик*, *Yandex переводчик*, etc.). Unless asked directly, they rarely add the brand name to it. As discussed in Section 5.2, the generative AI app *ChatGPT* may also be used for translation.

Participants' understanding of which LT they are using does not necessarily match the actual LT used. For example, Dariya explains that the messenger app *WhatsApp*, has a built-in translator, which she occasionally makes use of while interacting with her German-speaking colleagues; she explains a fellow Ukrainian taught her about it. In reality, this translation is offered not by *WhatsApp* but by *Google*'s virtual keyboard (*Gboard*), which has a built-in *Google Translate* function (Weir, 2020). However, because Dariya understands this instance of machine translation as an affordance of *WhatsApp* (rather than her keyboard), her use of the translator is constrained to this particular app. This highlights how forced migrants develop a practice-based understanding of technological affordances (rather than one based on formal digital literacy), with which they then tackle their communicative goals.

The ways LTs are deployed to reach immediate communicative goals are shaped by the broader situational contexts in forced migrants' lives, especially situations that are often urgent and existential in nature. For example, multiple participants describe using LTs to resolve their housing situation (such as contacting potential landlords), solving bureaucratic issues related to their 'basic care' benefits, communicating with medical professionals, and understanding food product labels in the supermarket. On a less immediate level, LTs are used for communication with the child's teacher, their neighbours or even passersby. Put differently, LTs may be used when and wherever some type of communication with the Austrian host society is necessary.

Against this background, we now examine how the participants report using LTs to achieve the three communicative goals outlined in Section 3, i.e., understanding, producing, and interacting, and also consider individual variation in the extent of their reliance on LTs.

Common among all participants is using LTs to 'understand' German text across a variety of situational contexts. Valentina and Zoya describe using a combination of OCR and machine translation to understand supermarket labels. Dariya uses LTs to understand everything from documents and websites to her child's math homework and the presentation slides at a parent-teacher conference. Four participants also reported or demonstrated using OCR technology to quickly decipher printed text around them, thus allowing them to navigate the semiotic landscape. Valentina in particular uses *Google Lens* both as a standalone app and integrated into *Google Translate*, the former primarily to quickly research products in the supermarket and the latter to immediately translate her surroundings.

Using LTs to 'produce' text in German is least often mentioned. Valentina (more about her in the next section) attempts to solve her bureaucratic issues by using LTs: She produces letters of several pages explaining her complicated situation, which involves a disability preventing her from finding work easily, to Austrian authorities. Potentially, this discrepancy is due to the contexts of LT use described above: The participants are not currently finding themselves in situations which require the production of text outside of interactions with speakers of German.

LT-assisted 'interaction' is more diverse. Most participants describe how LTs help them with digitally mediated communication. Dariya uses *WhatsApp* with her colleagues and Eva with her daughter's schoolteacher, and both occasionally draw on machine translation to understand their interlocutors' replies or construct their own message. Using LTs in this context is easily possible due to the written language modality and the asynchronicity of communication, which affords the two women some time to copy the interlocutor's message into a machine translation app to make sense of it. In contrast, the use of LTs in face-to-face situations is particularly complex, as it involves real-time production, translation, and reception of speech. For speech production, some participants type into their preferred machine translation app, while others use speech-to-text technology. Some prefer to read out the written, translated results themselves, others show the smartphone screen to the interlocutor. In addition, the forced migrants must also somehow understand the interlocutor's reply. This can be accomplished, for example, when the Austrian interlocutor uses an LT app on their own smartphone, or when they speak or type into the LT app on the forced migrant's device. Due to this complexity, face-to-face LT-assisted interaction is strongly dispreferred by most participants. For example, Zoya rejects the usefulness of LTs in face-to-face interaction because even though she can use LTs to produce speech in the target language, she still cannot understand the interlocutor's reply.

One strategy the participants adopt instead is to prepare for the interaction beforehand with the help of LTs. Dariya prepares for medical appointments by producing the full text beforehand in German on her notes app with the help of *Google Translate*, and then gives it to the doctor to read. Hanna and Eva use LTs to look up the vocabulary and/or create sentence constructions beforehand, which they then memorise for the appointment. Such preparation can be viewed as a mixture between LT-assisted language learning and LT-assisted interaction, as well as between LT-assisted asynchronous text production and subsequent real-time interaction.

5.2 Chains of LT-assisted action

When faced with more complex communicative tasks, forced migrants may resort to linking together several LT-mediated actions, thereby drawing on one or several LTs, to achieve a specific goal. We term such linkages 'chains of (LT-assisted) action'. The following interview extract exemplifies the potential complexity of such a chain of action. Shortly before the interview, Valentina's social benefits, by which she paid for her apartment, were abruptly halted for unclear reasons. Valentina thought it might be due to the type of rental contract she has, as the Austrian authorities differentiate between 'Mietvertrag' (a standard rental contract) and 'Bittleihvertrag' (translating roughly as 'cession of right to use', a special type of rental contract) and only provide the full payment of 165€ to Ukrainians with the former. However, Valentina is uncertain what contract she has. She thus uses LTs in an attempt to understand her contract, in order to eventually reinstate her benefits to pay her landlord. In Extract 1, Valentina reports the LT-assisted actions she undertook to solve this issue, briefly showing the interviewer the relevant LTs on her phone as she talks.

Extract 1 (Original Russian)

Valentina: А потом, когда у меня возникли с жильем вопросы, мне нужно было законодательство, я зашла [в ChatGPT] и просто его спрашивала, как друга. Привет, так. И вот чем отличаются по смыслу договора Bittleihvertrag и Mietvertrag в Австрии. Он мне объясняет. Очень грамотно объяснял, кстати, потому что я понимаю, что я должна как-то это доказать сама, а я не могу обычный перевод слов сделать, и мне мой хозяин не может перевести. Вот, он мне перевел. [...]

Жалко, у меня, конечно, у меня нет платной версии, там можно картинку, там можно текст любой, а здесь – это минус, что я не могу. Вот... [Scrolls through her conversation with ChatGPT] Вот, я спросила, что-то я... А! Я, все-таки, я взяла договор, скопировала текст, скажем так. А как я сделала: я просто навела, скопировала, э, сфоткала лист ваш, и потом пальцем нажимаем. Это, кстати, насчет пользования.
Interviewer: На Гугл, этого – э – [Lens], да?
Valentina: Да. Копируешь столько, сколько тебе нужно, либо весь лист. Но в основном, если это картинка, то можно просто текст. Копируешь и просто сюда вставила. Пишу. [Opens ChatGPT, shows existent conversation with ChatGPT again.] «У арендатора есть такой вот текст.» На немецком пишу. «Можешь мне его перевести?» Потому что мои переводчики [Гугл Переводчик и Яндекс Переводчик], кстати, переводили неправильно. Не всё. Он мне говорит: «Пункт, который вы мне предоставили, он говорит о том-то и том-то. Это параграф такой-то.» И дальше он мне все подробности, видите, я была очень довольна. Он мне как раз очень сильно помог, когда я не знала.

Extract 1 (Translated from Russian)
Valentina: And then when I had a housing issue, I needed legislation, I went in [to ChatGPT] and just asked him[5] as a friend. Hi, so. And what is the difference, in terms of meaning, between Bittleihvertrag and Mietvertrag contracts in Austria. He explains it to me. He explained it very competently, by the way, because I realise that I have to prove it myself somehow, and I can't translate the words, and my landlord can't translate them for me. So, he translated it for me. [...]
It's a pity I of course don't have – I don't have a paid version, there you can have a picture, there you can have any text, and here it's a disadvantage that I can't. Here... [Scrolls through her conversation with ChatGPT] Here, I asked what I – something I... Ah! I took the contract, I copied the text, let's say. How I did it: I just pointed, copied – ah, I took a picture, here is your sheet, and then we press with our finger. [Demonstrates Google Lens with the information sheet provided to participants.] That's about usage, by the way.
Interviewer: On the Google, um, uh, [Lens], right?
Valentina: Yes. You copy as much as you need, or the whole sheet. But, basically, if it's a picture, you can just copy the text. You copy and just paste

5 As Russian has grammatical gender, it remains ambiguous to what extent the use of the masculine third-person pronoun for *ChatGPT* should be linked with perceived animacy.

> it here. [Opens ChatGPT, shows existent conversation with ChatGPT again.] I write: "The tenant has a text like this." I write it in German. "Can you translate it for me?" Because my translators [Google Translate and Yandex Translate], by the way, translated it wrong. Not everything. And he says to me, he says, "The paragraph you gave me, it says this and that. It's paragraph so-and-so..." And then he gave me all the details, you see, I was very satisfied. He just helped me a lot when I didn't know.

Valentina describes using a combination of four different LTs to understand her rental contract: *Google Lens*, "[her] translators", *Google Translate*, *Yandex Translate*, and *ChatGPT*. First, she attempted to use her machine translation apps to translate the contract into Russian. As she has a physical (not digital) copy of the contract, she had to use OCR technology to convert the printed-out contract into machine-readable text. Valentina did not specify if she used to this purpose the standalone *Google Lens* app or the OCR technology integrated into *Google* and *Yandex Translate*. Regardless, she was not satisfied with the result and turned to *ChatGPT* instead. Next, therefore, she used OCR technology to machine-encode the original German text. During the interview, she used the info sheet to simulate this process. She then copied the contract text into *ChatGPT* and requested for a translation into Russian by commanding *ChatGPT* in German: "Can you translate for me?"[6] Finally, Valentina asked *ChatGPT* to explain the two rental contract types mentioned above.

This example demonstrates the two major reasons for chaining together multiple LT-assisted actions: The first reason is to take advantage of the combined affordances of several LTs, when a single LT is not capable of fulfilling all the tasks required. This is seen in the combination of the OCR tool, *Google Lens*, and the generative AI tool, *ChatGPT*. The latter can only translate machine-encoded text, and thus the former must first be used to convert printed text from a photo into machine-encoded text. Notably, Valentina remarks that in the "paid version" of *ChatGPT*, a photo with text can be uploaded directly.[7] Thus, all actions could be done within a single LT, which would likely result in a simplified chain of action: taking a photo of the contract, uploading it into the 'paid version' of *ChatGPT*, and requesting a translation. This means that chains of LT-assisted action may be a bottom-up, practice-based solution to economic

6 Since Valentina's rental contract probably consists of multiple pages, the sequence of taking a photo of the contract, copying the machine-encoded text, and then translating it via *ChatGPT* was probably repeated multiple times.

7 Since the interview was conducted, this has become possible in the free version as well.

limitations (in this case, not being able to pay for a premium version of *ChatGPT*), which many forced migrants no doubt face. In addition, Valentina's use of *ChatGPT* to understand the legal terminology of the contract types can also be viewed as an additional necessary action in the chain: The mere machine translation of the terminology is not always sufficient for an understanding of the legal situation. In short, Valentina shows a deep level of awareness of the affordances of the various LTs at her disposal, and how these affordances may be combined to achieve her goal.

A second reason for creating a chain of LT-assisted actions is when the first attempt at the action at hand fails to yield satisfactory results. This is seen in Valentina's translation of the contract, where she carries out three versions of machine translation—via *Google Translate*, *Yandex Translate*, and *ChatGPT*. While using these three LTs differs in the details (for example, *ChatGPT* requires the human user explicitly asking for a translation, whereas the machine translation apps translate entered text automatically), these are nonetheless repetitions of the same 'type' of action, namely machine translation. In her second turn in Extract 1, Valentina claims that both machine translation apps "translated it wrong", but then adds, "[n]ot everything", which might mean that some parts of the contract text were translated adequately and some inadequately. Be that as it may, repeating the machine-translation action is necessary for her to understand her contract to her satisfaction. This type of action-chaining, which presupposes an 'awareness' of the first attempt being unsuccessful and may be solved either via another LT or by involving a human instead, is explored further in the following sections.

While not all chains are this complex, all participants are comfortable with the necessity to complete a complex action that involves one or more LTs in a particular sequence, in order to achieve their goals. The need to chain LT actions to overcome technological constraints is common especially with faulty translation (see Extracts 1 and 2) and speech-to-text conversion. An example is Dariya's demonstration of using *Google Translate*: Dariya first speaks into her phone, but then must correct several small mistakes in the machine-transcribed Russian text, such as inserting punctuation marks between sentences, to improve the subsequent translation into German. What is particularly notable about these LT action chains is not only how routinised they have become to the forced migrants, but also that they all are accomplished on a smartphone.

5.3 Awareness of LT failures

The previous section demonstrates that the output of an LT-assisted action is not always considered satisfactory by the participants. All participants criticise the machine translation apps they use. Some criticism concerns the difficulties involved in handling the app (e.g., the default font size), but most complaints focus on the translation affordance itself. This is particularly notable because these complaints are expressed by participants at various levels of German competency, from A1 to B2. In other words, the awareness of translation failures, particularly from Russian/Ukrainian into German, is not directly correlated to higher competency in the target language.

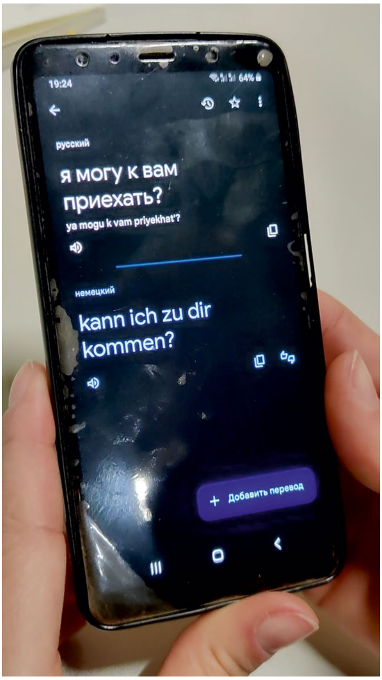
In the following interview extract (Figures 1 and 2 and Extract 2), Zoya and Serhiy explain their difficulties with messaging potential landlords while searching for an apartment on an Austrian website with classified advertisements. This happened shortly after the family came to Austria, when they were searching for a permanent place to live. The figures show stills of Zoya re-enacting her use of *Google Translate* to communicate with potential landlords online, and Extract 2 shows the couple's reflections on LT failures in this situation.

In Figure 1, Zoya re-enacts her request for an apartment viewing: she used the Russian phrase "Можно прийти?" (Is it possible to come over?), which is a standard polite formulation of this interrogative act. Due to the ellipsis of agent and locative in Russian, the LT mistranslates her request to visit as an invitation for the addressee to come to Zoya and Serhiy. Zoya then explains that for *Google Translate* to translate accurately, it is necessary to input the Russian expression correctly. She demonstrates a 'correct' input ("Я могу к вам приехать?", Can I come to you?), which explicitly includes agent and locative. However, as Figure 2 shows, the translation is still not fully accurate, and pragmatic nuances are lost. Russian and German both have the T/V politeness distinction in their second person pronouns (informal 'ты/du' vs. formal 'вы/Sie'), but the formal Russian 'вы' is translated here into German informal 'du'.

Figure 1: Stills of Zoya re-enacting her use of Google Translate to communicate with potential landlords online. Polite Russian phrasing.

RUS, lit.: Possible to come
GER: Can you [informal] come
Is it possible to come over?

Figure 2: Stills of Zoya re-enacting her use of Google Translate to communicate with potential landlords online. A more literal re-phrasing.



RUS, lit.: I can come to you [formal]?
GER: Can I come to you [informal]?
Can I come to you?

In the interview (Extract 2), the couple describes their experience with contacting landlords in more detail. They show awareness of both issues with LT translations, i.e., mistakes on the literal level (what is the request?) and mistakes with pragmatic nuance (how polite is the request?). Zoya and Serhiy consider the resulting lack of politeness a major issue, describing it as showing "[n]o respect" and lacking "norms of decency". That is, even if the literal meaning were translated accurately by the LT, the output would still be considered imperfect, and the desired communication not fully achieved.

Extract 2 (Original Russian)

Zoya: Ну, правда, с квартирой я очень переживала, потому что на тот момент я ещё была беременна. И я начала писать на Willhaben-е. Мне подсказали сайт, я начала писать всем подряд на Willhaben-е с помощью переводчиков. И как оказалось, что когда ты пишешь с русской логикой – ну, с русской, украинской логикой – в переводчике «Можно прийти посмотреть квартиру?», оно переводит «Kannst du kommen?» ['Ты можешь прийти?']

Zoya and Int.: [Laugh.]

Zoya: То есть, «Вот, можешь ты ко мне прийти?» На тот момент мы этого еще не знали. Потом, когда я читаю, что я писала людям, это был просто какой-то кошмар. Ну, то есть, человеку пишешь с просьбой прийти посмотреть квартиру, оно переводит «Можешь ли ты ко мне прийти? Будешь ли ты дома?» там. [Laughs.] Первая наша –

Serhiy: Причем это вы – ты, там [unintelligible] –

Zoya: Вы – ты, там, вообще –

Serhiy: Никакого уважения. [Laughs.]

Zoya: [Laughing] Не говоря уже о каких-то, да, нормах приличия...

Serhiy: Потом стратегию поменяла, начала писать мы из Украины. И люди начали отзываться.

Extract 2 (Translated from Russian)

Zoya: Well, I was very worried about [finding an] apartment, because at that time I was still pregnant, and I started writing on Willhaben.[8] They suggested the website to me, and I started writing to everyone on Willhaben with the help of a translator. And as it turned out, when you write with Russian logic – well, with Russian, Ukrainian logic – in a translator, "Is it possible to come view the apartment?", it translates it as "Kannst du kommen? ['Can you come?']"

Zoya and Int.: [Laugh.]

Zoya: That is, "So, can you come to me?" We didn't know that yet. Later, when I read what I wrote to people, it was just some kind of nightmare. That is, you write to a person asking to come take a look at the apartment, it translates, "Can you come to me? Will you be at home?" [Laughs.] Our first –

Serhiy: What's more, stuff like вы ['formal-you'] – ты ['informal-you'] [unintelligible] –

Zoya: Stuff like вы – ты, there –

Serhiy: No respect. [Laughs.]

Zoya: [Laughing] Yes, putting aside any norms of decency...

8 *Willhaben* is an Austrian classified ads website, like *Craigslist* in the US.

Serhiy: Then she changed the strategy, started saying we're from Ukraine. Then people started to respond.

At first, it appears that Zoya and Serhiy's awareness of this issue came simply with increased German competency. Zoya describes a temporal component: first not knowing that a less literal Russian wording was translated badly ("We didn't know that yet"), and only "later" realising how pragmatically awkward the output was ("some kind of nightmare"). However, Zoya in fact became aware of the failure earlier. She originally received no or few responses and realised the problem was a linguistic one (rather than due to the family's residency status or current lack of employment). In response she "changed the strategy" of communication, explicitly writing in her messages that the family are Ukrainian forced migrants. Implicitly justifying the grammatical errors and/or pragmatic awkwardness caused by machine translation, this strategy proved effective, as Zoya started receiving replies. Zoya's awareness of LT failures of LT output thus came from realising that her goal of connecting with potential landlords was not being achieved.

While increased German competency and a lack of achieving communication goals are indirect ways of becoming aware of output failures, several of the participants also describe directly testing the LT output. An important strategy that emerges here is attempting to machine-translate into a language that the forced migrant is competent in. Eva and Serhiy, who have a higher competency in English, described translating from Russian/Ukrainian into English with various machine translation apps and evaluating the outcome. However, there is no uniform evaluation of the outcome. Eva eventually selected *DeepL* as her app of choice, while Serhiy decided no LT was good at translating, but nonetheless chose *Google Translate* for its higher ease of use. Translation into a language forced migrants are competent in serves as a useful proxy for evaluating how well a LT app works for a language whose output they cannot yet evaluate directly.

Another strategy which emerges from the interviews is testing the output via back translation, that is, translating Russian/Ukrainian into German and then translating the output back into Russian/Ukrainian. This action sequence is described by both Valentina and Dariya, who use it to double-check the quality of the translation. If the result is not satisfactory, they edit the Russian/Ukrainian message, for example by simplifying a longer sentence, and repeat the action. This chain of action thus not only serves to evaluate the machine translation output despite a lack of sufficient language competency, but is also used to fix any communication problems that might arise due to LT failure.

