Agency and Policy: Who Controls the Linguistic Landscape of a School?



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Abstract Agency has been an ongoing topic of concern in Linguistic Landscape (LL) studies since the field's emergence while more recently notions of top-down vs. bottom-up power have been questioned in favor of more nuanced appreciations of the multiple factors that influence a local LL actor's selection and emplacement of public language. Agency in public schools in the United States exists at the nexus of policy (determined at national, state, and local district levels) and the many decisions made by administrators at individual schools while teachers and support staff, students, and other stakeholders act according to and sometimes against explicit and implied policies. Previous studies of the LL of schools (schoolscapes) have demonstrated the role that public displays of language play in constructing identities, agency, diversity, and ideologies that affect multilingualism and literacy practices. This chapter reports findings of a mixed-methods study of all three elementary schools and the two secondary schools in a mid-sized public school district in Oregon. The combination of photographs, video-recorded walking tours led by schoolscape actors, and interviews with teachers and administrators documents the district's schoolscapes and provides insight regarding their composition. This data leads to a classification of the functions of schoolscape signage and comparisons across the three elementary schools and across educational levels in terms of languages present, attitudes, policies, and agency. A Nexus Analysis focuses on the ideological positioning of Spanish relative to English and the construction of collective identities primarily as they affect English Language Learners and Spanish heritage speakers in the district.

 $\textbf{Keywords} \ \ \text{Schoolscape} \cdot \text{Minority language} \cdot \text{Spanish} \cdot \text{Language policy} \cdot \text{Nexus} \\ \text{analysis}$

1 Introduction

The growing body of schoolscapes research (studies of the linguistic landscape in and around schools) attests to applied linguists' interest in the intersection of language teaching and learning, language ideologies, and the dynamics of agency in educational institutions. Whether we are working at or conducting fieldwork at a K-12 school, walking on a college or university campus, or in a classroom with students, we are, as the larger body of linguistic landscape scholarship reminds us, awash in public discourse. The walls around us, the immediate hallways, and the sidewalks beyond are likely the first places to which we draw students' attention if we seek to raise their awareness of the language that surrounds us. Is the local schoolscape providing input for language learners? Is it promoting multilingualism and giving voice to minority languages? Do you or your students seek to become agentive actors of schoolscape modification? Following an introduction to and brief summary of schoolscape research, the primary goal of this chapter is to demonstrate how a nexus analysis from a Language Policy and Planning perspective can frame an understanding of the multiple factors that affect the public discourse of schools as exemplified in a case study. Using these theoretical frames of reference, schoolscape scholars and language teachers may be better equipped to study and act as agents in their sites of research and places of daily teaching and learning.

2 Schoolscape Research

Linguistic Landscape (LL) studies have long been closely connected to schools and education. Landry and Bourhis (1997), who are most often credited for coining the term 'linguistic landscape' in the sense that it is used by LL researchers, drew their data from questionnaires distributed to 2000 Canadian high school students. Their exploration of Francophone students' perceptions of ethnolinguistic vitality concluded that the linguistic landscape is a significant factor in shaping subjective views of vitality. However, it was not until 2012 that Brown published the first analysis of an educational setting as a linguistic landscape and added the term 'schoolscape' to the LL field. Whereas most LL studies target public spaces as sites of research, educational settings are institutions that are not open to the general public. Yet as Brown (2012) stated, "The state-funded school, a central civic institution, represents a deliberate and planned environment where pupils are subjected to powerful messages about language(s) from local and national authorities" (p. 281). Her study of the use of Võro, a local marginalized minority language in Estonia, in the ecologies of several schools revealed that, despite the reintroduction of the language in classrooms, it remained largely excluded from the public spaces of institutions except for small 'niches' of Võro claimed by teachers. Brown concludes with a call to action, stating,

LL researchers need a deeper understanding about the way the material use of language in school shapes the ideologies and consciousness of those who study and work in these educational spaces including pupils. (2012, p. 296)

A growing number of subsequent studies have explored schoolscapes, providing additional methodologies and theoretical perspectives. Significant contributions from several researchers have applied a wide range of methodologies and analyses. Gorter and Cenoz (2015) photographed signage in the classrooms, hallways, other rooms, and the immediate surroundings of seven schools in Donostia-San Sebastian, Spain and interpreted their quantitative data using a framework of Informational and Symbolic functions similar to much previous LL work. Dressler (2015) conducted qualitative research in the German-English bilingual program of an elementary school in Alberta, Canada, which led to a nexus analysis similar to the approach used in this study. In the context of four elementary schools in Hungary, Szabó (2015) employed his 'tourist guide technique' to co-explore the schoolscape with participants while taking video, photographs, and fieldnotes in order to draw conclusions about the organizational cultures of public and private schools. Similarly, Laihonen and Todór (2017) relied on ethnographic methods to study the language ideologies present in an elementary school in Romania where Romanian competes with standard Hungarian in the linguistic landscape to the exclusion of vernacular Hungarian. Laihonen and Szabó (2017) draw on data from the previous two projects and add an emphasis on visual literacy practices in the linguistic landscape in order to situate schoolscape studies within the larger framework of visual socialization that occurs as children orient to adult literacy practices.

The first collection of studies dealing with educational policies and practices from an LL perspective appeared in the 2018 special issue of Linguistics and Education. Edited by Laihonen and Szabó, who provide an editorial introduction to the seven articles, the issue concludes with Gorter's review of LL schoolscapes research. The first three studies in the collection demonstrate ethnographic and qualitative approaches. Pakarinen and Björklund (2018) investigate how students in a Finnish primary school that offers a Swedish immersion program constructed multilingual identities relative to the LL and their discourses outside of school. Brown's (2018) contribution presents a diachronic study of Estonian schools comparing data from 2001–2003 and 2013–2014 to draw conclusions about the dynamic forces that influence schoolscapes. Implementing ethnomethodological conversation analysis, Jakonen (2018) studied video recordings of a secondary-level classroom in Finland to reveal the role of material artifacts in the social action that occurs during instruction. Shifting to quantitative approaches to the schoolscape, Savela (2018) compiled a corpus of 6016 signs from a Finnish primary and secondary school which he analyzed with a comprehensive scheme of 22 categories for data categorization. Zheng et al. (2018) ventured beyond the school setting and offered a multimodal and cognitive event analysis of language learners' mobile game-playing interactions resulting in a novel exploration of how students engage in languaging in place. Przymus and Kohler (2018) in their article examined 1652 signs in 30 neighborhoods in Tucson, Arizona, and cross-referenced these findings with neighborhood demographics and the language programs and policies of the neighborhood schools; not only were the schools in wealthier neighborhoods with predominantly Anglo-American residents more likely to have expensive dual-language Spanish-English programs, but there was also more Spanish in these local linguistic landscapes whereas the poorer, Mexican-American communities suffered from deficit bilingualism in English-only schools while surrounded by the English signage of nativist naming policies. The final research article in the special issue is the least LL-oriented, but Tapio's (2018) visual-embodied approach to the spatial practices of signing students demonstrates the importance of multimodal places in these classroom contexts.

