Virtual linguistic landscape: Prospective English language teachers' critical enquiry on discourse practices in digital multilingual spaces

Virtual Linguistic Landscape (VLL) research goes beyond traditional Linguistic Landscape research focusing on multilingual signage in the physical geography of public spaces to investigate all kinds of semiotic practices in digital spaces. This renewed understanding of the socially constructed nature of communication involving issues of digital repertoire, language choice, representation and self-presentation in virtual environments has direct implications on literacy education as well as on language teacher education. The paper reports the findings attained from an explorative practice in an applied linguistics course at the ELT department of a Turkish university where VLL is utilized for engaging prospective teachers of English in self-driven research, critical reflection and co-constructive dialogue on how language functions in diverse digital contexts. Based on qualitative data comprising 31 participants' written reports and presentations on VLL research and their evidence-based post-reflection, the paper discusses how VLL research informs professional identity development with close reference to multiliteracies approach, multilingual-multicultural practices in user generated content and the related issue of identity/identification in virtual realms.

1 Introduction

Virtual Linguistic Landscape (VLL, hereafter) which is anchored in Linguistic Landscape (LL, hereafter), scrutinizing social interaction in public spaces of a physically defined world, moves beyond to explore communication in virtual spaces. Both LL and VLL studies are grounded in social semiotic studies, seeing language practice as a complex multimodal meaning making system being situated in social contexts. Meaning of signs are largely dependent on where they are located and through negotiation of these meanings the notion of place is continuously reconstructed, a concept which Scollon / Scollon (2003: 110) define as "geosemiotics". Increasingly complex ways of communication not only in real but also in virtual environments invite applied linguists to reconsider the notion of place, or in a more relevant way 'space', and scrutinize language as semiotic practice in digital communication which is transitory, dynamic and constantly updated even on a day to day basis. LL is mainly concerned with the way different languages interact in the public signage of shared physical spaces and how this phenomenon marks issues of identity, ownership, ideology, and power relations (Shohamy 2006). In this respect, LL research stimulates new areas of enquiry and reflection on societal multilingualism (Gorter 2013). VLL research has a shared interest with LL research in exploring linguistic as well as other semiotic choices and the possible meaning making systems operating in this process but broadens its scope to address these issues in virtual environments which, according to Ivkovic / Lotherington (2009: 19), "can innovatively repackage and reposition languages in an unfolding universe of new interactive possibilities, creating a linguistic ecology that is not representative of the physical world". As they further comment, in this ecology all encounters are "mediated", "delocalised" and "transient" (Ivkovic / Lotherington 2009: 30).

Drawing on this theoretical background, the article makes language teacher professional identity development a central theme of inquiry, and hence questions the affordances of VLL research in pre-service language teacher education. Integrating VLL insights to teacher education is driven by three intersecting aims: 1. raising awareness on New Literacies Approach in language education where communication is envisioned as social semiotic practice, 2. developing

an understanding of linguistic and cultural diversity by addressing pluri/multi/translingual practices in digital spaces, 3. gaining deeper insight to the dynamic and complex processes of teacher identity development where multiple selves of the prospective teachers as social media users, researchers and future practitioners inform each other. The preferred model for pursuing these aims in teacher preparation is inspired by "Explorative Practice" (Miller / Cunha 2019: 583) which prioritizes data-driven joint enquiry and co-constructive critical reflection by theoretically underpinning "inclusivity", "ethics" and "criticality" on one hand and integrating research to pedagogical action on the other hand. The modal supports explorative work which positions prospective teachers and teacher educator as co-researchers thus enhancing their agencies in providing relevant data and working collegially to develop shared understanding of VLL and its implications for language education.

2 Background to the Study

The VLL research project was implemented in the fall term of the academic year 2020-2021 with the participation of 80 senior prospective English language teachers enrolled in an applied linguistics course at the ELT Department of a state university in Turkey. Having a project on the exploration of communication in digital realms triggered special interest as it was a period when all kinds of social, academic and professional activities moved online due to the pandemic. In this context, the project partly responds to the thought-provoking question raised by Krompák / Fernández-Mallat / Meyer (2022: 20) with respect to future perspectives on linguistic landscape research: "To what extent will linguistic and semiotic educationscapes expand even deeper into the digital?" With this question in mind, the following section explains the rationale of the study and its process of implementation.

