The Co-Construction of the Concept "Linguistic Landscape" by Language Educators in an Online Course

Maria Helena Araújo e Sá, Raquel Carinhas, Sílvia Melo-Pfeifer, and Ana Raquel Simões

Abstract In online teacher education programmes, the co-construction of concepts is of paramount importance to create a sense of sharing, motivating teachers to further engage in the activities of a short-term community of practice. Indeed, participants usually (and immediately) engage in this kind of conceptual dialogue, as it builds a sort of affective bond and a cognitive common ground, and reduces potential dissonances. Such co-construction of the meaning of key concepts is even more important in multilingual and online teacher education contexts, as these characteristics of the context might otherwise discourage teachers from actively participating in the exchanges, due to potential technical and linguistic issues. In this contribution, we focus on teachers and mentors participating in an online teacher training event (one-week duration) around the use of Linguistic Landscapes in language education, and we analyse how they collaboratively construct the meaning of "linguistic landscape" in multilingual discussion around specific literature using the platform Perusall. More specifically, we will analyse how they dialogically expand or reduce the scope of the concept and appropriate it for pedagogical purposes, depending on their linguistic repertoires and professional background.

Keywords Teacher education · Socioconstructivism · Co-construction of knowledge · Linguistic landscape

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1 Introduction

The field of teacher education has revealed the importance of establishing and participating in professional development communities (Wenger, 1998). These communities can take place in face-to-face, virtual or blended environments (Sylla & Vos, 2010) and can be facilitated using one or more languages of communication (Araújo e Sá & Melo-Pfeifer 2018; Mondada, 2004), meaning that crosslinguistic mediation can be called upon as a strategy to assure intercomprehension between participants (Araújo e Sá, De Carlo & Melo-Pfeifer, 2019). In any of these scenarios, the community of teachers and/or student teachers must agree upon and discuss the nature of the concepts they use as a starting point for engaging in subsequent tasks. If participants have different profiles and levels of expertise, cognitive mediation can also play a role in how participants negotiate concepts and get involved in their definition, sharing and development (Coste & Cavalli, 2015, on cognitive mediation). In this contribution, we delve into the co-construction of the concept of Linguistic Landscape (LL) in an online, multilingual and short-term community of practice (one-week duration), in which participants have different degrees of professional experience. We assume that the discussion of the concepts used by a community of practice, because it contributes to the professional and reflexive socialization of the participants (Sylla & Vos, 2010), is a reflexive approach that may lead to professional development. Following Alarcão and Roldão (2008), we understand professional development as a process of conceptual and empirical change that takes place in socially constructed contexts of search for professional identity. By engaging in conceptual discussions, participants also co-construct their professional "self", made up of a complex weave of experiences, knowledge and inter-individual relationships (Marcelo, 2009; following Araújo e Sá, De Carlo & Melo-Pfeifer, 2010a, 2010b).

In the scope of this contribution, we aim to answer the following research questions:

- How do participants in a short-term and multilingual community of practice around the concept of LL appropriate and discuss that concept?
- What pedagogical use do they attach to LL in educational environments, namely when it comes to the implementation of multilingual pedagogies?

To answer these research questions, we will first discuss conceptual co-construction as a particular strand in fostering (professional) knowledge and we will approach its role in professional development. In a second moment, we will describe the contexts and design of the empirical study, followed by the presentation and discussion of its results. We will then suggest some ways forward for developing more critical and controversy-driven communities of practice.

2 Fostering Knowledge and Teacher Education: A Focus on the Co-Construction of Concepts in Online Collaborative Environments

In the socio-constructivist and coactional stance adopted in this contribution, prior linguistic and professional experience plays a central role. Participants are encouraged to construct, together with peers and trainers, their knowledge on LL and its pedagogical use for language education. It is a question of learning to become a language-culture professional not alone but with the other, by placing oneself, at the same time or alternately, in the role of the subject in training and co-trainer. Our conceptual approach to professional (teacher) development is, thus, based on the following premises (Araújo e Sá et al., 2010a, 2010b):

