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Easy de Traducir:

Geomapping Spanish Language Billboards Across Fort Worth, Texas

Steve Przymus, PhD

Texas Christian University

Melissa Mendoza, PhD

Texas Christian University

Abstract

How languages are used in public spaces, our linguistic landscape (LL), influences how individuals feel about those languages and, by default, the speakers of those languages. These thoughts, perceptions, beliefs, etc. are known as language ideologies, and language ideologies are some of the greatest influences and predictors of how people are positioned, treated, valued, and given (or not given) opportunities for power and success in a community. Fort Worth, Texas, is the 12th largest city by population in the United States and second largest ethnicity in the city at 35% of the population is Hispanic/Latine people. And although Spanish is frequently heard in many parts of Fort Worth and found on private shop signs in historically Mexican-American neighborhoods, the explicit and very public display of written Spanish in the linguistic landscape (e.g., billboards) of Fort Worth is not representative of the percentage of Latine individuals nor is it thematically balanced with the themes found on English billboards. Using the geomapping app Lingscape, we have discovered a surprising and potentially influential pattern of primarily using the Spanish language on Fort Worth billboards to advertise for alcohol companies. We argue this sends a clear (albeit unconscious), unspoken message of the place, value, and role of Spanish in Fort Worth. We worry about the impact this might have on how Spanish-speaking and Hispanic/Latine youth are viewed in schools, potentially leading to negative stereotypes and more problematic representations of these students.

“Las cosas tienen vida propia... todo es cuestión de despertarles el ánimo.”¹ (García Márquez, 2009, p. 9)

“Spatiality as lived, humanly oriented space is a perceptual, horizontal extension... Society provides for certain symbols and institutions to organize spatial orientation, within which perceptual connections then become possible.” (Lowe, 1982, p. 59)

Introduction

Having a seat at the table is a phrase that has come to mean to have representation in decision-making, to have the opportunity/voice to make choices, and to have an influence; it is linked to the perception of equity of power. The Spanish language and its sizable representation within Texas schools, communities, and society demands an explicit consideration of the role of Spanish and the identity positioning of Spanish-speaking, Latine community members in Texas. However, what might a purposeful and critical analysis of the representation of the Spanish language and the choices of how and where it is used in the linguistic landscape of Texas tell us about the identity positioning of the language and its speakers? The linguistic landscape (LL), or use of language within a public space, can directly influence the way a language is used, internalized, replicated, and how the speakers of the language are viewed and provided or prohibited power. In describing this influence, Shohamy (2016) claims that

Each building, each site, each sound, a billboard, an outdoor moving screen, a mall, a homeless person sitting in the corner of the street, IS actually an LL text that has to be critically “read.” In other words, all those visible “texts” need to be processed as “tips of icebergs” for deeper and more complex meanings which are embedded in histories, cultural relations, politics, and humanistic inter-relations. (25:04-25:38)

Considering the LL as agentic constructs of social space, we are as humans, both producers and yet products of our linguistic landscapes.

With this explicit and implicit power in mind, our linguistic landscape study sought to uncover what is both the quantitative and qualitative representation of the Spanish language on billboards in Fort Worth, Texas in order to begin problematizing what this might mean for the identities of Spanish-speaking students in schools. Fort Worth is located in the north of Texas, is 346 square miles in size, and is the 12th largest city in the U.S. by population (978,468). According to 2020 U.S. census data, analyzed by the city of Fort Worth, Fort Worth’s three largest racial/ethnic groups are white alone, not Hispanic/Latino (38.9%); Hispanic/Latino (35.1%); and Black or African American alone (18.5%) (The City of Fort Worth, 2022). Census data also shows that 26.9% are Spanish-only speakers, with many more individuals being Spanish-English bilinguals (The City of Fort Worth, 2022).

With this study, we provide a deep semiotic investigation and analysis of the linguistic representation of the Spanish language on billboards in the city of Fort Worth in order to document

¹ “Things have their own life... It’s all a question of waking their spirit.”

where and how Spanish is used on billboards across the city. This research allows us to examine the ways that Spanish is represented within these advertisements but can also point to the ways the Hispanic/Latine community is considered by advertising companies and is viewed by the rest of the community through these billboards. We are guided by the following research questions: is, in fact, Spanish primarily used as the language of vice (e.g., beer, liquor, tobacco, etc.), as previous studies of Texas cities and other U.S. metropolitan areas have demonstrated? And if so, how might this usage of the Spanish language on prominent platforms in the linguistic landscape (e.g., billboards) create and recirculate deficit-based myths, metonymies, and metaphors that strengthen negative stereotypes about the Spanish language and, by default, the speakers of Spanish in Fort Worth?

