

Sensescapes and What it Means for Language Education



Josh Prada

Abstract This chapter lays out the groundwork for the notion of sensescapes as grounded in my own ethnographic work, and in dialogue with current developments in the field of linguistic landscapes (LL) as well as with proposals from other areas in the humanities, the social and cognitive sciences. The perspective presented herein centers on how multilingualism in the study of the LL may benefit from a wider lens that integrates sense-making, both, in the sensorial way and in the cognitive way, bridging them through trans-ing processes. The second part of the chapter focuses on language education, and describes the possibilities of sensescapes in this context. Two examples of pedagogical applications (framed as proyectos) are presented; both articulate a sensescapes approach as operationalized at the undergraduate level with multilingual students in a Spanish for heritage/native speakers program, and at the graduate level with pre- and in-service language teachers in an MA program. Both pedagogical assignments promote an ecological understanding of personhood in space, the translanguaging processes that mediate meaning- and sense- making, and the ways in which contextual factors are processed through embodied cognition.

Keywords Sensescapes · Sensoriality · Sense-making · Translanguaging · Embodied cognition · Language education

1 Introduction

El mercado este no tiene un lenguaje...aquí el lenguaje es la música y el sonido que se oye siempre. Allá abajo tiene el señor una tiendita de CDs and DVDs y siempre tiene música hispana nuestra, de México y la escuchamos en todo el mercado. Y el olor este de carnitas, y de las tripas que las pone muy crispy la señora de allá; esa [apunta con el dedo]. ¿La ves allá? Como en México, igual. El mismo olor y son muy sabrosos los tacos. Y cuando ves el paletero, eso también es el lenguaje del mercado. Es más que el inglés o el español que son las lenguas de acá, y el spanglish también: es los colores, y los olores y lo que se oye.

J. Prada (✉)

Indiana University (IUPUI), Cavanaugh Hall, 502A - 425 University Blvd, Indianapolis, IN 46202, USA

e-mail: jprada@iu.edu

(The market doesn't have a language...here, the language is the music and the sounds you can always hear. Down there, this gentleman has a little CD and DVD shop and he's always playing our Hispanic music, from Mexico, and we can hear it all over the market. The smell of carnitas and those nice and crispy tripes that lady makes; that one [she points with her finger]. Can you see her over there? Just like in Mexico, just the same. It's the same smell and those tacos are really tasty. And when you see the ice cream man, that is also the language of the market. It's more than just English or Spanish, which are the languages we use here, and Spanish as well: it's the colors and the smells and what you hear.)

Excerpt from interview 6 – El Paso, TX (2017)

I first arrived at the notion of *sensescapes* while doing linguistic landscape (LL) research in marketplaces in the U.S./Mexico border. From the earliest stages of fieldwork in the cities of Lubbock and El Paso (Texas, United States)—the first two sites where my collaborator and I collected data, interviews with vendors and local shoppers were replete with discourse about the roles played by the senses, memory and identity in shaping the marketplaces' LL. In these conversations, locals pushed me to transcend my initial goal to explore the multilingual and socio-political aspects impinged on the markets' LL. With these new opportunities, I adopted new roles that flowed between learner (as they explained to me their perspectives on the market), senser (as I attuned to the various stimuli they called upon while inviting me to make sense of the environment in the same ways they did), and researcher (as I tried to pursue—but still adapt—the original objectives of the project). This way, the interviewees organically reformulated the object of study from an initial focus on multilingualism and its representations on publicly displayed signs to a much broader spectrum of resources, processes and elements guiding the social semiotic mapping of space in the minds and lives of these people and their communities.

Considering their perspectives, and after some initial sorting through the interview data, it became apparent that an alternative route to the study of LLs had opened: a *sensescapes* perspective. At that time, I came up with the term *sensescapes* intuitively, loosely based on the idea that 'the physical and mental escapes which we navigate daily are loaded with elements that rely on our ability to sense them to enable us to make sense of them (note retrieved from my fieldwork journal written after these interviews were completed). In these early notes, I used the term *sensescapes* to capture the idea that 'a number of interwoven elements and dimensions, all complexly related to one another, shape how individuals and communities sense (i.e., physiologically engage with stimuli) and make sense of (i.e., cognitively organize and derive meaning from) the space around them.' In these journal entries, I described space as a collage of stimuli and resources processed in ways that are linked to and often mediated by language, but which necessarily, also transcend it. A *sensescapes* view of the LL, I wrote 'would, therefore, center this ecological understanding of sensing and meaning-making, capitalizing on embodiment, emplacement, and personhood'

After sketching some initial notes on *sensescapes*, I turned to the existing literature to compare my prototypical idea with what other researchers had already explored and proposed. As a term, *sensescapes* already existed in the works of anthropologists and sociologists, as well as in accounts developed by cultural studies researchers, all

of whom followed some sort of *sensual turn* in their disciplines. In applied linguistics and language studies, Alastair Pennycook and Emi Otsuji, whose work I knew at the time, had pointed at multisensoriality in relation to communication (2015). Similarly, Ofelia García and Li Wei had already pointed at the linkage between language and the senses in their early accounts of translanguaging (2014). At the same time, yet still unbeknownst to me, other LL researchers were developing on a body of works (e.g., Peck, Stroud & Williams, 2018; Pütz & Mundt, 2019; Malinowski, Milani & Tuf, 2020) that pushed towards a semiotic view, following calls from the early 2000s, such as Scollon and Scollon's (2003), and Shohamy's (2006). In other words, sensescapes was in line with a number of proposals across disciplines, yet remained heavily underrepresented and undertheorized as a concept and as a perspective.