- the concept of professional development is indispensable in an educational profession, since it refers to the process of lifelong transformation;
- for this development to take place, participants must be stimulated to adopt a reflective attitude, which makes them critical of the representations and certainties concerning teaching subjects and the profession;
- autonomy, however, does not mean autarky, because all professional development takes place within a community that acts as interlocutor, source of information, and educator: a reflective approach to training is therefore necessarily a collaborative one, and it is in this sense that we interpret the concept of co-reflexivity;
- discussion around certain concepts (such as LL or intercomprehension), because they offer a new look at language teaching and learning and challenges some persistent biases about languages and language learning, is a valuable approach to promoting reflective, critical and collaborative learning (see Melo-Pfeifer, forthcoming, on LL).

As already stated, collaborative professional development can take place through participation in communities of practice, whether face-to-face, online or hybrid. In research concerning online communication, a particular reflection has taken place among several authors on the notion of community, be it virtual, of practice, of learning or other (Dejean-Thircuir, 2008; Dillenbourg et al., 2003; Herring, 2004). In this work, we take up the definition of Wenger (1998), for whom the concept of "community of practice" is effective for describing knowledge-oriented social organisations with two fundamental, strictly related characteristics: practice (which defines a special community) and identity (which is formed as a function of practices). Wenger proposes a model of learning as a social process in which the appropriation of practices occurs through the construction of social identity and common semantics (including concepts). This is one of the core ideas for the creation of the community that we will study here. Even if the literature frequently denounces the difficulty to define the specific traits that would characterize an online community, some criteria can be identified: (i) actions deployed by participants to advance communication (including identification of a shared objective, active participation in exchanges, acceptance of communication rituals, use of a common language and behaviours, etc.)

and (ii) personal attitudes expressed during exchanges (including self-disclosure, taking into account the words of others, construction of emotional links, presence of humour, conflict management, negotiation of meanings, etc.). Here, we will focus on exchanges around the negotiation of the meaning of LL.

Relevant to this contribution, studies of collaborative work in communities of professional development emphasize the need to consider how knowledge and know-how emerge and are co-constructed in interaction. This implies analyzing interactions as a means of accessing the collaborative construction of knowledge and know-how between members of the "community of practice" or "professional community", following a socio-constructivist approach to interaction. This analytical work is even more important when we take as the object of study online multilingual communities of language teachers, which are characterised by their radically interactional dynamics (around the different languages and their use) or by their exclusively discursive nature (as other meaning-makers and sense containers, such as gaze and gesture are only scarcely present, e.g., through the use of smileys).

3 Empirical Study

In this chapter, we analyse an online teacher training event (one-week duration) around the use of LL in language education, where teachers and mentors participate to collaboratively construct the meaning of LL in multilingual discussion around specific literature. The training event, one Training Week (TW), was organized between 18th and 22nd January 2021, within the scope of the LoCALL project (2019–1-DE03-KA201-060024). The TW occurred in an online format and was coordinated by the team of researchers from Aveiro University (Portugal), as a project partner. The main goals of this TW were: (i) to reflect on and discuss the concept of Linguistic Landscapes and its integration in teaching practices; (ii) to promote awareness of language presence, roles and dynamics in the community; and (iii) to develop knowledge about the educational added value of mapping local LL, namely using the LoCALL App (cf. Chap. 8).

3.1 Participants

After disseminating the TW, 130 individuals showed their interest, by filling in Google Forms. When the program was defined, there were 65 registrations of participants, from 20 countries: Portugal (12), Turkey (11), not mentioned (7), Uruguay (4), Mozambique (4), U.S.A. (4), Brazil (4), Spain (3), Philippines (3), China (2), France (1), Germany (1), Ireland (1), Costa Rica (1), Malta (1), Netherlands (1), Canada (1), Colombia (1), Switzerland (1), Guinea (1) and U.K. (1). These participants mentioned 11 different working languages (Portuguese, English, French, German,

Spanish, Turkish, Mandarin, Dutch, Tagalog, Italian, Filipino). In terms of the participants' profile, 15 were university teachers, 14 were Ph.D. students, 12 were school teachers, 5 were Master students, 3 were researchers, 2 were University students, 1 was a consultant and another one an ELT graduate.