2.1 Rationale of the Study

LL research and the expansion of the research area to VLL is grounded in Applied Linguistics and Sociolinguistics in dialogue with many other study areas such as Multimodality, Critical Discourse Analysis, Multilingualism, New Literacies and Communication Technologies. VLL study aligns with social and digital turn in communication studies; new forms of information and means of interaction with Web 3.0 tools indicate an era which is "participatory, social, and reflective" (Lomicka / Lord 2019: 12) requiring not only higher degrees of digital competence but also skills in having a critical interpretation of digital content. As Kim (2018: 41) discusses, the notion of digital literacies needs a broader vision tracing "sociocultural practices for relationships, identity construction and positioning" where "language norms and practices are not fixed, but multiple, fluid and under constant negotiation, especially as individuals move across contexts". The existence of many-to-many communication through (micro)blogging, collaborative digital spaces enabling co-authoring, smart applications for user-generated content, multiple opportunities for social networking, online gaming, live streaming and many other digital facilities indicate an era which makes digital communication more and more personal, dynamic and transitory. All these digital connections lead to a renewed understanding of "design" which is not limited to the act of creating and composing multimodal texts but rather signalling limitless possibilities to get connected to different communities of practice which is not grounded in a particular space and/or time. Gee (2004: 284) discusses new literacies, new times and new capitalism with reference to three types of designs in close interaction with each other; the ability to design new identities, affinity groups, and networks. In other words, multimodal discourses operate at material, individual and social levels, enacted and interpreted in diverse ways to create meanings and increase ways of being in digital spaces.

Following these threads of arguments, VLL research needs to move beyond the linguistic focus on spoken and written language to "embrace the complexity of semiotic spaces" (Biró 2018: 182) and identify language users as authors, designers and agents of semiotic landscapes. In a similar vein, language and language teacher education have to seek future directions in L2 contexts to synergize new ways of introducing Multiliteracies approach (The New London Group 1996; Cope / Kalantzis 2000) which, according to Luks / Warner / Blyth (2021: 22) recognizes language as a "flexible semiotic system" and language learners as "designers of meaning" having "agency" in using all semiotic resources available to them. These new perspectives necessitate a revised understanding of literacy. As Lotherinton / Jenson (2011: 227) discuss two-dimensional (2D) literacies, or namely "flat" literacies, based on receptive and productive skills in school curricula need to be transformed to three-dimensional (3D) literacies which support learners' dynamic interaction in multimodal communication as cowriters, actors, avatars, producers and consumers of mediated communication. Such a paradigmatic change points to substantial shifts in teacher preparation for literacy education in an additional language.

Driven by this motivation, VLL research embedded in an applied linguistics course could potentially pave the way for an understanding of new directions in discourse studies, i.e. systemic functional linguistics originally located in linguistic texts and grammar systems expanding its focus to analyse multimodal semiosis and interaction between different systems of multimodality via Systemic Functional Multimodal Discourse Analysis (SF-MDA) and the integration of the tools and methods of Critical Discourse Analysis to Social Semiotics, Conversation Analysis to Interactional Multimodal Analysis, Pragmatics to Multimodal Pragmatics in a transdisciplinary frame to capture the complexity of communication in the digital world (Tan / O'Halloran / Wignell 2020: 263-281).

One further affordance of VLL is its potential to help student teachers question if and to what extent their own daily practices in social media platforms, their multimodal ways of self-presentation and self-expression inform their beliefs and attitudes on language use in computer mediated communication and increase their understanding of translanguaging. Lee / Li (2020: 399) conceptualize mobility not only as displacement in physical sense but as data transfer in networked digital spaces. Based on this view, they envision communication in late modernity as the process of "orchestrating languages, modes and media" which removes boundaries and binary oppositions between languages and semiotic modes, a phenomenon which they define from a translanguaging lens. As Lee / Li (2020: 413) put it;

translanguaging is a discursive and semiotic performance, one that is dynamic and processual, and in which the language-user as performer constructs social experiences and identities by weaving across the complex fabric of multilingual and multimodal discourse.

The theoretical framework discussed here has been the roadmap in the implementation of the VLL research which involved student teachers in data-informed collaborative dialogue on a wide range of interrelated topics; language as social semiotics, multilingual/translingual practices in online communication, identity work in digital spaces accompanied by deeper reflection on the issues of multiliteracies, diversity, inclusivity and criticality in educationscapes. Many of the student teachers involved in the project were 'digital natives' so above all VLL offered them a critical lens to dig deeper and reflect on the ways they use their digital repertoires, scrutinize what they find salient in digital communication, and bring in different perspectives to the exploration of data shared by their peers.