With the above in mind, in this chapter, I pursue two objectives. Firstly, I present an overview of sensescapes grounded in my own work on LL (which I approach through a translanguaging lens), and in dialogue with lines of work proposed by semiotic accounts of LL, as well as previous proposals from other disciplines. Secondly, I discuss some of its possibilities for language education by foregrounding the foundations for a sensual turn. I begin by laying out some core ideas that situate the study of the LL in line with a sensescapes perspective.

2 Beyond the *Linguistic* in Linguistic Landscapes: A Story Already Told

2.1 Multimodality: Towards a Broader Semiotic Lens

Early definitions of LL emerged from an interest in the “the language of public road signs, advertising billboards, street names, place names, commercial shop signs, and public signs on government buildings combines to form the LL of a given territory, region, or urban agglomeration” by focusing on their “visibility and salience [...] on public and commercial signs in a given territory or region” (Landry & Bourhis, 1997). This definition captured the imagination of researchers interested in language and the implications of its representation and visibility. Considering this, Sebba (2010) situated LLs somewhere at the junction of sociolinguistics, sociology, social psychology, geography, and media studies. This interdisciplinary orientation couched LLs in a not-so-linguistic realm from very early on, which I understand as a recognition that LL research has never been (or at most, was only briefly or only partially) really solely about named languages as countable entities. Conversely, LLs bring us to the interface between the named languages we see around us, and the kinds of knowledges, experiences, and capacities we draw on for meaning- and sense-making around them, as well as the processes connecting these elements ecologically as part of our individual and collective universes. In fact, rather early on, Scollon and Scollon called for “[a]n integrative view of these multiple semiotic systems which together

form the meanings which we call place' (Scollon & Scollon, 2003, p. 214), as they alluded to how multiple factors and elements come into play in the shaping of the LL.

In the 2000s and 2010s, as publicly displayed languages continued garnering the attention of researchers, this logo-centrism was transcended to develop a wider orientation. In fact, Pütz and Mundt's (2019) report to employ the term LL in keeping with "previous literature, but view the term as a metaphor which they expand to include the whole set of 'semiotic assemblages' (Pennycook, 2019) of discursive modalities: imagery, non-verbal communication, silence, tactile and aural communication, graffiti, smell and so on" (p. 1). Pütz and Mundt's (2019) edited collection on semiotic landscapes was preceded by multiple publications that explored the LL in terms of semiotic assemblages. For instance, with a focus on Welsh language and culture in Patagonia, Coupland and Garrett (2010) presented an example that clearly transcended logo-centric views of the LL through a qualitative, critical, frame-analytic account of the site of a Welsh colonial experiment in the mid-nineteenth century. The authors identified the Welsh heritage frame present in the visible landscape in Gaiman, Patagonia, where Welshness is associated with commercial heritage tourism initiatives—particularly *casas de té galesas* ('Welsh tea houses'). Besides language choice (mainly Welsh and Spanish), the authors discussed how multimodal and stylistic resources were used in framing the idea of Welshness, constituting it metaculturally in a variety of types of public signs and displays.

Another powerful example of LL research transcending logo-centrist views is Bonda and Jimaima (2015), who utilized the notion of repurposing to show how people from rural areas of Livingstone and Lusaka in Zambia (South-Central Africa) extend the repertoire of 'signs' to include faded and unscripted signboards, elements found in the local fauna and flora, mounds in the terrain, dwellings and abandoned structures, skylines, and paths (with no written names) in narrations of place. The authors emphasized the lack of studies on linguistic/semiotic landscapes in rural communities characterized by linguistic orality and documented how the system of signage transcends the limitations of the material conditions in these rural escapes. In their discussion, they described processes of redeploying memory, objects, artifacts and cultural materialities to acquire new uses, and for obtaining extended meaning potentials. At the heart of their piece, Bonda and Jimaima (2015) argue that the semiotic ecology in multimodal LL helps to accentuate the diverse processual characteristics of meaning-making.

2.2 *Languaging*

Considering the above, for over a decade, some LL researchers have recognized that the focus of LL is not exclusively related to the idea of language(s) as countable monoliths named after nation states or geopolitical spaces, presenting an expansive view of "language" as complex linguistic and semiotic assemblages. As a translanguaging scholar, I see the linguistic aspect of LL to be more related to meaning- and sense-making, neither of which is a purely linguistic. I, therefore, find the idea

of languaging particularly fitting in this approach. As described by Bloome and Beauchemin (2016), the term languaging emphasizes language as a transitive verb, whether it is teachers and students interacting with each other and with their classroom, or a seller at a marketplace and a potential buyer trying to agree on a fair price, people language the worlds, trajectories and experiences they inhabit and shape.