3.2 The Learning Scenario: Activities and Principles

The TW was organized and developed using the Google Classroom, where both trainers and participants enrolled in synchronous and asynchronous activities. There were two previous tasks, to be uploaded by the participants, before the first synchronous session: (a) "My fridge/pantry and my linguistic landscape(s)" and (b) Mandatory readings. In the first task, the participants had to create a short presentation of themselves, unveiling some information about their linguistic biography and about the linguistic landscape they find in their house, for instance in the fridge and/or in the pantry. They were asked to create a short video (up to 2 min), a drawing or a collage of photos using all their multilingual repertoire, and to upload it using the Padlet tool. Both trainers and trainees had to browse the Padlet, watch some of the presentation posts and comment on at least three of them.

The second previous task, which we will focus on in this chapter, was to read and comment on at least two of the provided readings on LL. The articles/chapters were chosen by the trainers according to the content, but also to the language in which they were written. The platform used to upload and comment on the texts was Perusall. Since some participants were not acquainted with Perusall, the organization team shared a tutorial video on how to use this tool.

We will briefly describe the developed activities in chronological order. On Monday, after a short introduction to the project and to the TW itself, 3 webinars were organized: "Exploring multimodal variance in pandemic-related regulatory signage" (by Jannis Androutsopoulos); "From Landscapes to Sensescapes: the implications of translanguaging for Linguistic Landscapes research" (by Josh Prada) and "Multimodal translanguaging in the Linguistic Landscape: in support of language reclamation and maintenance" (by Corinne Seals).

On Tuesday, the participants were asked to watch a video of the LoCALL App, which would be used during group work to be done later on. The LoCALL App was created by the project team in Aveiro and consists of a mobile application tool to explore the linguistic landscape, for example, with students or visitors/tourists in any given location (see chap. 8).

On Wednesday, participants were organized into 7 groups (each with 2 or 3 tutors/trainers), according to their different time zones and their synchronous task was to explore LL with the LoCALL App and create proposals to integrate LL in the App. This would be the final work to be presented by each group on Friday.

On Thursday, participants were invited to a synchronous online visit to Museums: "Looking at Mozambican Portuguese through a kaleidoscope" (by Perpétua

Gonçalves, from Eduardo Mondlane University, Mozambique) and "A virtual promenade through 'Ciudad Vieja: mapas lingüísticos'" (by Raquel Carinhas, Camões I.P. in Uruguay).

On Friday afternoon there was a synchronous group work presentation for two hours, followed by a wrap-up party, a kind of social meeting where all participants had the opportunity to play games and interact more informally, as well as discuss their opinions about the TW.

3.3   Perusall as a Data Collection Instrument

As mentioned above, in this chapter we focus on the reading activity of the chosen texts and the comments made by the trainees and trainers using the Perusall platform. Previous research on the negotiation of the concept of LL involved language teachers in multilingual discussion forums (Brinkmann, Gerwers, Melo-Pfeifer & Androutsopoulos, 2021; Brinkmann and Melo-Pfeifer 2023; Melo-Pfeifer forthcoming) and classroom talk (Brinkmann, Duarte & Melo-Pfeifer, 2022). These studies analysed how the concept of LL was negotiated in classic online and face-to-face interactional environments. The Perusall platform is a social annotation environment specifically designed for undergraduate courses (Miller et al., 2018) and "its goal is to foster the comprehension of curriculum contents by involving students in a digital environment where they can share their issues, doubts and questions by helping each other" (Cecchinato & Foschi, 2020, p. 49). Figure 1 presents a print screen of the Perusall platform, showing how it looks like to the user.