5.4 Human-in-the-loop strategies

As the previous sections illustrate, LT output is not always perfect, and forced migrants must develop various strategies to deal with its imperfections. In addition to combining different LTs (Section 5.2), another strategy emerges out of combining technological and human resources within a sequence of actions. In the field of Human-Computer Interaction, practices that include a human actor into a longer workflow which primarily relies on LTs are called 'human-in-the-loop' (Brown & Grinter, 2016; Groves, 2008), a term we also adopt here. While previous research in applied linguistics has documented how forced migrants occasionally rely on professional or community interpreters (Berbel, 2020; Kletečka-Pulker et al., 2019), our interest here is more specifically how humans are integrated into chains of LT-assisted action. A typical human-in-the-loop example is presented in Extract 3: Hanna recounts her experience soon after her child entered preschool.[9] While her German at the time of the interview was at B2 level, at the time of the story she knew hardly any German and thus attempted to use *Google Translate* to communicate with the child's teacher. As she explains, at times a boy in her daughter's class also acted as an ad-hoc interpreter.

Extract 3 (Original Russian)
Hanna: А самый первый, наверное, мой опыт с переводчиком, это был, когда мой ребенок пошёл в садик. Это был май месяц. Ей было три года. И это, конечно, был огромный шок для неё, для ребёнка, который оказался в немецкоязычной среде, не зная ни одного слова, и вокруг некому помочь.
Вот. И первые две недели я должна была присутствовать там, в утренние часы, то есть мы приходили на два часа, и первые две недели я присутствовала там. Ну вот, я не понимаю ничего, никого, никто не понимает меня. И там, да, там был исключительно переводчик. Переводчик, мы общались с воспитательницей исключительно с переводчиком. Да, а потом [laughing slightly] Господь услышал мои молитвы. И в группе моего ребенка оказался ребенок русскоязычный.
Interviewer: Аа!

9 In Austria, children go to preschool until approximately the age of 6.

Hanna: Ну, он родился здесь. То есть, он свободно… У него больше немецкий родной, чем русский. Вот, ну он из семьи, которая тоже выехала в 90-е годы из бывшего Советского Союза.
Вот, и, конечно, этот мальчик очень сильно поддержал и помог моему ребёнку в садике. И когда мы заходили с воспитательницей совсем в тупик, когда мы не могли объясниться даже с переводчиком, мы уже просто звали этого мальчика и просили… Я спрашивала: «Скажи мне, что она говорит, я не понимаю.» Вот, и, хотя она пишет, а переводчик переводит что-то такое… Я не очень люблю Google Translate.

Extract 3 (Translated from Russian)
Hanna: And my very first, probably, experience with the translator was when my child went to preschool, it was the month of May. She was three years old. And it was, of course, a huge shock for her, for a child who found herself in a German-speaking environment, not knowing a single word, and no one around to help.
So. The first two weeks I had to be present there in the morning hours, that is, we came for two hours, and the first two weeks I was present. Well, I don't understand anything, nobody understands me, and there, yes, there was exclusively the translator. The translator – we communicated with the teacher exclusively with the translator. Yes, and then [laughing slightly] God heard my prayers. And a Russian-speaking child turned up in my child's group.
Interviewer: Ohh!
Hanna: Well, he was born here. That is, he freely… German is more his mother tongue than Russian. He's from a family that also left the former Soviet Union, in the '90s.
So, of course, this boy really supported and helped my child in the preschool. And when we came to an impasse with the teacher, when we couldn't explain ourselves even with the translator, we just called this boy and asked him… I would ask him: "Tell me what she's saying, I don't understand". Although she writes it, but the translator translates something so… I don't really like Google Translate.

This story illustrates the primacy of LTs as a solution, with the human-in-the-loop strategy only used sparingly. Although Hanna claims she "[doesn't] really like Google Translate", she still overwhelmingly relied on it as her main resource for communication at that time. Only when she and the teacher "couldn't explain [themselves] even with the translator", that is, when she failed to accomplish LT-assisted interaction, did she turn as a last resort to the ad-hoc interpreter available. The dispreference for a human-in-the-loop solution cannot be due to a belief that the LT is more accurate at translation or better at achieving the communicative goal, as the boy was tasked with helping specifically in more difficult situations when the LT failed. Rather, the dispreference likely arises due to the identity of the interpreter, namely a young child who is not a family member. In contrast to the LT, a constantly available resource, asking a young child places an additional burden on them and is therefore avoided.

An additional aspect is the ambiguity as to what extent involving a human interpreter can be considered a proper solution to the task at hand when compared with the use of LTs. Hanna jokingly describes the appearance of the boy in her daughter's class as "God hear[ing] [her] prayers", that is, a very positive but unexpected coincidence. She did not deliberately seek out another human to accompany her to the preschool. This contrasts with the use of LTs as a resource, which requires the deliberate downloading of apps and other digital literacy activities. Nevertheless, once a human resource is coincidentally available, they can become incorporated into a routinised chain of actions for achieving understanding in interaction.

While the very young age of the ad-hoc interpreter makes this specific case striking, the patterns found here are mirrored across other participants. More specifically, a human-in-the-loop strategy appears to be used only after an initial LT attempt, often a failed one. For example, Eva's chain of LT-assisted action to interact with her child's school is to first use *DeepL* to understand the teacher's *WhatsApp* messages. If she does not understand the outcome, she forwards the messages to her husband, and he in turn asks his work colleagues for a translation. Of course, those forced migrants who can rely on a family member or friend to act as a community interpreter may strongly prefer this solution at the expense of LTs. For those who don't have such a connection, however, the human-in-the-loop does not seem to be a preferred solution to issues with LTs. In Zoya's report, this dispreference is not due to a lack of trust in human output compared to LT output. Rather, human resources are used sparingly for tasks considered too complex to entrust to LT. In addition to the examples above, Zoya describes first machine-translating medical documents regarding her pregnancy, then asking a bilingual friend to check the correctness of the machine translation output. Similarly, Dariya describes using LT assistance in messaging with a potential landlord, then asking a friend to talk with him at the apartment viewing. She explains adopting this strategy not because of a higher difficulty of using LTs in face-to-face communication, but to ensure the accuracy of the information relayed.

In short, due to the participants' acute awareness of potential LT failures (Section 5.3), even untrained ad-hoc interpreters are considered more trustworthy on occasions where the communicative goal is particularly important and/or complex. On the other hand, a disadvantage of this reliance on human resources appears to be the burden placed on another individual, especially as their engagement typically comes without any compensation due to the precarious living situation of the forced migrants. Thus, the human-in-the-loop strategy within an LT-assisted chain of action centres on balancing the constant availability of LTs with the reliability of human translations.

6. Conclusions

This chapter draws on data from preliminary fieldwork to tap into a largely unexplored, but highly timely area of digital literacy practice: How forced migrants with limited knowledge of a host society language draw on language technologies for a variety of tasks that aim at overcoming communicative barriers in the precarious situation of (early) forced migration. The lack of applied linguistics and sociolinguistics research on this process might be explained by the novelty of the technological solutions involved, on the one hand, and the recent intensity of forced migration into Europe, on the other. The collated impact of both processes only made itself felt in the late 2010s and early 2020s. The degree of routinisation in the use of LTs documented in this research is yet another evidence for the statement that migrants are at the forefront of adopting digital technologies for interpersonal communication (Lexander & Androutsopoulos, 2023; Madianou, 2014).

We expect that future research will bring to the fore similarities between our findings and the strategies adopted by other communities of forced and voluntary migrants. That said, two aspects make the situation of forced migrants particularly striking. Firstly, forced migrants face an especially high pressure to achieve communication goals due to the precariousness of their situation, especially immediately upon arrival. They may also face additional mental pressure, as an inability to communicate with others can add a further layer of trauma to existing ones (Bušić et al., 2022). Secondly, in situations of forced migration like the Ukrainian one, a large group of people find themselves encountering a new language near-simultaneously. Tips and tricks are spread among the community as they learn to use (often entirely unfamiliar) smartphone-based technologies: as our examples suggest, community members help each other acquire new skills and strategies, albeit imperfectly. Due to the combination of pressures and mutual aid, forced migrants' understanding of how to deal with LTs is often especially intricate, whilst also being obtained very rapidly.

Even though data from six participants only allow for highly preliminary findings, we suggest this study offers some points of departure for follow-up work. More specifically, the research approach proposed in this paper aims to document the LT-assisted actions forced migrants undertake to achieve communication with host society authorities and citizens. Our focus is on relations between LTs, goals, and communicative contexts (including participation formats and modalities of language), thereby also taking into consideration how individual life trajectories and language-learning practices may influence people's predisposition to use LTs. The tripartite distinction between understanding, production, and interaction shows that our informants place different importance on these goals. Understanding text in the host society language is most crucial and common, then interacting with members of the host community, and finally producing text. While other populations may have different priorities, we nonetheless expect the systematics developed in this chapter to prove useful for further research. In addition, the interviews and re-enactments of the six participants brought to the fore three further dimensions of LT use that seem worth exploring in more detail in future work: chains of LT-assisted action, awareness of limitation and failures of LTs, and occasional reliance on human support alongside smartphone-based tools. Forced migrants thus develop complex strategies and a practice-based awareness of how LTs work and how they can be appropriated to ease communicative barriers at early stages for forced migration.

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‘Living at the limit’
Sociotechnical affordances and unlearning colonial gender and sexuality

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Abstract *This chapter examines how sociotechnical affordances of activist education and digital interaction enabled a pedagogical practice aimed at disentangling learners from colonial legacies of gender, sexuality, and race. Specifically, I focus on a 2021 Faveladoc class, a documentary-making workshop held via Google Meet for young favela residents in Rio de Janeiro, organised by the grassroots NGO Raízes em Movimento. Led by Joice Lima, a Black social scientist and activist, the class explored what it means to inhabit a gendered, racialised body shaped by desire within a peripheral space. The interactions among the instructor, the young participants, and the digital and discursive affordances at play gave rise to a situated collective that actively resists (in)securitisation—that is, the process of framing certain populations as existential threats. As territories predominantly inhabited by Black working-class communities, favelas have been key targets of Brazil’s (in)securitisation, subjected to intensified policing and the persistent ‘crossfire’ between the state and organised crime. Against this backdrop, this chapter analyses how this dialogical digital setting fostered unlearning of patriarchy, racism, and LGBTQI-phobia—ultimately repositioning language as hope.*

Keywords *Unlearning; Sociotechnical Affordances; (In)securitisation; Digital Activism; Gender and Sexuality*

1. Introduction

It was a Thursday morning, 13 May 2021. Joice Lima sat in front of her computer, addressing a group of young residents of Complexo do Alemão, a group of favelas (neighbourhoods built by residents) in Rio de Janeiro.[1] Due to the COVID-19 pandemic, the class she was teaching—part of Faveladoc, a documentary-making workshop—was being held online. Her words carried a sense of urgency. "I don't think I remember a time in my life when I didn't live at the limit", Joice told her students, referring to the ongoing struggle for survival they all shared.[2] She spoke about the daily precariousness that defined their lives—fragile access to education, food, and basic sanitation. She added:

> It's the limit of education, always precarious. You're always there, trying, or completely unmotivated to keep trying in a space that doesn't offer many possibilities. It's the problem of access to dignified food, access to basic sanitation—things we all see in our daily lives.

A few minutes later, Joice elaborated on the shared experience of 'favelados' (favela residents), who live in areas disproportionately affected by harsh policing and the territorial conflicts between 'crime' and the state (Cavalcanti, 2008; Machado da Silva & Menezes, 2019; Menezes et al., 2024). She presented to the class an image that photographer Mauro Pimentel had shared on *Twitter* (now *X*) of women protesting in the Jacarezinho favela just days earlier, following a violent police raid that left 28 male residents dead (Lyra et al., 2021; see Figure 1, ahead). Her reflections on Brazil's necropolitics—what Achille Mbembe (2003, p. 11) describes as "the capacity to dictate who may live and who must die"—became a crucial part of the affective and epistemic stance that took shape in the class. It was an acknowledgment of living at the limit but also a refusal to be defined by it.

Since 2012, I have conducted linguistic-ethnographic research in Complexo do Alemão, a group of twelve favelas in Rio de Janeiro, home to approximately 80,000 residents. I attended this Faveladoc class—and the entire workshop—both as an ethnographer and an allied linguist (Borba, 2022). Organised by the grassroots NGO *Raízes em Movimento* and funded by a federal

1 Joice Lima, a publicly recognised activist, social scientist, and member of the collective *Raízes em Movimento*, is identified by name and image in this chapter due to her public visibility (as are fellow activists Alan Brum Pinheiro and David Amen). A Black woman born in the Amazon state of Pará and raised in the Complexo do Alemão favelas, she has long been engaged in grassroots initiatives. In contrast, other workshop participants are identified by pseudonyms—a decision discussed and approved by them.

2 The Faveladoc workshop was conducted in Portuguese. For conciseness, I provide participants' speech excerpts only in English, translated by me.

cultural grant, the workshop ran from February to December 2021. Due to COVID-19 restrictions, sessions were held online from February to July and transitioned to in-person meetings (essential for the filming practice) from August to December. The initiative was structured around two key pillars: an introduction to film language, covering both theoretical and practical aspects, and a social and political education module, which included classes on local history, memory production, and citizenship-related topics (Instituto Raízes em Movimento, 2022; Silva et al., 2024).

Seventeen young residents of Complexo do Alemão participated in the 2021 edition of Faveladoc. The majority of them were Black,[3] and their motivations for joining the project were diverse. Some saw the audiovisual training as an opportunity to develop skills relevant to Rio's vibrant cultural and artistic industries, while others, particularly those with backgrounds in theatre or acting, sought to deepen their understanding of filmmaking as a complementary practice. A number of participants were especially drawn to the project's sociopolitical education component, recognising its potential to engage critically with their lived experiences and the realities of their community.

Previous editions of Faveladoc resulted in two full-length documentaries. In its first iteration, twelve young participants underwent technical training and co-produced *Copa pra Alemão Ver*, or 'Worldcup for the Gaze of Germans/ Foreigners', which explored local perspectives on the 2014 FIFA World Cup (Instituto Raízes em Movimento, 2016). The second edition, released in 2017 (Raízes em Movimento, 2021), engaged fifteen participants in the making of *Quando Você Chegou, Meu Santo já Estava*, or 'When you arrived, my saint was already here', a documentary focused on Afro-Brazilian religious practices in Complexo do Alemão (Raízes em Movimento, 2021). *Dona Josefa*, the short documentary produced in the 2021 edition, resulted from the classes I attended

3 The capitalisation of '*Black*' in this text follows a widely adopted convention that recognises '*Black*' not merely as a descriptor of skin colour but as an identity rooted in shared histories, cultures, and struggles. Major journalistic institutions, including *The New York Times* and *The Associated Press*, have formalised this usage in their style guides, citing the term's sociopolitical significance and its role in affirming collective identity (see Coleman, 2020; Meir, 2020). This decision aligns with historical advocacy, such as W.E.B. Du Bois's (1899/2010, p. 1) campaign to capitalise '*Negro*' in the late 19th century, which was ultimately recognised as an act of racial self-respect. The distinction between '*Black*' (as an identity) and '*black*' (as a colour) reflects a broader linguistic shift in acknowledging racialised experiences and resisting the erasure of Black communities in public discourse.

(Mostra Memórias Faveladas, 2021a). The three films were screened at film festivals for community-driven storytelling.

The workshop sessions were audio- and video-recorded and later transcribed by me. I am currently working with *Raízes em Movimento* activists Alan Brum Pinheiro and David Amen—whose efforts made the workshop possible—on these transcribed materials for the book *Language, (In)security, and Activist Education (in press)*. Figure 1 captures the virtual environment of *Google Meet*, where the first six months of Faveladoc took place. At this moment, Joice was projecting the opening slide of the class '*Gender, Segregation, and Culture*', which is the focus of my discussion in this text. The slide features the photograph by photojournalist Mauro Pimentel, which I described earlier. Notably, the choice of this image served as a strategy to highlight the predominant role of women at the forefront of caregiving. The apparent gender of most protesters is female, in stark contrast to the exclusively male group of residents who were killed and for whom these women were protesting.

Figure 1: Screenshot of the Google Meet digital space of Faveladoc

My argument in this chapter is that this class was an instance of unlearning. As in other moments of the workshop and my fieldwork, unlearning here involved reframing precarious conditions, disengaging from ideologies detrimental to marginalised communities (including racism and patriarchy), and nurturing ethical forms of collective flourishing. Beyond Joice, fifteen young residents of Complexo do Alemão participated in this session, connecting remotely via *Google Meet*. Following scholars in cybernetics, digital anthropology, and sociolinguistics (Bateson, 1972; Blommaert, 2019; Cesarino, 2022; Horst & Miller, 2012; Maly, 2023), I approach digital interaction not as a mere technical mediation of offline relationships but as part of a sociotechnical infrastructure in which human and non-human agents interact, shaping possibilities for action and understanding. These infrastructures are complex systems where agents co-emerge through interaction, and where digital media afford specific forms of engagement. In this chapter, I explore how these affordances were strategically mobilised by participants to resist patriarchy and racism in favelas. Online environments do not merely replicate face-to-face encounters but reconfigure them (Blommaert, 2019; Jacquemet, 2019; Maly, 2023; Silva & Maia, 2022), generating new communicative, epistemic, and affective conditions (Conti & Lenehan, 2024). Although sociotechnical infrastructures have been strategically co-opted by a constellation of far-right actors—including political figures, corporate agents, and influencers—who engineer digital technologies to deepen divisions and incite violence (Cesarino, 2022; Maly, 2023; Silva, 2020), I argue in this chapter that this emerging collective of workshop participants instead reconfigured the affordances of digitalisation and language to challenge dominant ideologies and cultivate alternative modes of knowledge production and solidarity.[4]

This chapter examines some forms of affect, positioning, and identification that emerged among participants through their interaction with Faveladoc's sociotechnical infrastructures, as well as with Joice's discourse—particularly the substrates she offers as the session's instructor and as a social scientist. As I will discuss below, Charles Goodwin (2018) defines substrates as any semiotic or linguistic material introduced by a participant and subsequently transformed by others. The participants' uptake of Joice's conversational contributions reveals reorientations—or instances of unlearning—in the ways they understand gendered Black bodies in a society as unequal and

4 My interpretation of educational activism in the Faveladoc workshop is an ongoing endeavour. In this regard, I have previously examined Joice Lima's class as an instance of the flourishing of the seeds of Marielle Franco, a Black Rio de Janeiro councillor who was brutally murdered in 2018 (see Silva & Lopes, 2023). I have also conducted an initial analysis of this class as a process of collective unlearning, particularly addressing the attempt to heal the introjection of racism and colonialism (see Silva, 2025). Although drawing from the same dataset, this chapter differs in both focus and form from my previous discussions of this session.

authoritarian as Brazil (Nobre, 2022). Since reorienting knowledge is a way of producing hope (Miyazaki, 2004)—not as escapism or naïve optimism, but as practical reason (Bloch, 1986)—the practice of unlearning that I describe below is also an emergent and situated method of hope (Silva & Borba, 2024; Silva & Lee, 2024).

In what follows, Section 2 contextualises Faveladoc within broader processes of (in)securitisation in Rio de Janeiro's favelas, outlining how activist education can resist systemic violence. It also presents my ethnographic approach and theoretical framework, drawing on scholarship on unlearning, interculturality, and sociotechnical affordances—concepts that will help me analyse the workshop as a digital ecology. Sections 3–5 are empirical ones. The first of these sections examines Joice Lima's discourse as a substrate, focusing on how she frames gender, race, and militarisation to foster critical engagement. The second section explores how heterosexual male participants take up her discourse to question essentialised notions of masculinity, particularly in relation to caregiving and vulnerability. The third section turns to queer participants, analysing how they rework Joice's insights to interrogate heteronormative ideologies and reclaim agency over their sexual identities. The conclusion elaborates on digital mediation as a possible catalyst for ideological reorientations, positioning unlearning in Faveladoc as a practice of hope that mobilises language and technology to challenge colonial legacies and foster collective flourishing.