This proposal is informed by Becker's (1991) notion of "languaging" as an alternative to structuralist views of language which he referred to as "humanistic linguistics" (Becker, 1988, p. 29). Becker's (1991) proposal stated the following:

[People] develop a repertoire of imperfectly remembered prior texts and acquire more and more skill at recontextualizing them in new situations ... the a priori to languaging is not an abstract conceptual system and a means of mapping it onto sounds but particular, imperfectly remembered bits of prior text. The strategies by which memories are reshaped to present circumstances clearly vary from person to person, under general cultural and natural constraints. [...]. Understanding another person is possible to the extent that an utterance evokes memories. A new set of metaphors for languaging emerges: communication becomes orientational and not the encoding and decoding of "meaning" (p. 34).

As Bloome and Beauchemin (2016) describe, according to this perspective, language emphasizes the "construction of intertextuality, recontextualization, memory, the adaptation of previous uses of language and texts to new circumstances, framing and reframing, and the centrality of "orientationality"—relationships, stances, perspectives, and engagements within and to events, people, histories, the material world, the self, and so forth (p. 153)"

Languaging is, thus, the processes whereby humans make meaning and sense in the world, interact with one another and with their environments, transforming, re-appropriating and reformulating parts of their worlds, while engaging in trans-languaging practices that go beyond language(s), modalities, and dimensions (e.g., Wei, 2018). Departing from the notion of languaging, an ampler conception of text and textuality is enabled, where the nature of texts departs from their conception as organically multimodal, multisemiotic, and multilingual assemblages. To engage with texts as defined through a (trans-)languaging view, more than just countable named languages modeled after the boundaries of nation states is needed. Texts, through this view, can be seen as showing-telling, with a multiplicity of resources from various modalities intermeshing with one another in ways that transform them into new wholes (Prada, 2022), as embodied performance (Zhu & Wei, 2022), and / or as collages of resources of different natures, such as sensory or historical. This wider, transdisciplinary stance recognizes the role of different media, stimuli, and elements coming into view as individuals make sense of the world around them. Importantly, this perspective helps us embrace Pennycook's (2018, 2019) push towards space as resource. To engage spatial repertoires in LL research, we must move towards understandings of sensing and making sense that transcend sight and readability.

2.3 *Sensing and Making Sense: Enter the Senses*

I move forward with my theorization of sensescapes based on the recognition that to navigate the semiotic landscape, and by extension, to map out the nature of place and make sense of space through (trans-)linguaging, visibility is privileged as a sensorial axis in Western societies. In short, traditional accounts of LL depart from the assumption that the LL is something that is read, with the eyes, and therefore conceptualizes those who can see and those who can read as *de facto* users. Pennycook's (2018, 2019) idea of semiotic assemblages and spatial repertoires, however, helps us transcend ocularcentrism (Macpherson, 2006). Following through, what would happen if we approached the LL through a lens anchored in (multi)sensoriality—that is, a lens that includes sight/visibility and language(s), but opens our scope of attention to other ways of meaning- and sense- making, as captured in the vignette presented to open this chapter? What are the consequences of exploring the semiotic landscape through phenomenological accounts of sensing and sense-making? Extensive multidisciplinary theoretical and empirical research situating the “five senses” as crucial in human perception, memory, and behavior (Damasio, 2009; Goldstein, 2009; Howes, 2005) can help us move in this direction.

Recognizing this, an innovative example of “semiotic landscape” research is Pennycook and Otsuji's (2015) “Making scents of the landscape” draws our attention to the sensoriality of place. In this piece, they described the piles of Bangla newspapers spread across the floor at the entrance to a Bangladeshi-owned video and spice store, which, along with its small travel agent business at the back, sells a variety of items, including spices, pots and pans, cosmetics and DVDs of Bangladeshi films in Marrickville (Sydney, Australia). As the authors discuss, the idea of sensory landscapes may add olfactory and other modes to a landscape, where the notion of the smellscape has more potential for an understanding of mobile semiotic resources (Pennycook & Otsuji, 2015) as different stimuli can create the effect of ‘olfactory maps of cities, enabling people to conceptualize their environment by way of smell’ (Classen et al., 2002, p. 18). Regarding the sense of smell and odors, Porteous (1985, p. 356) described that cities have “smellscapes,” that is landscapes of different smells, which, in turn, are closely associated with context and with memory (Degel et al., 2001; Schroers et al., 2007).

Beyond smells, other sensorial aspects come into play in our navigation of space. Undoubtedly, people whose visibility is impaired have a wealth of knowledge to contribute to this perspective. The navigational practices of blind and visually impaired people are developed to solve many types of obstacles and difficulties (Due & Lange, 2018). Considering that blind people are arguably a disabled and marginalized group, Due and Lange (2018) highlight the difficulties that stem from the ocular-centric nature of Western thought and its application in everyday spatial arrangements (Jay, 2002; Macpherson, 2006). In these contexts, the function of the blind person's cane has been understood as a sensory extension, for example, metaphorically as ‘the blind man's eye’. Although the cane extends ‘the scope and active radius of touch’ (Merleau-Ponty, 2002, p. 165), it nevertheless

possesses specific affordances for what it can and cannot detect. Connectedly, during a visit at the University of Hamburg (Germany), one of my colleagues offered to show me around. As we walked around the city center, a public object caught my attention. As we approached it, I realized it was a metal, 3D map of the city, including buildings, monuments and roads. The map also included descriptions in braille, transcending the purpose of spatial beautification, and serving as a tactile device for visually-impaired people making sense of the city.

