SIGNS: Uncovering the mechanisms by which messages in the linguistic landscape influence language/race ideologies and educational opportunities
Linguistics and education

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A R T I C L E   I N F O

A B S T R A C T

The collocations "hidden agendas" and "implicit messages" are commonly used to describe the influence of our linguistic landscape (LL) on language ideologies and subsequent pedagogical decisions in schoolscapes. However, exactly *how* these messages wield such suggestive power has gone relatively unexplored. In this study, we introduce the Semiotic Index of Gains in Nature and Society (SIGNS), an example of a potential framework for LL analysis that investigates 1) historical and synchronic perspectives of place, 2) messages on syntagmatic and paradigmatic axes, 3) elective vs. circumstantial reverse indexicality, 4) societal myths (Barthes, 1972), and 5) messages as metonyms/metaphors. Using SIGNS, we analyze 30 school neighborhoods in an American Southwest border town and find that wealthier neighborhoods are more likely to have LLs indexed by Spanish than English, and these neighborhoods are subsequently more likely to support bilingual education. This research demonstrates how semiotics, bilingual education, and LL research can together provide for an interdisciplinary approach to better understanding specifically *how* and *why* our LLs are implicitly influential.

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1. Introduction

A principal role of the semiotician is to attempt to understand and explain how signs influence what people view as normal, typical human behavior (Danesi, 1999). Put in other terms, semioticians are concerned with how signs influence individuals' ideologies, political, professional, and personal agendas and actions, and thus aid in the construction of figured worlds (Holland, Lachicotte, Skinner, & Cain, 1998). For several decades now the field of linguistic landscape (LL) research, and much more recently the field of schoolscapes (Brown, 2012), has taken up the charge of investigating, understanding, and explaining the hidden and implicit ideological positions, agendas, intentions, and the cultural and political influences embedded in the historical and present day (synchronic) linguistic messages in our everyday physical landscapes, which includes a variety of contexts from schools to the digital landscapes of cyberspace (Ivkovic & Lotherington, 2009, p. 30). A discourse analysis of Twitter feeds, academic blogs and books, and scholarly papers shows that indeed scholars working in LL and schoolscape research are concerned with the "hidden ideological positions of emplaced texts" (Jaworski & Thurlow, 2010, p. 15; see also Malinowski, 2008), covert categories of language or "cryptotypes-hidden, meaningful patterns" (Jaworski & Thurlow, 2010, p. 89; see also Scollon & Scollon, 2003), and the symbolic function and power of implicit language use (Ivkovic & Lotherington, 2009), as well as with how this research can be used to describe the influence and hidden agendas of our LL (Shohamy, 2006) and the "hidden and implicit policies and ideologies" enacted at schools (Szabó, 2015, p. 27; for further related discussions on Twitter and in academic texts, see #columbia2016LL; @LLUCLA; @LL7Berkeley; Blommaert, 2013; Gorter, 2013, 2006; Jaworski & Thurlow, 2008;

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#linguisticlandscape; Mitchell, 2002; #paisajelingüístico; @subliminallandscapes; @subliminalprojects; Scollon & Scollon, 2003; Shohamy & Gorter, 2008).

Below we investigate the intersect of individuals as disseminators of messages and the governmental structure of place and space (Ivkovic & Lotherington, 2009) and address the often blurry lines of the agency of landscape and the authorial intent (Malinowski, 2008) of language use in neighborhoods in the vicinity of schools. Although we view everything, every thought, cognition, experience, and perception as some sort of semiotic sign, we simplify the focus of our discussion here on one specific and very well known and recognizable sign to the semiotician and nonsemiotician alike; street name signage (henceforth, street signs). In analyzing the language of street signs, where individual authorial intent collides with governmental regulations, we demonstrate that these signs, fraught with implicitly framed views, can influence personal ideologies of language and language status and affect linguistic behavior and educational policy (Gorter, 2013). With this context, we provide an example of the "onion" of language planning (Ricento & Hornberger, 1996) that metaphorically describes the multiple layers of "agents, contexts, and processes" that make up language planning and policy (Johnson & Ricento, p. 14, 2013). In doing so, the condensed dichotomy of top-down vs. bottom-up, ubiquitous in LL studies, becomes more complex in means of authorship and intent. Johnson (2013) points to how language policies are developed across multiple 'levels' of policy creation and even a language policy typically considered bottom-up, like a policy developed *in* a school district *for* that school district, can still be top-down for somebody (like, teachers or students); thus, the terms *top-down* and *bottom-up* are *relative*, depending on who is doing the creating and who is doing the interpreting and appropriating" (p. 10) [original emphasis].