2. Unlearning amid (in)securitisation

To better explain the joint unlearning that took place in the workshop session, a few words on my fieldwork are in place. Originally, my research, conducted with colleagues Adriana Facina and Adriana Lopes, centred on literacy practices, especially as fostered by the grassroots collective *Raízes em Movimento* (see Silva et al., 2015). However, our focus shifted as we became more aware of the dynamics of (in)securitisation affecting everyday life in favelas. Favelas emerged at the end of the 19th century, as former enslaved people and their descendants settled on available hillsides due to a lack of policies offering possibilities of housing and labour for these groups. In the 1980s, following the establishment of drug factions in Brazil, these spaces became targets of systemic racism and heavy-handed policing. This history has not only shaped the physical landscape but also reinforced an association of favelas with crime and insecurity, stigmatising their residents in both public discourse and government policies (Machado da Silva & Menezes, 2019; Souza, 2020).

My early fieldwork underscored the complexity of (in)security in this context, where even seemingly ordinary activities were punctuated by the surveillance of armed groups. For instance, during an interview with Raphael Calazans, a *Raízes em Movimento* activist and funk musician, we were monitored first by a drug trafficking lookout and then by local police, who patrolled the area in an intimidating display of force (Silva, 2023, pp. 8–9). This experience illustrates how two different regimes of control coexist within favelas, each staking a claim to authority through surveillance, and sometimes through force. These experiences underscored how the residents of Complexo do Alemão face overlapping systems of (in)securitisation that challenge any singular notion of "security" (Rampton et al., 2024, pp. 300–304). Residents of middle- and upper-class neighbourhoods may support policing initiatives as a means of creating 'safe' zones in urban areas, viewing harsh repression of peripheral areas and those who look like 'criminals' as positive security measures. In contrast, for favela residents, these same interventions often represent extensions of state repression, enacted in an environment already under the constant vigilance of both law enforcement and local crime factions.

To capture the nuanced realities of security in favelas, I engage with sociolinguists and critical security scholars' notion of (in)securitisation (Bigo & McCluskey, 2018). Rather than taking security as a universal condition, (in)security signals a process where certain populations—especially racialised and marginalised communities—are identified as existential threats and subsequently subjected to 'exceptional measures' under the guise of protection. As McCluskey et al. (2021) note, these measures often suspend conventional political rights and rules, producing a governance predicated on constant surveillance, militarised control, and selective protection. In Brazil's favelas, this form of (in)securitisation emerges through both visible policing tactics and broader discursive constructions that portray favela residents as threats to national security (Machado da Silva & Menezes, 2019). This framing legitimises exceptional measures, including heavy police presence and militarised raids, yet fails to account for the socio-political claims of residents.

The data I will discuss in the next empirical sections is an example of unlearning such entrenched militarised ideologies in Brazil. I use the term unlearning in a basic sense as "(moments in) educational practices aimed at disengaging students from particular ideologies, embodied dispositions, and forms of talk" (Silva, 2025, p. 1). Further, my perspective of unlearning resembles efforts in critical education (Windle & de Araujo Rosa, 2023), linguistic anthropology (Briggs, 2021), and applied linguistics (Fabricio, 2006) towards repurposing and transforming received ideologies. Yet the analysis of unlearning in the Faveladoc seminar that I will discuss ahead builds more closely on the ethnographies of Muzna Awayed-Bishara (2023) and Rodrigo Borba (2016), which I summarise below.

Awayed-Bishara (2023) examines how Palestinian students in Israel "learn to unlearn colonial fear" (p. 16). Her ethnography of 'colonised education' documents how schools function as extensions of state surveillance, compelling teachers to depoliticise discussions of Palestinian identity and history. For instance, Israeli educational directives prohibit mention of 'al-Nakba', the Arabic term for the 1948 Palestinian displacement (Awayed-Bishara et al., 2022, p. 1056). They describe how a teacher, rather than engaging with a student's remark on political oppression, redirects the lesson to apolitical topics (pp. 1058–1065). Such moments, though subtle, reinforce a broader policy of de-Palestinisation, mirroring the surveillance and restrictions students face beyond the classroom.

Yet Awayed-Bishara's research also highlights how teachers and students push back, reframing education as an act of "unlearning colonial practices of *de-Palestinisation*" (Awayed-Bishara, 2023, p. 16, emphasis in original). In one case, a teacher fosters discussion around '*tawra*' (revolution), allowing students to articulate experiences of occupation and oppression. Unlike the previous example, this approach positions English as a tool for voicing Palestinian realities on a global stage (Awayed-Bishara et al., 2022, pp. 1065–1068). Unlearning in this context means not only rejecting colonial metapragmatic constraints but also forging new avenues for political expression. As Awayed-Bishara (2023) argues, this pedagogy of unlearning—what she calls 'sumud' ('steadfastness') pedagogy—reclaims language as a means of resistance rather than domination.

Borba's (2016, 2019) work on the transsexualising process in Brazil highlights the complexities of unlearning within oppressive institutional frameworks. His ethnography of trans individuals navigating the Brazilian healthcare system reveals how unlearning operates as a contextual, adaptive process. Borba (2019) shows that those seeking hormone therapy and gender-affirming surgery must 'unlearn' their personal understandings of gender to conform to a rigid medicalised model of 'true transsexuality'. Rooted in international psychiatric and medical discourses, this model imposes narrow behavioural expectations. For instance, under the medical notion of gender dysphoria

(Newman, 2000), individuals are expected to express aversion to their birth-assigned genitalia, though this is not always the case. They are also presumed to exhibit stereotypical traits associated with their identified gender, an assumption that often does not align with lived experiences. In this context, unlearning is less an emancipatory act than a survival strategy—requiring individuals to suppress or strategically perform aspects of their identity to meet institutional expectations.

Borba's research further illustrates the situational nature of unlearning. Some trans individuals modify their appearance and behaviour only during medical appointments, aligning with the medical model temporarily to secure treatment. Outside the clinical setting, they often revert to self-expressions that feel more authentic, highlighting the selective adaptation involved. Borba thus frames unlearning as a tactical, context-dependent process—one that responds to institutional power while preserving elements of personal agency. His ethnography underscores the need to view unlearning within its sociopolitical context, particularly when institutional structures impose pathologising standards that shape marginalised communities' access to identity and resources.

In addition to drawing on Awayed-Bishara and Borba's perspectives on unlearning, I examine its role in Faveladoc as a practice of developing intercultural competence within a digital space (Oliveira & Tuccillo, 2024). Scholars in intercultural communication build on Jürgen Bolten's (2015) pioneering distinction between culturality and interculturality (see Conti, 2024; Oliveira & Tuccillo, 2024). Bolten (2015, p. 118) defines cultural encounters as engagements with the 'familiar'—culturality, for him, refers to the "familiar multiplicity" that emerges in interactions among members who share relatively common ways of thinking and acting (see Oliveira & Tuccillo, 2024, pp. 57–61). By contrast, Bolten (2015, p. 118) defines interculturality as "unfamiliar multiplicity". Expanding on this idea, Conti (2024, p. 20) explains that "interculturality signifies encounters with the unfamiliar, which can occur not only in unfamiliar contexts but increasingly within familiar contexts, due to the intensifying dynamics of change". Interculturality is thus characterised by the uncertainty we experience when engaging with difference—an uncertainty that, over time, can evolve into an expanded form of culturality, fostering a habituation to new ways of being and relating.

I see the process of unlearning in the data below as one in which deeply rooted certainties about gender, sexuality, and race—colonial modes of perceiving the racialised, gendered, and sexualised body in the periphery—are reframed as 'uncertain' by the instructor. In line with Bateson's (1972) formulations on cybernetics and systems theory, the Faveladoc class constitutes an ecology. Within this online setting, the group's engagement with digital and discursive affordances entails navigating the epistemology of the sociotechnical system that takes shape through their interactions—both among themselves and with the system's resources. Through the interplay of digital and discursive affordances—most notably, the online mediation of educational interaction in a context of physical distancing and Joice's metapragmatic discourse—participants interrogate a culturality anchored in colonial modes of sensing and understanding the world. Through intercultural friction, they transform the culturality embedded in colonialism and project more expansive modalities of identification and belonging. The next section turns to the analysis of this intercultural dynamic in practice.

3. Transforming past action

In this section, I examine how students engage with Joice's authoritative discourse. Before doing so, I first outline a diachronic view of semiosis that helps illuminate the dialogical dynamics of the workshop. As we know, Ferdinand de Saussure (1916/1986), in his *Course in General Linguistics*, distanced himself from the dominant diachronic approach to language, instead emphasising its structured, synchronic nature. He argued that focusing on the relationships between linguistic elements at a given moment, rather than their historical transformations, better reveals language's internal structure. This view has been widely critiqued (e.g., Blommaert, 2010; Derrida, 1977; Jakobson, 1980; Silverstein & Urban, 1996). In linguistic anthropology, for instance, Bauman and Briggs (1990, p. 73) propose that producing discourse is not merely a matter of contextualising but an act of decontextualising textual units from past interactions and recontextualising them into novel texts—a process they call entextualisation. Every utterance thus carries elements of its history.

Similarly, Goodwin (2018, p. 1) suggests that "[n]ew action is built by decomposing, and reusing with transformation, the resources made available by the earlier actions of others". While Bakhtin (1981) emphasised the dialogical nature of language, Goodwin (2018) and others (e.g., Bauman, 2004; Enfield & Sidnell, 2017) expand this notion, showing that human action is shaped by the adaptation and transformation of prior semiotic material. Goodwin illustrates this with an example generated by Marjorie Goodwin in her fieldwork with African-American children. Tony and Chopper are playing in the street and produce the following dialogue:

> Tony: Why don't you get out of my yard?
> Chopper: Why don't you make me get out of the yard?
> (Goodwin, 2018, p. 3)

In the conflict that emerges between the two children, Chopper "us[es] resources provided by his opponent [and] *transforms* them into something new and quite different" (Goodwin, 2018, p. 3, his emphasis). Chopper makes a few simple syntagmatic alterations to Tony's statement, such as replacing 'my yard' with 'the yard' and adding the verb 'to make', creating a new combination of elements in the utterance that functions as a challenge to his opponent. Goodwin points out that reusing and transforming past sign complexes are ubiquitous in human action and extend beyond verbal signs. This principle aligns with Charles S. Peirce's (1955) concept of semiosis, where the interpretant—the translator of meaning between sign and object—incorporates earlier signs and subsequently becomes the substrate for future ones (see Parmentier, 1994).

This perspective of human action as both dialogical and transformative informs my analysis of unlearning in Faveladoc. In the workshop on gender, segregation, and culture, students collectively recycled and transformed Joice Lima's discourse on inhabiting a gendered and racialised body in a militarised context. Her initial discussion functioned as a substrate—a term Goodwin (2018, p. 32) defines as "whatever utterance, or other public source, [that is] being used as the point of departure for the operations used to build a subsequent action". He draws from earlier notions of substrates in sociolinguistics (where the 'substrate language' is the language that provides the base for creolised mixtures) and biochemistry (which defines "substrate [as] a molecule upon which an enzyme acts", p. 39). Within the collective unfolding of interaction, actors are constantly drawing on previous textual or semiotic units to produce their present utterances—and the latter may well serve as substrates for future utterances, in a constrained yet open-ended process. However, as Goodwin warns, a substrate is not a blank or uniform structure; rather, it is a "semiotic landscape with quite diverse resources" that enables "transformative sequences of action" (Goodwin, 2018, p. 39).

A defining aspect of Joice's substrate in Faveladoc was her effort to frame gender through an intersectional lens. As Díaz-Benitez and Mattos (2019) note, intersectionality emerged in Black feminism during the 1990s, highlighting the interplay of social categories historically treated in isolation—such as gender, race, and class. While Kimberlé Crenshaw (1994) coined the term, its core concerns date back to figures like Olympia de Gouges (1791/2016) and Sojourner Truth (1851), who articulated the interwoven nature of oppression. Joice's approach deliberately distanced itself from what she termed a "European matrix" in gender and sexuality discourse—that is, she embraced a discussion of gender more attentive to the local realities of the favela. She emphasised:

> Joice: It's essential for us to start discussing gender within a context of militarisation. In academia, we've commonly approached gender through European concepts, right? But for those of us from the periphery, many of those ideas simply don't align with our reality. And when I talk about gender, I'm not just referring to female or feminised bodies. Gender is a broad discussion, and in the favela, there's no way to address it without also considering male and masculinised bodies in this process.

Aligning with debates that reject essentialist notions of gender (e.g., Borba, 2014; Butler, 2019; Sabsay, 2023), Joice avoids treating categories like 'man' and 'woman' as fixed. Her lexical choices—such as female and feminised bodies and male and masculinised bodies—underscore the distinct ways gender and sexuality are expressed and perceived in the favela.

To illustrate the stakes of gendered and racialised violence, Joice invoked the case of Claudia Ferreira, a Black woman whose masculinised body rendered her a target of state violence—an extension of the lethal policing disproportionately affecting Black male bodies in Brazil (Carvalho, 2020). Claudia was shot by police in 2014 while buying bread, allegedly mistaken for a trafficker because, as officers later claimed, she was holding a coffee cup that "would have been mistaken for a gun" (Carvalho, 2020, p. 6). Her body was then dragged nearly 300 metres by a police vehicle, an act recorded by residents and widely circulated in the media. Yet, rather than being remembered by name, she was frequently reduced to the label 'mulher arrastada' ('the dragged woman'), a dehumanising erasure that compounded the violence against her (see Duncan, 2020).

As Joice explained, masculine and masculinised bodies are the easiest targets for bullets, while feminine and feminised bodies are subjected to different forms of violence, often linked to caregiving and sacrifice. She underscored how gendered expectations persist within the favela, recalling an encounter with 'Mães de Manguinhos', or 'Mothers of Manguinhos,' a collective of mothers seeking justice for their sons killed by police (Araújo et al., 2020):

> Joice: I was with the 'Mães de Manguinhos', and one of them told me: "When my son died, of course, I was devastated. But after a while, I started taking care of myself again, going out, having a beer, dancing with my friends. And then the neighbourhood started judging me. People said, 'How could she? Maybe she's actually relieved her son is gone'". That's what she told me. But when it's a man: "Poor guy, he's just drowning his sorrows at the bar, trying to clear his mind from the pain".

Joice's observations highlight the gendered burden of grief. While men are granted public expressions of mourning, women who reclaim moments of joy after loss are harshly judged. '*Mães de Manguinhos*' embodies resistance to these constraints, challenging the expectation that their grief must remain endless and invisible. By exposing these contradictions, Joice prompts students to question who has the right to mourn, heal, and experience pleasure.

Her discourse offered the class an intersectional lens on gender and race amid (in)securitisation. By rejecting Eurocentric gender frameworks and insisting on locally rooted perspectives, she foregrounds how militarisation disproportionately targets bodies in distinct yet interrelated ways.[5] Through cases like Claudia Ferreira, she reveals how race and gender intersect to determine whose bodies are killable and whose are subject to erasure and abuse.

4. Unlearning essentialised gender norms

In this section, I examine how two Black male participants, Manu (early 20s) and Ricardo (early 40s), responded to Joice's substrate, demonstrating how they reused and transformed her discourse in their unlearning of internalised social scripts. Their engagement unfolded within the ecology of the workshop

5 Joice's point about avoiding the "approach [of] gender through European concepts" seems tied, in her discourse, to the tendency in former colonies like Brazil to take theories from former metropoles at face value. These theories sometimes overlook racialised and marginalised bodies. As Xhercis Mendez (2015, p. 42) reminds us, in many liberal (read: Western and Anglo-European) frameworks, "'gender' and its concomitant 'Man' and 'Woman' function to obscure the histories and bodies of those who bear the historical mark of slavery and colonisation, whether intentionally or not".

(Bateson, 1972), where the sociotechnical assemblage—the online setting, digital affordances, and group interactions—enabled new forms of knowledge production and unlearning.

Consider the following interaction, in which Manu demonstrates an emerging awareness shaped by Joice's substrate:

> Joice: Moving away from that context to another type of violence—the fight for food, right? We know this is part of a slow-death project that gradually deteriorates people. It's not a quick death, like a bullet. It's the slow degeneration of the peripheral body. In Raízes, we organised an aid and prevention effort for COVID. Manu was with us at times. And we distributed food baskets. So, who were the main figures in this effort?
> Manu: Now I've realised that most of the people interviewed by the social workers were women. And the person assisting them was also a woman, right?
> Joice: Yes, the majority were predominantly women. And when I talk about men's roles in this space, I'm referring to the broader context of patriarchy. Men will never be in a position where they feel diminished.

In her substrate, Joice reflects on an experience she and Manu shared—working in the Complexo do Alemão Crisis Committee, created by residents and activists to support those affected by the COVID-19 pandemic. Responding to Joice, Manu uses the phrase "Now I've realised" (originally 'agora eu percebi' in Portuguese), signalling an emerging awareness. His realisation foregrounds the often-invisible burden of care disproportionately carried by women, who create interdependent networks of support, while men largely remain absent—stepping in only when aiding their partners. Joice then situates Manu's observation within a broader critique of masculine privilege, explaining that even in contexts of struggle, men are not expected to "occupy a place of subjugation". She points out that rigid societal constructs dictate that "the man has a place of privilege in relation to the woman [...] even if, in this struggle for food, in seeking donations, it's not a place of subjugation". This framing highlights how patriarchal expectations limit men's ability to assume roles associated with vulnerability and caregiving, further entrenching gendered inequalities.

Manu extends this reflection to Black masculinity, recalling a conversation with a friend in the military:

> Manu: He was a big Black guy, and in the army, they have this thing where the Black man can't be fragile; he has to withstand everything. When he felt sad or tired, people would say, 'No, man, you're a Black man, you can't be like that'. It's double the pressure on us.

Through this example, Manu illustrates how Black men are systematically discouraged from displaying vulnerability, intensifying the physical and emotional toll of these demands. Joice expands on this by connecting masculine ideals to health disparities, noting that societal expectations discourage men from seeking medical care:

> Joice: The man doesn't go to the doctor; he doesn't put himself in that place. But the woman who neglects gynaecological exams is labelled 'dirty', a woman who doesn't take care of herself.

This contrast reveals a gendered double standard: While men's detachment from healthcare is normalised, women are judged harshly for the same neglect. Ricardo builds on this discussion by linking Black masculinity to broader structures of precarity, questioning the impact of social pressures on men's well-being:

> Ricardo: I think it might be worth looking into research on suicide rates or men abandoning their homes. The killable body, the relationship with Blackness… there's a lot of social pressure to keep working. I live that.

In the excerpt above, Ricardo inquires Joice about academic studies on the rates of suicide or abandonment of homes by men, given their identification as killable bodies in Joice's previous words, and the prevalence of coping mechanisms like alcoholism. For Ricardo, these patterns reveal the toll that sustained social pressure takes on Black men, both in terms of physical safety and psychological health. He points to his own experiences, sharing how "the social pressure to keep working" has also shaped his life, highlighting how these pressures reinforce cycles of vulnerability.

Joice's reply opens up the discussion to reflect on how gendered expectations are not easily challenged, especially within patriarchal structures that serve the interests of "white men and the broader context of patriarchy". She notes that such frameworks use "gender asymmetry", especially in the form of physical strength, to subjugate women. At the same time, Joice warns against the trap of "discussing gender from a closed concept" that cannot fully account for the realities of the periphery. She emphasises,

> Joice: I'm not saying that these [concepts] are disposable [...] but we need to keep our feet on the ground and observe our surroundings attentively.

Through this situated perspective, Joice suggests that reflecting on local realities can give rise to new understandings of gender and vulnerability, rather than relying on universalised concepts (see Mahmood, 2005; Mendez, 2015; Sabsay, 2016).