2.2 Implementation of The Project: Data collection and analysis

At the initial phase a course blog was created to generate whole class discussion on the impact of the rapid transition to online education on language learning and teaching. The prospective teachers of English were invited to reflect and share views on language use in online spaces and comment on the new skills and knowledge learners and teachers might potentially need to function in online spaces. In the next phase, 31 participants who volunteered to take part in further research were asked to observe language use in public spaces of online communication, document the data chosen and offer a written report on why they find the data salient, how verbal as well as nonverbal aspects of the text function, with what purpose? The participants were also invited to reflect on their own online practices, i.e. their practices in social media platforms, preferred ways of self-expression and self-presentation in these platforms. Following the written reflection stage, a smaller group of 12 student teachers further volunteered to share their research findings in whole class Zoom sessions to complement the study with joint reflection and discussion on communication in digital spaces. At the final stage 31 student teachers who contributed to the project were asked to respond to a series of open-ended post-reflection questions to define how they relate to VLL research. Post-reflective forms were collected from 28 students who participated in every phase of the project.

For their VLL research, student teachers were asked to focus on the public domain of digital spaces. However, from the very outset this raised keen discussions on the blurred line between public and private spheres in online communication. The issue of authorization, varying degrees of privacy in platforms with a dynamic movement in membership, the semiotic practices in private spaces being reposted for reaching wider audiences were some of the preliminary discussions indicating the major challenging aspects of VLL research. Student teachers were informed that consent of the interlocutors needs to be taken if they choose to integrate data from their own media-based interactions. Student teachers were asked to offer a multimodal analysis of their data by making Halliday's Systemic Functional Theory (1978) as a reference point. In this frame, they were encouraged to focus on "ideational", "interpersonal" and "textual" metafunctions of discourse, a topic which has been covered in class with supportive examples. For further guidance, they were asked to reflect and elaborate on a series of questions whenever they find relevant: How is/are meaning(s) constructed by using multiple modalities? What languages are being used with what purpose? How are ideologies conveyed and maintained? How are identities constructed and negotiated? Why did you choose to focus on this particular piece of data for exploring VLL? If and to what extent do you find the data relevant for raising discussions on digital discourse(s), multi/pluri/translingual practices, identity work, literacy in an additional language?

The study offered rich data obtained from blog discussions, written reflections on participants' own everyday digital practices, reports on self-driven VLL research, zoom recordings of VLL presentations and post fieldwork questionnaire on VLL research experience. Qualitative content analysis was applied to identify the emergent themes with respect to the two overarching research questions: 1. How do the semiotic practices, as filtered from prospective English language teachers' lens, contribute to an understanding of communication in virtual spaces? 2. If and to what extent does VLL research inform their professional identity development?

The whole qualitative data was read a number of times to identify major themes. VLL corpora obtained from participants' interrogative field work was analysed to see what they prioritize as a centre of interest in computer-mediated communication and how they negotiate their ideas. Considering the degree of divergence in digital practices and personal variation in meaning making, all data driven discussions are filtered from student teachers' own encounters and cannot therefore be taken as generalizable representations. This complies with the interpretative frame required for personal interaction and engagement in LL research (Etuş 2021: 59), being also applicable to VLL.

3 Discussion of Research Findings

The initial overview of student teachers' VLL research showed that they foregrounded different dimensions of communication in digital realms. VLL corpora mainly focused on multimodal practices on social media platforms such as Instagram, Facebook, Twitter, YouTube, and there was special focus on the use of emoticons, emojis, twitch emotes, memes, GIFs, randomization, abbreviation and hashtags. The VLL corpora also involved comprehensive work on specific discourses such as "Internet troll language" and language of "cancel culture". In the limited scope of the article, it is not possible to offer a thorough analysis and discussion of the diverse elements of the immense data gathered during the project. The article reports findings on three major concerns regarding VLL research in an English language teacher education context: (a) rethinking languages, discourse and communication in virtual spaces, (b) VLL as a translingual and transcultural space, (c) VLL research and professional identity development.