Besides scent and touch, sound is a paramount sense which comes into play while navigating space. Davies et al. (2013) describe soundscape as “the totality of all sounds within a location with an emphasis on the relationship between individual’s or society’s perception of, understanding of and interaction with the sonic environment (p. 4).” Particularly vigorous in the field of anthropology, soundscapes focus on an aspect that, while important for the mapping of space, has been often considered as lacking concreteness for sustained empirical attention (Samuels, Meintjes, Ochoa & Porcello, 2010).

Drawing from this perspective, as foreshadowed, the LL transitions organically into Pennycook’s (2018, 2019) notion of assemblage. Assemblages include, among others, multimodal, multisemiotic, multilingual elements that may be read and written, perceived through touch, smell and taste, heard and listened to, and understood and engaged with through the individual’s particular capacities among which language is just one. This approach capitalizes on embodiment and emplacement, and expands the lens of LLs by integrating how different people make sense of their surroundings beyond the named languages they can read, and the semiotic and social values of observable objects and layouts. This stance privileges a bottom-up perspective on how individuals and communities configure, navigate, and collaborate on the creation of space while decentering visibility and named languages, and redistributing meaning- and sense-making throughout individual and collective repertoires. I conceive of this understanding of LL as a sensescapes approach.

3 Sensescapes

The sensescapes perspective I present herein harnesses the theoretical bedrock I have laid out in the previous sections, and reflects a sensual/sensorial turn that embraces social semiotics and the world as text and image, while paying increased attention to sensory perceptions as they interplay with language and broader semiotic resources and abilities in sensing and sense-making.

The idea of sensescapes, which was proposed in the field of human geography, suggests that all the five senses, and not only sight, can be spatially ordered and contribute to individual experiences with place (Rodaway, 1994). A powerful illustration of sensescapes work is Bunkše (2012). In “Sensescapes: or a Paradigm Shift from Words and Images to All Human Senses in Creating Feelings of Home in Landscapes” Bunkše (2012) describes how home can be anywhere, provided there are values and feelings of home. In her case, it is in wilderness mountains that such

values are found. According to Bunkše, wilderness landscapes may become home landscapes when one learns to become competent in using all the senses -touch, smell, taste, hearing, sight, and proprioception (i.e., the human body in its entirety as a sensor). Sensescapes is about including all the senses in theorizing and planning landscapes, as well as the individual and group behaviors brought forth in them.

For me, sensescapes mobilizes a phenomenological perspective on how individuals make sense of their environment, presenting an expansive view on meaning- and sense-making beyond multilingualism, and adhering to the practical nature of translanguaging. Sensescapes is underpinned by embodied cognition, and in doing so incorporates two key ideas: “first that cognition depends upon the kinds of experience that come from having a body with various sensorimotor capacities, and second, that these individual sensorimotor capacities are themselves embedded in a more encompassing biological, psychological and cultural context” (Varela, 1991).

A sensescapes approach centers the individual as they interact with the LL in its entirety, beyond the linguistic aspect, engaging the person as a whole, ecologically, in their sense-making processes and abilities. It bears on one’s individual capacities, the affordances of contextual factors, and their existing repertoires. It privileges what the individual brings to the table to make sense- and meaning as they navigate space. A sensescapes view capitalizes on making sense of the space as memory, identity, physical and mental capacities come into play, interact with one another, and organize emerging knowledge about space, creating histories, and personal and collective accounts of space, and privileging a first-person perspective developed through how spaces are experienced by individuals. Sensescapes incorporates an understanding of one’s identity and historical formation as elements that come into dialogue with our understanding of space.

Finally, sensescapes is born outside of existing hierarchies of countable languages named after nation states, yet it recognizes them as impinging on the experience of many people, particularly in the Global North, as recognized in decolonial approaches (particularly, in translanguaging). Fundamentally, sensescapes is not a counterview of LL or semiotic landscapes, nor does it problematize LL as a field of study, its methods or its interests. In fact, sensescapes as developed herein departs from my own engagement with LL research as a translanguaging scholar, and therefore it reorients LL research through a recognition that we make sense of our environment ecologically, and our senses, sensibilities and sensitivities mediate our understanding of the semiotic landscape in the context of our own experience. In doing so, a sensescapes view of the LL departs from the transdisciplinarity of experiencing, of sense-making, and is therefore naturally attuned to research in cognitive neuroscience, cultural psychology, and applied linguistics, among others.

Thus far, I have focused on presenting the notion of sensescapes as grounded in the evolving nature of LL research by discussing how some work on LL has for a while now been oriented towards a post-logo-centric conception of LL in space mapping. I have, then, connected this understanding of semiotic landscapes to the senses, to multisensoriality, to embodied cognition and to emplacement. In so doing, I have

centered a phenomenological perspective that privileges how individuals interact with the LL (with an emphasis on the non-linguistic dimensions that frame it) through their own means, utilizing their own resources and repertoires, which change and flow, and which inform (and are informed by) individual historical formations and socio-cognitive affordances. In the remainder of the chapter, I focus on the applications of sensescapes to language education.