In addition to addressing LL work inside of educational settings, such as the works referred to above, Gorter (2018) reviews studies in four other educational contexts: teachers' use of environmental print with students; the more specific cases of using the linguistic landscape to teach English as a foreign language; examples of engaging university students and preservice teachers in LL research; and studies of the linguistic landscape outside of schools but that rely on data collected from students (i.e., Landry & Bourhis, 1997, and others). Three schoolscape studies not included in Gorter's (2018) review, but that provided background for this chapter are Hanauer (2009, 2010), which documented the linguistic landscape of a university microbiology lab in a unique application of LL methods to a single classroom environment to explore how representational space contributes to students' identity formation, and Garvin and Eisenhower (2016), who compared the linguistic landscapes of two middle schools: one in the United States and the other in South Korea—this comparative approach across schools is reflected in the current chapter's analysis of similarities and differences among four school sites within a single district.

3 Theoretical Frames of Reference: Nexus Analysis, Geosemiotics, Language Policy and Planning

A linguistic landscape is more than a mere collection of visible language (Troyer & Szabó, 2017). In order to account for the complexity of language use and the multiple levels of discourse that affect it, for this chapter's case study of the linguistic landscape of a mid-sized rural school district in the US, I will primarily rely on the analytical apparatus developed by Scollon and Scollon in two significant books: Discourses in Place (2003), in which the authors lay the groundwork for a semiotics of place, or geosemiotics, as well as the more broadly encompassing Nexus Analysis (2004) which argues for a multi-level theory of situated social action. At the core of their approach is the belief that language, be it spoken, signed, or emplaced on a sign, is a mediational means or resource that allows social action to be conducted. Of course, language is not the only semiotic resource available; all manner of cultural tools and knowledge from cell phones to shoes to the principles of visual literacy are at our disposal as we enact our social identities. Furthermore, our social

actions, which "must take place somewhere in the material world" (Scollon & Scollon, 2003, p. 19), and which are mediated by the conglomerate of semiotic resources, are all part and parcel of multiple discourses that intersect in a given place and time.

As demonstrated in previous LL studies (Pietikäinen et al., 2011; Dressler, 2015; Hult, 2009, 2014; Thistlethwaite & Sebba, 2015), a nexus analysis allows researchers to untangle and account for these discourse cycles that converge to create a linguistic landscape. These cycles, or overlapping currents, consist of discourses in place: the widely circulating ideas and beliefs that shape people's actions; the interaction order, which constitutes the types, norms, and expectations for social interaction; and the historical body (or individual habitus in Bourdieu's 1979 terminology), which is the sum of an individual person's lifetime of experiences and practices. Scollon and Scollon (2003, 2004) use the term actors to refer to any individuals who engage in social actions; in this chap. I follow other LL-researchers in using actors in the sense of LL-actors: "actors who concretely participate in the shaping of LL by ordering from others or building by themselves LL elements according to preferential tendencies, deliberate choices or policies" (Ben-Rafael et al., 2006, p. 27). LL-actors possess some degree of agency to influence the LL, but this conception of actor and agency need not be limited to those who directly emplace a sign or individuals with greater power status in the school. A child who amends (possibly transgressively) a sign in a hallway, a custodian who removes a sign, and an administrator who creates a signage policy are all LL-actors. From a discursive perspective, a teacher who advocates for or against some kind of signage or a parent who posts comments on social media regarding school signage are contributing to the discourses in place and should also be considered relevant actors though with different goals and kinds of agency.

Regarding the historical body, Hult (2009) noted that much linguistic landscape research up to that point had focused on "the objects produced by these actors" (94) without seeking to document or analyze decisions from the perspective of individual actors:

Admittedly, this may be one of the most challenging dimensions of nexus analysis to incorporate with linguistic landscape analysis since it would involve a great deal of individual contact with the multitude of people involved in the construction of a particular public space. Nonetheless, it may also prove to be an especially illuminating perspective since there is surely a story behind every object in any linguistic landscape. (94)

In that same volume, Malinowski (2009) did in fact address authorship in the linguistic landscape by interviewing shop owners in a specific business area, and subsequent studies have incorporated emic perspectives by engaging in qualitative and ethnographic fieldwork with LL actors (Brown, 2012; Garvin, 2010; Poveda, 2012; Szabó, 2015; Troyer et al., 2015). This study accounts for the historical body in the nexus analysis by including interviews with a range of school district personnel. As detailed below in Table 4, I interviewed nine individuals consisting of both teachers and administrators, all of whom had been employed for several years in their current positions, and several of them had been employed in the district in multiple positions and buildings for more than 10 years. These personal histories provided a rich

account of developments in the district regarding language policies, language ideologies, and the linguistic landscape, all of which were essential for understanding the context of this study. Likewise, I had maintained close connections to district personnel at all levels during the previous 6 years in which I had conducted professional development trainings as part of multi-year grants, and several of my former students (in linguistics courses required for Education majors at our institution) had obtained teaching positions in this school district.

In this nexus analysis, the interaction order is addressed through a functional classification of school signage and language choice as detailed below. These norms of interaction in the schoolscape are intertwined with the personal histories of agentive individuals and the language ideologies that circulate nationally, regionally, and locally as discourses in place that are embodied in state and district language policies. In addition to nexus analysis, this paper draws on perspectives from the field of Language Policy and Planning (LPP) to explain the connections between discourses and the attitudes and belief systems entailed in language ideologies. As Bever's (2016) analysis of the Ukrainian linguistic landscape from an LPP perspective explains, "official and non-official ideologies can be extrapolated from the properties of the signs, negotiating the meanings of the text in particular social, cultural and political contexts and addressing particular audiences" (p. 342). Furthermore, Bever endorses Ruiz's (1984) three-part classification of policy orientations, language-as-problem, language-as-right, and language-as-resource, as a critical framework for analyzing the discourses in educational places. As her article demonstrates, "LLs continually invoke the aspects of language resource, problem, right: each of these daily reminders surrounds the population through the visual world" (348). These orientations are applied below in the Results and Discussion.

4 Case Study Location and Methodology

This case study of Central School District, a mid-sized district in rural Oregon composed of approximately 3480 students distributed across three elementary schools, one middle school, and an adjacent high school, began in the fall of 2016. All proper names used here have been changed and measures have been taken to protect the anonymity of individual participants. After obtaining Institutional Review Board approval from my university, I contacted the Superintendent of the district to seek access to the school grounds to take photographs when classes were not in session and to interview teachers and administrators. Following this assent, I contacted building Principals to arrange specific dates and times for site visits and interviews with them whenever possible. I also arranged interviews with other relevant administrators and began contacting teachers at each school to schedule interviews.

This project served as a follow-up to earlier research in one of the towns served by the school district and conducted by my colleagues and me (Troyer et al., 2015). One town, Monmouth, had a population of 9900, was home to one of the elementary schools in the district, and contained a population that was demographically and

socio-economically similar to state-wide averages in Oregon at that time: 12% Latino, 10% Foreign born with 48% of these being Latino, and 9% reporting speaking Spanish at home (2010 US Census and 2006–2010 American Community Survey). The other town, Independence, was the location of the other two elementary schools and the two secondary schools, which were situated very near where the city limits of these neighboring towns meet. In contrast to Monmouth, Independence's population of 8590 was 35% Latino, 18% Foreign born with 85% of these being Latino, and 34% reported speaking Spanish at home (2010 US Census and 2006–2010 American Community Survey).