Below we provide a review of similar linguistic landscape studies that focus on billboards as sites of language ideology production, that describe our method in documenting and analyzing the billboards, and that provide detailed data around the quantity and quality (measured in terms of diverse thematic codes) of Spanish language billboards. We finish by arguing there may exist a systematic use of Spanish for themes of alcohol, liquor, and societal “self-help” social issues that are disproportionate in percentage in comparison to English-language use for similar themes in the LL of Fort Worth. We worry that this may send a clear (albeit unconscious), unspoken message of the place, value, and role of Spanish in Fort Worth and about the impact this might have on how Spanish-speaking or Hispanic/Latine youth are viewed in schools.

Literature Review: Language Ideologies, Critical Media Literacy, Linguistic Landscapes, Multimodal Critical Semiotic Analysis

Image 1

Spanish language billboard for immigration legal help in Fort Worth, Texas



Language Ideologies and Folk Theory

How languages are used in public spaces (our linguistic landscape) influences how individuals feel about those languages and, by default, the speakers of those languages. These

thoughts, perceptions, beliefs, etc. are known as language ideologies and language ideologies are some of the greatest influences and predictors of how people are positioned, treated, valued, and given or not given opportunities for power and success in a community. These ideologies exist because they work in tandem with humans' everyday understandings of the world, or folk theory. Folk theory relies on "erasure" (Gal & Irvine, 1995) or "a kind of inattention that makes contradictory evidence invisible" (Hill, 2009, p. 5). When we see a sign in our surroundings, we use it and its passive message to "interpret the world without a second thought" (Hill, 2009, p. 5) through common sense. For example, Image 1 above is a large, highly visible Spanish language billboard, located on the very busy I-35 in Fort Worth, Texas. Spanish speakers will understand this is advertising immigration lawyers and legal help to secure one's legal status papers or documents without having to enter into a marriage of convenience. English-speakers, at best, will be curious about the "bad marriage" picture and, at worst, will recognize the cognate "*tóxica*" and pair this with the image to interpret some kind of understanding that Spanish-speakers have toxic marriages... reifying folk theories and myth in social language about the lifestyles of "illegal" immigrants. This kind of quick thinking is taken for granted, is ubiquitous, and is often subjected upon us by media and advertising. These advertising messages often strengthen our linguistic ideologies and life metaphors that shape, confirm, and rationalize our political, economic, social, and identity-based interests.

Critically Examining Media and Advertising

Media, especially advertising, can be examined from multiple angles. The advertisers and business researchers are most interested in what types of advertising are most effective, and the research reflects this. For example, one study examined the associations made by native Spanish speakers when Spanish is used in advertising within the United States. Researchers found that when using print media with consumers' native language (Spanish), participants were more likely to associate the ad with family, friends, home, or homeland (Noriega & Blair, 2008). Another study was interested in how Spanish-speaking adolescent males responded to English and Spanish-speaking beer ads and found that participants responded more positively to the English-speaking beer ads (Slater et al., 1997).

Similar research has been conducted within Latin American countries. Researchers were interested in understanding how the stereotypes around English-speakers influenced how people viewed advertisements that included English. They surveyed bilingual and Spanish-speaking participants within México, Ecuador, and Chile and found the persuasiveness of English advertisements increased as the stereotype associated with code-switchers (people switching between English and Spanish) increased (Alvarez et al., 2017). Below, through the concept of reverse indexicality, we will make a brief connection to this international perspective with our existing study. This research demonstrates advertising interests in language use is wholly concerned with how consumers might respond to the different languages used.

Critical Media Literacy

Another way of examining advertising media is to use an education pedagogical practice known as Critical Media Literacy, which encourages developing literacy related to multiple forms of mass media in order to examine the relationships between the media, society, power, and information (Garcia et al., 2013, p. 111). It has been used by teachers to support language learning

skills (Hobbs et al., 2014), to examine the media that students interact with every day (Garcia et al., 2013), and, in one case, to even take photos of the media within students' neighborhoods to take back and analyze within their classrooms (Share et al., 2019). To implement this pedagogy, first teachers incorporate conversations of media representation, power, and ideology within the context of whatever subject they are teaching; then teachers model and practice questioning the different types of representation; and offer, finally, opportunities for students to create their own alternative media messages using different forms of technology (Garcia et al., 2013).

Critical Media Literacy in Our Own Backyard and Nationally. Since the current study takes place in Fort Worth, a large city in the North Texas region, it is instructive to review similar critical media studies of Spanish language signs in other Texas cities. Previous research in Texas investigated what the researchers determined as “advertising of vice” in white neighborhoods vs. Hispanic/Latine neighborhoods. Researchers found that across these neighborhoods in San Antonio, Texas, there was a significant occurrence of Mexican-American neighborhoods to be more likely to have alcohol/tobacco billboards than white neighborhoods. They did review these signs for language use and saw equal amounts of English and Spanish were used when advertising tobacco and alcohol while, for all other products, more English was used than Spanish. It should be noted that they also found a significant relationship between income level and the type of products being advertised to argue the targeted advertisements of vice may be related to class as well (Lee & Calcott, 1994). Twenty-three years after Lee and Calcott’s study, Jimenez et al. (2017) documented the Spanish language billboards and their thematic content by location and socio-economic contexts in San Antonio. And, similar to our study below, the authors also used GPS technology and photographs. Jimenez et al. (2017) found that “as the number of less educated, low-income Hispanic residents increased in census tracts, particularly in central San Antonio, the number of alcohol billboard advertisements in their neighborhoods increased as well as the number of alcohol retailers” (p. 9).