In practical terms, instructors create and upload a library of readings to the course page on the Perusall platform and assign readings to trainees adjusting several parameters (for instance, the minimum number of annotations, type or work–individual or in groups, participant identification or anonymous interaction, duration). The trainers assign readings to all participants at once, or they may give the trainees the possibility to choose which ones they are going to read. The participants' interactions are based on specific sentences they identify, either because they are considered more difficult to understand or more relatable or more controversial. This tool can therefore foster communication and interaction between participants and can also be useful for the teacher to identify ways to overcome possible misconceptions or clarify concepts and points of view, for instance. One of the potentialities of this tool is its role in creating a sense of community (Rovai, 2002), and in its collaborative approach, since students read and can flag common inquiries (using an orange question mark) or reinforce other annotations (using a green checkmark). As stated by Clarke, "Perusall has incredible potential from a pedagogical perspective. Not only does it encourage more regular reading intervals, it monitors the reading patterns across individual assignments and students" (2021, p.153).

All comments for Gorter (2013) Linguistic landscapes in a multilingual world

physical space. The extension, she argues, should go beyond the traditional sense of language and must take into account "texts+images+location+environment+people+practices+history+time+ideology" (p.161)

Name	Comment		Nota		
Raquel Carinhas	↰ Muchísimo!!!	2	Nota: 0 ▾	jan 20 2:37 pm jan 20 2:37 pm	✔ Mark as read
María Carolina Lúgaro	Pienso que también se deberían incluir manifestaciones artísticas como graffitis, que muchas veces están acompañadas de frases en diversos idiomas	2	Nota: 1 ▾	jan 17 8:50 pm jan 17 8:50 pm	✔ Mark as read
Sibrecht Veenstra	↰ I like your suggestion of a multilingual surroundingscape. We should not exclude non-urban settings. There is a lot of interesting LL to be found there as well.	2	Nota: 2 ▾	jan 17 6:50 pm jan 17 6:50 pm	
Hülya Tuncer	I also prefer "multilingual cityscape" since it may well encapsulate the idea behind although some might disagree on "cityscape". How about (multi)linguistic surroundingscape?	2	Nota: 2 ▾	jan 12 8:33 am jan 16 12:49 pm	
Eylül Karabulut	The public signs in Istanbul, for example, are mostly written in Turkish as well as Arabic and English. However, the signs that are written in Arabic outnumber the ones that are written in English. This example indicates the variations of languages in Turkey. Therefore, the explanation given here is quite right. We can easily figure out which languages are used or in other words we can see the "general language situation" in any country by analysing its linguistic landscapes.	2	Nota: 2 ▾	jan 18 6:36 pm jan 18 6:42 pm	
Sara Santos	This choice of languages "signals what languages are prominent and valued in public and private spaces and indexes the social positioning of people who identify with particular languages" (Dagenais et al., 2009, p. 254). Dagenais, D., Moore, D., Sabatier, C., Lamarre, P., & Armand, F. (2009). Linguistic landscape and language awareness. 253–269.	2	Nota: 2 ▾	jan 14 3:24 pm jan 14 3:26 pm	
Laia Ruíz	Interesting to connect it to the current situation in Northern Ireland.	2	Nota: 1 ▾	jan 16 6:46 pm jan 16 6:46 pm	
Wilfred Gabriel Gapas	↰ The FLC Group recently encouraged linguists to examine transgressive linguistic landscapes as a means of identifying health and environmental issues. The method is proposed was to use Google	3	Nota: 2 ▾	jan 15 2:23 pm jan 15 2:24 pm	

Fig. 1 Printscreen from the Perusall platform showing content from the LoCALL project Training Week January 2021

Thus, Perusall functionalities give the trainer access to participants' participation, both quantitative (relying on multiple indicators and on a Machine Learning algorithm) and qualitative (the transcription of all the annotations written by the participants). With this platform, participants may write comments, underline sentences, highlight parts of the text, share their questions and comments with other participants (both trainers and trainees) in an easy way. Hence, by using the Perusall social annotation system, the reading experience is transformed, changing from a pretty solitary experience to a social one (Miller et al., 2018).

3.4 Corpus and Methodology of the Analysis

The *corpus* (Table 1) comprises 160 entries by 28 participants of the online TW, relating to six theoretical or empirical studies on LL in different languages (Spanish, French, English, Portuguese). Note that the languages of the texts were chosen according to the linguistic profiles of the participants (Sect. 3.1).