Despite these significant differences within a relatively small geographic area, the school district unites the members of both communities, and in interviews with school personnel, individuals did not distinguish between students from different parts of the towns, but rather consistently referred to the collective group of students and families they served. Yet, the ethnic, linguistic, and socio-economic differences between Monmouth and Independence can be seen in the demographic data (from the year following data collection) of the three schools which are arranged in Fig. 1 to represent their geographical location: Elementary 3 and the Middle and High

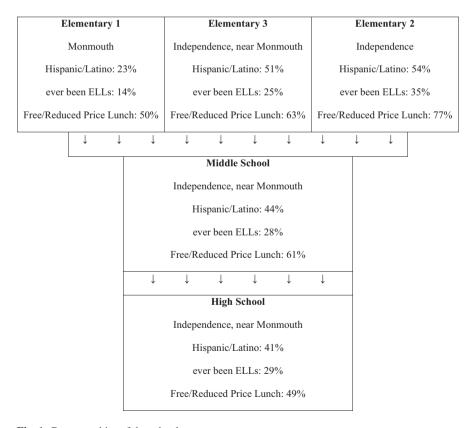


Fig. 1 Demographics of the schools

schools are located within Independence but near the shared border with Monmouth. Figure 1 reports the percentage of students who had reported Hispanic/Latino ethnicity, the percentage who were or had been classified as English Language Learners, and the percentage who were eligible for free or reduced cost lunches.

Our previous study of the linguistic landscape of the two main streets through the center of Independence revealed that despite the very large and historically present community of Spanish-speakers, 88% of the 646 signs visible from the street and shopping areas were in English only (Troyer et al., 2015). Furthermore, 10% were bilingual with half of these displaying English more prominently than Spanish, and only 2% featuring Spanish only. Detailed functional analysis of these signs and interviews with a city official and several owners and managers of businesses with and without displays of Spanish allowed us to conclude that the linguistic landscape of Independence reflected, among other findings, long-standing socio-economic disparities between the white middle-class and the Latino/Hispanic citizens, the lingering presence of linguistic intolerance combined with racial and social prejudice, and the fear of immigration problems among many in the Hispanic population, but also a growing optimism for and acceptance of multilingualism, especially among the younger generation.

By venturing into the buildings of Central School District and interviewing people who interact in and shape the schoolscape, in this study I sought to answer the following questions:

- 1. What is the functional distribution of items posted in the schoolscapes?
- 2. What languages are used and how does this vary across functions and schools?
- 3. How are different types of agency for shaping the LL of the schoolscape distributed among administrators, teachers, staff, parents, and students?
- 4. How do the functions interact with language choice and agency to convey language ideologies and hierarchies?

Between October 2016 and January 2017, I visited all five school buildings to collect a photographic record of all signage on the school grounds outside the buildings and in all 'public' areas including foyers, hallways, cafeterias, and student commons areas, but excluding the insides of classrooms and offices (see Table 1).

4.1 Functional Categorization of Schoolscape Signage

Though many of the schoolscape studies described above have categorized the signage they documented, little attempt has been made to create a functional framework that encompasses all of the signs posted in educational settings. Gorter and Cenoz (2015) relied on the distinction between the Informative and Symbolic functions of language and their possible combination for their classification, shown here in Table 2 (from Table 11.1, Gorter & Cenoz, 2015).

Similarly, Garvin and Eisenhower (2016) considered the form, placement, and meaning of signs to classify them into a broader set of five functions: navigational,

Location	Number of signs	
E1: Elementary school 1 (in Monmouth)	122	
E2: Elementary school 2 (in Central Independence)	186	
E3: Elementary school 3 (in Independence, near Monmouth city limits)	230	
MS: Middle school (in Independence, near Monmouth city limits)	64	
HS: High school ^a (adjacent to MS)	513	
Total	1115	

Table 1 Buildings, locations, and number of signs documented

Table 2 Functions of signage inside multilingual Basque schools (Gorter & Cenoz, 2015)

Functions	
Teaching of languages and subject content	Informative
2. Classroom management	Informative
3. School management	Informative
4. Teaching values	Symbolic
5. Development of intercultural awareness	Symbolic
6. Promotion of the Basque language	Symbolic
7. Announcing collective events	Informative and symbolic
8. Provision of commercial information	Informative and symbolic
9. Decoration	Informative and symbolic

informational, expressive, interactive, and symbolic. For the current project, rather than relying on a predetermined set of functions, I organized signs into similar groups using a genre-based approach informed by the interviews I conducted and the perspective available from the webpages of a company that designs the signage for institutions and facilities such as hospitals, universities; hotels, public buildings, airports, and other transportation terminals (www.wmwhiteley.com). Subsequently, I named four general categories, which may better be understood as orientations toward broader functions, with four to five types of sign in each (see Table 3).

The category of signs that are oriented toward *requirements* for public buildings include those related to disability access, regulations for facility use, safety information, and explicit warnings, as well as navigational information including the names of offices that indicate building specific locations and/or the services or kinds of personnel at locations. *Interactive* signs include advertisements, information about group events, notices aimed at promoting some kind of action or involvement, and greetings. The latter often contained a secondary text that functioned as an implicit regulation in signs such as "Welcome to our tobacco-free school." *Educational* signage consisted of behavioral guidelines and rules; demonstrations of learning such as displays of student work; information related to academic content and the day-to-day activities such

^aOne small wing (hallways outside of classrooms) of the High School remained locked during the photo-documentation visit. Subsequent visits for interviews revealed this area to have no obvious differences of LL composition from the rest of the school

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Required	Interactive	Educational	Identity-marking
Accessibility	Advertisement	Behavior	Award
Navigation	Event	Demonstration	Decoration
Regulation	Greeting	Information (S) (A)	Place-marking
Safety	+implicit regulation	Instruction	Personal expression
Warning	Promotion	Motivation	Public expression

Table 3 Functional categories of schoolscape signage

as posted schedules; instructional materials used by teachers; and motivational signs. Signs oriented toward marking *identities* included displays of awards; decorations; optional, inessential, or redundant place-marking or naming signs such as "Central Elementary School Pioneers" written inside the building where it serves no navigational function; and expressions of either personal ideas or those shared (public) by members of groups. Though the types of sign in each category are sometimes similar, e.g., safety information vs. explicit warning against unsafe practices, or information about an event vs. an explicit request for attendance at an event (promotion), all of these types were present in the more than 1000 signs documented. This categorization is intended to be inclusive enough to account for most schoolscape signage, though there may be types at other locations that are not present in this case study. The only kind of signs not recorded in this study were the ubiquitous, small, permanent numbers labeling individual rooms.

Interviews were conducted from Dec 2016 to Sept 2017 and included the participants listed in Table 4. The semi-structured interviews began with pre-selected questions for teachers and administrators that allowed for follow-up discussion and impromptu questions with the goal of gaining an emic perspective from participants. All of the participants had worked in the district for several years, many for much longer, and some were already my acquaintances from previous interactions with district personnel. Interviews were conducted in teachers' classrooms and administrative offices, but I showed selections of photos and preliminary results of the photographic quantitative analysis to them on a tablet device to raise consciousness of the signage in the schoolscape. After initial questions to orient each other and the topic, the following items are representative of the kinds of questions/topics we discussed.

- Are there district and/or school policies or guidelines regarding signage, temporary displays in classrooms, hallways and other areas in and outside of the school?
- Does the district have a policy, mission statement, or other goal regarding language learning and/or bi- and multilingualism?
- Who handles the choice of, creation, and placement of different kinds of signage?
- How do you think that the language of signs and displays in your school affect students, staff, administration, and visitors?
- How much thought and planning do you think goes into the public face of the schools in the district?
- Can you recall any conflicts or debates regarding posted signs and displays?
- Have you considered the role that posted language might play in helping to teach non-English languages?