Related studies in other major U.S. cities have found similar supporting results, highlighting the choices made by companies in where they place their billboards and who they target (Hackbarth et al., 1995; Moore et al., 2008; Scott et al., 2008). Research has shown that tobacco and alcohol companies have targeted neighborhoods with larger populations of people of color (Hackbarth et al., 1995; Scott et al., 2008). Hackbarth et al. (1995) found alcohol focused billboards were on average five times more prevalent in these neighborhoods, compared to white neighborhoods in Chicago, Illinois. Moore et al. (2008) also used geo-spatial maps in Atlanta, Georgia and found that “alcohol billboards were more prevalent in African-American neighborhoods” (p. 509). Scott et al. (2008) documented that alcohol and tobacco signs were 40% more likely to be found in low-income communities of color in Los Angeles. Returning to language ideologies, the impact of a prevalence of Spanish being used on billboards for alcohol, tobacco, and other themes of “vice,” might have a negative impact on how Spanish-speakers in those communities are viewed. Touchstone et al. (2014) found that “Spanish-language billboard advertising may indeed increase racist attitudes among non-Hispanics” (p. 257).

Linguistic Landscapes and Their Impact on Language Ideologies

The linguistic landscape has been defined as “the linguistic items found in the public space” (Shohamy, 2006, p. 110); “language in the environment, words and images displayed and exposed in public spaces” (Shohamy & Gorter, 2009, p. 1); and first by Landry and Bourhis (1997) as

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 linguistic landscape of a given territory, region, or urban agglomeration. The linguistic landscape of a territory can serve two basic functions: an informational function and a symbolic function. (p. 25)

Linguistic landscapes as a multimodal critical discourse analysis field of academic study arose primarily as a recognition that most people see these signs for only their informational function and that more should pay attention to their symbolic function. Considering the latter, Blommaert (2013) contends that “signs in [a] social space tell us a lot about the users of the space... [and] how users are influenced and are influenced by them; they so start telling stories about the cultural, historical, political, and social backgrounds of a certain space” (p. 49). The work taken up in linguistic landscape research is to understand the implicit, “hidden ideological positions of emplaced texts” (Jaworski & Thurlow, 2010, p. 15) and to understand how “the language in which signs are written can influence the perception of the status of the different languages and affect linguistic behavior” (Gorter, 2013, p. 202).

Since quite literally anything in our LL can be a meaning-making sign, critical and empirical work in LL studies can at times feel unwieldy and subjective. As LL researchers, we need to have multiple analytical approaches for making sense of so much meaning-making: “If we claim that it is through semiotic activity that physical space is turned into social, cultural and political space, we need to understand how exactly these processes of semiotization operate” (Blommaert, 2013, p. 20). To this end, we turn to multimodal critical semiotic analysis.

