Stylizing the Ideal User

Insights into the Experiences of Turkish-Speaking Voice Assistant Users in Germany

Didem Leblebici

Abstract *This chapter examines how Turkish-speaking voice assistant users stylize their English and German to mimic the 'ideal' user of Alexa and Siri. To date, little research has explored the experiences of multilingual individuals who use such technologies. Drawing from an ethnographically informed study with Turkish-speaking newcomers in Germany, this chapter offers a linguistic anthropological and sociolinguistic perspective on voice assistant use. I focus in particular on linguistic stylizations performed by participants during interviews, stylizations that index the strictly nationalized language constraints of popular voice assistants. Orienting to Portmann's (2022) study of how UX writers curate audiences by means of little texts, I argue that digital assistants are also tailored for specific addressees. The interviewees discursively constructed those audiences based on their own previous engagements with the technology. These ideas were reflected upon through their stylizing practices, which I analyze as a form of double-voicing (Bakhtin 1994; 1999; Rampton 2018). Participants often mocked the assumed audience of the technology and the voice assistant persona by performing an accent stylization of non-Western names. At other times, they adopted the standard variety and demonstrated a phenomenon of (non-)addressing the voice assistants as part of their narrative practice to avoid unwanted activation of the device. The insights of this research hold broader implications for the adoption and integration of voice technologies, particularly in multilingual or multiethnic settings.*

1. Introduction

> Birini aramam gerekiyordu, yani orada aramam gereken insanın Türkçe ismini Almanca Alman biri nasıl söylermiş gibi aksan yapıp kasıp onun ev numarasını kendi kendime aratmayı Siri'yle becerdim ve kendimle gurur duydum.
> *I needed to call someone, so I managed to use Siri to call the person's home number by speaking with a German accent, as if a German person was saying the Turkish name of the person I was supposed to call, and I was proud of myself.*

Digital technologies, especially AI chatbots and assistants reliant on voice recognition, present challenges for users who engage with them in non-standardized language varieties (e.g., Wu et al. 2020; Markl 2022; Koenecke et al. 2020). Many contemporary AI technologies seem to be constrained by boundaries associated with nation states and their official languages. As the account of the Siri user quoted above suggests, his voice assistant set to operate in German seemed to exclude people with non-German names, exemplifying a broader sociotechnical issue (see also Beneteau et al. 2019 for a Spanish–English case). In contrast to the essentialist perspective on language that has been integrated into voice assistants, contemporary sociolinguistic perspectives posit that language is an embodied, interactive, and dynamic activity that transcends geographical and political borders (also known as (trans)languaging, as discussed by Pennycook 2018; Li 2018; Cowley 2011).

To date, little research has been done to explore the experiences of multilingual speakers as they navigate and adapt voice assistant technologies in everyday domestic interactions. In this chapter, I focus on cases in which Turkish-speaking newcomers to Germany discursively echo and adapt the voice of their voice assistants – stationary smart speakers as well as assistants on smartphones – to mock, criticize, comment on, or align with some of the linguistic design constraints. Alignment in this context does not refer to users cooperating with the machine (as in Lotze 2016) but rather to speakers' discursive practices of self-presentation and positioning in relation to the technology design. The analysis specifically focuses on the stylization practices of the participants during the interviews, i.e., how they "produce specially marked and often exaggerated representations of languages, dialects, and styles that lie outside their own habitual repertoire" (Rampton 2009, 149). For instance, in the quote above, the interviewee describes deliberately stylizing his pronunciation of a non-German name. Self-reflexive performances of linguistic acts are particu-

larly useful indicators of participants' subjective experiences and assessments, because they convey "metamessages" that shed light on interlocutors' ideologies and worldviews (Coupland 2001, 155). The analysis of these practices during the interviews is supported by ethnographically grounded research including participant observation and voice history data automatically generated by the Alexa app (also called "log data", as discussed by Habscheid et al. 2021).

The study aims to explore how multilingual users navigate, adapt, evaluate, and assess voice assistants that are inscribed with certain affordances and constraints. Specifically, it seeks insights into how multilingual and migrant speakers position themselves vis-à-vis voice assistant technologies that are designed according to an understanding of languages as fixed and discrete. The "migration-driven diversity" of late modern societies, characterized by heterogeneity of ethnicities, religions, languages, identities, and cultural values, has profound implications for contemporary language use, which cannot be reduced to standardized national languages (Blommaert and Rampton 2011; Vertovec 2010). The complexity of contemporary mobilities and linguistic practices does not seem to have been reflected in the design of voice-operated technological devices that offer languages options in the form of discrete, nameable entities tied to national countries with no possibility for code-switching within a single utterance. In addition to this nationalized concept of language, English is considered to be a "suitably representative language" for training other languages in the design of language technologies (Bender 2011, 17; Bender et al. 2021). The effects of this become strikingly evident in view of the significantly worse performance observed in languages with morphological structures that are different from English, such as Turkish or Finnish (Bender 2011, 5). Conversely, "[d]ominant, prestige-loaded, and standard forms (mostly from European languages), … are further pushed in status as popular gadgets like machine translation and digital voice assistants are available and work best in these" (Schneider 2022, 373).

In the following, I first introduce the concepts of style and stylization within sociolinguistics. I elucidate not only how individuals adopt the voice of the other to mock, critique, or align with the represented voice (Rampton 2018; Bakhtin 1999) but also how organizations and institutions strategically curate and invent specific audiences through stylization in digital and non-digital contexts (Cameron 2000; Portmann 2022). This is followed by a discussion of voice assistants and how their addressees are curated as monolingual speakers of the country of residence through national language options that do not allow two named languages to be used at once. The third and main

section of this chapter begins by providing insights into my methodological approach to data collection, interpretation, and analysis of indexical fields (Eckert 2008). My analysis then draws upon the notion of "double-voicing", which encompasses an interpretation of both the stylizers' reflexive voice and the represented voice as manifested through stylistic performance (Bakhtin 1994; 1999). The analytical sections discuss two primary discourses extracted from the interviews, which are further contextualized with data from participant observation: (1) stylizations of non-Western names, utilized to both mock and critique the design of voice assistants and (2) stylizations pertaining to 'wake words', strategically employed by users to avoid activating the device in undesirable situations. In both discourses, it becomes apparent that the voices adopted reflect the speakers' image of the "ideal" user supposedly envisioned by the designers of voice assistants, which is closely intertwined with the audience design of voice user interfaces. To conclude, I reflect on the broader implications of this study for the ongoing development and integration of voice technologies, particularly in multilingual and/or multiethnic settings.