Role	Site	Pseudonym	Data
Teacher	E1	Kelsie	Video tour of classroom and hall, 17 min
Teacher	MS	Linda	Audio interview, 16 min
Teacher	MS	Betsy	Video tour of classroom, 15 min; Audio interview, 6 min
Spanish teacher	HS	Deborah	Audio interview, 40 min
Spanish teacher	HS	Cathy	Audio interview, 21 min
English language arts teacher	HS	Rachael	Audio interview, 30 min
District office ESL coordinators	District Office	Elaine and Barbara	Audio interview, 55 min
Principal	E2	Tracy	Audio interview, 25 min
Principal	HS	Kandice	Audio interview, 31 min

Table 4 Interview participants

Given the relative amounts of English, Spanish, and other languages that my
preliminary research found in your school, do you think there would be advantages and/or disadvantages to increasing or decreasing the prominence of one or
more languages?

The results and discussion that follow present the quantitative data, informed by review of the audio recordings and transcription of thematically relevant sections, in order to analyze the interaction order of this nexus of practice and answer the first two research questions. Comments from the participants are the basis for analysis of the historical body from several points of view; however, rather than presenting a detailed account of each individual, the subsequent results and discussion emphasize commonalities in perspective among the nine teachers and administrators, and these will inform the third research question. This collection of qualitative and quantitative data and their interpretation allow a description of the discourses in place and orientations toward non-English languages in the schoolscape in answer to the final research question.

5 Results and Discussion

5.1 The Interaction Order

- 1. What is the functional distribution of items posted in the schoolscapes?
- 2. What languages are used and how does this vary across functions and schools?

The emplacement of signs in and around a school is a mediational means of social interaction between the LL actors who are able to choose, create, and enable the posting of signs and the audience who encounters the signs. The answers to the first two research questions are given below as a description of this interaction order in

terms of both signage form and function across the district and within each school. Analysis of the functions of the signs, as classified above, revealed that the three elementary schools share a similar constellation of functions which differ from the middle and high school (Figs. 2, 3, 4 and 6). At the elementary level, Required signage played an important role with navigation, regulations (mainly for parents and visitors), and safety at the fore. The relatively higher percentage of these signs at Elementary School 1 is due to the overall fewer number of signs at that site (discussed below). Following Required signage, signs promoting positive behavior were the most frequent at the elementary schools along with Educational signs providing information and motivation. Personal expression was commonly present in individual teacher's displays on or beside their classroom doors on which they conveyed their interests and affiliations to places or social causes (i.e., sports teams, universities, LGBTQ communities).

Notable differences among the three elementary sites included the presence of Place-marking and naming at Elementary School 3. There, students in one hall

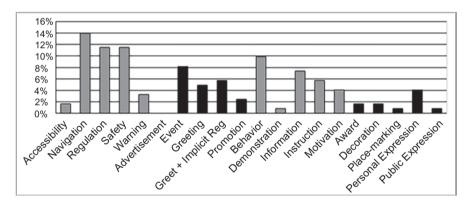


Fig. 2 Elementary School 1 functional distribution of signs, n = 122

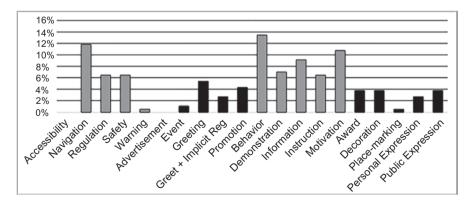


Fig. 3 Elementary School 2 functional distribution of signs, n = 186

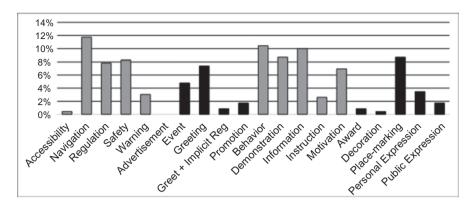


Fig. 4 Elementary School 3 functional distribution of signs, n = 230



Fig. 5 Old west themed signage (Elementary School 3)

had chosen an 'old west' theme, named the hall "West Pod," and in addition to the standard room numbers and teacher's name plates beside classroom doors, each room featured a decorative sign conveying the same information (Fig. 5). In contrast, Elementary School 1 was unique for several reasons which serve as an important reminder of the role that architecture plays in constructions of the LL. The lower number of signs at Elementary School 1 is not a result of a significantly smaller school, but its construction. Rather than one large building as at Elementary Schools 2 and 3, the Monmouth school is composed of five smaller structures that are adjacent to each other and connected by walkways. There are no internal hallways—outside of the single-story rows of classrooms are large covered play areas and walkways, and this explains the noticeable lack of displays

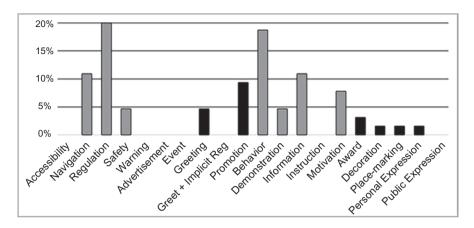


Fig. 6 Middle school functional distribution of signs, n = 64

that demonstrate student work in public areas. Without large indoor bulletin boards in halls, this LL element which was very salient at all the other buildings in the district was nearly absent from Elementary School 1. Whereas the other elementary schools seemed full of language and decoration, the minimal amount of these elements at Elementary School 1 resulted in a stark public face of the school, though it should be noted that the insides of classrooms (not included in the data) were quite the opposite with student work, instructional materials, and decorations in abundance.

The quantitative and functional analysis of signs at the middle school summarized in Fig. 6 is actually misleading due to the ever-present challenge in LL studies—identifying the unit of analysis when the size and composition of functional items are disparate. For example, most individual schoolscape items are the size of a poster or smaller. At some schools, a four-foot-tall by eight-foot-wide bulletin board was occasionally filled with examples of student work (as opposed to various items with different functions), so I counted the bulletin board as one unit; however, at the middle school the entire hallways above student lockers were lined with strips of cork for easily tacking up displays, which in this functional analysis were counted as one unit (one class's set of work—see Fig. 8). If each item of student work on display had been counted separately, the number of signs at the middle school would have easily surpassed 200. Thus, despite the low percentage of demonstration signs indicated in Fig. 6, these displays of student work were the most visually salient feature of the middle school schoolscape, but, as discussed below, one that was very monolingual.

As the largest and most architecturally complex building in the district, the high school contained a higher number and larger percentage of navigational signs (Fig. 7). Aside from size, the need for navigational signs in the high school was compounded by the many services and academic departments available there but not at the lower grades' buildings: educational and career counsellors, athletic department, facilities for art, mechanics, music, business, theater, etc. Similarly, the

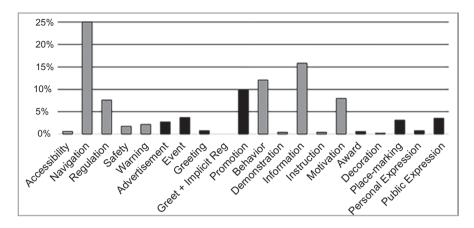


Fig. 7 High school functional distribution of signs, n = 513



Fig. 8 Halls lined with demonstrations of student work (Middle School)

posting of information regarding the different class and bell schedules and college and career planning are to be expected in an environment where students are more independently responsible for their schedules and the imperative to prepare students for life beyond secondary education is a primary goal.