4 Sensescapes and Language Education: Recognizing and Charting Possibilities

4.1 *Some Considerations*

Recently, Todd et al. (2021) asked “How do we theorize a view of education as a lived, perceived, and embodied experience of sensing the world and ourselves in the present? And in what ways does the lived specificity of educational encounters generate a different set of pedagogical questions for contemporary educational theory?” They explain that while there has been some interest in addressing these questions among education philosophers, efforts have not been substantive yet. Examples include the reframing of the purpose of education in terms of the dimension of subjectification (Biesta, 2014) and a rethinking of teaching that recalls the importance of being attentive in the present (Masschelein & Simons, 2013).

As regards second/foreign/world language teaching and learning multiple perspectives underscore the interplay between cognitive, individual and external factors as interacting pieces of a complex system (Vygotsky, 2011). A socio-cultural perspective centers context and interaction (Ellis, 2008) linking the individual and the world (Lantolf, 2005). Swain (2000) suggested that language learning occurs both inside the head of the learner and in the world in which the learner experiences the learning. In short, internal mediation (mental activity) is originated through external mediation (Ellis, 2008). Similarly, proponents of eco-social perspectives (Atkinson, 2013a, 2013b, 2014, 2019) as well as proposals by the Douglas Fir Group (2016) all underscore, in similar ways, complex thinking, ecological relationships and dynamic interactions which reflect the embodied, emplaced emphasis of a sensescapes approach.

If we consider the central role played by context in the development of cognitive process (Cowart, 2005) as it applies to the “interaction between perception, action, the body and the environment (Barsalou, 2008),” cognition is understood in ongoing dialogue with the body and with place. Research conducted in this area has described the intimate relationship between cognition and sensorimotor experience. Among others, Glenberg, Goldberg and Zhu (2011) and Barsalou (2008) have argued that the cognitive process develops when a tightly coupled system emerges from interactions between organisms and their environment, with the interactions being real-time and goal-directed (Cowart, 2005).

As synthesized by Todd et al. (2021), a person's bodily sensations and actions will impact how they comprehend language. Connectedly, evidence from the perspective of embodied cognition argues that action enhances comprehension (Glenberg, 2008; Glenberg et al., 2011; Tellier, 2008). There is also evidence that points that language processing is an embodied process (Willems & Casasanto, 2011), meaning that bodily action in the contextual environment and the person's perceptual experiences are inseparable during the cognition process. In fact, intentional actions activating the brain resources used for the motor system are also engaged in lexical-semantic processing and language comprehension (Rueschemeyer et al., 2010). Moreover, interestingly, the motor system is automatically activated under the following three situations: when a person (a) observes manipulable objects; (b) processes action verbs; and (c) observes the actions of another individual (Mahon & Caramazza, 2008).

Such findings and proposals about language learning couched in ecological, relational understandings of the individual's mind, body and place, bring to our attention a need to strengthen pedagogical approaches that integrate cognition, sensorimotor elements, personal and shared trajectories and spatial and contextual factors.

4.2 A Sensescapes Approach to Language Education: Two Examples of Pedagogy

My work as an educator takes me to classroom contexts mainly populated by two student profiles. First, I work with people who grew up multilingually, in households where minoritized, racialized speakers are exposed to and use immigrant, aboriginal or other non-official languages, such as Spanish in the United States. These students are often labelled heritage speakers and their lives have been shaped by normalized educational neglect within the ideological framework of standard language cultures (Prada, 2021a). Second, I work with pre- and in-service language teachers and educational researchers, many of whom seek to advance their pedagogies, research skills, and theoretical understanding of bilingualism and education through graduate work. Often, my students are both, racialized, language-minoritized multilinguals, and pre- or in-service teachers pursuing further education and professional development opportunities. In my pedagogies, I create ways of working with them that consider students as complex people, each with their own capacities, personal trajectories, and specific goals. I seek to understand them as individuals, and to present them with curricular pathways that leverage their abilities on multiple fronts, including their linguistic repertoires, their experiential repertoires, their physical abilities, and their identities as ongoing products resulting from their engagement with other people, with contextual factors, with their own evolving worldviews.

In these contexts, I routinely include different forms of fieldwork in the courses I facilitate. This fieldwork may be approached through a number of lenses, and present different objectives, which vary depending on the course and the student

population. Regardless, in my courses, there is typically a focus on how language is used (and by extension, re-appropriated) by different people, in different contexts, and for different purposes, in very different ways. Over the years, I have turned to the LL as an object for exploration and discussion around themes ranging from multilingualism and language diversity, to identity, attitudes and ideologies, language policies, immigration, and research methodologies, among others. In doing so, my students have been asked to complete different projects developed through examinations of the LL, and the various social, political, and personal aspects the LL may reveal (see Elola & Prada, 2021, for an example). A sensescapes approach expands these boundaries to also include how sense is made, how the senses are brought to the fore in sense-making, and how these sensing and sense-making processes contribute to one's historical formation.

Below, I describe two examples of educational work I have implemented with these two groups, both of which draw heavily from the sensescapes perspective presented in this chapter. Before moving on to these two examples, a few considerations are in order. To mobilize sensescapes into pedagogical practice, I build on the tenets presented earlier and create spaces where students can connect them, as well as other theoretical elements, notions and ideas relevant to their own experience. I, therefore, need three broad yet key elements to enable a sensescapes approach to language education: some degree of awareness among the students gained through presentations, readings and classrooms discussions, a physical space for students to engage with contextual stimuli in meaning- and sense-making explorations of the self and others, and the framework of an assignments with specific objectives, practices and expectations to guide them and support them. With these in mind, I now turn to describing the two examples.