3.1 Rethinking Languages, Discourse, and Communication in Virtual Spaces

One of the most important aspects of VLL research in teacher education was its contribution to language awareness. As one participant puts it, "I analysed things which I encounter most of the time but did not pay any attention." (R28). The project empowered them to envision communication with a new perspective by making the familiar unfamiliar: "Before this project and this Applied Linguistics Course, I was just reading/hearing, but now I am more careful with the text. I try to get the deeper meaning of every property of language." (R5)

Communication in online spaces helped them to be attentive to context sensitive dimensions of meaning making systems, going beyond individual analysis of verbal and nonverbal elements of discourse to focus on the concept of "design" and trace its relation to register. As one of the participants discusses;

When we communicate with people through an online platform, we express ourselves and our feelings contemplating about many things; it can be the setting we're in, or with whom we're talking; or how our relationship with the receiver(s) are. The things such as the font, the colour of our text, our use of emojis, stickers, gifs, caps and memes in these platforms will change according to the setting, the closeness, level of intimacy. (R6)

The following part addresses some of these semiotic tools, as filtered from the participants' lenses, and offers a multidimensional discussion of their functions in VLL.

3.1.1 Re-contextualization: Memes and GIFs

A meme offers a multimodal text, usually involving a visual and an accompanying text, which forms a template for the creation of other memes. As Knobel / Lankhear (2007: 199) explain "Memes are contagious patterns of 'cultural information' that get passed from mind to mind and directly generate and shape the mindsets and significant forms of behaviour and actions of a social group". Computer mediated communication is, therefore, always situated and allows for partial interpretation or interpretation from a particular position. Attending to these aspects of meme creation and circulation, an active social media user needs to be a follower of these "trends", witness cultural connotations on a local and global space such as the case with "memes" (R23). In alignment with this view, the participants focused on this process of recontextualization in the production and consumption of memes. In one of the respondents' words: "First, they can transfer an idea. They can express an ideology. They can point out a situation. They can just express one's emotional state. They can be used just for humour but above all they need to have a shared idea or attitude to be counted as a meme" (R16). The

following data has been offered by this student teacher to verify her point. Her selection of data was also significant in terms of showing how VLL research might further be explored for social justice informed education:



Fig.1: Memes as social semiotic practice

As Mooney / Evans (2019: 122) rightly suggest, memes indicate "bottom-up activity that changes the linguistic landscape" in great speed and scope. They are easily adaptable but a meme widely circulated can lose its popularity and give way to the emergence of others. Student teachers' reflective work on memes showed that these multimodal resources are a means of getting connected with the world; in a participant's view they are the very means "to share the current ideas and interests of the people in the world, which is relatable to all" (R23). Memes are significant in terms of building interpersonal relations, creating intimacy as their production and consumption contribute to solidarity building, creating a shared sense of humour and understanding.

Memes are also found to be an important aspect of "personal" design element in virtual communication, a feature which makes memes creative tools for self-expression: for one of the student teachers, "meme culture is a way of identity reflection" (R10). They are extensively used to achieve phatic communication by investing on humour, irony, sarcasm and/or social commentary. The following data shared by another student teacher shows how memes copied from public spaces navigate small talk in private spheres along with other types of multimodal self-expression such as randomized letters and emojis:



Fig.2: Memes as small talk

The meme used here addresses difficulties encountered during the pandemic from a humorous perspective, failing to have a professional haircut and having to do it oneself with undesired outcomes. The sense of intimacy is further achieved by laughing out loud as expressed by the capitalized random letters. The small talk ends with an intimate term of address in Turkish: "Kanka ya" ('Oh dude') (R27) with complementary emojis. The use of an image with captions provides users with options in language choice. In this particular case meme with an English caption is used in a conversation proceeding in Turkish, making English part of a shared repertoire.

One further attribute of memes especially when seen as part of small talk is to get the conversation going; for one participant, "in the virtual linguistic landscape, memes are also used to reply to one another through the use of additional memes to carry on a conversation" (R23) and for another, they "help create meaningful bridges in chats" (R24).

A close analysis of student teachers' VLL research has shown that the use of GIFs, similar to memes, is closely related to identity work, social participation and building a community of practice though multimodal resources. The circulation of memes and GIFs move in between online and offline spaces; for instance a gesture like thumbs up moves from offline to online communication through animated forms then being recontextualized in evolving discourse of private spheres before being possibly retransferred to public sphere through posts. As one of the students rightly suggested reaction GIFs need to be analysed in the progression of virtual communication in private realms to identify its pragmatic function. As he comments; GIFs together with other semiotic aspects such as font, size, colour and image "allow interlocutors to exchange and modify their ideas, build their positive or negative faces, and give them the opportunity to convey their ideologies, all these aspects making GIFs part of identity construction process" (R1). The following example from his data is significant in terms of showing GIFs' multiple roles in discourse and showing transcultural dimensions of virtual interaction;