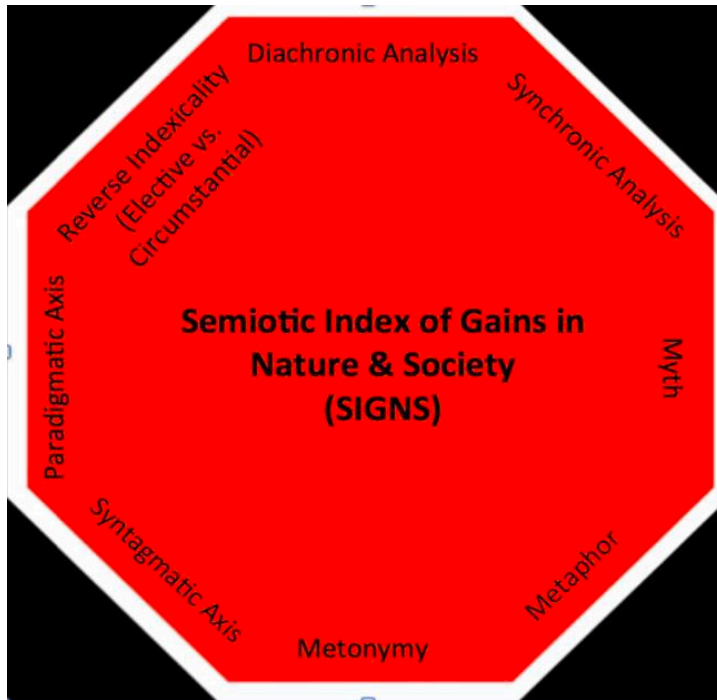
Multimodal Critical Semiotic Analysis

In order to understand and explain how signs influence what people view as normal, typical behavior, we are influenced and informed by multimodal critical discourse analysis (Gee, 2014; Gu & Catalano, 2022; Machin, 2013), of which we build upon for a multimodal critical semiotic analysis (Danesi, 1999; Przymus, 2017; Przymus & Kohler, 2018). Critical Discourse Analysis (CDA) allows researchers to uncover the “reproduction of ideology in language use” (Sriwimon & Zilli, 2017, p. 136) and since “discourses are communicated through different kinds of semiotic resources, different modes, and realized through different genres” (Machin, 2013, p. 347), we extend CDA beyond language to include the multimodality of life, such as the vast messages relayed daily in the LL. To us this necessitates an expansion to all of the meaning-making signs in the LL or a multimodal critical semiotic analysis.

The Semiotic Index of Gains in Nature & Society (SIGNS) framework (Figure 1) prompts researchers to focus on multiple points of LL analysis and provides for systematicity in this analysis (Przymus & Kohler, 2018). Elements of analysis include 1) diachronic (throughout points in history) analysis; 2) a synchronic (current) analysis; 3) the diverse myths relayed by the LL; 4) how these myths are spread through conceptual metaphor; 5) how those metaphors are built upon conceptual metonymies; how humans unconsciously “read” the LL via both 6) the syntagmatic axis and 7) the paradigmatic axis; and finally, 8) how the concepts of elective and circumstantial reverse indexicality can be used to help explain power structures and the contextual hegemony of the LL.

Figure 1

Semiotic Index of Gains in Nature & Society (SIGNS) framework



During the analysis and discussion over the possible impacts of the Spanish language billboards in Fort Worth, seven of the eight elements (sans diachronic analysis) of the SIGNS framework will be used to semiotically explain this mostly implicit influence of the LL.

Methods

Image 2

Bud Light billboard, “Hecha en Tejas (Made in Texas),” taken August 2022 and GPS mapped and pinned its location northbound on I-35, one mile North of downtown Fort Worth



Lingscape Geomapping App

Early in Summer 2022, I reached out to the Institute for Luxembourgish Language and Literatures at the University of Luxembourg and requested a project-specific login and password that would result in a project-specific map, using the Lingscape geomapping application. Taking pictures with our iPhones, we were easily able to upload, pin, and annotate each picture on our Lingscape project-specific map, which we named “*Evita el Exceso.*” Image 2, above, “Hecha en Tejas” (Made in Texas) is a Bud Light billboard documented and uploaded to Lingscape in August 2022. Images 3 and 4 are screenshots of our Lingscape-project map, with all red pins in Image 3 showing locations of Spanish language billboards. Image 3 also shows how once a user clicks on one of the pins, the corresponding billboard picture is displayed. Any blue circles (with numbers) indicate places where there are a group of billboards that are revealed upon zooming-in further. Image 4 shows what it looks like if a red pin is selected, how the image is larger, and how all the information is visible, allowing for researcher annotations to be read.

Images 3 & 4

Screenshots of project-specific Lingscape map, showing geomapped and pinned Spanish language billboard locations, across the North, West, and Central parts of Fort Worth (Image 3), including an enlarged billboard and annotation (Image 4)