An Example of Work with Multilingual Undergraduate Students: “Making Sense and Meaning En Mi Casa”

This proyecto final revolves around the exploration of the semiotic elements that make up one's home as experienced by the individual. I ask my students to explore their households or their places of residence, and to create a map that describes how sensorial stimuli interact with their linguistic and semiotic repertoires, their childhood memories, and their historical formation as multilingual people from so-called “diverse” backgrounds. These proyectos lead to multimodal texts which include traditional written discourse, images, gifs, links to videos (which they upload onto YouTube) and audios (which they upload onto a GoogleDrive, for example). These proyectos provide a first-person account of how their individual lives have been shaped by multiple elements structuring space, how meaning and sense are inter-related, and how their minds, bodies and context interplay with one another, with language (and multilingualism) being just one factor at work in the making of their (sense of) home.

For example, students describe specific smells and tastes, tie them to memories of specific relatives, and of valuable moments of becoming in childhood that impinge

on the present. Students also provide pictures and video clips that show how touch is connected to a sense of home (e.g., a blankie one had as a child) or the sound of novelas on television while the abuela was preparing tamales in the kitchen. The assignments they submit are translanguaging, multimodal compositions carefully designed by each student to immerse the reader in their world. In these proyectos, every element contributes to the assignment. These proyectos are then shared in class through presentations where they convey/call on processes of embodied cognition, sensing and perception to describe their experiencing of home, inviting others to do the same through their narratives. To this end, students often bring a variety of resources to the classroom, from music to food, to spices and perfume, tactile elements such as pieces of fabric or a hair-roll. On the projector, they may choose to play point-of-view videos where the student walks around the household showing us the space, telling everyone about specific memories that contributed to their sense of belonging, or their identity formation.

Through these immersive accounts, students explore and share their own historical formation as multilingual individuals, while zooming in on different aspects that connect to their memories, belonging and cultural practices. These proyectos are powerful in communicating complex ecologies of place, their interaction with self, and how they contribute to the students' personhood. The sharing of these perspectives lay out the groundwork for detailed conversations about the self, the community and what becoming and being Hispanic in the US entails, in very personal ways.

An Example of Work with Pre- and In-Service Teachers (Graduate Students): "Emotions, Languages and Space in the Classroom"

In my work with pre- and in-service language educators, one of my objectives in the practical realm is to promote the development of classroom ethnographic research skills. These are key for action research, an important ability for teacher's seeking autonomy in investigating the needs and strengths of their groups and their own practices. Additionally, epistemologically, one of my goals is to bring teachers towards new understandings of their language learners as complex people, reflecting the eco-social, complex view I presented earlier. Targeting these objectives, one of the exercises I have implemented for some time has focused on the exploration of schoolscales (i.e., the LL of schools and educational institutions). Through these explorations, student teachers investigate how multilingualism and other semiotic resources are strategically mobilized around their schools and classrooms to cater to, represent, and promote the presence and belonging of their diverse students, at times failing to do so in different ways. More recently, I have approached these explorations through the lens of sensescales.

To set the stage for these proyectos, I begin by laying out some key concepts, such as embodied cognition, translanguaging, and history-in-person, which we cover through readings, presentations and discussions. Against these notions, and an understanding of eco-social and socio-cultural approaches to language acquisitions, I provide them with prompts to guide their proyectos. Prompts I have used include: (i)

taking a sensescapes approach, explore how your classroom practices/configuration reflects and supports your students as they engage with specific curricular aspects; (ii) describe your classroom/campus from a mind–body–world perspective by conducting a walking ethnography either by yourself or with your students while drawing on the interplay between language, semiotic resources, identities and memory; (iii) create a lesson plan to explore the notion of LLs with your students, where you expand the focus from language and multilingualism to the senses and sense-making.

The proyectos help teachers explore the interfaces between multilingualism and space in ways that decenter previous assumptions about the multilingual experience of their students as complex people, moving them towards de-essentialized understandings of their day to day experiences. By extension, teachers gain tools to create more complex curricula that articulate a new awareness of the ecologies at work in shaping their students’ personhood and experiences in the classroom and in school.

5 Conclusions

In this chapter, I have laid out the groundwork for the notion of sensescapes, as developed in my own work and in dialogue with current developments in the field of LL and with proposals from other areas in the humanities and the social sciences. The perspective I have presented herein centers on how multilingualism in the study of the LL may benefit from a wider lens that integrates sense-making, both, in the sensorial way and in the cognitive way. In the second part of the chapter, I have moved on to the field of language education, and I have described two examples of pedagogical interventions (framed as proyectos) that articulate a sensescapes approach as operationalized in my classes with so-called “heritage speakers” and with pre- and in-service teachers. Both pedagogical assignments promote an ecological understanding of one’s personhood in space, the translanguaging processes that mediate meaning- and sense- making, and the ways in which contextual factors are processes through embodied cognition.