One commonality across the buildings in the district was posters featuring an acronym intended to foster desired student behavior. Referred to by district administrators and teachers as PBIS (Positive Behavior Intervention Supports), each school had their own approach or keyword which was nearly ubiquitous in the schoolscape:

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• Elementary School 1: SWIM- Safe students, Working responsibly, In control, Making good choices

- Elementary School 2: HEART- Hope, Empathy, Accountability, Respect, Teamwork
- Elementary School 3: Be Safe, Be Respectful, Be Responsible [with location-specific expectations added]
- Middle School: PRIDE- Purpose, Respect, Integrity, Determination, Empathy
- High School: POWER- Purpose, Ownership, Work ethic, Empathy, Respect

Only Elementary School 3 did not feature an acronym. Instead, the building PBIS team had posted location-specific guidelines for behavior (expectations for playground, hallways, restrooms, etc.) in school colors with the school mascot and the words "Be Safe! Be Respectful! Be Responsible!" Most of these educational behavior signs were printed on durable laminated posters or heavier, professionally supplied banners, though it was also common for teachers to post student-generated reproductions or interpretations of the behavioral guidelines.

While analysis of the LL interaction order can also include conventions of sign placement, materials, fonts, colors, and graphic design, the more germane consideration in addition to sign function for this chapter is the choice of language that carries these functions. Of the 1115 signs in the district on the days of photographic documentation, 98–100% of signs in each building contained English, with the percent of English-only signs varying as follows by location: Elementary School 1 = 90%, Elementary School 2 = 87%, Elementary School 3 = 83%, Middle School = 78%, High School = 95%. The most frequently occurring non-English language was Spanish, which only appeared alone seven times in the district. Of the 94 bilingual (English + Spanish) signs across all 5 schools, 77% displayed English in the more salient position (above and/or to the left), and the vast majority of these were instances of the same message content rendered in both languages with matching font, colors, and materials. Only seven signs contained a language other than English or Spanish: with approximately one display each of German, French, Kiswahili, Chinese, Latin, Russian, and Vietnamese, typically on small flyers along with English.

Figure 9 provides details on the percentage of signs of a given function at each school that contained a language other than English. The 114 signs accounted for in Fig. 9 were all bilingual English-Spanish except for the seven monolingual Spanish signs, and the few instances of other languages as mentioned above. In the category

¹Regarding the materiality and durability of signs, those in the Required category as well as greetings, behavioral signs, awards, place-marking, and public expressions (see Table 3) were typically professionally produced and relatively permanent, most having been there for several years. However, the other Interactive, Educational, and Identity-marking functions such as decorations and personal expressions were produced by staff, teachers, and students and changed at least annually or in the case of event notices, educational instructions, and demonstrations of student work, far more frequently.

²However, as noted earlier, if displays of student work which very seldom included other languages had been counted as individual tokens, the percentage of English-only signs at the middle school would have been much higher.

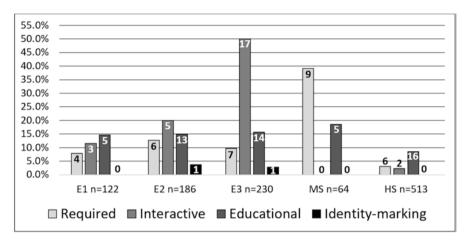


Fig. 9 Primary function % and # of signs containing a non-English language



Fig. 10 Bilingual regulations (MS)

of Required signs (the first bar shown for each location), all of the schools posted 3–12% of these notices as bilingual English-Spanish except for the middle school, at which nearly 40% were bilingual. Figures 10, 11, and 12 present typical examples of these signs which were not standardized across schools in the district.

At the elementary schools, signs in the Interactive category which offer greetings, inform about events, and promote activities were bilingual far more often than at the middle or high school. Most often these were greetings + regulations as in Fig. 13, though bilingual event notices such as in Fig. 14 were present especially at

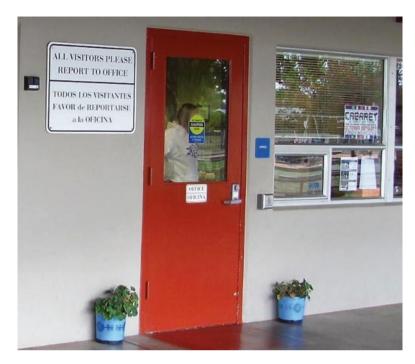


Fig. 11 Bilingual regulations and navigational signs (Elementary School 1)



Fig. 12 Bilingual regulations (Middle School)

Elementary School 3. Interview responses revealed that most regulatory signage, including the greeting + regulation versions, were chosen and emplaced by building administrators, often several years prior to the current administration. However, event notices, such as in Fig. 14, were posted by teachers or other staff members of their own accord or with the approval of building administrators. Figure 15 is an example of a teacher's bilingual greeting on their classroom door. The library at Elementary School 3 featured several displays of bilingual Spanish/English books

Fig. 13 Bilingual greeting + regulation (Elementary School 2)



and Spanish-only books (classified as promotions) which contributed to the much larger percentage of bilingual Interactive postings.

Notably absent from the schoolscape were bilingual signs here classified as creating or fostering a sense of place or group Identity-marking: awards, decorations, place-marking, and expressions of personal or public ideas. The only one of these signs in the district containing Spanish was on a tile mural in a hallway/workspace of Elementary School 3 (Fig. 16). On the other hand, the most frequent use of Spanish in the district was on the PBIS posters discussed above, which mostly accounts for the 10–20% of Educational function signs that include Spanish (Fig. 9). Figures 17, 18, and 19 are examples of the large posters that appeared throughout the schools, the text of which was sometimes also printed on smaller, 8.5x11 inch paper and posted in hallways often with more specific behavioral examples. During interviews when participants were asked about these bilingual signs, they clarified that PBIS teams consisting of teachers and administrators at each building had developed most of these themes within the past 2-3 years and had started with the English acronyms which they then had translated into Spanish by bilingual teachers and staff members; thus, it is coincidental (due to the shared cognates) that on the middle school signs, the PRIDE acronym works in both languages.

This functional analysis of signs indicates a schoolscape and LL interaction order which is primarily monolingual; however, the presence of a few very salient elements serves to create a public face that acknowledges the English/Spanish bilingualism of a large portion of the local community. The bilingual greetings and regulations tended to be located at entrances and locations where parents or other visitors

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Fig. 14 Bilingual promotion (Elementary School 3)



Fig. 15 Bilingual greeting on teacher's door (Elementary School 3)





Fig. 16 Spanish on a Tile Mural—a public expression of identity (Elementary School 3)

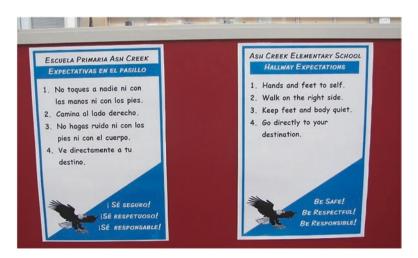


Fig. 17 Bilingual positive behavior intervention supports (Elementary School 3)

would notice them, and this echoes the comments from participants that highlighted the need for bilingual signs to accommodate parents with limited English proficiency. Similarly, the bilingual PBIS behavioral signs were very salient due to their large format and relatively frequent distribution throughout the common areas and halls of each building. Nonetheless, the percentage of all PBIS signs that included Spanish (including smaller, 8.5x11 inch versions) varied greatly across the district and never exceeded 38%: E1 0%, E2 28%, E3 38%, MS 33%, and HS 6%.