2. Style, Styling, and Stylization

In early variationist sociolinguistics, 'style' traditionally referred to language variation of speakers with regard to specific social situations such as formality or degree of attention to speech (Labov 1972). Later ethnographic studies expanded the notion by emphasizing speakers' reflexivity and their "communicative competence" (Hymes 1972) as they deployed different styles to address different audiences (Bell 1984), to evoke associations with certain social qualities in order to gain approval from the listener (Giles and Ogay 2007), or to signal identification with specific social groups (Le Page and Tabouret-Keller 1985). Against this background, contemporary research typically approaches style as something people do, i.e., 'styling', and as the accumulation of linguistic and semiotic resources that people deploy to produce social meaning and specific identities (Eckert 2003). Style is thus considered to encompass a wide range of social meanings that is not limited to the formality of the interaction, degree of attention to speech, or demographic categories (Jaspers and Van Hoof 2019, 112; Eckert 2008).

In everyday interactions, individuals naturally incorporate styling, but stylization goes beyond this, encompassing a deliberate and strategic "experiment with language" (Jaspers and Van Hoof 2019, 112). Rooted in Bakhtin's

exploration of creative textual practices in literature, stylization is characterized as "an artistic representation of another's language" (Bakhtin 1994, 362). Expanding on Bakhtin's work, Rampton approaches stylization as "the communicative action in which speakers produce specially marked and often exaggerated representations of languages, dialects, and styles that lie outside their own habitual repertoire" (Rampton 2009, 149). By stylizing, speakers engage in "double-voicing": incorporating both their reflexive voice and the stylized voice "either to mock or comment on the represented voice …, or to align oneself with the qualities that are associated with the original owners of the voice" (Jaspers and Van Hoof 2019, 112; Bakhtin 1999). In other words, alignment indexes the way speakers discursively "position themselves with respect to the form or content of their utterance" (Jaspers and Van Hoof 2019, 120). In essence, stylization practices evoke "secondary or meta-level representations" of language, thereby offering insights into speakers' broader sociocultural understandings, discourses, ideologies, and worldviews (Rampton 2006, 222; see also Thøgersen, Coupland, and Mortensen 2016).

Research in recent years has particularly emphasized the relation between stylization practices and larger societal issues, illuminating how speakers position themselves and others by performing voices (e.g., Koven 2015). Stylizations serve as markers that index social categories such as class or prestige through enregisterment processes, i.e., "processes whereby distinct forms of speech come to be socially recognized (or enregistered) as indexical of speaker attributes by a population of language users" (Agha 2005, 38). For instance, shifting between standard and stereotyped vernacular styles may serve as a means of positioning oneself in relation to power asymmetries based on socioeconomic class and ethnicity (Rampton 2006; Jaspers 2006), or as a way of expressing critical perspectives on political matters (Androutsopoulos 2023). Stylization is also observable in mediated representations such as in TV shows or radio broadcasts, contributing to the cultural reproduction of sociolinguistic stereotypes and typification (Coupland 2001; Van Hoof and Jaspers 2016).

Stylizations not only hint at the ideologies and worldviews of speakers but also inform us about how addressees are designed and curated (Bell 1984). In contrast to individuals' stylizations, language practices in institutional settings such as in service workplaces involve multiple actors and are prescriptive practices that are "imposed from the top down" (Cameron 2000, 326). In the context of digital interfaces, similar practices are observed in which specific audiences are curated "by imposing a particular 'built in' social identity" for software users (Portmann 2022). Drawing on work by Bakhtin (1986) and Piller

(2001), Portmann contends that designers of digital interfaces construct what she terms "an ideal addressee", i.e., "a social identity that users, if they wish to use that software, have no choice but take on" (Portmann 2022, 5). For example, depending on the target audience, writers may adjust the formality level of their cookie consent notices, opting for phrases like "I'm cool with cookies" rather than "I accept". In doing so, they not only reference specific addressees but actively "invent and craft said audience through their work" (Portmann 2022, 5). Voice user interfaces curate particular audiences through stylization practices in similar ways. The following section explores the audience design of voice assistants, with particular attention to the language options that they offer.

3. Voice Assistants and their Addressees

Building on Latour's work on actor networks, I conceptualize voice assistants in this chapter as "sociotechnical assemblages": assembled networks involving human and nonhuman actors (Latour 1992; 2005). Viewed as a network, a voice assistant system involves various actors including programmers, researchers, designers, UX writers, consumers/users, data labelers, algorithms, and environmental resources (Crawford and Joler 2018; Natale 2021). Whereas the human labor, environmental impact, and algorithmic processes of the assemblage are not immediately visible to users, the voice user interfaces that users engage with are presented with distinctive synthetic voices, personalities, and stylized conversation design (Natale 2021). The study upon which this chapter is based focuses on the experiences of users as addressees of Google Assistant, Siri, and Alexa – three popular voice assistants in Germany.

Companies employ several strategies to cultivate an "anthropomorphized" persona for voice user interfaces (Sweeney 2016). The assistants are often assigned female names (Siri and Alexa), accompanied by synthetic voice options that are initially introduced as exclusively female. With the primary objective of projecting an image of helpful, polite, and assisting personae, creators of these technologies have been criticized for perpetuating traditional gender roles wherein women are commonly associated with servant and assistant positions (e.g., Phan 2017; Sweeney 2016; West, Kraut, and Chew 2019). While AI assistants are stylized as the figure of a traditional middle-class housewife, users are positioned as "friendly participants in everyday family routines" (Humphry and Chesher 2020, 2; see also Phan 2017; 2019).

Like many other internationally marketed products, digital assistants undergo localization processes in which their design and content are adapted to target cultural contexts (Schneider 2022, 369). Localization encompasses several practices including the provision of gendered voice options, language choices in standardized national categories, and the incorporation of references to popular culture or other types of responses tailored to the target country. For instance, while the introduction of a new language option typically involves a female-gendered voice option, the Arabic language option for Google Assistant did not include a female voice until 2023.[1]

In terms of voice and language options, Phan (2019, 23) posits that they are "underwritten by ideals of whiteness". She argues that the language varieties chosen for voice outputs emulate the standardized varieties commonly associated with educated upper-class speech. These language options, typically represented by English varieties, are adapted for target countries incorporating regional varieties accordingly. For instance, users in Australia are presented with middle-class Australian English that also includes local knowledge and "Australian slang expressions" (Humphry and Chesher 2020, 10). Other languages are also offered in nationalized categories, e.g., a German language option is associated with a variant spoken in Germany and not in Austria, Switzerland, or other countries where users may wish to engage with Alexa in German. Although some voice assistants (including Google Assistant and Alexa) currently permit users to select multiple language options for a single device, the range of combination options is significantly limited[2] and the devices are unable to process code-switching within a single utterance. On the basis of these design choices, it appears that users are conceived of as monolingual speakers of the national language of their residency. For multilingual users, this implies an obligation to think or speak in "one language at a time", thereby suggesting a "monolingual bias" (Li 2020).