Figure. 3: GIFs as Transcultural Practices

The GIF here displays the animation of a scene from the film *Lord of the Rings* where an unexpected relief force, 'Riders of Rohan' come to the rescue of the city. It is shared in a WhatsApp group which is specifically opened to enable peer support for new graduate teachers who will have to take KPSS exam to get a teaching position in state schools in Turkey. As the student teacher discussed with reference to this data, GIFs are not only used for responding to certain topics, but also for opening topics. Following the GIF, the written text "*Notlar geliyor abi*" ('Here come the notes buddy...') receives immediate response "Şahane" ('Great'). Sharing information, materials and sources is crucial for the prospective teachers' successful preparation for this highly competitive centralised exam. Read in this light, sharing of notes brings immense relief when they were feeling exam pressure. Based on this analogy, the student teacher addresses the role of GIFs in achieving and maintaining interpersonal relations and creating inner communities. Seen from this perspective, having a shared cultural background on Tolkien's work, applying this cultural information to a new cultural context and building inner jokes conveying both ideas and emotions indicate awareness of the multiple layers of meaning, which defines GIF use as a transcultural semiotic practice.

While re-visiting the role of context in communication with reference to multimodal sources, student teachers' intensive work on VLL has offered further insight to the notion of "distance", the degrees of formality, intimacy or in some cases pseudo intimacy, all of which leading to a sensitized awareness of register and tone in online interaction. The following part discusses how the preferences for certain multimodal tools such as emojis, emoticons and the use of abbreviations and randomization are dependent on the relation between interlocutors, affiliation with certain groups in different platforms and intercultural encounters.

3.1.2 Self-expression: Emoji, Emoticon, Abbreviation, Randomization

Student teachers' work on semiotic resources showed that register plays a key role in their digital practices. As one of the participants noted, she never uses stickers and rarely makes use of emojis when communicating with peers in a course group but emojis and stickers are indispensable part of her online communication with family members and close friends because, for her, "there is no other way for expressing feelings" (R5). It is also interesting that many of the participants attributed meanings to the absence of certain design elements. As exemplified by a participant, if emoji use and/or randomization is missing in an interaction where these are regular parts of discourse making, then it probably means "something isn't going well, maybe s/he can be angry at us or s/he doesn't want to talk with us" (R30).



Figure 4: Amplifying: Tone in Emoji use

Discussions on cultural, personal and platform-based variation in emoji use triggered further reflection on other semiotic resources such as Twitch emotes, emoticons, random letters and abbreviations. Based on his comprehensive work on "twitch emotes", one of the student teachers discussed how these digital tools turn out to be a way of interaction between streamers and large group of viewers during live broadcast, enabling "quick and direct transfer of emotions" and creating a "twitch fluid" in the chat box where vast number of viewers "act as one unit" (R29). The real motive for using pre-set collections of emotes for expressing surprise, sarcasm, bafflement, empathy and many other emotions is to establish a community of practice with same responses rather than offering a personal reaction.

Based on data obtained from YouTube comment sections on some Turkish songs, one of the participants offered a thorough discussion on how slight changes in emoticons might potentially express different meanings: emoticon for expressing a smile [:)] might further be strengthened by adding more parenthesis [:))], adopt a more playful attitude by using a semi-colon instead of a colon [;)], as would be the case in winking, might reveal a more distant attitude by using a square bracket [:]], indicating a mechanical laugh, might offer a broad smile [:D] showing teeth or might even use X instead of a column [XD]to demonstrate genuine laughter with eyes closed (R8).

Emoticon use was also found to be a challenging aspect of intercultural communication. The following data which shows a student teacher's interaction with a Korean friend was used to illustrate the role of multimodal forms in ELF interaction. As she commented, only after a close look at their ongoing communications on different topics, she realized that the idiosyncratic use of orthographic elements of a language, Hangul letters in this particular case, create emoticons [^^, ~~, ~] which act as self-expressive forms showing happiness and are often employed when they were engaged in phatic communication. In time she realized that her friend uses another emoticon $[\pi\pi]$ whenever she feels distressed or is disappointed about a situation. As the student teacher further noted, she started to adopt and use similar emoticons in their correspondence to achieve intimacy and establish a close bond with her Korean friend. Data-driven research encouraged her to see ELF interaction from a wider perspective integrating multimodal

dimensions of online communication, where language is "more than it seems, more than what is written, drawn or said" (R14). This particular experience shows that multimodal communication is under constant negotiation, requiring strategies for accommodation and co-constructive meaning making.