Fig. 18 Bilingual positive behavior intervention supports (Middle School)



Fig. 19 Bilingual positive behavior intervention supports (High School)

5.2 The Historical Body and Discourses in Place

- 3. How are different types of agency for shaping the LL of the schoolscape distributed among administrators, teachers, staff, parents, and students?
- 4. How do the functions interact with language choice and agency to convey language ideologies and hierarchies?

Before distilling the information I gathered from 10 individuals into a summary of ideas that are relevant to this chapter, I would like to express my gratitude to the participants here in the body of this text. Each person to whom I spoke provided a

unique insight into the use of languages in the schools and the history of practices established among the various stakeholders in the district and community, and each person's contributions deserve far more detailed treatment than I am able to provide here. In order to protect the anonymity of participants, I will not indicate which individuals reported specific information. The photographic data discussed above, comprehensive as it may be, represents only one snapshot of the dynamic system that is the schoolscape (Troyer & Szabó, 2017), and the visual schoolscape is but a reflection of the larger linguistic landscape and the myriad variables that influence how language mediates social action in educational settings.

The results presented in the previous section indicate a nexus of practice in which the interaction order creates norms for the display of signage across the district. A relatively small percentage (8–20% except for two exceptions) of highly visible types of Required, Interactive, and Educational signs were bilingual whereas all but two of the approximately 125 Identity-marking signs in the district were monolingual English. As the data from interviews below confirm, Spanish was included on signs not as a positive marker of the bilingual skills and Hispanic heritage of the community but in order to remedy a lack of English proficiency in parents and students, often under the guise of accessibility, which orients toward a 'language-asproblem' ideology.

At public schools in the US there are different levels of policy (federal, state, district, building, classroom) and especially at the district and building levels there are degrees of top-down officialdom from published documents intended for all stakeholders to written documents intended for groups and committees to impermanent memorandum and notices produced by building administrators for their staff. Likewise, there are spoken 'policies' that emerge with varying degrees of planning at faculty meetings and in conversations with administrators as well as the kind of bottom-up, implicit, de facto guidelines that result from shared practices and informal conversations among colleagues (see Johnson 2013, p. 10 for 'Language policy types'). The perspectives that follow concerning district 'policies' or guidelines for public postings should be understood as distinct from written policy documents which may not have been available or known to all the participants. As became clear during the interviews, policy enactment is guided less by documents and more by individual actors' perceptions of policy, or rather, each person's historical body of policy information and experience. Also, while the interviews included discussion of all kinds of signage decisions, the following results emphasize language choice.

While some participants understood federal laws regarding "equity and access" to education to apply to local posting of bilingual signage, most saw language choice as a local, building-level decision. When asked about explicit language policies for public postings, administrators and teachers who had been more instrumental in shaping the schoolscape were certain that there was no official district policy regarding the language on signs, and that there was widespread support for bilingual English-Spanish signage. Among participants who would not be considered LL actors (outside of their classrooms), the common belief was that there was definitely not an English-only proscription, and that at some point(s) in the previous 2–4 years there had been an increase in the promotion and production of English-Spanish signs.

In addition to policies regarding public postings, an important facet of the local discourse in place is the policies that determine language curriculum which directly affect the schoolscape—these are often framed as a school mission statement or part of a strategic plan for second language instruction and /or bi- and multilingualism in accordance with state and national standards. In the months before this project began, the district had significantly altered its services for English Language Learners (ELLs). Following changes to how students were identified as potential ELLs and assessed for English proficiency, the early exit bilingual program that had been used for several years at the elementary level was replaced with a sheltered instruction model in which students, depending on their proficiency level, were mainstreamed into classrooms with teachers who had been trained in literacy and language development practices, and provided with daily ELD (English Language Development) instruction of various forms. The change of services had incited some debate, and while some stakeholders saw it as a removal of bilingual programs, the administration clarified that the district policy had always been to ensure English proficiency with no school responsibility for the maintenance or development of minority languages within the curriculum.

The emphasis on promoting English proficiency within classrooms should not imply that school officials in any way endorsed an English-only perspective—district personnel had provided free workshops targeted at, but not exclusive to, Latino/ Hispanic parents in which early literacy practices in the home language were taught and encouraged, and bilingual and Spanish-language books were on display in school libraries. Administrators showed interest in the potential for dual language instruction; however, they faced budget constraints which made it difficult to recruit qualified bilingual teachers who are in short supply and can earn larger salaries at much larger school districts elsewhere in Oregon. Most participants were very proud of the extensive measures taken district-wide to have bilingual office staff, automated phone messages and alerts in English and Spanish, school documents available in translation, interpreter services available at public events, and the fact that frequent conversational use of Spanish in the hallways and occasionally in classes was in no way prohibited or officially discouraged.

Yet the inescapable fact was that the only language aside from English taught in the district was introductory Spanish at the high school level, which L1 Spanish speakers typically tested out of. Thus, at all levels, demonstrations of student work that included languages other than English were almost completely non-existent in the schoolscape. Though this was not a change from the past in the middle school and high school, elementary schools that previously had early-exit bilingual classrooms had seen a marked decrease in displays of Spanish as demonstrations of student work.

More importantly, from a curricular and programmatic perspective, regarding research question #4, in Ruiz's (1984) classification of orientations toward language, the high Spanish proficiency but limited English proficiency brought to school by 30–40% of the students in the district was implicitly viewed as a "problem" to be overcome rather than a "right" or a "resource." Rather than offering Spanish as a medium of instruction to serve as a resource for learning math or history, for example, or as the right of students to be educated in their home language,

the district's curricular policies emphasized students' lack of English as a barrier to their education. Despite much talk among the participants of the benefits of including Spanish in public language to increase inclusion and welcoming of the Latino/ Hispanic community, the discourse about what is taught in classrooms—English proficiency—had a substantial effect on the role that Spanish played in the district, limiting the language to non-curricular contexts and erasing it from displays/demonstrations of student-produced work.

5.3 Agency

The aforementioned lack of consensus about language policies for public postings that emerged from the interviews revealed both a hindrance to and potential for agentive LL action. On one hand, the absence of policies that directly required or promoted bilingual signage led to a general lack of awareness of the role language choice played in the schoolscape. Several participants reported that before the interview they had given little conscious thought to these matters or that occasional attention to the language on signs was simply eclipsed by the more immediate concerns of teaching in or leading a public school. Likewise, the inclusion of Spanish on, for example, the PBIS displays had always been an afterthought rather than an initial goal. One participant offered,

my guess is that everybody has so much on their plates that when the issue [of bilingual signage] arises... most people would be well intentioned and then support more [bilingual] signage. And ultimately if it's really not the responsibility of an individual it's gonna get dropped.

When estimating and assessing the amount of Spanish in the schoolscape, most participants overestimated the amount, probably due to the saliency of the large PBIS posters, and one commented that students had "grown up with it—there's Spanish signs all over the place." Yet both this study and the larger study of the community revealed that this is certainly not the case. However, other participants reported that given the relatively high percentage of Latino/Hispanic families in the community and students in the schools, there is very little Spanish in the schoolscape, with one adding that this lack was "pretty representative of this sort of not conscious effort to push kids aside... sort of this hegemonic, I guess you could say, sort of current in which students do get pushed aside a bit."

On the other hand, efforts, mostly on the part of teaching staff, to increase the saliency of Spanish in the schoolscape were applauded by current administrators. The best example of this was the PBIS programs that were developed by building teams of teaching staff and students (at the middle and high school levels) and sometimes parents (at the elementary level). In all cases, after a set of behavioral guidelines, usually in the form of an acronym and sometimes with more detailed descriptions, was developed, the teams created Spanish translations and incorporated them into the large-format posters usually printed by the district print shop.