Numerous language options also remain unsupported in voice assistants, with Turkish notably absent for smart speakers such as Alexa Echo devices, Google Home, or HomePod. This observation is particularly significant for the

1 This statement is based on my own observations by checking for updates on my personal smartphone and following the news in 2022 and 2023. Although some blog posts discussed the lack of a female voice option in Arabic before 2023, I have been unable to find any official statement or announcement from Google itself.

2 For instance, Alexa only allows other languages to be combined with certain English varieties (see Leblebici 2024).

study presented here, in which participants are individuals who speak Turkish and reside in Germany. Against the background of such affordances and constraints, I argue that the users of voice assistants in this study do not fit the image of the "ideal" users envisioned by the devices' creators, as I have also discussed elsewhere (Leblebici 2024). In the next section, I introduce the backgrounds of my research participants and outline the recruitment and interview procedures.

4. Stylizing the Ideal User

4.1. Methodological approach

To analyze discourses about voice assistants in multilingual contexts, I draw from an ethnographically informed study conducted with 10 Turkish-speaking individuals living in Germany who had migrated there from Turkey within the past 10–15 years. Data collection occurred between 2021 and 2023, encompassing qualitative interviews, online and offline participant observation, follow-up interviews, and Alexa voice history data – also referred to as "log data" (Habscheid et al. 2021). This chapter centers on the informants' stylization practices observed during the interviews, which emerged as a prominent phenomenon in the collected data, offering insights into the users' assessments of the devices.

My informants were recruited by sending invitation messages to WhatsApp group chats of newcomers who self-identify as part of the "New Wave". Unlike the traditional "guest worker" diaspora in Germany, this self-proclaimed "New Wave" of migrants relocated from Turkey to Germany and other European countries for reasons such as higher education, labor opportunities, or sociopolitical motives (Yanasmayan 2018). As a member of these online communities, my positionality was of an "insider" with a similar migration and language biography (Ganga and Scott 2006; De Fina 2020). This position made it easy for me to contact individuals for interviews and for conducting participant observation both virtually and in person, in their homes, and to establish friendly relationships. Following the initial invitation message, a sample of 10 participants were included in the study. The devices they used varied, ranging from stationary smart speakers to voice assistants integrated into smartphones and smartwatches. Although their language biographies and repertoires differed, they all used Turkish and English in daily interac-

tions. Some also communicated in German in their academic or professional environments, while others were in the process of learning the language. In the subsequent analysis, excerpts from the study are contextualized to take into account the participants' devices and language repertoires.

The initial interviews were conducted in a semi-structured manner, inviting participants to comment on their motivations for using the devices and to recall their experiences and use cases related to technology. This semi-structured approach was chosen to open up participants' narratives and life stories, often referred to as "techno-biographies" (Kennedy 2003; Ching and Vigdor 2005; Lee 2014). According to Lee (2014), techno-biographic interviews are valuable as a way to prompt participants to reflect on and make sense of their experiences with domesticated technologies.

Following the period of initial interviews, participant observation was conducted during voice assistant use. Observations were made in a range of settings, including participants' homes for those using stationary smart speakers, out and about with users of voice assistants on smartphones and smartwatches, and through virtual interactions via video call. Alexa users were also asked to share their voice history data[3]. Three of the five Alexa users agreed to share their data from the previous week or month. After the observation phase, a second series of interviews was conducted to ask follow-up questions relating to the initial analysis and log data. These data served as complimentary to the analysis.

The interviews were transcribed primarily in Standard Turkish, with elements such as laughter and pauses included (see Appendix for transcription conventions). When appropriate, phonetic transcription based on the International Phonetic Alphabet (IPA) is provided to elucidate the stylization practices and demonstrate how they deviate from the participants' habitual repertoire.

Jaspers and Van Hoof (2019) propose that the analysis of stylizations should encompass an exploration of "the indexical field", which refers to "a field of potential meanings …, any one of which can be activated in the situated use of the variable" (Eckert 2008, 453). To make sense of the indexical field, the analysis is informed by a "thick" understanding, rooted in ethnographically grounded research, enabling the identification of potential indexical meanings within their local contexts (see e.g., Jaspers 2006; Rampton 2006; 2018; Coupland 2011). Stylization practices in the interviews are thus contextualized

3 Data log collection was not possible with Siri users, as Apple does not provide users access to their log data. At the time of writing, this policy remains unchanged.

with data from participant observation and voice history data retrieved from the Alexa app, which are reflected upon throughout the analysis.

In the subsequent sections, stylizations are analyzed through a dual lens, following Bakhtin's concept of "double-voicing" to examine how speakers engage with the represented voice (Bakhtin 1999; as applied by Rampton 2018, 218). Bakhtin differentiates between two types of discourses: (1) In *vari-directional* discourses, speakers engage in parody or disagreement with the represented voice. The first analytical section explores the types of creative language practices wherein participants mock or critique the supposed "ideal addressee" of voice assistants. (2) In *uni-directional* discourses, the speaker's voice and the represented voice are closer to each other; speakers align with the represented voice (Bakhtin 1999, 198). The second part addresses stylizations in which participants aim to embody qualities of the "ideal addressee" that they deem useful. In both cases, the analysis focuses on how participants discuss smart speakers in interview contexts and how they portray them in particular ways through stylization practices. Therefore, their descriptions of and reflections on the way they interact linguistically with smart speakers are considered as part of their narrative reconstructions and not simply as indicative of their de facto use.

4.2. Accent stylization of non-Western names

In the interview data, nearly every participant highlighted challenges they faced when commanding their devices to process non-English or non-German names. They explained that in order to achieve the results required, they often needed to adjust their pronunciation of Turkish names when commanding their devices to perform tasks such as playing music or making calls to friends. Notably, when participants recounted such situations, demonstrating their stylizations of Turkish names, they often did so with laughter, suggesting a sense of mockery. These examples thus illustrate vari-directional double-voicing wherein the informants distance themselves from the voice assistant's voice.