The bits of interaction I mobilised in this section display how Joice's discourse on intersectionality—shaped by the sociotechnical assemblage of the workshop—prompted Manu and Ricardo to interrogate deeply embedded social scripts surrounding Black masculinity. By situating these expectations within the broader dynamics of patriarchy, militarisation, and racialised vulnerability, Joice fostered an ecology of unlearning, where students engaged critically with the pressures shaping gendered lives in the favela.

5. Unlearning LGBTQI-phobia

In this section, I analyse the responses of three queer participants—Flavia, Manolo, and Marina—who build on Joice's critique of hegemonic norms of gender and sexuality. Manolo and Flavia are young Black participants in their early 20s, and Marina is a white participant in her early 30s. Each of them articulates modes of disengaging from ingrained societal judgements around LGBTQI+ identities. Their perspectives not only echo Joice's substrate but also reveal how they engage in a re-evaluation of prior beliefs. Flavia is the first to intervene:

> Flavia: I was that child who bullied others because I learned right and wrong only later. I think I made a lot of people feel bad at one time in my life. Until I discovered that my sexual orientation was okay, but for society, for the world, it was something bad. At home, they said it was the devil in my body. And then I started to see how much I made others feel bad and how people made me feel bad for judging me as a demon for liking women.

Flavia identifies herself as having once bullied others, a behaviour she later recognises as rooted in her own attempts to conform to societal norms that demonise LGBTQI+ identities. She acknowledges that her past actions were a way of shielding herself from being judged as a "demon" for "liking women". Flavia draws on Joice's discourse to illustrate how she unlearned lesbophobic norms that, as she puts it, "made others feel bad and [...] made me feel bad". Interactionally, she offers an example of how deeply ingrained gender and sexuality norms—what can be understood as a colonial culturality—cause harm, aligning with Joice's critical discourse. Yet, the fact that she spontaneously shared this reflection—just as Manolo and Marina would, as we will see—suggests that unlearning was also taking place within the digital space of *Google Meet*, where the class was held. In articulating her experience of coming to terms with her own sexual orientation, Flavia was not only constructing knowledge but also making it public to the group watching and listening to her through their screens.

Manolo's reflection extends Flavia's discussion, revisiting his own childhood experiences with a non-conforming gender expression:

> Manolo: That was a great comment, Flavia. When I was a kid, I didn't fit into that fixed place, you know? I was a boy who talked a lot, liked poetry—so I was always branded 'viadinho do grupo' [the little faggot of the group]. And I didn't even fully understand what that meant yet. Then, when I realised I could like boys and that was fine—or that I could like girls too—it was like a switch flipped in my head. Like, dude, I don't have to choose; it doesn't have to be one way or the other. Sexual orientation is fluid, way more natural than people make it seem. Over time, I understood that better, but it's also tied to where I've lived. Just like leisure—around here, men stop at the bar because that's all there is, you know? We're cut off; we don't have access to the city, to other places, other ways of being. So that's it—the bar is the only way to socialise, and because of that, we miss out on a lot.

The switch metaphor—"a switch flipped in my head"—is telling in Manolo's narrative. In his account, the chance to socialise in spaces where sexuality is viewed in more alternative ways enabled him to flip this switch. That is, it allowed him to unlearn rigid norms surrounding the expression of sexuality and desire. When Manolo speaks about socialising at the bar as one of the few leisure options for men in the favela, he is actually echoing Joice's previous comments. Circulating through the city and other social spaces provides him with choices to "switch" between discourses. Of course, unlearning certain social norms and overcoming the trauma of injurious words is not as simple as the switch metaphor might suggest. Nonetheless, Manolo's narrative (like Flavia's) points to the performative power of practices like bullying, which function to 'put' children and teenagers "in their place" (Hahn, 2021). Given the violence of these practices—as signalled by insults used against Flavia and Manolo, such as "demon" and 'viadinho do grupo'—this 'place' can also be a non-place (Butler, 1997), that is, it can be a space of epistemic disorientation and psychic suffering (Silva, 2017).

A few minutes later, Marina revisits the intrusive path of bullying into an individual's psyche as she reflects on the discomfort she felt toward her mother's homosexuality:

> Marina: Yes, it's funny because when I found out that my mother was homosexual, I started to feel a lot of anger toward lesbian women. I [was closeted] as a lesbian myself because I felt those things. I didn't understand why I fell in love with female teachers and not male teachers. And then I was like, 'this is absurd', because society always did that to my mother, and so I did it to her and to myself, right? That's why I say that nobody had to accept me. I was the one who had to accept myself. People have to respect me.

In the flow of semiosis, the students' interpretants (Peirce, 1955)—their translations of the meaning relations proposed by Joice and the Faveladoc team—closely resemble one another. Marina's response follows a similarly introspective path as Flavia's and Manolo's. She recalls that her discomfort with her mother's non-hegemonic sexual orientation was, to a large extent, a negative projection of her own repressed attraction to women. In reflecting on this, Marina unpacks a complex process of internalised lesbophobia shaped by societal prejudice against LGBTQI+ individuals. Her 'switching off' of internalised repression is particularly revealing. Marina emphasises: "Nobody had to accept me. I was the one who had to accept myself. People have to respect me". In other words, unlearning for Marina meant that, when it came to her sexuality, she no longer needed external validation to be who she wanted to be—a lesbian woman. While she expects others to respect her identity, the authority over it (i.e., the acceptance) rests with her alone.

Joice responds to the participants' reflections by emphasising "the power of language" as a fundamental resource for unlearning. For her, the ability to question deeply embedded norms around gender, sexuality, and race begins with understanding language as performative (Austin, 1962). Joice highlights:

> Joice: I think I mentioned several important things, right? But one more important thing is the power of language, right? And then, the multiple forms of language, the access to that language, and the ability to decipher these codes, right? When we don't have even basic education that allows us to decipher some codes, we're only going to reproduce them. And the basic education I'm talking about? I'm not talking about going to college, no, I'm not. Because we know countless people, including those in power, who went to college and did courses that should have given them a sharper and more coherent critical sense. So, university isn't always going to be the place that awakens a true and coherent critical sense in people or dismantles the world's ills. Not necessarily. [...] Instead, we need to develop astuteness and power to read these languages [...]. We know we just had an election that was heavily based on fake news, right? And this is an important point that shows the power of language, right? And when you can't decode that language, you just swallow it.

Joice's reflections echo Paulo Freire's (1968/1970) critique of banking education, a linguistic ideology that posits language as simply a medium of communication. As in a bank, the teacher only deposits meanings in the minds of students, who will later withdraw these units. She points out that this ideology had great traction in Brazil's 2018 national elections, when Jair Bolsonaro was elected. In her view, many people just 'swallowed' fake news. Instead, Joice suggests seeing language as a resource for building critical awareness. Her critique is grounded in an ideology of language as inherently performative and flexible—able to reinforce dominant structures but equally capable of being repurposed for self-liberation.

Joice also points out that formal schooling or university does not necessarily provide a critical perspective. As she puts it: "Because we know countless people, including those in power, who went to college and did courses that should have given them a sharper and more coherent critical sense". It is worth noting that aspirations are shaped not within a single institution but across multiple social contexts (see Agha, 2007; Borba, 2016; Silva, 2020; Wortham & Reyes, 2020). Moreover, the rise of conservative ideologies in Brazil, despite state-led inclusion policies and efforts at critical education, demonstrates that ideological orientations often exceed the progressivist direction of formal policy design, including educational policy (see Cesarino, 2022; Nobre, 2022).

At the same time, the availability of sociotechnical affordances and varied participation frameworks is fundamental for individuals to be socialised into interrogating the semiotic details of particular ideologies—or, in Joice's terms, "deciphering the codes". In this sense, Faveladoc, as an activist-led educational initiative, provided precisely such participation frameworks, immersing students in alternative discourses not only on filmmaking and artistic practice but also on broader social issues such as gender, sexuality, and racial inequality. Importantly, the digital environment was not merely a conduit for these discussions but an active component of the pedagogical process. Digital and discursive affordances shaped the very conditions under which students could engage in unlearning, fostering a space where meaning-making practices were refracted through the sociotechnical assemblage of the workshop.

6. Conclusion

In this article, I examined a situated experience of unlearning, facilitated by a Black woman, social scientist, and resident of a Brazilian periphery. This participation framework was embedded in broader chains of interaction, including other Faveladoc classes and everyday speech events. As seen in Awayed-Bishara's (2023) and Borba's (2019) ethnographies, spaces where individuals learn to decipher the codes—to navigate layers of oppression and inequality—rely on speech chains that gradually lead subjects into shifting perspectives. Through tailoring the affordances of *Google Meet* and other digital resources, Joice Lima deployed multimodal strategies—such as an image of women protesting a police massacre (cf. Figure 1)—and a critical, intersectional view of gender, race, sexuality, and militarisation. In line with a dialogic view of human action (Bauman, 2004; Goodwin, 2018), these elements served as a substrate—a public source for new forms of engagement. Participants' responses indexed their unlearning of essentialist views on race, gender, and sexuality.

Following Bolten's (2015) conceptualisation of interculturality as an engagement with the unfamiliar, the digital format of the workshop catalysed intercultural friction. The unfamiliar emerged not only in the reworking of old assumptions but also in the modes of interaction enabled by the online setting. The digital classroom fostered new relational configurations, decentring conventional ways of engaging with knowledge and demonstrating that unlearning extends beyond the rigid structures of institutionalised education.

Digital affordances thus played a key role in this epistemic transformation, creating new forms of participation that exposed the ideological foundations of gendered and racialised oppression. Moreover, a practical result of the Faveladoc—community-driven documentaries—are available as digital media on *YouTube*, which can potentially spread the messages and the unlearning processes further (see Instituto Raízes em Movimento, 2016; Mostra Memórias Faveladas, 2021, 2022).

While sociotechnical infrastructures have been weaponised for hegemonic and extremist ideological projects (Cesarino, 2022; Maly, 2023; Silva, 2020), this workshop exemplified how digital and discursive affordances can also be repurposed for counter-hegemonic knowledge production. Faveladoc's digital ecology thus provided an alternative space of knowledge-making—one in which students actively reworked and transformed Joice's critical discourse.

To conclude, while participants in this workshop navigate systemic racism and (in)securitisation, they are not defined by 'living at the limit'. Instead, they project practical action, ethical engagement, and moral positioning that transcend constraints that might otherwise seem insurmountable. This kind of agency has been explored as a practice of hope—not as naïve optimism but as practical action, where individuals mobilise communicative and semiotic resources, networks of solidarity, and knowledge practices oriented towards collective flourishing (Bloch, 1986; Borba, 2019; Miyazaki, 2004; Silva & Borba, 2024; Silva & Lee, 2024). In this sense, the collective unlearning in this digital space was also an act of projecting hope—hope for a possible and more just world, despite the staggering political conditions we have witnessed both locally and globally.

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Sustainability communication between globalisation and localisation

A comparison of corporate websites in the oil & gas industry

Nadine Thielemann and Zlatoslava Savych

Abstract *Sustainability has emerged as a critical global business concept, prompting organisations to prioritise long-term value creation that addresses their operations' environmental, social, and economic impacts. This chapter examines the sustainability communication strategies of major oil and gas companies in four countries (the United States, Austria, Poland, and Russia), focusing on the balance between globalisation and localisation. Given the inherent conflict between the operations of these companies and sustainability priorities, effective communication is essential to maintain their licence to operate and avoid allegations of greenwashing. Our analysis of the sustainability sections on corporate websites examines how companies address the thematic dimensions of the Triple Bottom Line (economic, social, environmental) and how they linguistically present these dimensions to convey their sustainability commitments. Corporate websites as digital platforms reveal how similarities in sustainability communication often stem from shared economic pressures and institutionalised standards, while still allowing for local adaptations. The findings indicate a convergence in sustainability conceptualisation, with all companies framing their efforts as beneficial for shareholder value. However, notable differences emerge in local adaptations, revealing an East-West divide: Russian companies, and to some degree also the analysed Polish company, emphasise corporate philanthropy and patriotic elements, while U.S. companies prioritise diversity and inclusion. The analysed Austrian company takes a mid-position and highlights the role of technology in its concept of sustainability. The chapter situates these findings within a broader theoretical context and discusses the observed strategies through the lens of glocalisation. Moreover, it reflects on the role of digital interculturality in sustainability communication. It highlights how economic and institutional globalisation fosters com-*

munication strategies that transcend national borders. While corporate websites illustrate a shared digital communication culture across countries, this does not imply complete homogenisation. Instead, they underscore the interplay between global formats and localised content, offering new insights into postdigital sustainability communication.

Keywords *Cross-country Comparison; (Post)digital Sustainability Communication; Strategic Communication; Content Analysis; Glocalisation*

1. Introduction

Sustainability has become one of the leading global business concepts of our times. It represents the efforts of commercial organisations to create long-term value by considering how their operations affect the environmental, social, and economic spheres. Global and intergovernmental organisations, such as the United Nations, have formulated sustainable development goals (SDGs),[1] which contribute to the institutionalisation of sustainability as a priority for organisations and institutions and point to the global political and societal relevance of sustainability in tackling the major challenges of our time. Many commercial organisations orient themselves to these, showing how their business operations and strategies integrate and address sustainability. Thus, sustainability pertains to the management's priorities and their communication, i.e., publicly reporting on how the integration of sustainability is addressed in a company's business and management practices.

This chapter examines the (post)digital sustainability communication strategies of major oil and gas companies in four countries, focusing specifically on the sustainability-related content presented on their corporate websites. Sustainability is often used interchangeably with the term 'corporate social responsibility' (CSR) (Montiel, 2008) as both refer to strategic targets encompassed in the Triple Bottom Line: people (social goals), planet (environmental goals), and profits (shareholder-oriented goals) (Elkington, 1997). Sustainability communication is particularly challenging for controversial industries like oil and gas, whose operations inherently conflict with sustainability priorities, especially in the environmental dimension (Du & Vieira, 2012). Beyond the environmental impacts of their operations, which

1 Retrieved July 01, 2024, from https://sdgs.un.org/goals

range from local pollution to significant contributions to global warming, energy issues also involve (geo-)political implications concerning energy supply security. Moreover, policies advocated for by transnational and intergovernmental bodies (e.g., Intergovernmental Panel for Climate Change, EU), such as the Kyoto Protocol and the Paris Agreement, raise public awareness, influence policymakers' priorities, and shape the societal and political landscape. These effects make it difficult or nearly impossible to pursue a communicative strategy based on the denial of global warming as facilitated by the use of fossil fuels (e.g., Halttunen et al., 2022; Schlichting, 2013).

In their communications, oil and gas companies have to navigate the tension between global climate goals and their need to generate shareholder value and perform financially in a societal and political climate that recognises the harmful impact of their operations. Investing in sustainability communication is essential to maintaining their 'licence to operate' (Hurst et al., 2020). This concept refers to the approval and acceptance from stakeholders, such as the local community, government, and customers, necessary for conducting business activities. Without this social approval, a company may face opposition, protests, or even legal challenges that could impede or halt its operations. Thus, sustainability communication should be viewed as a response to societal pressure and a form of accountability to all stakeholders potentially affected by a company's activities.

When comparing how oil and gas companies address sustainability in their communication, we identify drivers that facilitate the emergence of global practices and thus contribute to standardisation and homogenisation. At the same time, we also find factors that promote the localisation of practices. The globalisation of sustainability communication is enhanced by global reporting standards such as the ones published by the Global Reporting Initiative, which also addresses sustainability reporting in addition to mandatory reporting; by frameworks like the United Nations' SDGs, which provide a set of sustainability goals for organisations to reference when setting their priorities; and by transnational or intergovernmental policies such as the Directive 2014/95/EU and now the Green Deal, which outline binding political priorities for economically significant regions.

In addition to global aspects, however, local factors drive companies to adapt their practices and communication to meet the expectations of local audiences and stakeholders. These factors include contextual elements such as differing value orientations associated with culture, understood here specifically as national culture (see Miska et al., 2018). Additionally, more structural factors define the national context in which a company operates, such as the legal system and regulations, the political framework, and the characteristics of the local business environment, including whether energy companies are privately or state-owned (Matten & Moon, 2008). As a result, the conceptualisation of CSR—including stakeholders' expectations and whether it is pursued strategically or altruistically—varies across countries (Planken, 2013).

This chapter explores how major oil and gas companies from the United States, Austria, Poland, and the Russian Federation conceptualise sustainability on their corporate websites to see how globalising and localising factors shape the conceptualisation of sustainability and the way it is communicated on digital media. Our analysis focuses on the sustainability sections of these companies' corporate websites in the country's official national language. These sections are widely accessible and designed to engage a broad range of national and, in the case of the U.S. companies' websites which are in English, also international stakeholders (e.g., customers, shareholders, employees, politicians and administrators, and business partners). This makes corporate websites an ideal platform for demonstrating corporate social responsibility and for renewing and maintaining their license to operate. At the same time, the analysis of corporate websites is particularly interesting as websites are part of a company's owned media and as a digital platform of Web 1.0, a communicative tool for "transmissive" and "one-directional" "communication *of* sustainability" (Weder, 2023, p. 589; emphasis added), i.e., strategically designed communication promoting a particular understanding of sustainability. Our study thus adds to the body of research interested in the divergence and convergence of corporate communication of sustainability (e.g., Lin, 2021; Tang et al., 2015; Vollero et al., 2022). Understanding divergences offers valuable insights into how local cultural, political, and social contexts shape the concept and communication of sustainability. In doing so, the digital communication of sustainability reflects the unique priorities and challenges of specific regions. Conversely, examining convergences sheds light on how globalisation and shared digital platforms foster universal principles and practices in sustainability communication.

From a broader perspective, our study also contributes to research on the global-local dilemma in public relations (Alaimo, 2016; Sriramesh & Verčič, 2019) and the ways it manifests in the (post)digital global society. By exploring how corporate websites balance global standardisation with local adaptation, we provide insights into how organisations navigate the tensions between addressing global sustainability norms and responding to local stakeholder expectations in an interconnected (post)digital world.

To systematically examine the concept of sustainability as presented on each company's website, we analysed the primary thematic dimensions of the Triple Bottom Line (economic, social, environmental) (RQ 1) and explored how these are argumentatively linked and linguistically conveyed (RQ 2). This analysis highlights both country-specific practices and sector-specific commonalities in sustainability communication. It reveals how the analysed companies balance global and local practices in the communication of sustainability.

Our paper is structured as follows: Section 2 characterises the database, describes our sampling strategy, and addresses the role of corporate websites as a digital channel for strategic communication. Section 3 presents our methodological approach. Section 4 outlines and discusses our findings by considering important concepts from strategic communication and patterns in the communication of sustainability. Section 5 situates the findings within a broader theoretical context and discusses the observed strategy through the lens of 'glocalisation'. Finally, the conclusion highlights the practical and theoretical implications of '(glo)localised' strategic communication in an era of increasing digital interculturality.