The interactions comprise comments to fragments of the studies under analysis and subsequent interactions by participants on a given topic, including reactions (emoticons), reading notes and bibliographic suggestions. The *corpus* was analysed using inductive thematic analysis (Braun & Clarke, 2006), to identify what kind of reflections emerge around LL using a collaborative reading application. From the data analysis, three thematic categories emerge in terms of relevance and meaning, as well as internal homogeneity of each theme and external heterogeneity between themes (Braun & Clarke, 2006): (i) LL-conceptual discussions; (ii) LL as a pedagogical resource; (iii) dynamic relations between languages.

Table 1 *Corpus*: texts, comments and languages

Text code	Reference of the text	Number of participants (P) + comments (C)	Languages used + frequency
T1	Carinhas et al. (2020)	P-10 C-30	Portuguese (23), Spanish (4), English (2), Emoticon (1)
T2	Dagenais et al. (2013)	P-2 C-4	French (4)
T3	Gorter (2013)	P-21 C-60	English (54), Spanish (4), Portuguese (1), Emoticon (1)
T4	Lomicka and Ducate (2019)	P-13 C-32	English (32)
T5	Ma (2018)	P-8 C-15	Portuguese (8), Spanish (6), English (1)
T6	Melo-Pfeifer and Lima-Hernandes (2020)	P-6 C-16	Portuguese (10), Spanish (5), French (1)

In terms of language representativeness, the language used in the text influences the readers and, consequently, the languages or groups of languages used in the comments. In this context, English was the most common language in the interactions (in 4 of the 6 texts, alone or in combination with other languages), followed by Spanish and Portuguese. Regarding the latter two languages, in some cases, there is plurilingual interaction among participants in the same topic, based on the possibilities of intercomprehension between these romance languages.

4 Data Analysis

This section is divided into a presentation of the three thematic categories obtained through an inductive thematic analysis of the *corpus*.

4.1 Linguistic Landscapes: Conceptual Discussions

In the first thematic category we observed from the *corpus*, the data analysis points to a re-appropriation and re-conceptualization of the concept of LL that emerges from the interaction between participants. The extension of the concept attends, above all, to a synesthetic apprehension of the landscape that surrounds us. For the participants, LL goes beyond the written modality, encompassing different modes such as sound, gesture, taste, approaching the concept of *sensescapes* (Pennycook & Otsuji, 2015) and a strong relationship with multimodality and the semiotic power of the landscape: "Me parece muito interessante a inclusão do gestual já que também é cultural.[1]" (P3.T5).[2] This semiotic power of landscape embodies a strong relationship between the concept of LL, narrativity and the identity of spaces, as mentioned by P3 and P4: "It is symbolic and also presents a historical narrative of the place" (P4.T3).

> Poderíamos considerar também como parte da P[paisagem], além do sonoro, táctil, visual, verbal que se menciona aqui, o paladar? Levando em conta o fluxo migratório e a globalização que faz com que tenhamos nas prateleiras produtos de muitos países e cujos ingredientes vão se misturando com o local.[3] (P3.T5)

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[1] All the examples are reproduced in the original form and languages, but translation into English is provided in all examples that are not in this language. In this quotation: "The inclusion of signs seems to be very interesting, since it is also cultural".

[2] The input coding combines the number assigned to each participant (P) and the commented text (T).

[3] Translation: "Could we also consider the taste as part of the Landscape, besides the sound, touch, visual and verbal, mentioned before? Taking into account the migratory flow and globalisation which makes us have in our shelves products from several countries which have ingredients that are mixed with the local ones."

For the participants, the concept of LL ends up encompassing a communication that, as Canagajarah argues through the concept of translinguistic practices, "transcends words and involves diverse semiotic resources and ecological affordances" (Canagarajah, 2013, p. 6). Consequently, the plurisignifications attributed to a given LL involve the concepts of agentivity and creativity of social actors in the recreation of the plurisemiotic landscape:

> I think this is a crucial extension of the term as it captures the agency involved. Given that we do not usually see the creators or authors of the linguistic landscape in the act of creating it, we may have the tendency to forget that just like other language use, people are creating it and re-creating it somewhere along the way (P5.T3).