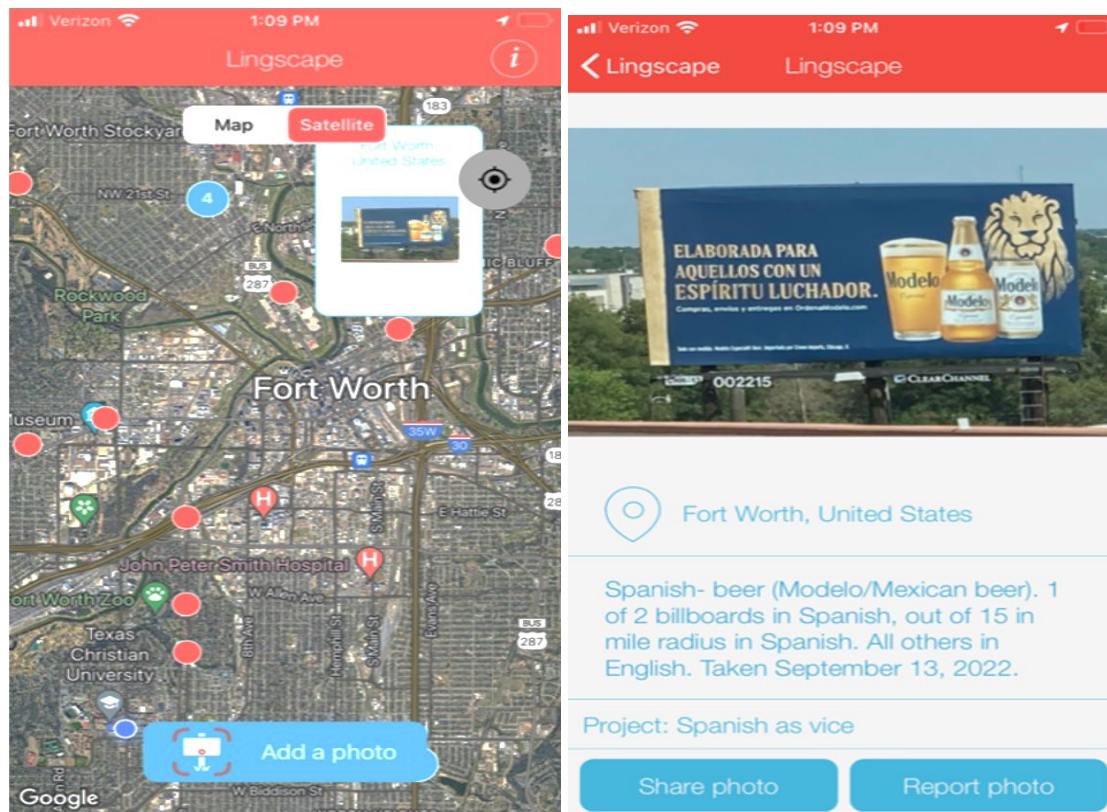


Image 3 illustrates how Spanish language billboards were located throughout all parts of Fort Worth, including (but not visible in Image 3) the South and East quadrants of the city. Using Lingscape, the researchers documented all Spanish language billboards, across Fort Worth over a

one-year period. Data collection took place between August 2022 and July 2023. The city of Fort Worth is 346 square miles in size, includes over 8,100 lane miles of streets, and has 1,044 total billboard locations (Ad Quick, 2023). In order to systematically document these signs, the research team divided the city into quadrants (North, South, East, West) and drove the main roads of each quadrant at least once per quarter. Understanding that companies pay for a billboard for various contracted periods of time (e.g., 3 months, 6 months, a year, etc.), the researchers wanted to both account for locations that would change topics quarterly and those locations and specific billboards that remained the same across multiple quarters. It could be argued that the latter creates an even greater normalcy of daily life and reifies unquestioned myths regarding certain content and languages. When billboards were maintained over multiple quarters, they were documented and annotated as such within the app to show the continued presence of the Spanish billboard over multiple quarters.

Inclusion and Exclusion Data Criteria. Billboards were included within this analysis if they included Spanish within the text of the advertisement itself. In some cases, the Spanish was embedded within English text, what some may refer to as Spanglish, code-switching, or translanguaging. These billboards were kept for analysis because they too can account for the ways advertising is attempting to attract Spanish-speakers or position the Spanish language in a particular way. Throughout this documentation, the researchers also noted signs on the sides of trucks, restaurants, or buses, resulting in a total of 70 logged signs in the Lingscape app, but these were not included for analysis as they were often not stationary signs or in the case of restaurants would require a different method of documentation in order to ensure that all signs were included.

The resulting final documentation resulted in 63 billboards for analysis. Following a visual analysis of each photo, the researchers pulled the text from each billboard and included a brief description of the visual elements included on the billboard as well (see Image 4). This text was then coded using descriptive coding to highlight the topic of each billboard. Additionally, the text was coded using in vivo coding to be able to analyze the choice in words utilized by multiple companies within their advertising. The visual imagery was descriptively coded and analyzed for themes as well. In analysis of this work, we considered the various ways of examining this data: from the advertising perspective of effectiveness, using Critical Media Literacy to consider representation, power, the information being transmitted, and the SIGNS framework analysis to include a semiotic examination of diachronic/synchronic considerations, myth, metaphor, metonymy, the syntagmatic axis and paradigmatic axis of language, and existence of elective vs. circumstantial reverse indexicality.

Findings

Image 5

Bud Light beer billboard, “Easy de Beber (Easy to Drink),” an example of translanguaging



Over a period of one full year and across the 1,044 available billboard locations in the city of Fort Worth, only 63 (.06%) were in Spanish or included the Spanish language with English in unique code-switching, translanguaging, or Spanglish ways.² These 63 billboards were identified and analyzed for the themes across these advertisements. The most salient finding from this analysis was the dominance of alcohol related advertisements across these billboards. Over 50% of the billboards (n=32), promoted beer (n=27) or liquor (n=5). The largest group of billboards within this “alcohol” themed category were beer advertisements. These included advertisements from eight different beer companies: Bud Light; Modelo; Miller Lite; Shiner Bock; Busch Light; Coors Light; Dos Equis; and a local brewery, Four Corners Brewing. The greatest in frequency of these signs were for Modelo (n=11) and Bud Light (n=5). Interestingly, 21 out of 27 of the beer billboards were selling light beer. There are a few other themes that can be noted across the beer billboards as well. These billboards used imagery and text referring to mountains, México, Texas, and soccer. Additionally, 12 of the 27 billboards used some form of translanguaging, code-switching, or Spanglish. These included phrases such as “*manteniendo la fansiedad*” (maintaining the *fansiedad*, a mix of fan and the word for anxious in Spanish), “we say ‘*salud!*’” (we say ‘cheers!’), and “easy *de beber*” (easy to drink, see Image 5). As previously mentioned, several