2. Data

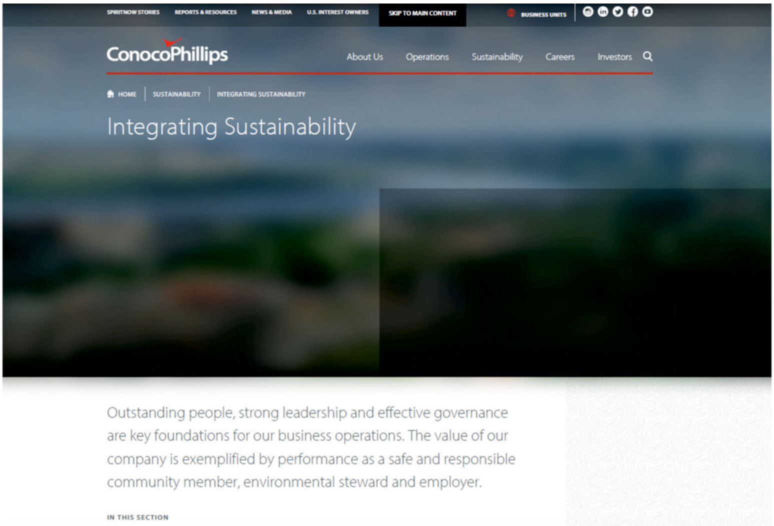
The countries selected for this study represent a diverse range of national contexts, including former socialist countries (Poland, Russia), Western countries (Austria, United States), and both EU and non-EU members. The chosen companies are the largest oil and gas firms in Russia (*Gazprom*, *Rosneft*, *Lukoil*), the United States (*ExxonMobil*, *Chevron*, *ConocoPhillips*), Austria (*OMV*), and Poland (*PKN Orlen*), based on their rankings in the 'Forbes Global 2000' list of the world's leading public companies for the sample year (Forbes, 2020).[2]

The analysis is based on the sustainability sections of each company's website. Corporate websites are a primary platform for strategic communication in the digital sphere next to corporate social media channels (Köhler & Zerfaß, 2019, pp. 353–354). Corporate websites, as typical platforms of Web 1.0, follow a one-to-many communication logic, providing companies with full control over

2 Forbes 2020–The World's Largest Public Companies 2020: Global 2000 (Retrieved June 17, 2020, from https://www.forbes.com/lists/global2000/).

the messages presented to stakeholders. In contrast to Web 2.0 applications, where prosumers actively shape content and influence emerging discourses, corporate websites allow companies to manage their messaging without the unpredictability of external voices such as influencers or journalists (Köhler & Zerfaß, 2019). Social media complicates information control, as a growing number of stakeholder voices can alter or critique corporate narratives. As a result, corporate websites have become a vital tool within communication management for strategically presenting sustainability initiatives to diverse audiences (Weder et al., 2019).

Figure 1: Sample of one section on sustainability from ConocoPhillips.



For this analysis, we gathered data by producing screenshots of all sections on each corporate website dedicated to sustainability. This approach captures the user experience of someone navigating the site to find sustainability-related content. Our data collection method aligns with the concept of websites as 'pull media', which rely on users actively seeking information (Buchele & Alkan, 2012). Through this process, we compiled a dataset of 174 sections (i.e., screenshots, see Fig. 1) that provide detailed coverage of the companies' sustainability activities. The dataset was created by starting with the sections on the corporate websites where the topic of sustainability is initially introduced and then following links to additional sections that explore related topics in greater depth.

Table 1 provides an overview of the scope of sustainability communication for each company.

Table 1: Number of sections per company and country.

Country	**Company**	**Number of sections on sustainability**
Russia	Gazprom	12
	Rosneft	20
	Lukoil	25
	Total	57
US	ExxonMobil	20
	Chevron	12
	ConocoPhillips	48
	Total	80
Austria	OMV	11
Poland	PKN Orlen	26

It is important to note that the sustainability sections were collected in the official language of each company's home country. We assume that these presentations are, at least to some degree, tailored to the needs of a diverse set of local stakeholders. However, it should also be noted that this assumed localisation does not apply equally to the U.S. companies, whose English-language websites are accessible to an international audience, allowing a global public to engage with their content. While translation apps, now commonly integrated into browsers, can facilitate the translation of website content into other languages, this does not necessarily align with the default behaviour or preferences of typical users, who are more likely to engage with content presented in their native language. This suggests that localised communication still holds strategic importance, even in an increasingly digital and interconnected world.

3. Method

To analyse the concept of sustainability, we conducted a qualitative content analysis (Mayring, 2015, 2019), using *ATLAS.ti* for annotation. The analysis included several stages of coding and combined top-down or deductive and open coding.

During the first stage, we identified the thematic strands and issues discussed within each strand. These codes are based on the established division of CSR practices, i.e., the Triple Bottom Line distinguishing social, environmental, and economic targets. This means we identified content focusing on 'social', 'environmental', and 'economic' issues assigning the according label, and adding the code label 'other' where legal and governance issues were presented as part of the company's CSR activities.

This first round of coding allowed for identifying which issues feature prominently and whether sustainability is mainly framed as a matter of social or environmental engagement, thus pointing to a conceptualisation in terms of stakeholder orientation, or whether economic aspects are key and sustainability, accordingly, appears as an orientation towards shareholder value (see van Marrewijk, 2003).

If two or more areas are mentioned in a segment, we assigned multiple code labels. Accordingly, these code overlaps point to ways CSR activities are argumentatively linked.

During the second coding stage, we identified the stakeholders addressed in the sustainability sections. Here, we adopted an open coding strategy and ended up with codes for the most relevant stakeholders, i.e., the 'community', 'customers', 'employees', 'shareholders/investors', 'suppliers & contractors', and the code 'other' for heterogeneous stakeholders occasionally mentioned by some of the companies (e.g., states, children, women, local administrative units/authorities).

This coding process enabled an analysis of how sustainability is conceptualised within each national sample and allowed us to identify cross-country similarities and differences. Close reading of segments assigned to the same code labels provided deeper insights into the thematic issues and practices emphasised by each company, as well as the primary stakeholder groups targeted. Overlapping codes pointed to segments where CSR engagement is framed with argumentative motivations. Beyond thematic and argumentative patterns, which relate to content, examining the dominant patterns uncovered recurring textual and linguistic features specific to CSR promotion.

4. Findings

In the following subsections, we present and discuss our findings in the light of important concepts from strategic and sustainability communication to show in which ways the analysed companies adopt similar practices and thus follow global trends and to what degree they tailor their communication of sustainability to the local context so that it better resonates with a targeted audience.

4.1 Thematic strands in the companies' CSR communication

The first research question posed in this study sought to determine what topics and practices feature prominently in the CSR sections of the selected energy companies. Overall, social CSR emerged as a dominant theme across almost all the examined companies' websites. Notably, the analysed companies in the United States, the Russian Federation, and Poland devote considerably more attention in their sustainability communication to social initiatives compared to environmental and economic issues. In contrast, *OMV*, the Austrian oil and gas company, devotes more attention to environmental matters, with social issues ranking second.

Nevertheless, as most of the analysed sections are dedicated to reporting social practices, the companies primarily focus on their responsibility towards society, thus conceptualising CSR as a form of social engagement. Specifically, all companies highlight education, workplace safety, and healthcare initiatives. For example, health-related efforts include disease prevention and health improvement incentive programmes for employees, initiatives combating various infectious diseases in local communities, funding the construction of healthcare facilities, and medical equipment donations. Education-related initiatives encompass, for instance, support for STEM programmes, partnerships with universities, and the construction of schools in the communities where these companies operate. Employee safety, training programmes, and professional development opportunities also play an important role in companies' CSR activities.

While there are overarching themes in the CSR activities of these companies, regional cultural differences also influence the specific activities they undertake. Corporate charity is one of the major localised social CSR initiatives disclosed by Russian and Polish companies. These practices often include the protection of national heritage, support for folk crafts, local religious institutions, theatres, and museums. Corporate sponsorships are also prominent, encompassing support for local athletes and national teams. In addition, CSR initiatives are tailored to address the needs of local communities, especially where major production plants are located, such as Płock in Poland and Nizhny Novgorod in Russia. These CSR practices are also often oriented towards employees as primary stakeholders, including initiatives related to housing and infrastructure. This orientation connects to practices established during communist times; for example, during the Soviet period, state-owned enterprises provided social services and supported infrastructure in their local communities (Henry et al., 2016; Settles et al., 2009). These expectations have persisted even after privatisation and continue to influence the relationships between state and business companies today (Henry et al., 2016, p. 1341). Moreover, both in the analysed Polish and Russian sustainability communication, there is a strong orientation to the national market, even when companies have operational locations abroad, and a notable patriotic framing of their CSR activities:

> Являясь лидером нефтегазовой промышленности Российской Федерации и одной из крупнейших компаний мирового топливно-энергетического комплекса, **«Роснефть» стремится достичь не только высоких производственных и финансовых показателей, но и внести вклад в развитие и процветание страны, в улучшение качества и условий жизни ее граждан.**
> (Rosneft, Устойчивое развитие)
>
> *As the leader of the oil and gas industry of the Russian Federation and one of the largest companies of the world's fuel and energy network,* ***Rosneft aims not only to achieve high production and financial indicators but also to contribute to the development and prosperity of the country, to improve the quality and living conditions of its citizens.***
> (Rosneft, Sustainable development, emphasis added)
>
> Sport w naszej strategii sponsoringowej odgrywa ważną rolę. Z jednej strony**, jako największa polska firma, czujemy się odpowiedzialni za wspieranie dyscyplin i reprezentacji narodowych, które pozytywnie oddziałują na miliony Polaków**, z drugiej mamy świadomość jak potrzebne jest promowanie sportu amatorskiego oraz zdrowego i aktywnego stylu życia.
> (Orlen, Sponsoring sportowy)
>
> *Sport plays an important role in our sponsorship strategy. On the one hand,* ***as the largest Polish company, we feel responsible for supporting disciplines and na-***

> ***tional teams that benefit millions of Poles****, on the other hand, we are aware of the need to promote amateur sports and a healthy and active lifestyle.*
> (Orlen, Sports sponsorship, emphasis added)

Thus, the CSR initiatives of the analysed Russian and Polish energy companies demonstrate their focus on societal welfare and illustrate how their historical and cultural contexts influence the specific ways in which they implement CSR.

In contrast to their Russian and Polish counterparts, the companies from the United States and Austria in our sample emphasise diversity and inclusion within their social CSR practices. They address various dimensions of diversity, including gender, sexual orientation, race, and ethnicity, and target multiple stakeholders with specific initiatives. These initiatives include the formulation of companies' diversity and inclusion action plans, diversity training for employees to foster an understanding of how inclusion and diversity are integrated into corporate culture, the establishment of diversity councils, and the enforcement of non-discriminatory policies. Additionally, these companies often highlight efforts to promote diversity within their supply chains by including, for example, minority-owned businesses, women-owned businesses, and LGBTQ+-owned businesses. Furthermore, they express a commitment to ensuring the representation of women, minorities, and people with international experience in their workforce, particularly in leadership roles.

The analysed U.S. and Austrian companies also demonstrate a greater focus on human rights within their social CSR activities. Their communication of sustainability mentions respecting the human rights of employees and community members in their areas of operation. This includes non-discrimination, freedom of association, the right to collective bargaining, and the avoidance of forced or child labour. Additionally, they tend to disclose the adoption of corporate human rights policies to manage potential human rights violations as well as organise human rights awareness training for their employees. One possible explanation for this is that, in both the United States and Austria, there is a strong cultural emphasis on individual rights, equality, and social justice (e.g., Schwartz, 2006; see also Inglehart & Welzel, 2005). Current public discourses in these countries heavily focus on diversity, social inclusion and equality, LGBTQ+ rights, and non-discrimination, prompting companies to align with these values.[3] It is important to note that this focus

3 Non-profit organisations and political institutions, such as the *EU Commission*'s LGBTIQ Equality Strategy 2020–2025 and the *U.S. Office of Personnel Management*'s

on diversity, inclusion, and human rights is not present in the CSR disclosures of the analysed Russian and Polish companies. This absence aligns with the socio-political context in these countries. For example, in 2013, Russia enacted a law banning 'propaganda of non-traditional sexual relationships' among minors, which effectively curtails the public promotion of LGBTQ+ rights (Ugolino, 2013). Similarly, in Poland, several municipalities have declared themselves as 'LGBT-free zones', symbolically reflecting broader societal and political resistance to LGBTQ+ rights (Korolczuk, 2020). Consequently, the analysed companies in these countries localise their CSR strategies to align with conservative cultural attitudes and societal values, avoiding topics that conflict with the prevailing political agenda.

Another important topic in the sustainability communication of the analysed sample is environmental performance. Environmental concerns consistently rank second in terms of prominence. However, the notable exception is the sustainability section of the Austrian company *OMV*, where environmental considerations take precedence. As Keinert-Kisin (2015, p. 138) suggests, environmental preservation has become increasingly significant in Austria, influenced by current local and global discourses on sustainability. This evolving societal awareness likely leads to heightened stakeholder scrutiny of *OMV*'s environmental practices and communication strategies. To maintain legitimacy and social licence to operate, *OMV* may prioritise environmental issues in its CSR disclosures, reflecting the importance placed on this aspect by the public. Nevertheless, all the analysed companies address a similar range of environmental concerns, including water and waste management, biodiversity preservation, oil spill prevention, and flaring reduction. This focus on operational impacts suggests a reactive approach to environmental responsibility, with companies concentrating on mitigating the negative environmental consequences of their activities (see Du & Vieira, 2012).

However, there are also some culture-specific differences in the companies' disclosures of their environmental activities. U.S. companies and the Austrian

DEI initiatives, no longer supported by the Trump administration and formerly also presented online (LGBTIQ Equality Strategy: https://commission.europa.eu/strategy-and-policy/policies/justice-and-fundamental-rights/combatting-discrimination/lesbian-gay-bi-trans-and-intersex-equality/lgbtiq-equality-strategy-2020-2025_en; DEI initiatives: https://www.opm.gov/policy-data-oversight/diversity-equity-inclusion-and-accessibility/), actively promote this agenda, which may have broader implications for other stakeholders, including commercial organisations.

company explicitly and frequently mention climate change in their CSR communication. This is often done within the framework of policy implications, financial repercussions, and references to proactive engagement in political dialogues and debates. Occasionally the companies also mention some concrete measures that they take to reduce emissions such as *ExxonMobil* as shown in the following excerpt:

> ExxonMobil works to meet the world's growing demand for energy while reducing environmental impacts and the risks of climate change. **To mitigate greenhouse gas emissions from our operations, ExxonMobil focuses on increasing energy efficiency and reducing flaring, venting and other emissions. We deploy proven technologies, such as cogeneration and carbon capture and storage, and we conduct and support research to develop breakthrough, lower-emission technologies**.
> (ExxonMobil, Managing Climate Change Risks, emphasis added)

It is also important to note that in the analysed Russian CSR communication, climate change issues are also mentioned, however, the companies remain deliberately unspecific about this topic as illustrated in this statement from *Lukoil*:

> **ЛУКОЙЛ признает важность мероприятий по предотвращению глобального изменения климата, поддерживает участие России в глобальных усилиях по сокращению выбросов парниковых газов. […] Компания принимает активное участие в обсуждении и реализации мероприятий в части вопросов регулирования выбросов парниковых газов**, запланированных Распоряжением Правительства РФ от 02.04.2014 №504-р, а также управленческие решения по развитию корпоративной системы учета и управления выбросами парниковых газов.
> (Lukoil, Регулирование выбросов парниковых газов)
>
> ***LUKOIL recognises the importance of measures to prevent global climate change and supports Russia's participation in global efforts to reduce greenhouse gas emissions.* […] *The company takes an active part in the discussion and implementation of activities related to the regulation of greenhouse gas emissions*** *planned by Order of the Government of the Russian Federation dated April 2, 2014 No. 504-r, as well as management decisions on the development of a corporate system for accounting and managing greenhouse gas emissions.*
> (Lukoil, Regulation of greenhouse gas emmissions, emphasis added)

The emphasis on climate change and environmental protection appears to be linked to a divergence in values increasingly separating Western countries from non-Western ones as shown by Jackson & Medvedev (2024) and Haerpfer et al. (2022a). Particularly relevant in this context are the global differences in self-expression values that "give high priority to environmental protection, tolerance of diversity and rising demands for participation in decision-making in economic and political life" (Inglehart, 2018, p. 37). According to the *Inglehart-Welzel World Cultural Map* (World Values Survey, 2023), the United States and Austria place a strong emphasis on self-expression values, whereas Russia and Poland show a weaker alignment with these values. Specifically, regarding environmental protection, the majority of Americans and Austrians surveyed for the study believe that "protecting the environment should be given priority, even if it causes slower economic growth and some loss of jobs" (Haerpfer et al., 2022b). In contrast, only 39.2% of Poles and 40.2% of Russians support this view (see also Cichocki et al., 2024). Furthermore, Javeline et al. (2024, p. 12) conclude, based on their research, that climate change appears to be a less pressing issue for Russian society, with little urgency placed on it by the public or the government. Their findings suggest that Russia's heavy dependence on fossil fuels and its perception of international climate policy as a Western-imposed agenda (Tynkkynen, 2019, p. 54) contribute significantly to this viewpoint. Similarly, studies by Marcinkiewicz and Tosun (2015) indicate that Poland exhibits a lower level of public concern regarding climate change. For example, the Eurobarometer survey on climate change (European Commission, 2019) reveals that only 45% of Poles regard it as one of the world's most serious problems, compared to the EU average of 60% and 62% of Austrians. Consequently, there seems to be less scrutiny from stakeholders and lower societal expectations regarding these issues, making climate change and environmental protection of lower importance in Russia and Poland's oil and gas sectors and, thus, also for the analysed companies in their web-based sustainability communication.

While environmental issues may not be a top priority in public discourse or government policy in Russia and Poland, as discussed earlier, the analysis of the sustainability communication of the selected Russian and Polish energy companies reveals a distinct approach to environmental awareness and education. These companies employ various educational tools, such as lectures, lessons, and dedicated environmental journals. These resources aim to foster environmental awareness and promote responsible practices among employees and community members. In addition, these companies actively engage in organising environmental activities such as tree planting campaigns and 'subbotniki' (i.e., unpaid community service events typically held on weekends) that are rooted in the Soviet tradition and emphasise collective effort and responsibility.

The analysis further reveals that other significant issues addressed by all the selected energy companies pertain to legal matters, governance-related activities, and business ethics. However, notable differences emerge in the companies' framing and presentation of their commitment to these areas. In the cases of the analysed Russian, Austrian, and Polish companies, there is a clear and explicit focus on the issue of corruption. These companies outline concrete anti-corruption measures and guidelines for employees, executives, and contractors. Such measures often include awareness-raising programmes and the establishment of whistle-blower mechanisms to report unethical behaviour. The emphasis on anti-corruption measures seems to reflect stronger stakeholder attention to ethical business conduct within those countries. In contrast, the examined U.S. companies tend to label unethical practices as corruption primarily when such incidents occur outside the United States. Within the domestic context, the term 'corruption' is generally avoided in favour of terms like 'transparency'. Consequently, the focus shifts to establishing governance structures, formulating lobbying policies, and engaging in public policy discourse. This includes, for example, activities related to climate change, trade agreements, and free market competition. This focus suggests prioritising influencing or supporting policy frameworks that are conducive to their business interests.

Finally, it is important to note that text segments exclusively focusing on economic issues are infrequent in the data. The only instances where economic performance is explicitly addressed appear in the Russian data, where companies discuss their development and implementation of advanced technologies to achieve technological superiority. This finding suggests a conceptualisation of sustainability that transcends a purely shareholder-value oriented approach. However, as the argumentative analysis in the subsequent section will demonstrate, the shareholder-value orientation remains a significant concern. Although not overtly presented, it is intricately intertwined with social and environmental issues, framed as instrumental to economic success.

4.2 Argumentative patterns in the analysed CSR disclosures

The second stage of the data analysis concentrated on examining text segments characterised by co-occurring codes. These code-co-occurrences reveal argumentative patterns that elucidate the rationale behind the linkage of two CSR issues. Most frequently, environmental and economic issues are connected, with the combination of social and economic issues ranking second across all companies examined. Notably, the analysed U.S. and Austrian companies display a particularly strong tendency to connect environmental and economic issues within their CSR communication. More specifically, the following argumentative pattern is discernible: Climate change is addressed primarily due to its financial implications for the company. This entails that environmental actions are evaluated in terms of cost-effectiveness, and shareholders and investors are explicitly addressed as key stakeholders in the context of environmental action, as in this example from *Chevron*:

> At Chevron, we believe that managing climate change risks is an important element of **our strategic focus to return value to stockholders**. […] Chevron shares the concerns of governments and the public about climate change and believes that encouraging **practical**, **cost-effective actions** to address climate change risks **while promoting economic growth** is the right thing to do.
> (Chevron, Climate change, emphasis added)

Furthermore, as can be seen in the example taken from *ConocoPhillips* provided below, there is a pronounced orientation towards peers and competitive pressures:

> We recognize that our GHG [i.e., Greenhouse Gas Protocol[4]] intensity will be **compared against peers,** so we track this as a **competitive risk** at the corporate level. Investors, the financial sector and other **stakeholders compare companies based on climate-related performance, and GHG intensity is a key indicator.** For this reason, our GHG intensity target aligns with the long-term time horizon to ensure we manage the risk appropriately. **It also demonstrates our goal to be a leader in managing climate-related risk.**
> (ConocoPhillips, Short, Medium and Long Term Risks, emphasis added)

4 GHG refers to a corporate accounting and reporting standard, see https://ghgprotocol.org/corporate-standard (retrieved October 11, 2024).