To provide a concrete example of these practices and to contextualize them, I will first introduce one participant, Selim[4], who utilizes multiple devices, including two stationary smart speakers (Alexa and Google Home) at home and Siri on his smartphone. A 27-year-old postgraduate student, Selim resides in

4 All of the names used for the participants are pseudonyms.

a shared flat with one other person who also owns a Google Home device situated in the shared living room. During our initial interview, I inquired about the language preferences Selim had chosen for his voice assistants. He said that he enjoyed using Siri in Turkish, although it had initially been set to English. Since neither Alexa nor Google Home offer Turkish as an option, he used those devices in English. Similar to experiences reported by other participants, Selim encountered difficulties with activities such as playing music or making calls, particularly when they involved processing non-English names.

Excerpt 1 – Accent stylization of the name "Ibrahim"

Selim: O [Alexa] da İngilizce
müzik falan açıyorsun bi şeyler tarif ya da soruyorsun bi şeyler
anlamıyor ki zaten seni
Didem: A öyle mi?
Selim: Hani böyle şey değil
hani çok onun gibi konuşman lazım
Ne bileyim. **İbrahim ['ibɹahim]** falan böyle lafın gelişi [...]
ismi algılamıyor aynen yani Türkçe olarak söylersen algılamayacak
Selim: *It [Alexa][5] is also in English*
When you turn on the music or ask for a recipe or something
It doesn't understand you
Didem: *Oh really?*
Selim: *I mean it is not like*
you have to speak like it [Alexa]
I don't know. ***Ibrahim ['ibɹahim].*** *Like that for example [...]*
It doesn't understand the name I mean it won't understand it if you say it in Turkish

In this excerpt, there is an accent stylization in the pronunciation of the name Ibrahim, which Selim performs in a way that deviates noticeably from his usual manner of speaking. The typical pronunciation of the name Ibrahim in Turkish would be [ib.ɾaː'him], but Selim alters it to ['ibɹahim]. Specifically, he modifies the pronunciation of "r", adjusts the pattern of intonation, and shortens the vowel sound. It is evident that Selim and other participants exaggerate their

5 Personal pronouns in Turkish are gender neutral. The third-person pronoun "o" is translated in all the excerpts as "it".

modified pronunciation in such narratives to illustrate the extent to which they deviate from their typical speech patterns in order to facilitate the device's processing of Turkish names.

Although Selim emphasized during the interview that he often needs to pronounce Turkish names with an accent, accent stylizations of people's names were only observed on some occasions when he was actually using the smart speaker Alexa. According to his voice history data of one week before the interview, he primarily used his smartphone to control music playback, utilizing voice commands to adjust volume settings, skip songs, or turn off the music, rather than specifically requesting songs by a particular artist or title. This data differed markedly from what I witnessed during participant observation in Selim's home, where he attempted to command the device to play a song by the renowned Turkish singer İbrahim Tatlıses, using an accent stylization similar to that which he demonstrated during the interview. İbrahim Tatlıses is known for performing traditional Turkish songs. Hence, accent stylizing his name introduces an extra layer of contrast, potentially heightening the implicit mockery. The juxtaposition pits "modern" technology against "traditional" music, highlighting the implied clash between contemporary voice assistant technology and the traditional genre of music performed by İbrahim Tatlıses. Additionally, since the singer is primarily recognized within Turkey and not internationally, accent stylization of his name may further emphasize the localized nature of the reference, contributing to the playful interaction between Selim, the device, and the researcher. This interaction situation persisted for some time, with the device repeatedly failing to process the name and playing other songs from Spotify instead.

This type of creative language use represents a performance for the researcher present in the room and thus differs from the interlocutor's regular engagement with the device. But Selim also performs these stylizations for other audiences, e.g., friends who visit him at home or those who connect with him through social media. For instance, there are instances in the voice history data where he instructs the device to "Say Hi to [friend's name]". When questioned about these situations in the follow-up interview, Selim explained that he likes to record Alexa's synthetic voice pronouncing the Turkish names of his friends and then shares the recordings with them via WhatsApp. This practice echoes situations in human–animal interactions (Tannen 2004), in which pets serve as communicative resources to facilitate relationships between humans.

As the dialogue with Selim illustrates, there is an understanding that users are expected to 'speak like' the voice assistant in order for Turkish names to be accurately processed by the machine (Excerpt 1). Consequently, users mimic the voice of the machine during operation, and also reproduce their imitated pronunciations for specific audiences in order to mock it. Interlocutors' performance for various (human) audiences of Turkish names pronounced with the foreign accent necessitated by the device parodies the voice of the envisioned "ideal" addressee. This ideal addressee is curated to be a monolingual speaker of a standardized language variety, in this case Standard (British or US) English. Therefore, this imagined user is expected to pronounce Turkish words with an English accent. This discrepancy between users' habitual repertoire and the expected pronunciation that the voice assistant has been designed to respond to becomes a point of entertainment and commentary for the participants.

The sensed need to mimic the represented voice is rooted in previous experiences with such technology. In the following excerpt, another participant, Erdem, shares insights into his stylization practices, although he does not actively demonstrate them during the interview. A 33-year-old engineer, Erdem had been living in Germany for just over 10 years at the time of the study. He told me that he communicated primarily in German at his workplace and engaged with Turkish, English, and German in his day-to-day interactions. He used Siri in German and had previously owned an Alexa device. However, he complained that persistent communication problems with Alexa had ultimately led him to discontinue using it. Throughout the interview, he mentioned these instances of miscommunication frequently, attributing them to "multilingual issues". Below, he elaborates on how he navigates these challenges.

Excerpt 2 – Remembering how to pronounce names like Siri

Selim: Sen birini ara dediğinde onu anlayınca o kendi nasıl anladığını *pronunciation*'i söylüyor.
Şimdi ben Didem'i *call Didem* diyorum mesela benim telefonumda Siri (2) benim telefonumda Siri Almanca mesela ben *ruf Didem an* diyorum O bana mesela *Okay ich rufe Didem an* derken Didem'i farklı söylüyor ve bir dahaki sefere onu nasıl anladığını aklımda tutuyorum yani seninle konuştuğumda bu küçük farkı böyle hani

Etrafından dönüyorum hani normal Türkçe bi isim söylesem onu anlamayacak çünkü.

Selim: *When you tell it [Siri] call this person, it tells you how it understood the pronunciation.*
Now I say "call Didem" for example. In my phone Siri (2) In my phone, Siri is in German for example. I say "ruf Didem an" [Call Didem] for example.
When it says "Okay ich rufe Didem an" [Okay I'll call Didem] it pronounces Didem differently and the next time I remember how it understood it. The small difference I mean.
I turn around it [the usual pronunciation]. I mean if I say a normal Turkish name it won't understand it.