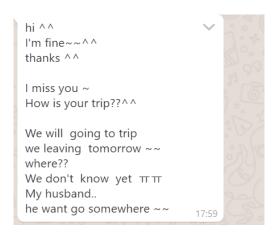


Figure 5: Emoticons in ELF Interaction

Student teachers' discussions on the use of abbreviations showed that these self-expressive forms also have a great variation in scope and span, some of the abbreviations being highly unique becoming an inner group identity marker while others being part of the digital repertoire of many people, i.e. [LOL], [LUL] — 'laugh out loud' or [SWH] — 'smiling was here' for indicating an ironic stance, [ICYMI] — 'in case you missed it' mostly used before posting a video, [OMG] — 'Oh My God' for defining awkward situations. There were also remarks on the underlying reasons for using abbreviations or random letters instead of emojis or emoticons in certain social media platforms such as Twitter. In one participant's view, "emoticons or emojis are accepted as uncool and/or old school and they do not follow the Twitter rhetoric" (R25).

Randomization or keyboard dashing also raised profound discussions on how certain aspects such as length, capitalization, writing in bold, sound associations might influence meaning making. As one of the participants discussed, "Kksjsjsjskks" randomization for laughing creates a sound-based association with the Turkish word "kis kis gülmek" ('to snigger') and the length indicates a moderate degree of fun while an increase in length and transition to capital letters will indicate a corresponding increase in cynicism (R19).

3.1.3 Blurred lines between online and offline spaces: Hashtags

Self-driven VLL research showed that hashtags [#] are defined as hyperlocalized signage as they constantly circulate by tagging and reach vast number of people in a very short span of time. As some of the respondents discuss, hashtags allow for creative use of language and help make a personal statement or even create one's own narrative. Nevertheless, the analysis of hashtags prioritized their role in reaching huge population of users. In this context, there was focus on the use of hashtags as a marketing strategy with reference to commodification of virtual spaces. Some of the student teachers discussed the existence of hashtags as ideal examples for arriving to an understanding of digital communication as multilingual communication; a product advertised in a particular language in real life can reach global circulation through hashtags in multiple languages. Moreover, it is not just the name or origin of the brand and/or product which circulates, but diverse information on its prize, function and catchy phrases, "hooks", for advertising that travels in multiple languages (R21).

Hashtags are also discussed as important tools for giving "voice" to people: "they are quite functional in making people who are silenced or postponed have their voices heard, seek their rights, and cause these issues to be heard enough to be passed on to the government" (R25). It is about having a global reach, "a way of getting support for a struggle in your life" or "help people notice your grief and build solidarity" (R26). As they discussed, hashtags are borderless semiotic practices. The following data from a student teacher's VLL research (R26) shows that a tragic mine accident in Soma, Turkey resulting in the loss of 301 miners found global response through hashtags expressing solidarity, this fluid of hashtags in virtual spaces was then transferred to an offline space where a group of Turkish actors and actresses responded with their placards "\$ Soma" in Cannes Film Festival and this is reposted in many social media sites:



Figure 6: Hashtags on the move: blurred lines of online and offline spaces

3.2 Recognition of VLL as Translingual and Transcultural Landscape

VLL research-based class discussions and post-project reflections showed that the participants started readdressing the issue of language change with a new lens taking the complex and multifolded interaction between online and offline communication into consideration. The following excerpt taken from the post reflection survey of a student teacher raises the fundamental question of how languages evolve:

Are there ground changes in language use, gradually evolving to a global, transnational social media based language use; does this language influence our gestures in offline communication (gestures borrowed from online communication -like/hashtag etc); does this gradually turn into a grounded, very familiar, common language aspect for future generations or does it address to an ever changing, dynamic process of language use? (R26)

A related finding was the need to have not only a diachronic but also a synchronic exploration of language use especially in digital communication where there are endless possibilities for the emergence of different discourse genres, patterns of use, and platform-specific multimodal practices. These possibilities are not confined to semiotic choices, for the participants, VLL is a translingual and transcultural space enabling assemblages of semiotic sources together with the blending of various languages. This paved the way for a deeper reflection on the status and role of English in the era of new media technologies. As expressed by one of the participants;

I came to understand English is used as a bridge between people's L1 especially when they are mixing all codes, contrary to the general belief, I have observed myself that this is not an outcome of lack of knowledge

but a thing which shows how comfortable social media users are in using their languages. English in computer-mediated communication is mostly a language that can stretch with the contribution of different languages. (R25)

There were also discussions which take this view one step further and explain how online games create their own jargon where English is a binding element not only combining different L1s but also creating utility-based specific terminology.