² This unique mixing of Spanish and English in the United States can both simultaneously act to create solidarity among Spanish-speakers who mix languages on a daily basis and position Spanish in the United States as a less formal, broken, at times jocular, bastard language (Anzaldúa, 1999) in the ideologies of non-Spanish-speakers and Spanish-speakers alike. We argue that this creates the fertile ground for metaphors, such as SPANISH AS SPOKEN IN THE UNITED STATES IS VICE, discussed below.

billboards were seen in multiple places across the city. For the 13 billboards that were repeated in multiple places, eight of them were alcohol-focused billboards.

The remaining 31 billboards focused on health-related issues, lawyers, the bus system, education, and more. After the top category of alcohol-focused billboards, health-focused advertisements were the second largest group documented, accounting for 19% of the billboards. These advertisements focused on the health of mothers and their children (n=3), clinic advertisements (n=2), mental health support (n=2), health insurance (n=2), health of the elderly (n=1), high blood pressure (n=1), and eating healthy (n=1). Three of these billboards were also repeats throughout the city. Other multiple location topics included immigration and accident lawyers (legal issues) and a Spanish language advertising campaign for using public transportation (e.g., the bus system). These, combined with the health-focused billboards, together counted for over a third of all Spanish language billboards and could be grouped into a similar “social issues” theme. This includes billboards with advertisements such as, “*Apoyate en los recursos para la salud mental*” (help yourself to resources for mental health), “*Apoyo gratis para la lactancia 24/7*” (free 24/7 help for lactation) and “*Nosotros podemos arreglar tus papeles*” (we can fix your papers). The remaining analyzed and coded themes were categorized as “education”-related and general advertising of businesses (e.g., gas stations, car dealerships, restaurants, etc.). Due to the overall small representation of Spanish language billboards in Fort Worth (63/1,044 or .06%), the two largest themes of “alcohol” and “social issues” were disproportionate (over-represented) in nature, compared to English-only billboards that ran the gamut of all topics, also including alcohol and social issues, but together with hundreds of general advertising of businesses, as well. Plainly put, it felt like we only just saw beer, liquor and social issue advertisements whenever a billboard was in Spanish.

Analysis and Discussion Via the Semiotic Index of Gains in Nature & Society (SIGNS) Framework

Overall, our results both update and also reify similar findings from research on Spanish language billboards in Texas cities and other cities across the U.S. Although Hispanic/Latine individuals closely compete for the largest racial/ethnic group in Fort Worth, and Spanish is an important language in the city, the representation of the Spanish language on the largest, most salient messages in the linguistic landscape of the city (billboards) is quantitatively much lower (0.06%) and qualitatively less socially positive in nature compared to English-only billboards. We do not believe it is a stretch to claim this could have an unconscious and implicitly negative effect on individuals’ ideologies about the Spanish language and, by default, speakers of Spanish, such as an increase of racist ideologies on the part of non-Hispanic individuals (Touchstone et al., 1999). With the remainder of this discussion section, we use seven of the eight elements of the SIGNS framework to explain how this implicit effect might take hold in the consciousness of individuals who interact daily with and are influenced by the linguistic landscape (i.e., all of us).

SIGNS Element #1: Diachronic Analysis

Analyzing how the LL of a specific area has changed at successive periods throughout history is an important aspect of LL research (Pavlenko & Mullen, 2015). Although through my experience over the last eight years of living in Fort Worth, I can anecdotally claim that I have

observed a consistent pattern of Spanish language billboards for major beer companies, this would not suffice for a real diachronic analysis. An adequate diachronic analysis would have to include sociolinguistic interviews with long-time Fort Worth residents coupled with a multimodal discourse analysis of newspapers, city archives, and other data sources that document Fort Worth's past. We did not do this for this study.

SIGNS Element #2: Synchronic Analysis

For our multimodal critical semiotic analysis, then, we start with the second element of the SIGNS framework, a synchronic analysis of Fort Worth. A synchronic analysis is useful for becoming aware of and for understanding in-the-moment interactions and influence of the LL. In the end, it gives us the results that we share above. Synchronic analyses are important, as they can reveal major and current themes of advertising and linguistic ideologies, such as the following "Sports & Beer" theme. Five months (August-December, 2022) of our one-year synchronic analysis overlapped with the run-up to and the duration of the 2022 World Cup in Qatar. A synchronic analysis, or snapshot of time, of the Spanish language billboards of Fort Worth may contain sports-related themes anyway (e.g., Miller Light as the "only" beer of the Dallas Cowboys or Budweiser as the "official beer of the Texas Rangers), but this coincidence in overlapping our LL ethnography and a world event resulted in many soccer/beer-related billboards in Spanish. Images 6 and 7 (below) show the usual beer company suspects and their soccer-themed billboards.