Scholars from the Hawaiian Islands of the United States (Townsend, 2014) to Ethiopia (Mendisu, Malinowski, & Woldemichael, 2016), Hong Kong (Finzel, 2012), Australia (Bianco, 2003), and Scotland (Hancock, 2012) have claimed that pedagogy, language ideologies, and policies of language suppression, promotion, and conditions of language loss have all been influenced by the effects and/or perceived absence of underlying messages in the linguistic landscape and that through analyzing these, institutionalized educational practices that act to ascribe identities to students may be uncovered (Szabó, 2015). Indeed, this is a recurring theme across the contributions to this special issue including Tainio & Halonen's discussion of the hidden, unnoticed curricula represented in the LL of Finnish classrooms that index values and power; Zheng et al.'s investigation into the exploitation of space for promoting the understanding of the relational "becoming" of individuals implicitly influenced by their surroundings; Savela's analysis of the "ordering of reality"; Garvin's call for the tapping of local histories to increase awareness of the educational, cultural, and economic power and influence of our LL; Tapio's examination of the social construct of space; Brown's focus on diachronic considerations regarding the LL in the equity in education; and in total the implicit, subversive, and unconscious messages that can be brought to light through the kinds of approaches to multimodal discourse analysis of the LL employed by Jakonen and many of the other authors in this special issue. But while the arguments regarding the influence of our LL, both within this issue and without, are convincing and important, what is left underdeveloped in the field of LL research is the necessary attempt to explicitly uncover, understand, and explain these implicit, hidden influences.

It is our intent to offer guidance broadly toward that more explicit understanding for the field of LL research, but also to provide schoolscape researchers with an example potential analytical framework that addresses this implicit influence of the LL by focusing our semiotic analysis on signs in neighborhoods immediately surrounding schools. By extending the idea of schoolscapes from the elements, text, and space within and immediately around a school-based environment (Brown, 2012; Szabó, 2015) to also include the streets and neighborhoods surrounding schools, we stand to uncover the implicit influence of the LL on the (re)construction of the language ideologies of individuals who live in these neighborhoods and who support the language policies of their children's schools. Similarly, Dagenais, Walsh, Armand, & Maraillet (2008) look at how raising students' language awareness (LA) of their linguistic landscape in the vicinity of two elementary schools in Canada has helped to engage students in discussions of language diversity, equity, status, power, etc. Informed by the work of Fairclough (1992), the authors state "that critical LA (CLA) activities might help students recognise the different values attributed to languages and language speakers, interrogate stereotypic representations of languages, language speakers, and language learning, question social inequalities and work towards greater equity" (p. 140). In our current study, we call for a greater awareness of these stereotypes and inequalities of status, power, and opportunity beyond the school walls among the parents who support school programs, the policy makers who enact them, and the LL researchers who do the work of exposing the influential power of hidden messages.

By doing this, we bridge interdisciplinary thought by triangulating theory and practice from semiotics, bilingual education, onomastics, and LL research to show how these fields can inform and complement each other and together provide for a specific approach to understanding why and how our linguistic landscape is implicitly influential. In the study within, we present an example of an analytical framework that specifically targets the implicit influence of the LL and its potential relationship with the disparity of societal wealth, power, and educational opportunities, called the Semiotic Index of Gains in Nature and Society (SIGNS). We have purposefully chosen the name SIGNS on the one hand as a convenient acronym that is intended to have the same implicit influence that we hope to uncover in this study and on the other hand for the specific meaning of each component of the name. Specifically, the word Index is a double entendre that we hope to be understood both from a semiotic sense as a sensory feature that implicitly correlates with and points to something else (Peirce, 1974), a principal objective of our study, and also understood from a nonsemiotician point of view (probably much more common) as a list of names, subjects, places with reference to where they occur-which is what we have done analytically below in 30 neighborhoods surrounding schools. The words Gains, Nature, and Society all are intended to create the conceptual association of the potential relationship between the implicit messages of signs in our landscape and their hidden influence on financial gains and power in society. The SIGNS framework takes into account 1) a historical and synchronic perspective of place, 2) how messages in the LL enter our cognition on the syntagmatic and paradigmatic axes, 3) how reverse indexicality (Inoue, 2006; Weidman, 2014) and specifically what we call elective vs. circumstantial reverse indexicality (Przymus, in press), can act as strategies of condescension (Bourdieu, 1989) and influence language planning, policy, and pedagogy, 4) how messages in our LL are interpreted through societal myths (Barthes, 1972) promulgated by the modern day bourgeoisie, and 5) how all of the above are first understood conceptually as metonyms and metaphors. This particular constellation of elements is certainly not a comprehensive list of semiotic tools for analyzing the LL, but was distinctly chosen for its power in uncovering the implicit. Specifically, in providing the metonymic analysis of the LL below, thus far scarce in LL studies, we aim to add an analytical tool to the field of LL research, needed to better understand the LL's influence on implicit ideologies that have profound effects on our daily lives, identities, and social interactions. "It is the right and the duty of linguists and