Student teachers offered ample evidence for showing how they "personalize, individualize or even localize language" (R14). Apart from constant shifts between English and Turkish in their digital interactions, sharing and producing content through memes, using stickers in English when communicating with Turkish-speaking interlocuters or placing abbreviations in English such as [brb] – be right back, [tbt] – throwback Thursday, for sharing memories or past events are common practices in their interactions in Turkish. Likewise, translanguaging is also defined as an indispensable part of their communication in online spaces. As they illustrated, combining Turkish suffixes with certain English words originating from new media is a very common form of language use, i.e. "likelamak", "ghostlamak", "trollemek", -mek/-mak suffix in Turkish signifying the act of doing something, "vibe'um tutmadi" ('sensing negative vibe'), creating blended forms for formulaic utterances such as "we can't yani", ('of course we can't'), creating playful language through double use of a form in different languages, that is, adding an English suffix to a Turkish word which already includes a suffix with the same function such as "geliyoring", ('I'm coming') "dinliyoring" ('I'm listening to...') -yor suffix in Turkish marking an action in present continuous tense.

A close analysis of the participants' reflective notes on their own activities in VLLs showed that not only English but also various other languages played a central role in their media practices. For instance, one of the students offered a comprehensive analysis of a South Korean video streaming platform, VLive offering content in 9 different languages. She has been following this platform for some years and believes this experience has contributed to her exploration of Korean language as well as offered her new horizons to see how "Konglish" (Korean English) creates its own space and how speakers of other languages adopt its terminology globe wise. For another student teacher, social sites are the very spaces where she can enact her multilingual practices by creating content for her website in English, Turkish and Kurdish.

The study showed that student teachers' reflections on VLL research is largely informed by their own language and digital practices. This necessitates a closer look on language teacher identity development from a wider angle to see how they relate to VLL research as future language teachers.

3.3 VLL Research and Professional Identity Development

The findings drawn from the qualitative data showed that there needs to be a deeper focus on professional identity development, integrating all aspects of student teachers' multiple "selves"; as individuals with plurilingual and pluricultural resources, as agents in digital spaces with varying interests and digital practices, as researchers enquiring complex processes of meaning making both in online and offline spaces and as future language teachers. Identity construction is an ongoing process of becoming and needs to be read as trajectory where daily experiences of prospective teachers contribute to their journeys in language education. As one of the student teachers discussed, his digital practices define his relation to English and have long been a liberating force which informs every stage of his professional identity development.

My social media use dates back when I was 10-11 years old. At the beginning, I used social media just for following my family and close friends. Then, I started to meet with new people all around the world and

follow global pop and movie stars, that was when I needed English to communicate. As a result, I acquired English in time and naturally. In almost 10 years, my social media use changed in a way where I use it not only for communicating globally but also for being inspired and creating new things. In accordance with this, I started to build an image of myself on social media, which is about giving positive messages to inspire people to work for their dreams, give importance to their friends and educate themselves. In order to do these things, I started my own YouTube channel in which I talk about my education, books I read, movies I watch, experiences I go through. While doing these, I feel like a modern academician of the universe of YouTube, but this not like bragging. There, in my channel, I feel selfless and want to give everything I learn so that I can be a part of the creation of a better society. (R17)

While digital literacies of prospective language teachers play an important role in their professional development, there needs to be abundant opportunities for critical and reflective engagement in the topic. As one of the student teachers claimed it is hard to develop a metalingual awareness of language use in digital spaces where a great deal of their computer mediated everyday practices are "spontaneous, acted out without such focus or projection" (R10). VLL research, in this context, created an ideal platform for grounding teacher preparation in criticality and reflexivity. One of the most important findings of the particular project was its appeal to the emotional aspects of teacher development. When the participants were asked to reflect on how they relate to VLL research, there was one common concern raised, decreasing the potential gap between themselves and their future students in terms of language practices, and hence finding opportunity to invest more on the creation of a democratic learning environment. The following quotation from a student teachers' written reflection underlines this concern:

Since my students will most probably be native social media users, be it in their L1 or FL, I myself need to keep pace with their linguistic schemes and develop more inclusive strategies for teaching (R 25).