Image 6

Bud Light billboard, "Una Por México (One for Mexico)"



Image 7

Coors Light billboard, “Manteniendo la Fansiedad (Maintaining Fan Anxiety/Energy... Fandom)”



A synchronic analysis is important because it is the documentation of what most people (non-sociolinguists) think about the LL. It is the non-critical (folk theory) recollection of what people see and remember in the moment and thus makes it an easy tool for incorporating the LL in language, culture, and other content lessons in schools. Here, though, we advocate for teachers to go further with their students, to use the LL for critical language awareness activities, and to get students thinking about power structure via language and about their own linguistic and cultural identities. For example, what other visual analyses could be studied and lessons learned from the billboards in Fort Worth? An extension of our multimodal analysis might show a strong connection to *machismo* culture stereotypes being reified in the linguistic landscape. Beyond the sports examples above, we also can see the rooster in the *El Chingón* (the dominating male) beer billboard, the lion on the *Modelo* beer billboards (which also includes language around being a *luchador* -wrestler or fighter), the sugar skull and Dallas Cowboys star on *Miller Light* beer billboards, and other beer-related billboards that refer to the adventurous outdoors with mountains. All of the following elements of the SIGNS framework facilitate those discussions.

SIGNS Element #3: Myth

The third element of the SIGNS framework is myth. Myths are “a system of communication, that is a language” (Barthes, 1972, p. 217), and “what makes myths so powerful is that they are experienced as nothing more than innocent speech” (Przymus, 2024, p. 3). Some myths are harmless, such as *mice love cheese*, or *a goldfish has a three second memory*. Other myths get swept up in public language and memory and can border on having serious implications: *A glass of red wine a day is good for you*. And some myths are outright both wrong and harmful, but are still believed, such as *bilingualism confuses children, especially if they have a disability*.

Myths are believed because 1) they get told over and over and 2) because they are a second chain of semiological meaning (signifier + signified + sign), that is built off of the first, more literal (and truthful) chain. This means that as long as the first chain exists, the second chain (myth) has life. We have seen above that the majority of Spanish language billboards advertise beer, liquor, and social issues (such as issues of immigration legality). This cannot be contested. Seen in their totality, they do form a first chain semiotic understanding of signifier (material signs in existence) + signified (mental concept or understanding) + meaningful sign (quite literally Spanish language signs for this theme).

This is fertile ground then for myth, which only needs motivation and historical language use. The myth produced is that the Spanish language is the language of vice, partying, *machismo*, illegal activities, etc., and unconsciously, by default this is placed upon the identities of Spanish-speakers, whether they like it or not. One only needs to be semi-aware of the LL as Cinco de Mayo approaches in the U.S. Signs in and around restaurants and bars abound with “Drinko de Mayo” phrases and multimodal representations of a partying lifestyle. This jocular use of the Spanish language is a subtle form of racism that Jane Hill (2007) refers to as Mock Spanish (see below in “Reverse Indexicality” section). Mock Spanish is frequently rationalized as just clever or funny but works to relegate the Spanish language (and thus the speakers of Spanish) to a less serious status in U.S. society.

Of course, myth gets a lot of help in its production. Anytime it serves the purpose of a political party to position Spanish-speaking immigrants as immoral, illegal, dangerous in some way, etc., discourse around drinking, partying, illegal lifestyles is never far off. Much of this myth production relies on the next two elements of the SIGNS framework: conceptual metaphor and conceptual metonymy.

SIGNS Element #4: Conceptual Metaphor

As per convention in cognitive linguistics, which focuses on the analysis of metaphor/metonymy and other elements, conceptual metaphors/metonymies are denoted in all caps. Here the metaphor is SPANISH IS VICE or perhaps better said, SPANISH AS SPOKEN IN THE UNITED STATES IS VICE (see footnote above). Conceptual metaphors serve a couple of important functions for humans. First and foremost, they help us understand the world. Just that. Secondly—and this explains much of how the first function is achieved—conceptual metaphors make abstract concepts understandable and concrete. Much of our world is made up of abstract concepts (e.g., love, life, vice). Even a reader of this article who might claim that they know very little about conceptual metaphors will have heard the metaphor “love is a battlefield” (Benatar, 1983). Love and battlefield clearly belong to different idealized cognitive models or cognitive domains, as no one would ever say that they literally are the same thing. However, as love is an abstract concept (hard to touch) it can be more easily understood by linking it to a concrete concept (battlefield), through similarity. If one chose to, they could walk onto a battlefield and experience some of the same rush, risk, excitement, fear, etc. that love can produce, and thus understand love better. Similarly, life (abstract) can be understood by taking a long journey (LIFE IS A JOURNEY), or vice (abstract) can be understood by linking it to a language, coupled with images (SPANISH IS VICE). This is the power of conceptual metaphors.