Thus, while there was no top-down mandate regarding language choice, and building administrators were responsible for approving all public postings, a great deal of freedom was accorded to teachers, students, and other groups. Teachers were generally allowed to create their own displays of student work, and those who wanted to include Spanish or other languages on items they posted were never censured. One teacher in particular at the high school was especially agentive in adding Spanish to the schoolscape. Around 3 years earlier, this teacher, one of the participants in this study, had created an elective leadership course in which one of the priorities for students was to make the new PBIS program (PRIDE) more visible and to increase investment in its ideals by the student body. In addition to many other measures taken, the class and instructor considered the posting of Spanish versions to be essential for ensuring that as many students as possible understood behavioral expectations, and she also cited the goal of increasing the level of inclusiveness in the school by including Spanish.

This shaping of the high school's schoolscape can be seen as a response to signage that had been posted around 6 years earlier following a large-scale remodeling and expansion of the building as described by several participants. One interviewee in particular recounted that these events from the past had a profound impact on language in the schoolscape. According to this source, the former district Superintendent had hired a construction project manager with whom many stakeholders were dissatisfied. When decisions about new required signage for the remodeled building needed to be made, the project manager stated emphatically that English is the language of the United States, the school district's responsibility is to teach English, and new signs on the building would be posted in English only—a sentiment that the Superintendent at the time agreed with. In the words of my interviewee, "It was very purposeful. It truly was very purposeful on the part of the project manager that this [English-only signage] was going, and the superintendent." This was a top-down decision that stood despite opposition, and it was the direct cause of the low percentage of bilingual Required signs at the HS at the time of this study—see Fig. 9.

Thus, in answer to research question #3, the agency of LL actors is not evenly distributed in schools. Upper administrators play a regulative role and, in the case of this district, former leaders dictated policies that excluded Spanish. Under later administration, while there was no instructional support for minority languages, very favorable attitudes toward inclusive bilingual practices passed from the district office through the building administrators, which allowed teachers and students to alter the schoolscape. With this laissez-faire approach, the onus was on bottom-up actors to translate and post signs and, as nearly all the participants stated, given their workload and numerous responsibilities, these practices were simply not near the top of their list of priorities nor part of their conscious attention.

Finally, I would like to summarize participants' thoughts about the reasons for including other languages, especially Spanish, in the schoolscape and its effects on school personnel, students, parents, and community members. One participant who had worked in the district for 17 years and had long felt that the schoolscape did not reflect the student body or community stated:

I think if you have a population of students that speak a different language, and they see that language posted equally with the English that it validates the importance of that language and that culture, and I think that, you know, that is going to have a huge impact on students. And if there is nothing in their native language, then that demeans that language... so I think it has a big impact. I think it also helps make staff aware that we have a significant number of students that speak something other than English, and it's important for them to be reminded of that, 'cause you can forget.

Multiple interviewees pointed out the benefits of bilingual signage to make the school more inclusive of students and more welcoming for parents, especially ones who were hesitant to attend school events due to their limited English proficiency. They discussed at length how bilingual signage would validate the heritage of the community and the bilingual resources that much of the population possess, but that is not salient in the visual environment. One of the Spanish teachers commented on the potential for using the schoolscape to teach language, saying, "we have so many students [whose] Spanish is so influenced by English they really think the word for library in Spanish is *librería*, so labeling that *biblioteca* is not just a matter of recognizing the language, it's also a matter of educating."

It should be noted, however, that the sample of 10 individuals interviewed, while they all were in influential positions in the school district, cannot represent all possible perspectives. It is likely that their positive attitudes toward bilingualism made them more willing than other potential interviewees to participate and to express positive assessments during an interview with a sociolinguist. When asked whether increased Spanish in the schoolscape would lead to more acceptance of Spanish and Spanish speakers, one participant showed non-committal agreement while another stated, "I don't know that it would make a difference. If I had some data to suggest that it might make a difference, I'm certainly willing to consider it."

6 Conclusion

This case study of the schoolscape of a rural school district in Oregon reveals the potential for approaching language in educational settings from a nexus analysis perspective. In this chapter quantitative data that documents the norms of interaction is combined with qualitative interviews that provide insight into the historical body of LL actors while considering the broader discourses in place, all of which intersect to shape the LL of the five schools in the district. National and state discourses in the form of educational policy required that students who are identified as ELLs are provided with instruction that allows them access to public education. The form that these accommodations for ELLs could take varied from district to district with offerings in Oregon ranging from dual-language (two-way) immersion to early-exit bilingual programs (i.e., home language instruction used to facilitate a transition to English typically over 3 years) to ELLs mainstreamed into Englishmedium classes but with specific lessons and materials ("sheltered instruction") for English Language Development taught by the classroom teacher(s) and/or a

specialist inside the classroom or in a separate location. It is my contention that these discourses and the local selection of only sheltered instruction for ELLs is ideologically oriented toward viewing the Spanish-speaking emerging bilinguals in the district from a deficit, or language-as-problem, perspective. This orientation in discourse manifests in the interaction order of the schoolscape as a distinct lack of Spanish in students' demonstrations of learning.

Likewise, the majority of comments made by participants regarding the district's efforts to post signage in both English and Spanish in and around the schools and to engage with Spanish-speaking parents outside the classroom (bilingual handouts, flyers, voice messages, personnel, etc.) were framed as accommodations to allow access. Not celebrations or expressions of fundamental rights, but solutions to the perceived problem that these families' lack of English proficiency would limit access to educational opportunity which was afforded only in English. While several interviewees passionately extolled the role of Spanish in the schoolscape both as a means of inclusion embracing the right of people to use their home language and as a resource for the promotion of bilingualism, it was clear that these voices were overshadowed by the discourse of access and accommodation that primarily shaped this nexus of practice. Furthermore, while laudable efforts had been made to allow such access via translations and bilingual staff, the district had not made a concerted effort to create a bilingual schoolscape, instead relying on a few salient tokens of signage to accommodate parents and students with much of the burden of agency falling on teachers and staff with limited time and resources.

The functional analysis of schoolscape signage developed in this paper and the multiple levels of policy combined with the roles that top-down influence and bottom-up agency play in a historically situated context are essential frameworks for understanding the linguistic landscape of an educational institution. Following Scollon and Scollon's (2004: Chap. 7) explanation of the stages and actions of nexus analysis, the research documented here began by *engaging* and then *navigating* the particular nexus of practice of this school district. The third step advocated by Scollon and Scollon is *changing* the nexus of practice. Accordingly, I shared the results of this project including a draft of this paper with district administrators. However, this should be seen as merely a beginning to the kind of sustained and interactive relationship that Scollon and Scollon call for if we are to enact positive social change.

To these ends, there are many avenues for future research and collaboration with the school district. One approach would be to work in conjunction with classroom teachers on projects to raise students' awareness of the roles that multiple languages play in the community and facilitate explorations of how the LL reflects and constructs identities. A less participatory form of research would involve documenting the specific actions taken by agentive individuals and groups such as the teacher and students in the leadership course that produced many of the bilingual signs at the high school. Follow-up interviews and diachronic analysis should also be conducted to determine whether or not shifts in ideological orientations, discourses, and the interaction order of the schoolscape change over time and to determine causation. In the last chapter of *Nexus Analysis*, Scollon and Scollon (2004) elaborate on the

"unfinalizability" of a nexus analysis, and they conclude as I will with "a charge to discourse analysts to locate ourselves within meaningful zones of identification and to continue to pursue our active interrogations of the discourses of our lives" (p. 150).