In this context, environmental engagement is predominantly framed as a strategic endeavour aimed at enhancing shareholder value and ensuring business success. This framing underscores that environmental sustainability is pursued not merely as an ethical imperative but as a critical component of financial performance and competitive advantage.

All the companies examined in this study also displayed a similar argumentative pattern when linking social and economic issues within their CSR communication. This pattern centred around the concept of employee investment, highlighting how investing in the well-being and development of employees is directly connected to the company's overall success, as illustrated using examples from *Chevron* and *Rosneft*:

> At Chevron, **we rely on the power of human energy to help us find newer, smarter, ever cleaner ways to power the world**. At the same time, **we invest in people to strengthen organizational capacity and develop a talented global workforce that gets results the right way**.
> (Chevron, People, emphasis added)

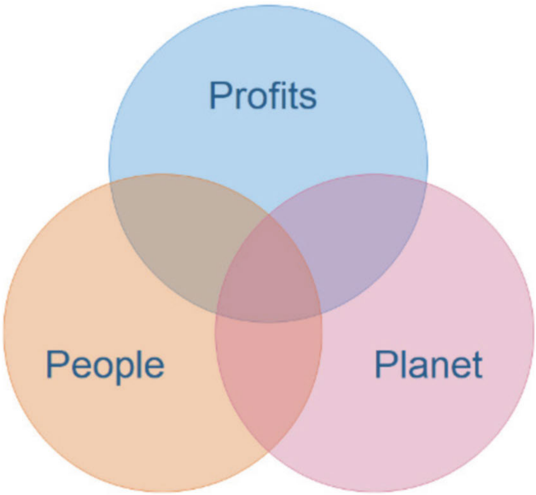
> **Профессиональный, высококвалифицированный персонал, мотивированный на эффективную работу – один из ценнейших активов «Роснефти» и залог ее будущего развития**. Роснефть предоставляет своим сотрудникам равные возможности для постоянного совершенствования их способностей и навыков.
> (Rosneft, Персонал)

> ***Professional, highly qualified staff motivated to work effectively is one of Rosneft's most valuable assets and a prerequisite for its future development***. *Rosneft provides its employees with equal opportunities to continuously improve their abilities and skills.*
> (Rosneft, Personnel, emphasis added)

Building on the previous discussion of similarities, it is also important to recognise that cultural differences play a significant role in how companies from different regions integrate social and economic issues in their sustainability communication. The analysed U.S. companies emphasise their local communities, highlighting that their community engagement aims to benefit both the community and the company's economic success. This approach includes local hiring, safeguarding assets, such as through cybersecurity measures, and protecting their workforce, highlighting their commitment to a safe and secure work environment. Furthermore, there is a focus on adopting an employee perspective that prioritises individual career development and fosters long-term employment. In contrast, the selected Russian and Polish companies concentrate on staff training and educational programmes, as well as on providing social benefits like housing mortgages and parental leaves. The rationale behind this strategy is to maximise the returns on investment in their workforce and attract the most qualified candidates.

The analysis reveals that social and environmental initiatives in all companies studied are primarily driven by their perceived economic benefits. This consistent focus on economic gain that subordinates social and environmental goals to economic success aligns with the economic rationality model of the Triple Bottom Line, as proposed by Wexler (2009). According to this model, companies approach CSR activities primarily from the perspective of economic advantage (see Figure 2).

Figure 2: The "economic rationality" model of the triple bottom line according to Wexler (2009, p. 69)



This focus on economic advantage, observed across all the companies considered, is further evident in statements combining all three Triple Bottom Line elements. These often take the form of general statements introducing the companies' CSR sections. Typically, they address the company's commitment to integrating all three aspects of CSR in an unspecific manner, allowing them to appeal to a broad range of stakeholders while retaining flexibility to adjust their strategies as needed. This communicative strategy is commonly found in the analysed CSR sections of the selected Austrian, Polish, and Russian companies, and less frequently in U.S. companies. The selected examples from *Chevron*, *Orlen*, and *OMV* illustrate the generic and non-specific nature of these statements:

> It is a cornerstone of our corporate values of high performance, integrity, trust, partnership, and protecting people and the environment.
> (Chevron, Diversity and Inclusion Policy)

> W prowadzonych działaniach dbamy o swoich pracowników, konsumentów, partnerów biznesowych, lokalne społeczności oraz środowisko naturalne. Troszczymy się o to, by nasz sukces budowany codzienną pracą powstawał w sposób etyczny i odpowiedzialny wobec naszych interesariuszy i otoczenia, na które wpływamy prowadząc swoją działalność.
> (Orlen, Odpowiedzialny biznes)

> *In our activities, we care for our employees, consumers, business partners, local communities and the environment. We make sure that our success, built on everyday work, is achieved in an ethical and responsible manner towards our stakeholders and the environment we impact through our activities.*
> (Orlen, Responsible business)

> Wir tragen zu einer nachhaltigen Gestaltung der Energiezukunft bei. Wir führen unsere Geschäfte verantwortungsvoll, schonen die Umwelt und sind Arbeitgeberin erster Wahl.
> (OMV)

> *We contribute to a sustainable design of the energy future. We conduct our business responsibly, protect the environment and are an employer of choice.*
> (OMV)

The communicative strategy illustrated in these examples is known as 'strategic ambiguity', a form of textual vagueness which leaves much space for interpretations by not being overly specific. The concept of strategic ambiguity, introduced to communication studies by Eisenberg (1984), refers to "instances where individuals use ambiguity purposefully to accomplish their goals" (p. 230). This communicative strategy allows companies to address a diverse range of stakeholders and, by leaving room for interpretation, the message can resonate with different stakeholders' perspectives, even those that might be potentially conflicting (Scandelius & Cohen, 2016). Wexler (2009) further underscores the advantages of strategic ambiguity in mission statements and similar strategic communication texts and argues that strategic ambiguity "is like a form of writing on sand. It suggests that the issues at hand are open for discussion and may be revised. It invites dialogue and enhances the use of discretion" (p. 65). This flexibility enables companies to adapt to changing circumstances while avoiding strict accountability (Eisenberg, 1984, 1998; Scandelius & Cohen, 2016). In the analysed data, strategic ambiguity is often employed when companies combine CSR priorities or issues that are difficult to reconcile and that conflict with the nature of their operations.

Shifting focus from strategic ambiguity and the economic rationality model of the Triple Bottom Line, the analysis also uncovers culture-specific patterns regarding how the areas of CSR engagement are combined. These patterns, however, are on a more granular level. One of these patterns highlights the company's responsibility and commitment to providing affordable energy. This occurs in the disclosures of the selected U.S. and Austrian firms that frame this task as a duty or obligation, indicating that their environmental activities are often subordinated to socio-economic considerations. This subordination is justified as being for the benefit of their customers, who are the primary stakeholder group targeted in this context, as illustrated in the following examples taken from *Chevron*, *ConocoPhillips* and *OMV*:

> **Affordable energy is a catalyst for economic growth and prosperity.** Our company's values drive us to provide that energy responsibly while protecting the environment and working with our partners to strengthen communities.
> (Chevron, Corporate responsibility Overview, emphasis added)

We recognise how important it is to deliver reliable and affordable energy to the world and know that we also have to do so in a sustainable way. (ConocoPhillips, Sustainability Overview, emphasis added)

Der ansteigende Energiebedarf und der zunehmende Klimawandel stellen die Energiewirtschaft vor große Herausforderungen. Es gilt die **Ausgewogenheit von Klimaschutzmaßnahmen, leistbarer Energie und Versorgungssicherheit zu finden**.
(OMV, Nachhaltigkeitsstrategie)

The increasing energy demand and increasing climate change pose major challenges for the energy industry. It is important to ***find the balance between climate protection measures, affordable energy and security of supply****.*
(OMV, Sustainability strategy, emphasis added)

Another pattern of similarity observed at a more granular level concerns the analysed Austrian and Russian companies. They frame their effort to reconcile the sometimes-conflicting issues of social, environmental, and economic considerations within their business operations as striving for balance. The concept of strategic ambiguity offers an alternative account of this framing, which is illustrated using the example of *Lukoil*, and also included in the example from *OMV* reproduced above:

В своей деятельности Компания руководствуется принципами устойчивого развития и **старается достичь равновесия между социально-экономическим и природно-экологическим развитием**.
(Lukoil, Устойчивое развитие)

In its activities, the company is guided by the principles of sustainable development and ***tries to achieve a balance between socio-economic and environmental development****.*
(Lukoil, Sustainable development, emphasis added)

All the analysed companies also claim that they aim to achieve leadership in their CSR activities. However, they tend to stay strategically vague (i.e., use strategic ambiguity) and do not necessarily define or commit themselves to specific measures. This approach allows the companies to project an image of proactive engagement in CSR while retaining flexibility and avoiding binding commitments to particular strategies or outcomes. The examples from *Exxon-*

Mobil and *Rosneft* show how the selected wording strategically limits the commitment:

> Access to reliable and affordable energy is essential to economic growth and improved standards of living. **We strive to demonstrate leadership in environmental management**. ExxonMobil recognises the environmental risks associated with our industry and evaluates potential and actual risks at each stage of a project to mitigate environmental impacts. ExxonMobil complies with applicable environmental laws and regulations, and applies reasonable standards where they do not exist.
> (ExxonMobil, Environmental Management, emphasis added)

> **Стремясь к достижению лидерства в сфере экологической безопасности среди нефтегазовых компаний,** Роснефть не останавливается на достигнутых результатах, продолжает развитие корпоративных программ, направленных на снижение негативного воздействия на окружающую среду, организует и участвует в добровольных экологических акциях, подчеркивающих ее прямую заинтересованность и нестандартные подходы к улучшению экологической обстановки в регионах деятельности и в мире в целом.
> (Rosneft, Охрана окружающей среды)

> ***In an effort to achieve leadership in the field of environmental safety among oil and gas companies,*** *Rosneft does not rest on its achieved results, continues to develop corporate programmes aimed at reducing the negative impact on the environment, organises and participates in voluntary environmental actions, emphasising its direct interest and non-standard approaches to the improvement of environmental situation in the regions of activity and in the world as a whole.*
> (Rosneft, Environmental protection, emphasis added)

It is important to point out that these broad and rather undetermined claims, so far analysed in terms of strategic ambiguity, can also be viewed as a greenwashing strategy (e.g., Greer & Bruno, 1996, TerraChoice' Sins of greenwashing[5]). This, however, also depends on how greenwashing is understood. Some authors define greenwashing as intentional deceit, for example, as "the dissemination of false or deceptive information regarding an organisation's environmental strategies, goals, motivations, and actions" (Nemes et al. 2022, p. 5). Similarly, Seele and Gatti (2017) argue that greenwashing

5 Retrieved June 23, 2024, from https://www.ul.com/insights/sins-greenwashing

occurs when "an organisation intentionally communicates false or misleading green claims" (p. 245), emphasising the importance of external accusation in identifying greenwashing. On the other hand, strategic ambiguity can also shield organisations from accusations of greenwashing by showing a broad commitment to sustainability goals without being pinned down to specific actions that may be more easily criticised.

In addition, all analysed companies tend to highlight the external validation they receive for their environmental CSR activities. Only in the analysed U.S. companies' communication of sustainability, external recognition is also frequently mentioned with respect to their social CSR activities. This discursive pattern of impression management via recognition by external authorities helps companies enhance their credibility and enables them to avoid self-praise as illustrated in the following examples from *OMV*, *Lukoil* and *ConocoPhillips*:

> Die OMV wurde im Jahr 2019 **mit CDP „Leadership A-" ausgezeichnet** und zählt somit unter alle Sektoren österreichweit zu den Top fünf Unternehmen, die einen CDP Leadership Score von A/A- erreicht haben. **Damit gehört die OMV zu den führenden Unternehmen in der globalen Öl- und Gasbranche** und demonstriert seine hohe Transparenz in Bezug auf konkrete Ziele und Klimaschutzmaßnahmen zur Reduktion von Treibhausgasemissionen als auch externe Verifizierung.
> (OMV, Klimaschutz)

> *OMV was **awarded CDP "Leadership A-"** in 2019 and is therefore one of the top five companies in all sectors in Austria that have achieved a CDP Leadership Score of A/A-. **This makes OMV one of the leading companies in the global oil and gas industry** and demonstrates its high level of transparency with regard to concrete goals and climate protection measures to reduce greenhouse gas emissions as well as external verification.*
> (OMV, Climate protection, emphasis added)

> Уже 6-ой год подряд Компания участвует в рейтинге открытости нефтегазовых компаний России в сфере экологической ответственности. **По итогам деятельности за 2018 год Группа «ЛУКОЙЛ» удерживает 4-е место среди 20-ти нефтегазовых компаний. Компания отмечена дипломом «За достижения в области прозрачности.** Степень потенциального воздействия на окружающую среду участников рейтинга оценивают Всемирный фонд дикой природы (WWF) России и анали-

> тическая группа КРЕОН. Экологическая эффективность компаний ТЭК оценивается по ряду показателей, таких, как качество экологического менеджмента, степень воздействия на окружающую среду и раскрытие информации.
> (Lukoil, Добровольные инициативы)

> *For the 6th year in a row, the Company has participated in the rating of transparency of Russian oil and gas companies in the field of environmental responsibility.* ***Based on the results of activities for 2018, the LUKOIL Group maintains 4th place among 20 oil and gas companies. The company was awarded a diploma "For achievements in the field of transparency.*** *The degree of potential impact on the environment of the rating participants is assessed by the World Wildlife Fund (WWF) Russia and the analytical group CREON. The environmental performance of fuel and energy companies is assessed based on a number of indicators, such as the quality of environmental management, the degree of environmental impact, and information disclosure.*
> (Lukoil, Voluntary initiatives, emphasis added)

> **The Human Rights Campaign's 2018 Corporate Equality Index recognised us for our commitment to lesbian, gay, bisexual and transgender equality in the workplace. In 2018, we also were named as a Best Employer for Diversity by Forbes and listed as one of the Top 25 Companies for Diversity by the Texas Diversity Council.** While we have been recognised for our inclusion efforts, we know that it takes ongoing commitment to make sustainable progress. So, we continue to provide training, build awareness and reinforce accountability at all levels of the organization and focus on behaviours and processes that build an environment where everyone has the opportunity to succeed.
> (ConocoPhillips, Diversity and Inclusion, emphasis added)

In summary, the analysis reveals that the social and environmental CSR initiatives of the examined companies are primarily driven by economic benefits, aligning with the economic rationality model of the Triple Bottom Line. The companies also communicate their CSR activities through broad, general statements characterised by strategic ambiguity, which allows them to remain flexible and adaptable, addressing diverse stakeholder perspectives without necessarily committing to specific actions or targets.

It is worth reiterating at this point that although economic performance is not explicitly addressed in the sustainability communication of most companies, a closer inspection of the argumentative patterns reveals that economic concerns remain an underlying theme. While not overtly emphasised, the connection between economic performance and social and environmental issues becomes evident and reinforces the idea that these dimensions are often framed as instrumental to achieving long-term economic success. This observation ties back to the earlier discussion in Section 4.2, where we noted that, despite its absence in direct discourse, the shareholder-value orientation continues to subtly influence the overall sustainability communication strategy.

5. Discussion

The analysis highlights a transnational convergence in how the studied companies approach CSR. This is evident in their alignment with the economic rationality model, as well as their use of strategic ambiguity. At the same time, local differences remain visible at a more granular level—for instance, a stronger emphasis on corporate philanthropy in the Russian and Polish companies and a focus on diversity and inclusion in the U.S. companies, and to a lesser degree also in Austria, when it comes to social CSR. These patterns can be understood through various concepts and theoretical frameworks that explore the interaction between global and local trends.

The concept of 'glocalisation' is particularly relevant here. In business, glocalisation refers to adapting global strategies to resonate with local needs—a balance between global standardisation and local customisation (Roudometof, 2016, pp. 106–113). This idea, often described as a kind of "micro-marketing" (Robertson, 1995, p. 29), acknowledges that while global companies may face common expectations across markets, they must still account for local differences, such as preferences, income levels, and cultural values within regional or national markets (Roudometof, 2016, p. 111). In our case, however, sustainability practices do not originate from the headquarters of a multinational corporation and then adapt locally. Instead, we observe the seemingly independent adaptation of sustainability concepts by various energy companies across different countries, suggesting a more complex interaction between global and local elements.

Another useful framework is 'translocality' (Roudometof & Carpentier, 2022, pp. 335–328), which emphasises the active role of local communities in shaping ideas or practices that are shared globally. It also underscores the importance of digital media 2.0 and 3.0 in facilitating global interconnectedness. Unlike glocalisation, which typically describes a top-down approach, translocality focuses on the contributions and adaptations made by local actors themselves. While translocality provides valuable insights into how global ideas are adapted to local contexts, it is less effective in explaining the emergence of similar forms of sustainability communication across diverse countries and regions. This limitation arises because CSR and sustainability are not fields rooted in grassroots movements but are instead driven by institutional and corporate initiatives.

A broader understanding of glocalised practices in CSR might come from what Roudometof and Carpentier (2022) refer to as the "world society perspective" (p. 328). This approach suggests that global trends often adapt themselves naturally to local contexts. In CSR, this perspective is linked to 'organisational isomorphism', where similar practices spread globally as companies adopt standardised approaches to be competitive and relevant (Roszkowska-Menkes & Aluchna, 2018; see also Tang et al., 2015). Several factors drive this global convergence. Drori et al. (2014, p. 93) identify three key drivers in their model: standards from leading institutions, imitation of successful peers, and current management trends.

As a result, the shared CSR approaches observed among these companies reflect a broader global trend, one that includes local adjustments but is largely shaped by universal pressures to align with recognised best practices, regulative standards and norms and the like. The observed convergent discursive patterns and practices—such as reliance on external validation for impression management, orientation toward international standards and benchmarking criteria, and generic aspirations for leadership—support this interpretation.

Taking into account the nature of the medium, corporate websites being Web 1.0 applications transmitting messages following the one-to-many pattern, and contextual factors such as the language in which sustainability messages are presented and perceived, we can better understand the observed localisation in the communication of sustainability. Limited international accessibility of content in languages such as Polish, Russian, or even German likely favours a more localised approach to sustainability communication. In these cases, the absence of strong public pressure or benchmarking by international audiences—due to the content being presented in the national language—reduces the incentive for companies to adopt more globalised messaging.

Conversely, providing content in English transforms corporate sustainability communication into a global message, reaching audiences beyond national borders. This explains the adoption of strategies of 'delocalisation', such as the generic references to 'communities where we operate' which reflect a form of de-contextualised internationalisation. It also highlights how Western or Global North trends—such as the focus on diversity and inclusion within social CSR observed with the analysed U.S. companies—are promoted and integrated into corporate narratives. These trends spread intrinsically through the influence of global standards and best practices.

At the same time, local socio-political and legal frameworks significantly shape sustainability communication. In the case of Russian firms, for instance, these frameworks necessitate tailored practices and communication strategies that align with local regulations and political environments, diverging from Western best practices.

Ultimately, the analysed companies demonstrate varied approaches to navigating this complex field, each adopting their own version of 'glocalised' corporate social responsibility (CSR). These strategies balance global influences with local demands, reflecting both the pressures of internationalisation and the imperatives of localised adaptation.