Erdem has set his voice assistant to reiterate his commands, including names, before carrying out the actions requested. He uses this feature to familiarize himself with the synthetic voice and to devise workarounds so that he can utilize the machine effectively. While this may not be considered a stylization, since he does not perform a marked or exaggerated variant of the name "Didem", it is noteworthy that he engages in metalinguistic reflection regarding his stylization practices. He acknowledges that he does not utter a "normal"-sounding Turkish name but instead must "turn around" the standard pronunciation by mimicking the sound produced synthetically by the machine. Furthermore, during our conversation, he compared this practice to performing in a theater, emphasizing that he deviates from his usual linguistic repertoire to mimic the voice of the machine. His insights reveal a deliberate effort to navigate and subvert the limitations imposed by the technology. The participant's decision to discontinue using Alexa due to communication issues further testifies to his critical perspective on the design of voice assistants.

While accent stylizations of Turkish names are commonly employed for the purpose of mockery or critiquing the inadequacy of voice assistants, in other situations participants adopt stylizations because they find them useful. The subsequent section discusses this aspect, with illustrative excerpts to elucidate how participants utilize stylizations for practical purposes.

4.3. Accent stylization of wake words "Echo", "Alexa", and "Hey Siri"

Not only are people's names subject to stylization, but also the wake words like "Alexa", "Echo" or "Hey Siri" used to activate the voice assistants. This section illustrates uni-directional double-voicing whereby users align with the rep-

resented voice rather than contest it. Adopting a stylized version of the wake word, often "with an accent", is reported to be necessary in order to effectively engage with the device. In the following excerpt, Selin, a 20-year-old undergraduate engineering student, who uses Alexa in German, discusses her decision to modify the wake word.

Excerpt 3: Accent stylization of "Echo"

Selin: Bir de şeyini değiştirmiştim hani komut harekete geçirme kelimesi Echo [eko] olabiliyor başka Amazon falan da olabiliyor sanırım. Onu başlarda Echo [eko] yapmıştım mesela, Echo'yu [eko] daha zor anlıyordu.
Echo [e:ko] falan hani böyle daha aksanlı söylemek gerekiyordu galiba. Onu daha zor anlıyordu. Şimdi Alexa'yı daha yine kolay anlıyor ama yine mesela duymadığı oluyor

Selin: *I also changed something, I think the command activation word can be Echo [eko], it can also be Amazon or something. For example, I made it Echo [eko] at the beginning, but it was harder for it to understand Echo [eko].*
E::cho [e:ko] *or something like that, I guess it should have been said with more of an accent. It found it more difficult to understand. Now it understands Alexa more easily, but there are times when it can't hear me.*

Unlike some other participants in the study, Selin does not use Alexa as a communicative resource to entertain visitors by demonstrating its shortcomings. According to her voice history data collected via the Alexa app, she frequently employs it for tasks such as playing music and setting timers, predominantly using short, imperative commands. Consequently, she prioritizes smooth device operation and opts for the most effective wake word, "Alexa," over "Echo". In recounting her narrative, she stylizes the word Echo by mimicking "an accent", which is, in fact, the standard German pronunciation of the word Echo [e:ko] instead of Turkish [eko]. Unlike the stylized Turkish names discussed in the previous section, stylizing the wake word is not about implying mockery or criticism. Instead, Selin frames the adjustment – either accent stylization or choosing an alternative wake word – as a technical solution to an issue that, unaddressed, would hamper functionality.

During the interviews, the presence of voice assistants in the room was palpable, often indexed by the occasional utterance of the wake word. As discussions centered around Siri or Alexa, participants with their assistants set

to English or German adopted the Turkish pronunciation of the wake word to prevent inadvertent activation while conversing with me in Turkish about the technology. For example, in the following excerpt, Alp, a 28-year-old Siri user, elaborates on the wake word "Hey Siri" using various accent stylizations.

Excerpt 4: Accent stylization of "Hey Siri"

Alp: son zamanlarda bazen böyle hey Siri [siɾi] diye sesleniyorum, bazen cevap vermiyor. Şu an da cevap vermiyor çünkü Türkçe olarak söylüyorum.
Didem: İngilizce farklı şekilde mi tonluyorsun?
Alp: **Hey Siri ['siɹi]** dediğim zaman. Mesela ya da
Siri: (beeps)
Alp: E:: italyancada **eyy ziri [ei:: ziɾi]** böyle **eyy [ei::]** diyorlar ona cevap veriyor
Alp: *Lately sometimes I call like hey Siri [siɾi], sometimes it doesn't answer. It is also not answering right now because I am speaking in Turkish.*
Didem: *Do you intonate English differently?*
Alp: *When I say **hey Siri ['siɹi]**. For example or*
Siri: *(beeps)*
Alp: *E:: they say eyy ziri **[ei:: ziɾi]** like ey **[ei::]** in Italian. It answers to that.*

It is noteworthy that Alp uses digital assistants in German, English, and Italian, particularly with his Italian- and English-speaking friends. During both interviews, he emphasized that he enjoyed using Siri with his friends to explore different ways of engaging with the device and to impress them (also observed in Habscheid, Hector, and Hrncal 2023). For instance, he demonstrated the activation of the smartphone flashlight by voice-commanding "Lumos", a charm from the Harry Potter series that creates light. By incorporating 'tricks' using popular media references, voice assistants can be adapted to impress and thus mediate relationships with others. This aspect is especially relevant in interpreting Alp's stylizations, as he was also able to experience how his Italian-speaking friends engage with the device.

In the excerpt above, Alp initially pronounces the wake word in Turkish to prevent device activation. When asked about intonation differences in English, he demonstrates his pronunciation of "Siri" with a voiced alveolar approximant. As with the user in Excerpt 1, the contrast between the English and Turkish pronunciation is discernible, particularly in the placement of the "r" sound.

Siri is activated by the accent stylization during our interaction, but Alp does not pay attention to this interruption and goes on to perform an Italian accent stylization of "Siri". He comments that he learned this pronunciation from his Italian-speaking friends: "they say eyy ziri". Although log data retrieval is not offered by Siri, the interview excerpt illustrates the implementation of different stylizations to avoid inadvertent device activation as well as to selectively activate it in desired situations according to language settings.

While stylization practices of wake words retain a distinctive quality and do not completely blend with the speaker's habitual language repertoire, they are not presented in mockery, parody, or irony. Rather, they indicate an alignment with the represented voice, which can be characterized as uni-directional double-voicing (Bakhtin 1999; Rampton 2018, 218). The distance between the usual voice and the represented voice remains minimal, although it is not possible to allege a complete "fusion of voices" (Bakhtin 1999, 198). For instance, in Alp's case, he echoes the voice qualities of his Italian friends when using Italian language settings, aligning himself with the characteristics associated with an "ideal" monolingual user with a standardized repertoire of a national language. In other examples involving English or German, speakers not only make use of their knowledge of standard varieties of English and German but also imitate the voice of the machine to attain the anticipated voice quality and ensure proper functionality of the device.