Another significant affordance of VLL aware teacher education pedagogy was its focus on "authenticity"; it enabled them to make joint reflection on language as social semiotics by discussing how social meanings with their ideological underpinnings are negotiated in various semiotic modes. This helped them scrutinize the notion of authenticity by addressing a series of thought-provoking issues such "authorship", "trustworthiness", "identity work as self-presentation". In a similar vein, VLL research made them revisit authenticity in teaching; as many of the student teachers reflected, new media necessitates innovative pedagogies and confident steps for bridging new literacies with traditional ones in language classrooms. They offered various ways of integrating design elements to task creation and implementation by working on images, memes, stickers, emojis and hashtags to cite a few. However, they also raised important questions on how to integrate critical media literacies to their teaching agendas and how to attain effective filtering in their pedagogical decisions. The following sharing proves "ethics" in research and education to be a key element in teacher preparation:

When I was trying to find examples for my research, I worked on these basic questions: What examples should I study with? Why should I study with these examples? How should I study with these examples? Then I asked the additional questions. Are the examples in public? Would the examples work for my research? Is it appropriate to use them in classes? My motivation for this study was to supply both explorable and learnable sources (R4).

4 Conclusion

Prospective language teachers need to be sensitized to an awareness of how language users utilize their linguistic as well as digital repertoire to get connected to different audiences, engage in identity work and realize multimodal ways of meaning-making in an era where the boundaries between on-line and off-line spaces are becoming increasingly blurred and a grand part of human communication is achieved in virtual environments. Towards this end, the study reported the findings attained from a VLL-project-based work in a preservice English language teacher education context in Turkey with two central motivations for interrogation: 1. How do semiotic practices, as filtered from prospective English language teachers' lens, contribute to an understanding of communication in virtual spaces? 2. How does VLL research as a pedagogical tool inform their professional identity development?

The study largely draws on Barkhuizen's (2017: 4) insightful reflections on language teacher identity:

Language teacher identities (LTIs) are cognitive, social, emotional, ideological, and historical – they are both inside the teacher and outside in the social, material and technological world. LTIs are being and doing, feeling and imagining, and storying [...] And LTIs change, short-term and over time – discursively in social interaction with teacher educators, learners, teachers, administrators, and the wider community, and in material interaction with spaces, places and objects in classrooms, institutions, and online.

In this study, VLL research has been transferred to educationscapes in an attempt to support prospective language teachers' professional identity development by offering them a dialogic platform for the empirical exploration of language as social semiotic practice in digital spaces. Student teachers' analysis of their self-gathered VLL corpora showed how the use of semiotic tools such as emojis, emoticons, memes, GIFs and digital practices such as randomization and use of abbreviations navigate interaction in online spaces, become powerful ways of self-expression and help maintain affiliation with different groups. They are also found to be the very sources which blur lines between online and offline spaces and call for the recognition of VLL both as an extension and also a redefining feature of meaning negotiation in LL. As Seargeant / Giaxoglo (2020: 316) rightly suggest, "linguistic landscapes and the media (both old and new) are interconstituted, and discourse circulation is thus a transmedia process". Congruent with their findings on hashtags, the participants' empirical exploration of hashtags along with other semiotic tools such as memes showed how digital practices erase dichotomies of online-offline, individual-collective, public-private domains of social interaction.

Student teachers' explorative work on VLL and their own digital experiences showed that digitally mediated communication affords multiple opportunities for translingual/transcultural communication where translanguaging is a common practice, dissolving barriers and divisions between languages and people. In their view, it is a phenomenon which cannot be explained as the existence of multiple languages or even a combination of these languages, it rather evolves to a new digital language, being co-constructed and shared. Their joint reflection on these aspects of virtual communication enabled a close focus on how they relate to VLL as future teachers. They voiced the need to adopt more integrative pedagogical approaches which are responsive to the digital and linguistic repertoire of language learners. Nevertheless, they also raised concerns on developing concrete strategies for integrating digital and multilingual discourses to their teaching agendas. They expressed the need for further provision of critical media literacy skills not only in language but also in language teacher education. A related concern was "ethics", a topic, which in their view, necessitates a multi-perspective focus; to cite a few, how to focus on content which is appropriate for school contexts, how to eliminate rude, offensive, racist, gendered, ethnocentric discourses, how to achieve a balance between traditional and new

literacies, and hence build onto language learners' own everyday language experiences, how to align teaching focus with the diverse needs and interests of the learners, how to keep up with the dynamic changes in digital communication, how to enable inclusive education where there is limited access to resources, how to integrate all linguistic repertoires while also ensuring a democratic platform for equal representation. These are all grand questions showing future directions for language teacher education research. VLL, in this context, can offer new paths in teacher education. The present study showed that VLL research developed student teachers' language awareness and encouraged them to take confident steps towards the creation of learning environments where language learners will find their voices both in online and offline communication and engage in the constitution of their own spaces.

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