To conclude, a brief note on my goal with this proposal. I do not think that a sensescapes perspective (should) supersede(s) LL. To be clear, sensescapes is in many ways different from LLs, and so it would fail to address central questions in LL research--particularly those related to language(s) as countable entities and their representation in space, or their relation to public policy. Sensescapes is about phenomenological accounts, sensorial interplays, and sense-making in its broadest sense. Language is part of this, but just one component. A sensescapes account does not have a sharp edge to explore language and multilingualism the way a LL approach does. I see them as complementary in many ways, and it is my hope that this idea supports LL researchers, language educators, and multilingual students gain a broader sense of how they, their students and the people they work with interact with and understand communication, meaning and sense in space. This perspective opens new, very exciting possibilities for growth and renewal.

References

- Atkinson, D. (2013a). Language learning in mindbodyworld: A sociocognitive approach to second language acquisition. *Language Teaching*, 47(4), 467–483. <https://doi.org/10.1017/s0261444813000153>
- Atkinson, D. (2013b). Beyond the brain: Intercorporeality and co-operative action for SLA studies. *Language Teaching*, 47(4), 467–483. <https://doi.org/10.1017/s0261444813000153>. (*The Modern Language Journal*, 103(4), 724–738, 2019).
- Atkinson, D. (2014). Language learning in mindbodyworld: A sociocognitive approach to second language acquisition. *Language Teaching*, 47(4), 467–483.
- Atkinson, D. (2019). Beyond the brain: Intercorporeality and co-operative action for SLA studies. *The Modern Language Journal*, 103(4), 724–738.
- Banda, F., & Jimaima, H. (2015). The semiotic ecology of linguistic landscapes in rural Zambia. *Journal of Sociolinguistics*, 19(5), 643–670.
- Barsalou, L. W. (2008). Grounded cognition. *Annual Review of Psychology*, 59, 617–645.
- Becker, A. L. (1988). Language in particular: A lecture. In D. Tannen (Ed.), *Linguistics in context* (pp. 17–35). Ablex.
- Becker, A. L. (1991). Language and languaging. *Language and Communication*, 11(1-2), 33–35.
- Biesta, G. (2014). Pragmatising the curriculum: Bringing knowledge back into the curriculum conversation, but via pragmatism. *Curriculum Journal*, 25(1), 29–49.
- Bloome, D., & Beauchemin, F. (2016). Languaging everyday life in classrooms. *Literacy Research: Theory, Method, and Practice*, 65(1), 152–165.
- Bunkše, E. V. (2012). Sensescapescapes: Or a paradigm shift from words and images to all human senses in creating feelings of home in landscapes. *Landscape Architecture and Art*, 1(1), 10–15.
- Classen, C., Howes, D., & Synnott, A. (2002). *Aroma: The cultural history of smell*. Routledge.
- Cowart, M. (2005). Embodied Cognition. Retrieved April 23, 2014, from <https://www.iep.utm.edu/embodcog/>.
- Coupland, N., & Garrett, P. (2010). Linguistic landscapes, discursive frames and metacultural performance: The case of Welsh Patagonia. *International Journal of the Sociology of Language*, 205, 7–36. <https://doi.org/10.1515/ijsl.2010.037>
- Damasio, A. (2009). Neuroscience and the emergence of neuroeconomics. In *Neuroeconomics* (pp. 207–213). Academic Press.
- Davies, W. J., Adams, M. D., Bruce, N. S., Cain, R., Carlyle, A., Cusack, P., Hall, D. A., Hume, K. I., Irwin, A., & Poxon, J. (2013). Perception of soundscapes: An interdisciplinary approach. *Applied Acoustics*, 74(2), 224–231.
- Degel, J., Piper, D., & Köster, E. P. (2001). Implicit learning and implicit memory for odors: The influence of odor identification and retention time. *Chemical Senses*, 26(3), 267–280.
- Douglas Fir Group. (2016). A transdisciplinary framework for SLA in a multilingual world. *The Modern Language Journal*, 100(S1), 19–47.
- Due, B., & Bierring Lange, S. (2018). The Moses effect: The spatial hierarchy and joint accomplishment of a blind person navigating. *Space and Culture*, 21(2), 129–144.
- Ellis, N. C. (2008). The dynamics of second language emergence: Cycles of language use, language change, and language acquisition. *The Modern Language Journal*, 92(2), 232–249.
- Glenberg, A. M., & Kaschak, M. P. (2002). Grounding language in action. *Psychonomic Bulletin & Review*, 9(3), 558–565.
- Glenberg, A. M. (2008). Embodiment for education. In P. Calvo & A. Gomila (Eds.), *Handbook of cognitive science* (pp. 355–372). Elsevier.
- Glenberg, A. M., Goldberg, A. B., & Zhu, X. (2011). Improving early reading comprehension using embodied CAI. *Instructional Science*, 39(1), 27–39.
- Goldstein, E. B. (Ed.). (2009). *Encyclopedia of perception*. Sage.
- Howes, D. (2005). Architecture of the Senses. In M. Zardini (Ed.), *Sense of the city: An alternate approach to urbanism* (pp. 322–331). Lars Müller Publishers.
- Jay, M. (2002). That visual turn. *Journal of Visual Culture*, 1(1), 87–92.
- Landry, R., & Bourhis, R. Y. (1997). Linguistic landscape and ethnolinguistic vitality: An empirical study. *Journal of Language and Social Psychology*, 16(1), 23–49.