References

- Ben-Rafael, E., Shohamy, E., Amara, M. H., & Trumper-Hecht, N. (2006). Linguistic landscape as symbolic construction of the public space: The case of Israel. *International Journal of Multilingualism*, 3(1), 7–30.
- Bever, O. (2016). Language as catalyst': Exploring the role of linguistic landscapes in the framework of Richard Ruiz's 'orientations in language planning. In *Honoring Richard Ruiz and his work on language planning and bilingual education* (pp. 338–354). Multilingual Matters.
- Bourdieu, P. (1979). Distinction: A social critique of the judgement of taste (R. Nice, Trans., 1984). Harvard University Press.
- Brown, K. D. (2012). The linguistic landscape of educational spaces: Language revitalization and schools in southeastern Estonia. In D. Gorter, H. F. Marten, & L. V. Mensel (Eds.), *Minority* languages in the linguistic landscape (pp. 281–298). Palgrave Macmillan.
- Brown, K. D. (2018). Shifts and stability in schoolscapes: Diachronic considerations of southeastern Estonian schools. *Linguistics and Education*, 44, 12–19.
- Dressler, R. (2015). Signgeist: Promoting bilingualism through the linguistic landscape of school signage. *International Journal of Multilingualism*, 12(1), 128–145.
- Garvin, R. (2010). Responses to the linguistic landscape in Memphis, Tennessee: An urban space in transition. In E. Shohamy, E. Ben-Rafael, & M. Barni (Eds.), *Linguistic landscape in the City* (pp. 252–271). Multilingual Matters.
- Garvin, R. T., & Eisenhower, K. (2016). A comparative study of linguistic landscapes in middle schools in Korea and Texas: Contrasting signs of learning and identity construction. In R. J. Blackwood, E. Lanza, & H. Woldemariam (Eds.), Negotiating and contesting identities in linguistic landscapes (pp. 215–232). Bloomsbury Publishing.
- Gorter, D. (2018). Linguistic landscapes and trends in the study of schoolscapes. Linguistics and Education, 44, 80–85.
- Gorter, D., & Cenoz, J. (2015). Linguistic landscapes inside multilingual schools. In B. Spolsky,
 O. Inbar-Lourie, & M. Tannenbaum (Eds.), *Challenges for language education and policy* (pp. 151–169). Routledge.
- Hanauer, D. I. (2009). Science and the linguistic landscape: A genre analysis of representational wall space in a microbiology laboratory. In E. Shohamy & D. Gorter (Eds.), *Linguistic land-scape: Expanding the scenery* (pp. 287–301). Routledge.
- Hanauer, D. I. (2010). Laboratory identity: A linguistic landscape analysis of personalized space within a microbiology laboratory. *Critical Inquiry in Language Studies*, 7(2–3), 152–172.
- Hult, F. M. (2009). Language ecology and linguistic landscape analysis. In E. Shohamy & D. Gorter (Eds.), *Linguistic landscape: Expanding the scenery* (pp. 88–104). Routledge.
- Hult, F. M. (2014). Drive-thru linguistic landscaping: Constructing a linguistically dominant place in a bilingual space. *International Journal of Bilingualism*, 18(5), 507–523.
- Johnson, D. C. (2013). Language policy. Palgrave Macmillan.
- Jakonen, T. (2018). The environment of a bilingual classroom as an interactional resource. Linguistics and Education, 44, 20–30.
- Laihonen, P., & Szabó, T. P. (2017). Investigating visual practices in educational settings: Schoolscapes, language ideologies and organizational cultures. In M. Martin-Jones & D. Martin (Eds.), Researching multilingualism: Critical and ethnographic approaches (pp. 121–138). Routledge.

- Laihonen, P., & Szabó, T. P. (2018). Studying the visual and material dimensions of education and learning. *Linguistics and Education*, 44, 1–3.
- Laihonen, P., & Tódor, E.-M. (2017). The changing schoolscape in a Szekler village in Romania: Signs of diversity in rehungarization. *International Journal of Bilingual Education & Bilingualism*, 20(3), 362–379.
- Landry, R., & Bourhis, R. Y. (1997). Linguistic landscape and ethnolinguistic vitality: An empirical study. *Journal of Language and Social Psychology*, 16(1), 23–49.
- Malinowski, D. (2009). Authorship in the linguistic landscape: A multimodal-performative view. In E. Shohamy & D. Gorter (Eds.), *Linguistic landscape: Expanding the scenery* (pp. 107–125). Routledge.
- Pakarinen, S., & Björklund, S. (2018). Multiple language signage in linguistic landscapes and students' language practices: A case study from a language immersion setting. *Linguistics and Education*, 44, 4–11.
- Pietikäinen, S., Lane, P., Salo, H., & Laihiala-Kankainen, S. (2011). Frozen actions in the Arctic linguistic landscape: A nexus analysis of language processes in visual space. *International Journal of Multilingualism*, 8(4), 277–298.
- Poveda, D. (2012). Literacy artifacts and the semiotic landscape of a Spanish secondary school. *Reading Research Quarterly*, 47(1), 61–88.
- Przymus, S. D., & Kohler, A. T. (2018). SIGNS: Uncovering the mechanisms by which messages in the linguistic landscape influence language/race ideologies and educational opportunities. *Linguistics and Education*, 44, 58–68.
- Ruiz, R. (1984). Orientations in language planning. NABE Journal, 8, 15–34.
- Savela, T. (2018). The advantages and disadvantages of quantitative methods in schoolscape research. *Linguistics and Education*, 44, 31–44.
- Scollon, R., & Scollon, S. W. (2003). Discourses in place: Language in the material world. Routledge.
- Scollon, R., & Scollon, S. W. (2004). Nexus analysis: Discourse and the emerging internet. Routledge.
- Szabó, T. P. (2015). The management of diversity in schoolscapes: An analysis of Hungarian practices. *Apples Journal of Applied Language Studies*, 9(1), 23–51.
- Tapio, E. (2018). Focal social actions through which space is configured and reconfigured when orienting to a Finnish sign language class. *Linguistics and Education*, 44, 69–79.
- Thistlethwaite, J., & Sebba, M. (2015). The passive exclusion of Irish in the linguistic landscape: A nexus analysis. In R. Rudby & S. Ben Said (Eds.), *Conflict, exclusion and dissent in the linguistic landscape* (pp. 27–51). Palgrave Macmillan.
- Troyer, R., Caceda, C., & Giménez-Eguíbar, P. (2015). Unseen Spanish in small-town America: A minority language in the linguistic landscape. In S. B. Said & R. Rubdi (Eds.), *Conflict, exclusion, and dissent in the linguistic landscape* (pp. 52–76). Palgrave Macmillan.
- Troyer, R., & Szabó, T. (2017). Representation and videography in linguistic landscape studies. *Linguistic Landscape: An International Journal*, 3(1), 56–77.
- US Census Bureau. (2010). American fact finder. US Census Bureau. Retrieved July 20, 2012, from http://www.census.gov
- Zheng, D., Liu, Y., Lambert, A., Lu, A., Tomei, J., & Holden, D. (2018). An ecological community becoming: Language learning as first-order experiencing with place and mobile technologies. *Linguistics and Education*, 44, 45–57.

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