5. Conclusions

This chapter set out to offer sociolinguistic and linguistic anthropological insights into the navigation, adoption, and critical appraisal of voice assistant technologies by multilingual speakers. Based on ethnographically informed data collected with Turkish-speaking newcomers in Germany, the analysis concentrated on participants' stylizations: exaggerated linguistic performances that fall outside the speakers' ordinary linguistic repertoires (Rampton 2009). Stylizations offer valuable insights into individuals' experiences and assessments and can unveil ideologies and worldviews (Coupland 2011, 155) that are connected to broader sociotechnical issues, particularly concerning the interface design of voice assistants.

With regard to voice assistants' audience design and curation, the findings resonate with Portmann's (2022) assertions concerning digital interfaces: it becomes evident that users feel obliged to conform to the prescribed mono-

lingual mode of interaction in order to obtain required results from voice user interfaces. The provision of languages in discrete national categories, coupled with the inability to process code-switching, makes it clear that the envisioned "ideal addressees" of these voice assistants are constructed to align with the characteristics of monolingual speakers of the standardized national language of their residence, such as standard German in Germany (as discussed in Leblebici 2024). These affordances and constraints shape user interactions within a predefined linguistic and sociocultural scope.

Against this background, I have argued that the study participants with their multilingual backgrounds are not the representative persons curated as target audiences of these technologies. The participants acknowledge this themselves, and reflect on it in different ways, not least when they mimic the voice of the machine or of their friends, performing accent stylizations in German, English, Italian. In doing so, they stage "double-voicing" (Bakhtin 1999; Van Hoof and Jaspers 2016), incorporating two voices in their performances: (1) the stylized voice of the "ideal addressee", (2) their reflexive voice for commenting, mocking, critiquing or aligning with the represented voice. In all cases, these stylizations are not simply creative performances but are a way for speakers to position themselves within the sociotechnical assemblage.

On the one hand, performed accent stylizations of Turkish names were observed as a means of mocking the interface and highlighting the shortcomings of its design. Contemporary migrant-receiving societies, characterized as "superdiverse" due to globalization effects, are home to populations with diverse religious, geographical, national, and ethnic backgrounds (Vertovec 2010). Given this diversity, one might expect voice technologies localized for specific countries to adapt their databases accordingly. However, the experiences of study participants suggest otherwise. Through accent stylizations of Turkish names, participants denigrate voice user interfaces that fail to adequately process non-English or non-German names when set to operate in English or German respectively. Within the contemporary landscape of diverse communication opportunities provided by ever more media channels and platforms (Madianou and Miller 2013), voice assistants' officially propagated range of services are expanded by the creative ways consumers use them to entertain and impress others, not least by deploying different accent stylizations. These stylizations go beyond casual humor: they also express critique of interface designers' limited perspectives. Future research into this promising field could explore whether processes of enregisterment, stereotyping, or typification

(Agha 2005) occur, associating specific forms of speaking with voice assistant attributes.

On the other hand, accent stylizations of activation words such as "Hey Siri" served much less to provoke humor than to adapt to the standard variety in order, quite simply, to be heard – or processed. At the same time, being able to shift between standard German or English and Turkish 'incomprehensible' pronunciations of wake word emerged as a useful resource that enabled multilingual participants to discuss the machine without activating it. In these examples, people describe how they adapt themselves to nonhuman actors' modes of operation for better functionality (Habscheid 2023) by bringing together "a range of linguistic, artefactual, historical and spatial resources … in particular assemblages in particular moments of time and space" (Pennycook 2017, 278). For future research, it could be interesting to explore the extent to which accent stylizations of functional lexical items like wake words "merge" with a speaker's own voice and contribute to processes where "stylization becomes style" (Bakhtin 1999, 198).

Based on ethnographically grounded qualitative research, the analysis presented here makes no claim to be representative of the experiences of Turkish-speaking people in Germany, let alone those of multilingual users of voice user interfaces more widely. Furthermore, the subjective experiences are presented through the lens of a researcher who is considered an insider within a specific community. The observations and analyses have been derived from narratives recounted in interviews rather than from interactive practices in everyday life. Nevertheless, the study has some valuable implications for the adoption and future design of voice assistants, especially in multilingual and multiethnic settings.

In the light of what contemporary research on superdiverse societies has shown, expanding the databases of voice assistants to include names that are not traditionally considered 'German' or 'English' seems long overdue. While this study has illuminated some of the challenges for users of voice assistants in multilingual contexts, it also underscores users' creativity in integrating these technologies into their daily lives. Users engage with voice user interfaces and incorporate them into everyday domestic interactions in unexpected ways by combining cultural, linguistic, and spatial resources. At the same time, these insights indicate the absence of multilingual practices, such as code-switching or the inclusion of non-English or German names in the respective language option, within the voice assistant data set. By failing to implement such prac-

tices in the interface design, technology companies thus contribute to the reinforcement, reproduction, and securitization of national language ideologies.

Transcription Conventions

.	pause of less than a second
(2)	approximate length of pause in seconds
?	raising intonation
line break	new idea/proposition
bold	stylization

Acknowledgements

I would like to thank Tim Hector and Stephan Habscheid for their helpful suggestions and comments in revising this article.

References

Agha, Asif. 2005. "Voice, Footing, Enregisterment." *Journal of Linguistic Anthropology* 15 (1): 38–59. https://doi.org/10.1525/jlin.2005.15.1.38.

Androutsopoulos, Jannis. 2023. "Punctuating the Other: Graphic Cues, Voice, and Positioning in Digital Discourse." *Language & Communication* 88 (January):141–52. https://doi.org/10.1016/j.langcom.2022.11.004.

Bakhtin, Mikhail Mikhailovich. 1986. *Speech Genres and Other Late Essays*. 1st ed. Austin: University of Texas Press.

Bakhtin, Mikhail Mikhailovich. 1994. *The Dialogic Imagination: Four Essays*. Edited by Caryl Emerson and Michael Holquist. 9th Edition. University of Texas Press Slavic Series 1. Austin: University of Texas Press.

Bakhtin, Mikhail Mikhailovich. 1999. *Problems of Dostoevsky's Poetics*. 8th Printing. Theory and History of Literature 8. Minneapolis: University of Minnesota Press.