The concept of LL also incorporates various spatialities such as the street, school, house, but also virtual environments: "Penso que também podemos considerar os espaços virtuais (sobretudo as redes sociais) como paisagens linguísticas (linguistic netscape), que integram textos multimodais a partir de elementos visuais, verbais, sonoros, gestuais, etc."[4] (P1.T5).

For P3, LL encompasses not only media and synaesthetic modalities, but a semiotic combination of these with artefacts in time and space, which appeal to multiple meanings (and evocations). This comment takes up the concept of semiotic assemblages which condense the "multisensory nature of our worlds, the vibrancy of objects and the ways these come together in particular and momentary constellations" (Pennycook, 2017, p. 272).

This expansion of the concept reinforces the relationship between individuals and the landscape in which they are immersed. Participants acknowledge the multiple temporalities, spatialities and subjectivities comprised in the same unit of analysis: "Sin embargo, recordemos que el propio concepto de PL [paisaje linguistico] estará en constante reformulación pues está directamente influenciado por la subjetividad y temporalidad específica (contexto)"[5] (P2.T5).

4.2   Linguistic Landscapes as a Pedagogical Resource

Regarding the second thematic category, we could observe how reading the empirical studies (Table 1 above) enabled the discussion around LL as a pedagogical resource (Cenoz & Gorter, 2008). The participants recognise in the LL a tool that enables the establishment of pedagogical continuities between different learning spaces, such as school and street, promoting individuals' engagement with spaces of their daily lives:

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[4] Translation: "I think that we may consider the virtual spaces (mainly the social networks) as linguistic landscapes (linguistic netscape), which integrate multimodal texts including visual and verbal elements, sounds, gestures, etc."

[5] Translation: "However, let us remember that the very concept of LL [linguistic landscape] will be in constant reformulation as it is directly influenced by subjectivity and specific temporality (context)".

- aprendizagem na rua, sem paredes, contínua, estimulante para todos os envolvidos[6] (P4.T1);
- Un lien école / famille particulièrement intéressant, qui ne se focalise pas sur l'individu mais sur son environnement[7] (P7.T6);
- É uma forma de incorporar a comunidade para dentro da escola, fazendo uma análise de seu entorno e aprendendo juntos[8] (P3.T6).

The creation of pedagogical scenarios that incorporate students' communities and personal experiences through the use of LL provides an opportunity to implement Language Awareness approaches (James & Garrett, 1992). These approaches awake students to the diversity of languages and cultures in the space they inhabit and that inhabits them: "esta es una excelente estrátegia y actividad para poder evidenciar la presencia de algunas lenguas en este caso del español en espacios físicos y virtuales"[9] (P2.T5); "devido à globalização, podemos aprender do nosso próprio entorno. Despertar a consciência linguística que está em cada um. Um equilíbrio entre o novo que é assimilado a partir da interação do sujeito com o meio"[10] (P3.T4). Some participants mentioned that using LL in class also enables the study of social uses of languages and even more familiar or popular language registers:

> I think it could also be used to help with noticing and reflection on the social use of language and language variation. This could include the use of formal linguistic structures in public spaces (Tu and Usted commands on public signs, or passive structures and infinitives instead of commands on signs i.e. ´no fumar ´etc) (P5.T4).

Furthermore, when LL incorporate languages of immigration, it is recognised that pedagogical work around these "bits of language" (Blommaert, 2013) may contribute to enhancing students' feelings of belonging: "Deve ter ajudado às crianças imigrantes a se sentirem realmente parte da cidade onde moram"[11] (P5.T1).

The use of technologies and more specifically of certain applications is another of the aspects pointed out by participants when discussing the potentialities of LL: "All of the LL and padlet application is great too… but this as a theoretical construct with solid application potential in classrooms is really exciting" (P5.T4). Technology is thus seen as a tool that can enable motivating and collaborative language learning environments.