6. Conclusions

This study explored the interplay of divergent and convergent trends in the communication of sustainability on corporate websites, using a sample of national companies operating in distinct markets shaped by specific socioeconomic, cultural, and legal framework conditions. By doing so, the study sheds light on (g)localised strategic communication in an era of increasing global interconnectedness.

The findings reveal a convergence in the conceptualisation of sustainability, with all analysed companies framing their efforts as aligned with prioritising shareholder value. However, significant differences also emerge, indicating that sustainability communication is adapted to local contexts, which points to an East-West divide. Notably, the Austrian company included in the study sometimes leans towards the identified Eastern patterns and, at other times, aligns more closely with Western trends. These differences underscore the glocal nature of sustainability communication, where global trends interact with local specificities. Theoretically, the findings align with frameworks such as (g)localisation, which emphasise the balance between global standardisation and local adaptation.

Practically, the role of language in digital communication emerges as critical. English-language content transforms corporate sustainability messaging into a globally accessible discourse, subject to international benchmarking and scrutiny. In contrast, content presented in national languages—such as on the corporate websites of the Polish or Russian companies included in the study—reflects a more localised approach, often catering to specific socio-political and cultural contexts.

The dual forces of globalisation and localisation are further mediated by the strategic use of digital platforms. The one-to-many communication pattern of corporate websites (Web 1.0) allows companies to project curated sustainability narratives to diverse audiences. However, the lack of interactivity limits the potential for deeper engagement, including intercultural engagement. This limitation is particularly relevant for U.S. companies, which provide content in English and are thus more exposed to global scrutiny and engagement. The choice of a distinctly transmissive digital platform safeguards commercial organisations from their top-down sustainability communication being challenged or altered.

In conclusion, the study highlights that sustainability communication in the digital age is not merely a replication of global best practices, but a dynamic process shaped by the intersection of global trends, local demands, and the unique affordances of digital media. This interplay not only fosters the spread of global trends but also reveals the persistence of localised strategies driven by regulatory and cultural imperatives. The result is a spectrum of glocalised CSR practices, illustrating how companies navigate the complex terrain of digital interculturality to align their messaging with both global expectations and local realities.

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Part III: Contextualising digital interculturality: Between connectivities and exclusions

Digital interculturality
Understanding postdigital reality through a new conceptual lens

Luisa Conti, Fergal Lenehan, Roman Lietz, and Milene Oliveira

Abstract *This article develops the concept of 'digital interculturality' as a critical lens for understanding postdigital societies. Against the backdrop of platformisation, algorithmic governance, and AI-driven epistemic infrastructures, interculturality is reconceptualised as a structurally mediated, dynamic, and ambivalent process, shaped by both connectivity and exclusion. The authors write in line with arguments for a shift from essentialist and interactionist models of cultural difference, which presume fixed, monocultural identities, toward a view of identity as fluid and developing within a culturally hybrid lifeworld. Interculturality is, thus, framed as the ubiquitous negotiation of uncertainty and alterity in communicative environments where meaning is algorithmically filtered, amplified, or silenced. In this context, digital interculturality emerges as a multilayered phenomenon embedded in the asymmetries of platform capitalism, epistemic colonialism, and intersectional regimes of (in)visibility. Drawing on Critical (inter)cultural Studies, Internet Studies, and Sociolinguistics, the article calls for infrastructural literacy as a key competence for engaging with the communicative conditions of the postdigital lifeworld, therefore part of intercultural competence. Digital interculturality, the authors conclude, is not peripheral—it is constitutive of contemporary cultural production and transformation.*

Keywords *Intercultural Communication; Digital Transformation; Platforms; Social Media; Cultures*

1. Introduction

As Clifford Geertz (1973) argues, context is essential for interpreting communicative behaviour; indeed, meaning emerges through spatial and social circumstances (Watzlawick et al., 1967, p. 20), and any interpretation of language use must account for the contextual variables shaping the communicative act (Austin, 1962; Gumperz, 1982). The field of intercultural communication is intricately connected to understanding these complex meaning-making processes while acknowledging how different collectives resort to (partially) divergent and contextually-bound resources. The need to understand not only how cultures differ but also how cultures flow one into another, merge, and develop (Bolten 2018, pp. 46–54) has remained central.

The 'digital turn' has massively radically reconfigured the landscape and complexity of human communication, opening to more connections and transformations, reshaping the conditions as well as the modalities of intercultural meaning-making (Conti, 2024). This development means that the field of intercultural communication needs to engage with this extended reality. Thus, a return to heavily contextualised methodologies, such as Geertzian "thick description", can help scholars to trace, disentangle, and reflect upon the contextual intricacies of what we term 'digital interculturality'.

Postdigitality—understood as the entanglement of the digital with every facet of life (Cramer, 2014)—further demands a theoretical reorientation. Context in digital settings is no longer merely social or spatial but also infrastructural and algorithmic. While the acknowledgment of contextual layers constitutes, in many ways, the very ethos of intercultural communication, postdigitality has brought about the necessity to incorporate further contextual layers (Jones et al., 2015, p. 9), beyond the representational: Rapidly changing lifeworlds now intertwine with a rapidly changing technological and media landscape. We argue here for a return to a consciously contextual orientation and make suggestions for the rethinking of what, exactly, constitutes context.

The rise of digital platforms has increased the speed, reach, and intensity of intercultural interactions. A proliferation of media sources, coupled with algorithmic filtering and recommendation systems, now co-constructs what users perceive and experience as reality. New, hybrid forms of participation have emerged, often situated at the intersection of algorithmic governance, platform affordances, and cultural practices. Traditional categories of identity have become more fluid and others—such as affinity-based affiliations (Gee, 2007; see also Blommaert & Varis, 2015 on light communities)—have gained importance. Local communities have become more heterogeneous and digitally interconnected, while disinformation, polarisation, and hate speech are now powerful phenomena threatening social cohesion and democratic discourse (Lenehan & Lietz, 2025).

This complexity, it is argued, calls for a theoretical framing of the internet as a space of constant movement—between standardisation and anti-standardisation, centralisation and decentralisation, culturality and interculturality. These dynamics are not fixed binaries but appear as processual tensions, waves of solidification and dissolution that inform digital life. Platforms have become not just spaces of interaction, but agents of these transformations. They incorporate economic and ideological logics, and increasingly exercise agency in shaping communicative norms, social recognition, and cultural legitimacy (Poell et al., 2019).

The paradox is striking: Local environments become more heterogeneous and hybrid through lifewide learning in culturally diverse lifeworlds (Conti & Lenehan, 2024), translocal publics often become more uniform—curated by algorithmic similarity—while proximity loses its power to produce connection. The line between individual and collective, between autonomy and normativity, between freedom and control is constantly redrawn.

In this chapter, we explore the conceptual field of what we have termed 'digital interculturality', provisionally described some years ago as the "hyper-interculturality of the digital world with its potential for a myriad of new and diverse connections" (Lenehan, 2022b, p. 6). Drawing on the work of the ReDICo[1] project, we refine this notion by approaching digital interculturality as a layered, dynamic, and ambivalent process—characterised by both expansive connectivity and structural exclusions.

In short, we approach the contextual layers embedded in digital interculturality, starting from a macro sociocultural perspective—with postdigitality, platformisation and artificial intelligence (AI), and the digital divide, regarded as moulding mechanisms influencing the formation of digital cultures. From there, we trace how digital interculturality is experienced and negotiated in situated practices, where shifting norms, representational politics, and infrastructural asymmetries intersect. Our aim is not to offer a fixed definition, but to map a conceptual terrain in which digital interculturality can be critically understood, as a site of potential, contradiction, and power.

1 ReDICo stands for Researching Digital Interculturality Co-operatively. The associated website is http://www.redico.eu

2. (Post)digitality

Digitalisation refers to the technical conversion of analogue signals into digital formats through a process known as 'digitisation'. This process is foundational, enabling the subsequent development of digital systems and infrastructures, such as information and communication technologies and the internet of Things (Brennen & Kreiss, 2016, p. 556). Digitalisation, however, has always gone beyond the mere technical conversion of analogue into digital data and encompasses the broader integration of digital technologies into various societal domains, highlighting its transformative impact on culture, communication, and social structures (Conti et al., 2024). Digitalisation, thus, signifies a shift towards a world where digital technologies are not just 'tools' but integral components of everyday life, fundamentally altering how society functions and interacts. Processes of digitalisation are entangled deeply with lifeworlds and now constitute the dominant cultural environment in which we operate (Stalder, 2018).

In this context, the concept of "digital dualism" (Jurgenson, 2011, Introduction section), expressing the traditional separation of digital and physical experiences, has been overcome as contemporary life is lived within a unified digitality, an ultimate "onlife" (Floridi, 2015). The idea of being either online or offline becomes thus "anachronistic" with "our always-on smart devices", as the postdigital becomes "hegemonic" and "entangled" with everyday life, in a "complex, messy and difficult to untangle way" (Berry, 2015, p. 50). In this vein, "the dichotomies of off-line/on-line do not do justice to the diverse ways in which the 'real' and virtual worlds are interpenetrated" (Warf, 2021, p. 1).

A theoretical discussion regarding the online/offline dichotomy has been ongoing for more than 20 years and can be seen as having stabilised via the introduction of the postdigital perspective, whereby the 'post' does not signify a world without computers and the internet but the opposite in fact (Schmidt, 2021, p. 7). In this sense, the 'post' in postdigital denotes a continuation rather than a rupture (Cramer, 2014, p. 13; for a sociolinguistic treatment of this issue, see Bolander & Locher, 2020): postdigitality also encompasses questions of materiality. The postdigital refers to how computation becomes "experiential, spatial, and materialised in its implementation", part of the "texture of life", materialising also "within the body" (Berry & Dieter, 2015, p. 3).

This materialisation is not limited to physical artefacts but includes the ways in which technological infrastructures shape social practices, affective relations, and embodied experiences. Recent theoretical discussions have built on this, framing the postdigital in terms of a critical understanding of technology's pervasion of the social (Jandrić et al., 2018; Peters & Besley, 2019), not least its re-ordering of the physical world (Levinson, 2019, p. 15), and a "rejection of binaries" (Sinclair & Hayes, 2019, p. 130). The term postdigital is an attempt to outline what is indeed 'new' regarding our relationship to the digital but also highlights the ways that digital technologies are "embedded in, and entangled with, existing social practices and economic and political systems" (Knox, 2019, p. 358). Postdigitality means that human beings are entangled with a variety of digital platforms which represent, online, a form of 'cultural' standardisation and solidification, meaning that platforms themselves, and those who own them, retain a large degree of power in relation to what happens in a digital context, and also in relation to how digitality has moulded lifeworlds.

The term 'platform' refers to digital infrastructures which have become the dominant form of digital-informational architecture online and which look to ease interactions between users. Platforms point to "a set of online digital arrangements whose algorithms serve to organise and structure economic and social activity" (Kenny & Zysman, 2016, The Key Technology section). This dominating structure of today's internet includes the communicative landscape of both the web and mobile apps. Platforms encompass social media, app stores, online market-places, payment services, gig economy apps, search engines, communication services, streaming sites, AI sites, and many more. It is interesting to note how *YouTube* first began describing itself as a "platform" in the late 2000s and how the term gained currency from then on as the "discursive positioning" of the word was "specific enough to mean something, and vague enough to work across multiple venues for multiple audiences" (Gillespie, 2010, p. 349).

Platforms "supply infrastructures that facilitate particular types of interactions" but also "represent strategies for bounding networks and privatizing and controlling infrastructures" (Cohen, 2017, p. 144). Thus, platforms represent the bordering of the internet, the creation of at times exclusive and 'walled' micro worlds, not necessarily connected with other platforms. While earlier conceptualisations of the internet promoted its networked character, the contemporary internet—in terms of inclusions and exclusions, the organisation of software, and the structures of text—should be seen as a (partly) disjointed and haphazard "patchwork of platforms" (Lenehan, 2024, p. 244). Some parts of the internet may indeed be interconnected, but this structure does not warrant the term 'network' anymore, suggestive as this term is of a broader systematic and interconnected structure.

A patchwork of platforms suggests, instead, a collection of informational silos which are internally interconnected but not open-ended, meaning that a network exists within the reality of the platforms themselves, but is not extended to the internet as a whole. This is a change from earlier internet structures, which openly connected users embedded in various digital architectural forms via hyperlinks. Systematic-interconnection is now no longer an aspect of the wider internet, but increasingly confined to the closed ecosystems of dominant platforms. While certain credentials—like a *Google* account—grant access across multiple services, this form of interoperability signals not cultural openness, but the solidification of infrastructural power. Interconnection is conducted, rather, within platforms, on the platforms' terms, and with platforms acting as communicative moulding agents, not least of a type of standardisation according to the prevailing norms of the platforms themselves. In this context, the phenomenon of platformisation has been depicted as "the rise of the platform as the dominant infrastructural and economic model of the social web and its consequences" (Helmond, 2015, p. 1).

The increased algorithmic underpinning of online activity has become evident (Kenny & Zysman, 2016), with internet communication of various kinds now embedded in a moulding and structuring "algorithmic culture" (Hallinan & Striphas, 2014, p. 119). However, it is important to note that the platform metaphor may hide the power of platforms, not just in terms of facilitating cultural, political, and socio-economic interaction but, in fact, steering it (Nieborg & Poell, 2018, p. 4276)—and steering it towards a type of almost global standardisation, a solidifying of emerging digital norms.

While the majority of the most influential platforms, such as *Facebook*, *Instagram*, and *YouTube*, originate in the United States and 'export' via their platform U.S.-centric norms, values, and communicational logics, a growing global reach of Chinese platforms is also evident, the best example being of course *TikTok* (We Are Social & Meltwater, 2025). This U.S.-Chinese digital geopolitical dominance suggests two competing spheres of digital standardisation, but other platforms and ways of doing things on the internet also exist, in a type of conscious anti-colonial, anti-standardisation approach to the creation of both digital architecture, the algorithmic underpinning of the internet, as well as AI (see, e.g., Franco, 2022, 2025). Despite their competition for global influence, the U.S. and Chinese platforms share commonalities in terms of the functionality of platform capitalism: Through engagement-driven algorithms and the commodification of user data, platforms extract economic value, and disproportionately from the Global South[2] (Udupa & Dattatreyan, 2023).

In many cases, users in the so-called 'Global South' rely mainly on foreign-owned platforms, for communication and information, reinforcing their dependency on the technologies they design and control. Researchers from South Africa (Gravett, 2020; Kwet, 2019) have labelled both the U.S. and Chinese approach to the internet in African countries as forms of "digital colonialism". Such platforms extract vast amounts of data from various global regions, generally without adequate legal protections or equitable returns, while centralising profits elsewhere. Thus, platforms and platformisation are central to contemporary phenomena inherent to economic globalisation, feeding into aspects of global geopolitics. While dominating the infrastructure of the internet, postdigital driving forces mould increasingly the materiality of the life-world.

One of the most discussed forms of systematic agency[3] in the realm of online action, contact, and interaction is of course AI. While an algorithm is a "set of instructions—a preset, rigid, coded recipe that gets executed when it encounters a trigger" (Ismail, 2018, Difference Between AI and Algorithms section), AI is used to refer to a set of "algorithms that can modify its algorithms and create new algorithms in response to learned inputs and data as opposed to relying solely on the inputs it was designed to recognize as triggers" (Ismail, 2018, Difference Between AI and Algorithms section). This ability for algorithmic modification, intertwined with human-linked inputs and data, is what gives AI its 'intelligence'. How artificial and machine intelligences are to be viewed has been widely discussed.[4] Indeed perhaps the term 'intelligence' is here something of a misnomer and suggests that this form of systematic agency retains a more independent type of agency than is actually the case. AI is a form of systematic agency that acts in relation to certain goals and norms (Barandiaran et al., 2009, p. 369), attributed ultimately to a collectivity of human agents involved directly in its authorship and development.

2 While the term 'Global South' is widely used to denote regions structurally disadvantaged within global economic and technological systems, its usage is not without critique. Scholars have pointed out that it risks homogenising diverse political, economic, and cultural contexts, and can reproduce binary logics reminiscent of earlier colonial geographies. For a critical overview, see Mahler (2017).

3 For a full discussion on the notion of agency in relation to postdigitality and platformisation, see Lenehan (2024).

4 See, e.g., Brockmann (2019) for a theoretical overview.

AI should be seen as a form of hybrid agency and an epistemological resource, deeply intertwined with the actions, and authoring of human—and diversely culturally embedded and multi-relational—agents. It can also be viewed as a standardisation of certain forms of knowledge, as a kind of levelling-out, as the platforms and agents who dominate the internet also dominate the production of knowledge which is at the centre of very many forms of artificial intelligence, via the vast learning schemes which essentially create AI. This also represents a centralisation of power—which perhaps often goes unnoticed as it remains implicit, yet is deeply embedded in such processes. It has been noted that collective artificial intelligences pose challenges connected to "our *interactions* with them, given the degree of social influence collective epistemic agents have, such as government agencies or corporations" (original italics) and, as the capacities of collective artificial intelligences "vastly surpass the resources of any individual, an intelligence jetlag is a major risk" (Montemayor, 2023, p. 177). Thus, interactions with most forms of AI are marked by vast differences in epistemic resources and, therefore, represent an inherent imbalance in power relations.

While AI can, in principle, act as a levelling force—by lowering access barriers to knowledge, offering real-time feedback, enabling automated translation, or assisting in content production—its potential for epistemic democratisation is unequally realised. Tools such as *ChatGPT* or other generative AI systems may indeed support users in writing, translating, coding, or summarising complex information, thereby enhancing cognitive and performative agency. However, the questions remain: what form of knowledge is disseminated, who is in a position to use these tools, with what level of literacy, and under what infrastructural and sociopolitical conditions? The digital divide is far more than a matter of access to digital technologies—it encompasses layered inequalities that shape how, to what end, and with what impact digital technologies, including AI, are used (van Dijk, 2020, pp. 3–4). These asymmetries are not external to the epistemic architectures of the AI-infused internet, they are constitutive of it. They represent a form of infrastructural and institutional agency that configures who is able to participate meaningfully in these spaces, who remains peripheral, and who is rendered invisible. Thus, even before encountering the centralising and standardising effects of algorithmic logics inherent to the contemporary internet as a patchwork of platforms, with its implicit inclusions and exclusions, a series of excluding processes are already taking place in the material world, in the pre-use stage of internet usage.

3. (Post)digital cultures

Processes of digital centralisation and marginalisation do not unfold without resistance or counter-dynamics (Duarte, 2017; Matthews, 2024). Alongside their homogenising tendencies, platforms also generate spaces for decentralisation, cultural negotiation, and more inclusive access to discursive, expressive, and cultural participation. They simultaneously function as infrastructures of control and as arenas of participation, enabling inclusion, cultural hybridisation, and even forms of resistance within and through their own technical and normative architectures. For instance, translation technologies embedded in various platforms may work against linguistic exclusion and support communication in contexts shaped by mobility and migration (on language technologies and migration, see Yudytska & Androutsopoulos, in this volume). Platforms also serve as sites where global and local influences intersect, producing new, hybridised forms of cultural expression. Users in translocal spaces re-appropriate tools and trends, localising global phenomena or challenging dominant cultural narratives (on challenging narratives, see Silva's chapter, in this volume). For example, while platforms often impose Western-centric norms of individualistic self-presentation or consumerism, users adapt and reshape these norms to align with their own cultural contexts, creating dynamic forms of communication and identity (on the postdigital 'glocalisation' of discourses, see Thielemann & Zlatoslava, in this volume).