Bell, Allan. 1984. "Language Style as Audience Design." *Language in Society* 13 (2): 145–204. https://doi.org/10.1017/S004740450001037X.

Bender, Emily M. 2011. "On Achieving and Evaluating Language-Independence in NLP." *Linguistic Issues in Language Technology* 6 (October). https://doi.org/10.33011/lilt.v6i.1239.

Bender, Emily M., Timnit Gebru, Angelina McMillan-Major, and Shmargaret Shmitchell. 2021. "On the Dangers of Stochastic Parrots: Can Language Models Be Too Big? 🦜." In *Proceedings of the 2021 ACM Conference on Fairness, Accountability, and Transparency*, 610–23. Virtual Event Canada: ACM. https://doi.org/10.1145/3442188.3445922.

Beneteau, Erin, Olivia K. Richards, Mingrui Zhang, Julie A. Kientz, Jason Yip, and Alexis Hiniker. 2019. "Communication Breakdowns Between Families and Alexa." In *Proceedings of the 2019 CHI Conference on Human Factors in Computing Systems*, 1–13. New York, NY, USA: ACM. https://doi.org/10.1145/3290605.3300473.

Blommaert, Jan, and Ben Rampton. 2011. "Language and Superdiversity: A Position Paper." *Working Papers in Urban Language & Literacies* 13 (2).

Cameron, Deborah. 2000. "Styling the Worker: Gender and the Commodification of Language in the Globalized Service Economy." *Journal of Sociolinguistics* 4 (3): 323–47. https://doi.org/10.1111/1467-9481.00119.

Ching, Cynthia Carter, and Linda Vigdor. 2005. "Technobiographies: Perspectives from Education and the Arts." Paper presented at the First International Congress of Qualitative Inquiry, Champaign, IL.

Coupland, Nikolas. 2001. "Dialect Stylization in Radio Talk." *Language in Society* 30 (3): 345–75. https://doi.org/10.1017/S0047404501003013.

Coupland, Nikolas. 2011. "The Sociolinguistics of Style." In *The Cambridge Handbook of Sociolinguistics*, edited by Rajend Mesthrie, 138–56. Cambridge; New York: Cambridge University Press.

Cowley, Stephen J. 2011. "Distributed Language." In *Distributed Language*, edited by Stephen J. Cowley, 1–14. Benjamins Current Topics, v. 34. Amsterdam; Philadelphia: John Benjamins Pub. Co.

Crawford, Kate, and Vladan Joler. 2018. "Anatomy of an AI System." http://www.anatomyof.ai.

De Fina, Anna. 2020. "The Ethnographic Interview." In *The Routledge Handbook of Linguistic Ethnography*, edited by Karin Tusting, 154–67. Routledge Handbooks in Applied Linguistics. London; New York: Routledge, Taylor & Francis Group.

Eckert, Penelope. 2003. "The Meaning of Style." *Texas Linguistic Forum* 47:41–53.

Eckert, Penelope. 2008. "Variation and the Indexical Field." *Journal of Sociolinguistics* 12 (4): 453–76. https://doi.org/10.1111/j.1467-9841.2008.00374.x.

Ganga, Deianira, and Sam Scott. 2006. "Cultural 'Insiders' and the Issue of Positionality in Qualitative Migration Research: Moving 'Across' and Moving 'Along' Researcher-Participant Divides." *Forum Qualitative Sozialforschung* 7 (3).

Giles, Howard, and Tania Ogay. 2007. "Communication Accommodation Theory." In *Explaining Communication: Contemporary Theories and Exemplars*, edited by B. B. Whaley and W. Samter, 293–310. Mahwah, NJ: Lawrence Erlbaum.

Habscheid, Stephan. 2023. "Socio-Technical Dialogue and Linguistic Interaction. Intelligent Personal Assistants (IPA) in the Private Home." *Sprache Und Literatur* 51 (2): 167–96. https://doi.org/10.30965/25890859-05002020.

Habscheid, Stephan, Tim Hector, and Christine Hrncal. 2023. "Human and Non-Human Agency as Practical Accomplishment: Interactional Occasions for Ascription and Withdrawal of (Graduated) Agency in the Use of Smart Speaker Technology." *Social Interaction. Video-Based Studies of Human Sociality* 6 (1): 1–31. https://doi.org/10.7146/si.v6i1.137378.

Habscheid, Stephan, Tim Moritz Hector, Christine Hrncal, and David Waldecker. 2021. "Intelligente Persönliche Assistenten (IPA) mit Voice User Interfaces (VUI) als 'Beteiligte' in häuslicher Alltagsinteraktion. Welchen Aufschluss geben die Protokolldaten der Assistenzsysteme?" *Journal für Medienlinguistik* 4 (1): 16–53. https://doi.org/10.21248/jfml.2021.44.

Humphry, Justine, and Chris Chesher. 2020. "Preparing for Smart Voice Assistants: Cultural Histories and Media Innovations." *New Media & Society* 23 (7): 1–18. https://doi.org/10.1177/1461444820923679.

Hymes, Dell. 1972. "On Communicative Competence." In *Sociolinguistics. Selected Readings*, edited by J.B. Pride and Janet Holmes, 269–93. Harmondsworth: Penguin Books.

Jaspers, Jürgen. 2006. "Stylizing Standard Dutch by Moroccan Boys in Antwerp." *Linguistics and Education* 17 (2): 131–56. https://doi.org/10.1016/j.linged.2006.09.001.

Jaspers, Jürgen, and Sarah Van Hoof. 2019. "Style and Stylisation." In *The Routledge Handbook of Linguistic Ethnography*, edited by Karin Tusting, 109–24. London; New York: Routledge, Taylor & Francis Group. https://doi.org/10.4324/9781315675824-9.

Kennedy, Helen. 2003. "Technobiography: Researching Lives Online and Off." *Biography* 26 (1): 120–39.

Koenecke, Allison, Andrew Nam, Emily Lake, Joe Nudell, Minnie Quartey, Zion Mengesha, Connor Toups, John R. Rickford, Dan Jurafsky, and Sharad

Goel. 2020. "Racial Disparities in Automated Speech Recognition." *Proceedings of the National Academy of Sciences* 117 (14): 7684–89. https://doi.org/10.1073/pnas.1915768117.

Koven, Michele. 2015. "Narrative and Cultural Identities: Performing and Aligning with Figures of Personhood." In *The Handbook of Narrative Analysis*, edited by Anna De Fina and Alexandra Georgakopoulou, 388–407. Malden, MA: Wiley Blackwell.

Labov, William. 1972. *Sociolinguistic Patterns*. Philadelphia: University of Pennyslvania Press, Inc.