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[6] Translation: "Learning in the street, without walls, continuous and stimulating learning for all those involved".

[7] Translation: "A bond between the school and the family is particularly interesting, not focusing in the individual but in his/her environment".

[8] Translation: "It is a way of incorporating the community into the school, analyzing its surroundings and learning together".

[9] Translation: "this is an excellent strategy and activity to show the presence of some languages, in this case Spanish, in physical and virtual spaces".

[10] Translation: "due to globalization, we can learn from our own surroundings. Awakening to the linguistic awareness that is in each one of us. A balance between the new that is assimilated from the individual's interaction with the environment".

[11] Translation: "It must have helped immigrant children to really feel part of the city they live in".

4.3   Dynamic Relations Between Languages

In the third thematic category, we could observe participants' comments on the relationship between languages in the public space and, most particularly, on how these dynamics are expressed in LL. Several authors have recognized that how languages circulate in the city results from the various weights they acquire in a given society, especially when this society is characterized by the daily use of one or more languages (Ben-Rafael et al., 2006; Cenoz & Gorter, 2006; Gorter, 2013; Hélot et al., 2012; Shohamy, 2005; Shohamy et al., 2010). Countries such as Switzerland, Spain, Belgium, in Europe, as well as several other decolonised territories in Asia, Africa, Oceania and America, are an example of this.

In this theme, 35 content units were counted. The participants' comments reflect on the power of languages in a given context ("Language is power", P3.T6) and its relation to the language policies of a given country. In addition, they point to reflections around English as a global language, the commodification of languages, as well as a reflective look around their contexts. Migratory flows have contributed to a change in the LL of host spaces. However, the presence or absence of certain immigration languages in the LL of cities may vary according to the type of target community.

> Mallorca es uno de los lugares preferidos por los alemanes para veranear o retirarse. Como consecuencia, en la isla reside una comunidad alemana permanente. Esto se traduce en que muchos de los carteles, símbolos, escritos, anuncios, etc. que uno se encuentra por la calle están en alemán (en muchas ocasiones, incluso priorizando este idioma por los propios, el catalán y el español). De alguna manera, esto sirve, además de para facilitar el entendimiento y la comunicación con los alemanes que nos visitan, también para hacer que los residentes se sientan parte de la comunidad[12] (P8. T5).

This comment thus explains the inclusion of German in the LL of the island of Mallorca. In response to it, however, another participant warns of the selection of languages of migrant communities according to their prestige. German may be included so that residents of the island will feel part of the community, constituting what Heller calls "niche markets" (Heller, 2010, p. 104). Nevertheless, other languages are present or absent due to their association with migrant communities.

> Efectivamente, tienen todo sentido tanto lo que está presente y visible como esas comunidades a las cuales ustedes se refieren (alemanes en el sur de España o Portugal), así como lo que no es tan visible o a veces silenciado como pueden ser las tiendas populares donde venden productos extranjeros o alimentos "exoticos" que generalmente compran los migrantes: bananas, platano macho, mandioca (yuca), harinapan, etc.[13] (P2.T5).

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[12] Translation: "Mallorca is one of the favorite places for Germans to spend the summer or to retire. As a consequence, a permanent German community lives on the island. This means that many of the signs, symbols, writings, advertisements, etc. that one sees on the street are in German (on many occasions, even prioritizing this language over their own, Catalan and Spanish). In a way, this serves not only to facilitate understanding and communication with the Germans who visit us, but also to make the residents feel part of the community."

[13] Translation: "Indeed, what is present and visible, such as those communities to which you refer (Germans in the south of Spain or Portugal), as well as what is not as visible or sometimes silenced,

In some cases, the linguistic landscape reflects the language policy of the dominant party in the area, regardless of the ethnolinguistic background of the people living in that area. (P13.T3)

As the participants' also imply, the literature has pointed to LL as one more factor of hidden imposition of power of a certain community or of certain linguistic-social behaviours by the centralising power which, consciously or unconsciously, is being absorbed by the population: "While language is dynamic, personal, free and energetic, with no defined boundaries, there have always been those groups and individuals who want to control and manipulate it in order to promote political, social, economic and personal ideologies" (Shohamy, 2005, p. xv).