A clear example of this is seen in relation to Indigenous creators on *TikTok*, who use hashtags such as #NativeTikTok and #Indigenous to share content that blends global trends with their specific cultural heritage. These creators participate in viral challenges, such as dances or comedic sketches, while incorporating traditional regalia, language, or music, adapting global phenomena to reflect their cultural roots. Simultaneously, they use the platform to address issues such as colonial history, land rights, and cultural erasure, reclaiming their identity and challenging dominant narratives. Such practices illustrate how cultural heritage, in the postdigital age, is increasingly shaped by digital infrastructures and participatory logics. Rather than being passively preserved, it is actively re-authored, fragmented, and recombined through everyday media practices. Digital platforms thereby function as sites of cultural negotiation, supporting hybridisation, visibility, and resistance in algorithmically structured spaces.[5]

Platforms also mould and structure flows of online communication between agents with varieties of complex cultural embeddedness, and increased platformisation has transformed the dynamics of communication on the internet, "in a hybrid post-digital environment where digital and human practices intermingle" (Davis, 2020, p. 84). In these quasi-universalised digital spaces, content that fits the specific medial frameworks of platforms—such as short videos, ephemeral stories, or algorithm-driven posts—can become globally accessible, often transcending geopolitical borders. Platforms and AI, as already discussed, are now integral to our postdigital lifeworld and platforms and AI systems lean on, and lead to, processes of standardisation and centralisation, which manifest themselves—outwardly at least—in shared semantic layers, digital metaphors, and analogous features across platforms, making them intuitive and easier to navigate.

As Bolten (2018, pp. 60–61) argues, standardisation emerges through a dynamic interplay between coordination—the process by which elements become increasingly aligned—and continuity—gradual, incremental change over time. Standardisations are reproduced, disseminated, and potentially passed down over time. Their intersubjective character provides the foundation for routine practices, enabling the formation of orientation systems that regulate the individual expectations and behaviours. In these transnational spaces, therefore, platforms lead to the emergence of new cultures that can be seen as specific formations of a broader culture of digitality (Stalder, 2018). Thus, the universal standardised presence of platforms contributes significantly to the emergence of shared behavioural—in particular communicational—routines at a global scale. These routines are shaped by medial frames—such as *Instagram*'s Stories, *TikTok*'s short-form videos, or *WhatsApp* Status—which dictate not only how human actions and expressions are presented but also how they must be conceptualised and adapted (or formatted, see Georgakopoulou, in this volume) to fit within platform-specific formats.

These frames structure communication in ways that are highly curated and influenced by the platforms' design, often emphasising brevity, immediacy, and visually engaging content. The profit-oriented logic underpinning the algorithms that manage these frames plays a critical role in shaping not only the

5 For a full discussion on the dynamic construction of cultural heritage in the postdigital condition, see Conti (2025b).

format of content presentation but also the content itself. The dominance of engagement-driven algorithms compels users to prioritise content that aligns with platform incentives, such as virality, emotional intensity, or relatability. This dynamic often pressures content creators to tailor their messages to capture attention quickly, favouring sensational, hyper-aesthetic, or polarising elements that maximise reactions, shares, and overall engagement (Arora et al., 2022; Rogers, 2021; Roring, 2024). As a result, content creation is increasingly led by algorithmic priorities rather than organic or context-specific considerations. Thus, platforms exercise power not only through the circulation of content, but also in shaping the very forms of communication and expression that are considered viable or valuable within their ecosystems.

While facilitating translocal connections, platforms also shape socially constructed schemes of meaning that enable a "common understanding which makes possible common practices and a widely shared sense of legitimacy" (Taylor, 2004, p. 23). Such schemes are not neutral but are often deeply embedded in the cultural and ideological frameworks of dominant global powers, shaping how digital spaces operate and the behaviours they encourage, again highlighting the interconnecting of global everyday digital architecture and geopolitics. Affective digital capitalism (Andrejevic, 2011; Hearn, 2010) emerges as a key mechanism within these frameworks, commodifying emotions and identities as integral components of platform economies. On platforms such as *Instagram*, *YouTube*, and *Facebook*, self-presentation becomes an economic activity, where user engagement, measured via likes, shares, and comments, drives profitability. This process not only monetises user behaviour but also reinforces platform dependency, steering interactions and content creation toward the priorities of profit-driven algorithms, as such also constituting a centralising of power.

Platforms such as *Instagram* and *Facebook* exemplify such dynamics by promoting performative engagement, through their visibility-driven algorithms, which reward polished, curated, and sensational content. On such platforms, users are incentivised to present highly individualistic and aspirational identities that align with consumerist and competitive norms. The focus is on showcasing oneself for an audience, creating a culture of self-promotion and branding. Here, individuals do not merely share personal experiences but craft themselves as marketable products, contributing to a system where visibility equates to value (Whitmer, 2019).

This contrasts with other, largely less influential platforms that centre collaborative and participatory content creation and operate on the 'edges' of the internet, often outside of some solidified internet norms and standardisations. The most prominent exception is *Wikipedia*: a non-profit, collaborative platform that not only resists many of the standardised norms of digital capitalism, but also remains a popular and epistemically influential platform. *Wikipedia*'s open-editing model, much like features such as duets and stitching on platforms like *TikTok*, enables collective authorship and decentralised participation, fostering interaction and community rather than solely individual performance (Kopf, 2023).[6] Still, such alternatives remain structurally marginal within an internet increasingly shaped by extractive economies and engagement-maximisation.

This structural imbalance is further reflected in the broader dynamics of participation in the digital space. From the cyber-utopian dominated early days to the emergence of web 2.0, the internet was widely perceived as a democratic arena where everyone could have a voice and diverse perspectives could be equally represented (Papacharissi, 2008). However, this ideal has receded as processes of standardisation and centralisation have gained a degree of dominance online. While the internet still allows for the possibility to produce, share, and access content—often while remaining anonymous or bypassing certain social barriers—this potential is not evenly distributed. Several platforms, including *Wikipedia*, *Open Universities*, *YouTube*, or even *ChatGPT*, can be perceived as helping to lower barriers to knowledge access. Yet, participation in digital spaces remains profoundly unequal, as some voices resonate louder than others and act as centralising forces (Bircan & Özbilgin, 2025). It is crucial to recognise that not everyone has the same opportunities or resources to engage meaningfully in the digital realm.

"Digital technologies support and strengthen epistemic colonisation, epistemic injustice, cognitive empire, and epistemicide" (Ndayisenga, 2024, pp. 8–9), and are part of excluding processes of digital centralisation, where diverse, local, or non-Western ways of knowing are marginalised or erased in favour of dominant narratives (see Schneider & Migge, in this volume). This issue is further exacerbated by the fact that AI technologies, which underpin many platform algorithms, are predominantly trained on datasets rooted in Western, Anglophone, and often white-centric texts and epistemologies. These systems thereby reproduce linguistic and cultural biases, reinforcing

6 However, there are relevant discussions on the gender gap on Wikipedia (see Ferran-Ferrer et al., 2023).

the dominance of English and Eurocentric worldviews in digital infrastructures. Nevertheless, historically marginalised communities are reinterpreting and reconfiguring AI as a tool of resistance, developing practices that adapt existing technologies to align with their specific sociocultural realities, while also contributing to the emergence of new, plural forms of technological engagement (Aguiar & da Silva, 2024).

As a result, AI systems reproduce, amplify, and centralise biases, perpetuating racism and systemic inequality by privileging certain cultural logics and marginalising others (Bommasani et al., 2022; Schneider, 2022). The capital-oriented logic of algorithms amplifies voices and perspectives aligned with engagement metrics while silencing others, curating and limiting the types of translocal (inter)actions that are possible. Udupa and Dattatreyan (20234, pp. 3–4) have called this process "digital unsettling": This represents the ways in which "colonial formations persist" and have retrenched themselves in "online spaces in the form of extreme speech, disinformation, and propaganda, animating violently exclusionary nationalisms that rely on racist, casteist, misogynist, and homophobic discourse". Thus, the centralisation and standardisation of platforms also means the re-inscribing of coloniality onto the digital.

What makes this particularly problematic is the extent to which communicative conditions are predetermined in digital environments. Unlike in physical settings, where communication can flexibly adapt to spatial, social, or material contexts, online expression is almost entirely mediated by the platform itself. Users depend on interfaces, algorithmic logics, and built-in affordances that shape not only what can be said, but how, to whom, and under which conditions something becomes visible. The architecture of the platform thus becomes the architecture of communicability—one that enforces specific temporalities, formats, and patterns of interaction.

This is particularly critical because these communicative conditions do not merely organise interaction—they actively shape what enters collective awareness. What is rendered visible under platform logics helps determine which meanings circulate, which experiences are legitimised, and which forms of knowledge become culturally authoritative. Communication is not merely the transmission of information; it is a primary means through which culture is created, negotiated, and transformed. The ways in which people express themselves, relate to others, and frame meaning are shaped today by the communicative infrastructures they inhabit.

In this sense, the platformisation of communication has direct implications for what people know, how they think, and how they act. It influences the very modalities of cognition, attention, and social interaction as well as the content of public discourse. In a postdigital society—where the boundaries between online and offline are increasingly blurred—these dynamics extend far beyond the digital itself. What happens within digital platforms feeds back into embodied life: shaping identities, reconfiguring cultural practices, and modulating collective perceptions of reality. Digital communication thus becomes a formative force not just within the digital realm, but of the social world as such. It alters subjectivities, restructures imaginaries, and transforms the contexts in which people live and relate.

In the postdigital lifeworld, platforms have therefore become central arenas upon which cultural identities and cultural practices are constantly negotiated. Platforms are thus not just tools for communication but spaces of convergence, shaping how individuals experience and construct their postdigital realities. Platforms function as translocal meeting points, allowing users to engage with a multiplicity of cultural references and influences that transcend their immediate geographical surroundings; spaces of co-existent standardisation and anti-standardisation, centralisation and decentralisation.

4. (Post)digital communities

As central nodes in the postdigital ecosystem, platforms mediate relationships, identities, and values, thereby reshaping the very foundations of community and belonging. Acting as digital 'central squares', they offer shared arenas for interaction, exchange, and collective sense-making across global flows of culture, knowledge, and affect. From this perspective, platforms may foster what Lenehan (2022a) describes as 'postdigital cosmopolitanism': the emergence of complex, cross-cultural entanglements that produce both individual transformation and new collectivities. These dynamics have long been seen as carrying emancipatory potential, promising a "joy of diversity" (Castells, 2004, p. 40) and the dissolution of inherited anxieties over alterity (Lenehan, 2022a).

However, the heterogeneity of digital environments can also provoke cognitive and emotional overload. In response, users often gravitate toward low-threshold digital routines and familiar spaces. Despite the internet's apparent openness, patterns of use tend to cluster around habitual platforms and bounded communities (Olejnik et al., 2014), a tendency that is further amplified by algorithmic personalisation reinforcing risks of epistemic insularity and a declining openness to alternative viewpoints (Gunn, 2021; Turner, 2023). This reveals a deeper human tendency toward coherence, predictability, and affective security in environments marked by algorithmically structured fragmentation and noise. This retreat into familiar digital enclaves creates the conditions for new forms of community to emerge. Within bounded and more predictable environments, users can develop shared routines, norms, and semiotic repertoires, forming micro-collectives based on recurring interaction and mutual legibility (Seraj, 2012).

While platforms enable translocal communication and cooperation, they transform the conditions under which social relations are formed and sustained. Users actively develop situated communicative practices in response to platform affordances. Although many digital communities remain fluid and fragile, others gradually stabilise. Digital environments can offer the stability needed for trust and collective meaning-making to emerge even in the absence of physical co-presence and, at times, of actual interaction (Cova & Dessart, 2022).

Blommaert et al. (2019) discuss the ethnomethodological notion of "congregational work" (Garfinkel, 2002) applied to the analysis of digital communities and highlight this dynamic process: Postdigital communities are constituted through congregational work where the word 'congregational' refers to the collaborative and often tacit efforts people make to produce and sustain a shared sense of social reality in everyday life. Particularly in superdiverse (Blommaert & Rampton, 2011) and weak-tie networks (Blommaert & Varis, 2015), this underpins ephemeral forms of collectivity, grounded in emergent norms and contingent alignments.[7] Digital interculturality thus becomes constitutive of communication itself. These potentials for cultural negotiation and community-building are increasingly undermined by the structuring forces of platform capitalism. What appears as openness usually masks algorithmic governance, data extraction, and engagement optimisation (Zuboff, 2019). Such mechanisms not only personalise and fragment user experience, but also contribute to polarisation and the formation of ideologically homogeneous enclaves. These processes erode public discourse, diminish the visibility of alternative voices, and foster antagonistic affective communities that form around outrage, fear, and resentment (Pariser, 2011; Sunstein, 2018).

7 On communality, see also Stalder (2018).

Within this dynamic, platform infrastructures reproduce and amplify existing societal hierarchies along intersectional lines. For users with stigmatised or marginalised identities—such as women, people of colour, LGBTQ+ individuals, and disabled persons—digital participation is often conditioned by persistent risks of harassment, hate speech, and exclusion (Kamenova & Perlinger, 2023). These forms of digital violence are not accidental but systemic: They are embedded in the architecture of algorithmic visibility and platform incentives. A negative standardisation emerges as an algorithmic normativity in which dominant user profiles are reinforced as the default, rendering othered identities hypervisible, as targets or invisible through neglect (Noble 2018; Wachter-Boettcher, 2017).

These exclusions are not merely technical oversights but are enacted through the very social and cultural processes of digital community-building. Normativity becomes embedded not only through algorithmic design but through iterative practices of interaction, recognition, and exclusion—processes which shape who belongs, who is heard, and who is rendered marginal. In such dynamics, the imagined neutrality of digital infrastructures obscures how dominant norms are socially reproduced within communities themselves, reinforcing power relations under the guise of universality.

Rather than enabling pluralistic publics, such dynamics generate toxic forms of cohesion, affective collectivities bonded simultaneously through discursive solidarity within the ingroup and antagonism (Conti, 2025a). Anonymity, virality, and algorithmic amplification allow fringe ideologies and hate-based rhetoric to scale rapidly, often beyond the capacity of moderation or resistance. The result is a reinforcement of structural inequalities through digital means: Racism, misogyny, and other exclusionary logics are not simply mirrored but intensified in the postdigital condition, re-articulated in platform-specific vernaculars and validated through engagement metrics (Hassim et al., 2024; Madriaza et al., 2025).

These antagonistic dynamics unfold through the very modalities of digital communication. The affective power of digital interactions is shaped by multimodal forms—e.g., emojis, GIFs, synchronous chat, video—that blur the boundaries between oral, written, and visual language. These affordances favour emotionally charged expression and complex relational alignments, enabling both playful connectivity and the stylised circulation of hate, mockery, and symbolic violence, as with "Hatemojis" (Kirk et al., 2021). While such tools can bridge aspects of embodied presence and make mediated communication more immersive, they remain constrained by sensory and contextual limitations. Experimental technologies such as digital skin or haptic interfaces promise deeper immersion, but the multisensory richness of physical co-presence remains only partially reproducible (Qi et al., 2024).

Yet digital spaces do not merely lack context; they produce their own. Availability indicators, metadata, user profiles, and algorithmically generated cues create layered communicative environments. These meta-contexts supplement interaction while also fragmenting it: Unlike physical space, digital communication lacks a unified, shared background. Interpretive instability becomes the norm, shaped by hidden infrastructures, disruptions, data trails, surveillance, and invisible labour. Despite this fragility, digital infrastructures can sustain and reconfigure local and translocal ties.

Both Castells (1996) and Appadurai (1996), from different theoretical vantage points, provide enduring insights into how global media and networked communication sustain diasporic connections across space. While Castells emphasises the infrastructural conditions that enable the maintenance of cultural and emotional bonds, Appadurai's concept of "mediascapes" captures the imaginative and symbolic dimensions of transnational cultural flows. Their frameworks remain useful for understanding how migrants today use digital platforms to maintain identity, build community, and facilitate economic and affective exchange across borders. In this context, tools such as translation apps, digital networking platforms, and localised support groups not only support these transnational ties, but also foster integration and participation in the new socio-spatial context (Lietz & Loska, 2024; see also Yudytska & Androutsopoulos, in this volume).

Digital infrastructures function as bridges, allowing users to inhabit multiple sociocultural realities simultaneously. Yet even here, the promise of connectivity remains uneven. As publics fracture into algorithmically tailored enclaves, the social functions of digital communication shift. Platforms increasingly satisfy emotional and political needs in lieu of proximate sociality. Whether one is recognised or accepted within one's immediate surroundings becomes secondary to digital validation. This fosters new forms of autonomy, but also cultivates atomised indifference and disembedded subjectivities. Hyperconnectivity and hyperindividualism converge in ways that challenge both democratic participation and social cohesion.

This culminates in a deep cultural paradox. Local communities grow increasingly heterogeneous, shaped by the lifewide learning processes that their members experience across their culturally hybrid, postdigital lifeworlds.[8] At the same time, the capitalist logics underpinning digital infrastructures favour disaggregating imaginaries: Instead of fostering pluralistic openness, they algorithmically stabilise and circulate fantasies of pure and static communities. The standardisation of platforms, which increasingly embeds authoritarian tendencies, feeds into a form of global techno-politics in which digital infrastructures are deployed as instruments of regulation, surveillance, and exclusion.

This dynamic produces a material regime of control in which digitally generated imaginaries manifest as real-world effects: in acts of offline violence, in cultural policing, and in the tightening of national and ideological borders. What is at stake, then, is not only epistemic but also political. As digital governance becomes more centralised, algorithmically enforced, and aligned with state interests, technological infrastructures and political authority are converging in new and dangerous ways, as the authoritarian trajectories emerging in the United States show.

5. Digital interculturality

Digital interculturality is not a supplementary dimension of intercultural interaction, but rather its contemporary condition. In postdigital societies, where communication is inseparable from the infrastructural, algorithmic, and economic architectures of digital platforms, interculturality becomes both ubiquitous and structurally mediated. It no longer describes encounters between clearly demarcated cultural identities, but rather the ongoing negotiation of meaning within systems that influence the visibility of content, guide affective responses, and determine which identities and perspectives receive recognition and legitimacy.

This transformation requires a conceptual shift: from interactional models to infrastructural analyses, from static identities to fluid, situational positionalities, and from normative ideals of 'mutual understanding' to critical inquiries into how cultural difference is produced, managed, and rendered (in)visible through digital infrastructures, and how these infrastructures actively shape cultural transformation and communicative agency and processes. As platforms increasingly function as global regulators of cultural

8 On lifewide learning in the postdigital era, see Conti & Lenehan (2024).

expression, subtly shaping what becomes legible, amplifiable, or monetisable, interculturality emerges as a contested terrain, embedded in and shaped by systems of algorithmic normativity and platform governance.

Yet the ambivalence of digital interculturality is constitutive, not accidental. The same infrastructures that constrain also enable. New collectivities form across difference; hybrid identities are performed, destabilised, and reassembled. The process is shaped by dynamic tensions, between homogenisation and heterogeneity, connection and exclusion, visibility and erasure. Interculturality in the postdigital age thus cannot be captured through competence models or celebratory narratives of global connectivity. It requires what we might term 'infrastructural literacy' as part of intercultural competence: a critical awareness of the material, algorithmic, and economic conditions that shape the emergence of meaning and the enactment and transformation of culture.

If we take seriously Geertz' (1973) call for "thick description" and the context-dependence of meaning, as suggested by Watzlawick et al. (1967) and Gumperz (1982), then studying interculturality in postdigital societies requires expanding our understanding of context itself. The digital infrastructure is no longer a background condition: It is the very environment in which culture is co-produced, circulated, and contested. The field of intercultural communication must therefore reorient itself: from analysing situated social interactions to also interrogating the invisible architectures that condition them.

Considering that culture is not a static repository of values but a product of communicative processes —often intercultural, increasingly digitally mediated—understanding the complexity of digital interculturality is not optional, but essential. It is through these processes of meaning negotiation, filtering, and amplification that cultural forms take shape and exert influence on individuals, institutions, and society at large.

The future of postdigital societies will hinge on our ability to collectively reimagine the internet, not merely as a tool for connection, but as a cultural infrastructure with world-making potential. Whether it enables plural, situated, and equitable forms of interculturality, or reinforces normative convergence and soft coercion, remains an open—and pressing—question, one that demands not just adaptation, but a fundamental rethinking of the internet itself: as a potential space for critical, emancipatory, and culturally plural futures.

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Appendix

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