- Lantolf, J. P. (2005). Sociocultural and second language learning research: An exegesis. In E. Hinkel (Ed.), *Handbook of research in second language teaching and learning*. Routledge.
- Macpherson, H. (2006). Landscape's ocular-centrism—and beyond. *Frontis*, 12, 95–104.
- Mahon, B. Z., & Caramazza, A. (2008). A critical look at the embodied cognition hypothesis and a new proposal for grounding conceptual content. *Journal of Physiology-Paris*, 102(1–3), 59–70.
- Malinowski, D., Milani, T. M., & Tufi, S. (Eds.). (2020). *Reterritorializing linguistic landscapes: Questioning boundaries and opening spaces*. Bloomsbury Publishing.
- Merleau-Ponty, M. (2002). *Husserl at the limits of phenomenology*. Northwestern University Press.
- Masschelein, J., & Simons, M. (2013). *In defence of the school: A public issue*. Education, Culture & Society Publishers.
- Peck, A., Stroud, C., & Williams, Q. (Eds.). (2018). *Making sense of people and place in linguistic landscapes*. Bloomsbury Publishing.
- Pennycook, A. (2018). Linguistic landscapes and semiotic assemblages. In M. Pütz & N. Mundt (Eds.), *Expanding the linguistic landscape: Linguistic diversity, multimodality and the use of space as a semiotic resource* (pp. 75–88). Multilingual Matters.
- Pennycook, A. (2019). From translanguaging to translingual activism. In D. Macedo (Ed.), *Decolonizing foreign language education* (pp. 169–185). Routledge.
- Pennycook, A., & Otsuji, E. (2015). *Metrolingualism: Language in the city*. Routledge.
- Porteous, J. D. (1985). Smellscape. *Progress in Physical Geography*, 9(3), 356–378.
- Prada, J. (2021). The critical awakening of a pre-service teacher in a Spanish graduate program: a phenomenology of translanguaging as pedagogy and as content. *International Journal of Bilingual Education and Bilingualism*, 1–14. DOI <https://doi.org/10.1080/13670050.2021.1881945>
- Prada, J. (2021a). Translanguaging Awareness in Heritage Language Education. In S. Loza & S. M. Beaudrie (Eds.), *Heritage Language Teaching* (pp. 101–118). Routledge.
- Prada, J. (2022). Approaching Composition as Showing–Telling through Translanguaging: Weaving Multilingualism, Multimodality, and Multiliteracies in a Digital Collage Proyecto Final. *Languages*, 7(1), 70.
- Pütz, M., & Mundt, N. (2019). *Expanding the linguistic Landscape*. Multilingual Matters.
- Rodaway, P. (1994). *Sensuous geographies: body, sense, and place*. Routledge.
- Rueschmeyer, S. A., van Rooij, D., Lindemann, O., Willems, R. M., & Bekkering, H. (2010). The function of words: Distinct neural correlates for words denoting differently manipulable objects. *Journal of Cognitive Neuroscience*, 22(8), 1844–1851.
- Samuels, D. W., Meintjes, L., Ochoa, A. M., & Porcello, T. (2010). Soundscapes: Toward a sounded anthropology. *Annual Review of Anthropology*, 39, 329–345.
- Scollon, R., & Scollon, S. W. (2003). *Discourses in place: Language in the material world*. Routledge.
- Sebba, M. (2010). Linguistic landscapes: A comparative study of urban multilingualism in Tokyo. Peter Backhaus. *Writing Systems Research*, 2(1), 73–76.
- Shohamy, E. (2006). *Language policy: Hidden agendas and new approaches*. Routledge.
- Schroers, M., Prigot, J., & Fagen, J. (2007). The effect of a salient odor context on memory retrieval in young infants. *Infant Behavior and Development*, 30(4), 685–689.
- Swain, M. (2000). The output hypothesis and beyond: Mediating acquisition through. *Sociocultural Theory and Second Language Learning*, 78(4), 97.
- Tellier, M. (2008). The effect of gestures on second language memorisation by young children. *Gesture*, 8(2), 219–235.
- Todd, S., Hoveid, M. H., & Langmann, E. (2021). Educating the senses: Explorations in aesthetics, embodiment and sensory pedagogy. *Studies in Philosophy and Education*, 40(3), 243–248.
- Varela, F. J. (1991). Organism: A meshwork of selfless selves. In A. Tauber (Ed.), *Organism and the Origins of Self* (pp. 79–107). Springer.
- Vygotsky, L. (2011). *Interaction between learning and development*. Linköpings Universitet.
- Wei, L. (2018). Translanguaging as a practical theory of language. *Applied Linguistics*, 39(1), 9–30.

Willems, R. M., & Casasanto, D. (2011). Flexibility in embodied language understanding. *Frontiers in Psychology*, 2, 116.

Josh Prada (MA, Birkbeck, University of London; Ph.D., Texas Tech University) is Assistant Professor in Applied Linguistics at the Indiana University School of Liberal Arts at IUPUI (USA). His research is in the field of bi-/multilingualism, with an emphasis on heritage/community/migrant multilinguals, multilingual teachers, and translanguaging within and beyond educational contexts.