Relatedly, other comments emerged about the English language as a global language, going in some situations as far as local languages being replaced by English, as shown by the comment by P9 regarding the language policy implemented at his university: "In the university where I teach, signs bearing the names of major structures in Filipino have been replaced by their English translations: (P9.T3)". This kind of language policy has consequences for the preservation of languages, as stated by P10: "The fact that it is possible to observe the linguistic diversity and the social status of languages through the semiotic symbols made me reflect on language maintenance" (P10.T4).

For some participants, English is associated with the commodification of languages. The concept of commodification, related to the work of Bourdieu and its concept of "linguistic market", refers to the value that languages acquire or lose as a result of the dynamics of late modernity (Heller, 2003, 2010). Currently, English is included in the LL of cities for mercantilist purposes ("It has a lot to do with the mercantilistic view on learning languages" P14.Q3) and prestige, associated with tourism or the representations that people develop concerning this language: "Here again we see the use of English for symbolic purposes rather than functional" (P5.Q3); "spread of English linked to prestige factor" (P11.Q3) to which P12 adds "or cool factor" (P12.T3).

5 Conclusions and Perspectives

This work has allowed us to understand how the co-construction and circulation of concepts occur in a multilingual online community of professional development for foreign language teachers around the concept of LL. As a corollary, it has also shown the importance of the relationship between the functionalities of a technological device (the Perusall platform) and the interactional dynamics (or lack thereof). Regarding the former, we analysed the participants 'representations of the concept of LL, identifying the semantic features they attributed to the concept, namely from a pedagogical point of view. Despite the heterogeneity of conceptions circulating

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such as the popular stores where they sell foreign products or "exotic" foods that migrants generally buy: bananas, *platano macho*, *manioc (yuca), harinapan*, etc.

in the reference literature and in the 6 texts proposed to the participants for reading on Perusall, we observed in the group of participants the co-construction of a rather homogeneous and complex notion, even if it was frequently problematized, put into perspective and even developed (the same observation was made on the concept of intercomprehension in Araújo e Sá & Melo-Pfeifer, 2018). Thus, we observed in this group of subjects a consensus around a rather homogeneous notion, even if complex. The participants seem to situate themselves discursively about the excerpts of the original texts rather than about the discussions in progress or the comments of other readers. This limits the scope of negotiation within the training sessions and the co-construction of a discursive and professional community, which was one of the major goals of the Training Week. This discursive feature may be related to the characteristics of the technological support, which is not originally intended to stimulate or sustain interaction. Nevertheless, studies on the negotiation of other concepts in other online communities have come to similar conclusions regarding the orientation towards consensus and the lack of dissent leading to negotiation. Such results have been observed in studies reporting on multilingual discussion forums (Araújo e Sá, De Carlo and Melo-Pfeifer 2015) or multilingual chat-rooms (Araújo e Sá et al., 201a, 2010b), which suggests that the orientation towards consensus may not be influenced by the synchronous or asynchronous nature of the interactions.

Following the suggestions in Araújo e Sá & Melo-Pfeifer (2018) on how to stimulate a more engaging environment for negotiation of concepts in contexts of teacher training, we propose the following:

- explicitly provoke the verbalisation of representations on LL, being more precise on the elements to comment (e.g.: identifying metaphors used in the texts, commenting on controversial stances, highlighting disruptions or contradictions between authors and evoked theoretical frameworks, etc.);
- stimulate "cognitive conflicts" (e.g. providing divergent, complementary or provocative definitions, opinions and texts; presenting sceptical perspectives or resistance to the use of LL in education);
- encourage discursive work on representations requiring the active involvement of other participants (stimulating exchange, debate, conflict, recalling divergent and complementary perspectives, role-playing);
- stimulate the linking of comments and texts to the personal and professional biographies of the participants in the discussion.

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