Latour, Bruno. 1992. "Where Are the Missing Masses? The Sociology of a Few Mundane Artifacts." In *Shaping Technology/Building Society: Studies In Sociotechnical Change*, 225–58. Cambridge, Mass: The MIT Press.

Latour, Bruno. 1992. 2005. *Reassembling the Social: An Introduction to Actor-Network-Theory*. Clarendon Lectures in Management Studies. Oxford; New York: Oxford University Press.

Le Page, R. B., and Andrée Tabouret-Keller. 1985. *Acts of Identity: Creole-Based Approaches to Language and Ethnicity*. Cambridge; New York: Cambridge University Press.

Leblebici, Didem. 2024. "'You Are Apple, Why Are You Speaking to Me in Turkish?': The Role of English in Voice Assistant Interactions." *Multilingua* 23(4): 455–85. https://doi.org/10.1515/multi-2023-0072.

Lee, Carmen. 2014. "Language Choice and Self-Presentation in Social Media: The Case of University Students in Hong Kong." In *The Language of Social Media*, edited by Philip Seargeant and Caroline Tagg, 91–111. London: Palgrave Macmillan UK. https://doi.org/10.1057/9781137029317_5.

Li, Wei. 2018. "Translanguaging as a Practical Theory of Language." *Applied Linguistics* 39 (1): 9–30. https://doi.org/10.1093/applin/amx039.

Li, Wei. 2020. "Multilingual English Users' Linguistic Innovation." *World Englishes* 39 (2): 236–48. https://doi.org/10.1111/weng.12457.

Lotze, Netaya. 2016. *Chatbots: eine linguistische Analyse*. Sprache – Medien – Innovationen, Band 9. Berlin: Peter Lang.

Madianou, Mirca, and Daniel Miller. 2013. *Migration and New Media*. Routledge. https://doi.org/10.4324/9780203154236.

Markl, Nina. 2022. "Language Variation and Algorithmic Bias: Understanding Algorithmic Bias in British English Automatic Speech Recognition." In *2022 ACM Conference on Fairness, Accountability, and Transparency*, 521–34. Seoul Republic of Korea: ACM. https://doi.org/10.1145/3531146.3533117.

Natale, Simone. 2021. *Deceitful Media: Artificial Intelligence and Social Life after the Turing Test*. Oxford University Press. https://doi.org/10.1093/oso/9780190080365.001.0001.

Pennycook, Alastair. 2017. "Translanguaging and Semiotic Assemblages." *International Journal of Multilingualism* 14 (3): 269–82. https://doi.org/10.1080/14790718.2017.1315810.

Pennycook, Alastair. 2018. *Posthumanist Applied Linguistics*. London; New York: Routledge/Taylor & Francis Group.

Phan, Thao. 2017. "The Materiality of the Digital and the Gendered Voice of Siri." *Transformations* 29:23–33.

Phan, Thao. 2019. "Amazon Echo and the Aesthetics of Whiteness." *Catalyst: Feminism, Theory, Technoscience* 5 (1): 1–38. https://doi.org/10.28968/cftt.v5i1.29586.

Piller, Ingrid. 2001. "Identity Constructions in Multilingual Advertising." *Language in Society* 30 (2): 153–86. https://doi.org/10.1017/S0047404501002019.

Portmann, Lara. 2022. "Crafting an Audience: UX Writing, User Stylization, and the Symbolic Violence of Little Texts." *Discourse, Context & Media*, 8.

Rampton, Ben. 2006. *Language in Late Modernity: Interaction in an Urban School*. Cambridge: Cambridge University Press.

Rampton, Ben. 2009. "Interaction Ritual and Not Just Artful Performance in Crossing and Stylization." *Language in Society* 38 (2): 149–76. https://doi.org/10.1017/S0047404509090319.

Rampton, Ben. 2018. *Crossing: Language and Ethnicity among Adolescents*. Third edition. Routledge Linguistics Classics. London; New York: Routledge.

Schneider, Britta. 2022. "Multilingualism and AI: The Regimentation of Language in the Age of Digital Capitalism." *Signs and Society* 10 (3): 362–87. https://doi.org/10.1086/721757.

Sweeney, Miriam. 2016. "The Intersectional Interface." In *The Intersectional Internet: Race, Sex, Class and Culture Online*, edited by Safiya Umoja Noble and Brendesha M. Tynes, 215–28. Digital Formations, vol. 105. New York: Peter Lang Publishing, Inc.

Tannen, Deborah. 2004. "Talking the Dog: Framing Pets as Interactional Resources in Family Discourse." *Research on Language & Social Interaction* 37 (4): 399–420. https://doi.org/10.1207/s15327973rlsi3704_1.

Thøgersen, Jacob, Nikolas Coupland, and Janus Mortensen, eds. 2016. *Style, Media and Language Ideologies*. Standard Language Ideology in Contemporary Europe. Oslo: Novus Press.

Van Hoof, Sarah, and Jürgen Jaspers. 2016. "Negotiating Linguistic Standardization in Flemish TV Fiction around 1980: Laying the Grounds for a New Linguistic Normality." In *Style, Media and Language Ideologies*, edited by Jacob Thøgersen, Nikolas Coupland, and Janus Mortensen, 161–88. Standard Language Ideology in Contemporary Europe. Oslo: Novus Press.

Vertovec, Steven. 2010. "Towards Post-Multiculturalism? Changing Communities, Conditions and Contexts of Diversity." *International Social Science Journal* 61 (199): 83–95. https://doi.org/10.1111/j.1468-2451.2010.01749.x.

West, Mark, Rebecca Kraut, and Han Ei Chew. 2019. "I'd Blush If I Could – Closing Gender Divides in Digital Skills Through Education." Technical Report GEN/2019/EQUALS/1 REV. UNESCO. https://unesdoc.unesco.org/ark:/48223/pf0000367416.page=1.

Wu, Yunhan, Daniel Rough, Anna Bleakley, Justin Edwards, Orla Cooney, Philip R. Doyle, Leigh Clark, and Benjamin R. Cowan. 2020. "See What I'm Saying? Comparing Intelligent Personal Assistant Use for Native and Non-Native Language Speakers." In *22nd International Conference on Human-Computer Interaction with Mobile Devices and Services*, 1–9. Oldenburg Germany: ACM. https://doi.org/10.1145/3379503.3403563.

Yanasmayan, Zeynep. 2018. *The Migration of Highly Educated Turkish Citizens to Europe: From Guestworkers to Global Talent*. 1st ed. Abingdon, Oxon; New York, NY: Routledge. https://doi.org/10.4324/9781315555584.