Returning to the first function of conceptual metaphors (explanations of life), metaphors are used by humans to understand life experiences, relationships, power dynamics, what to love, and what to fear. These conceptual metaphors are often strengthened through language deictics or the

linguistic process of pointing things out directly. We are the deictic centers of our life-understanding universes and this allows us to become closer to some and more distanced to others. Deictics are understood through how people are talked about as “us” vs. “them,” “me” vs. “you,” and how “they,” “the others,” are different from “us.” Image 8 brings this all together, showing how deictically Spanish speakers are positioned as “you,” “not me,” “someone else,” and are “othered” with an identity of a “partying” “*machismo*” (*chingón*) persona.

Image 8

Mostly English-language billboard for El Chingón beer



We understand that there are positive connotations of this sign, and that *chingón* can be interpreted as super awesome and cool. However, it cannot be denied that this directly links the Spanish language and identities of Spanish-speakers to beer consumption and potentially reifies the metaphor that SPANISH IS VICE. Reorienting this metaphor to also include SPANISH AS SPOKEN IN THE UNITED STATES IS VICE is a direct reminder that what is at work here is less about the language and more about a pattern of aligning the people who use the language to alcohol, via metonymy (see below), and thereby positioning them as interested in or a part of the whole of this vice.

SIGNS Element #5: Conceptual Metonymy

Conceptual metonymy is the other link in the myth production. Przymus and Gutiérrez (2022) posit that “before the metaphor, metonymy exists, and after the metaphor, mythologies (Barthes, 1972) carry the meanings into the future” (pp. 135-136). Conceptual metonymies are powerful mental shortcuts because, unlike metaphor, the two things being connected exist within the same cognitive domain. When we say “lend me a hand” we clearly understand that the hand is just part of and stands in place for the whole human we desire help from. When we say the White House put out a press statement about Gaza, we understand the building itself did not do it, but rather it stands in place for the executive branch and the president of the United States. This “stands

in place for” relationship makes metonymies powerful for making quick cognitive inferences (regardless of whether right or wrong).

In the case of Spanish language billboards, seeing one or two is all it takes for these (and their content) to stand in place for all of the Spanish language billboards, if not for all of the Spanish language LL of a given place, without actually having to see them all at once. This is how metaphors, such as SPANISH IS VICE can take hold and how myths of the Spanish language being the language of vice and therefore Spanish-speakers having a certain identity can continue to exist. This would explain how and why I mentioned above that it seemed like every sign I saw in Spanish was about beer. Even though just over 50% were, it did not matter. Metonymically, my mind was making the quick mental connections of meaning. Also, other linguistic and cognitive phenomena aid in this production of metonymies, and they are taken-up next.

SIGNS Element # 6: Syntagmatic Axis of Language

Due to their diagrammatic iconicity (Nöth, 2008; Peirce, 1988/1904; Przymus, 2017; Waugh, 1994), billboards are a form of advertising that could be ignored while commuting to and from work or school, as we come to expect them and do not always give them explicit attention. Their general, systematic size, location, height, and distance from the road, etc. all add to the familiarity of billboards that can render them to become unquestioned, uncritiqued, and normalized. This can act to lull consumers into a passive relationship with the linguistic landscape, especially with signs that make up so much of our quotidian lives:

We take snapshots, as it were, of the passing reality, and, as these are characteristics of the reality, we have only to string them on a becoming abstract, uniform and invisible, situated at the back of the apparatus of knowledge. Perception, intellection, language so proceed in general (Bergson, 1911, pp. 306).

Certainly, it is the above-described diagrammatic iconicity of billboards that contributes to this influence on our perception and intellection, but we posit here that there are other unconscious mechanisms and processes at work. Looking to the field of semiotics to understand how humans understand, produce, and make meaning with language, we can begin to place the LL on both the syntagmatic and the paradigmatic axes of language and make the argument that humans actually read the LL as if it were sentences on a page. The syntagmatic access of language, the axis of language that describes how humans simultaneously combine linguistic elements in a successive and contiguous manner, could be used to understand how individuals actually see and understand the messages of billboards, in succession, as we pass them in cars, busses, etc., one after the other. The idea is that we, as humans, naturally look for familiar ways to understand our surroundings and employ our knowledge of language, semiotics, and systems of communication to “read” the LL and the book that is our daily lives. Images 9 through 11 show three billboards that are seen in a row, each about 1 to 3 blocks in between one other, in the Northside of Fort Worth.

Image 9
Miller Light billboard



Image 10
Patrón billboard



Image 11
Modelo billboard



The syntagmatic axis works by each linguistic feature in a sentence working in relationship with the feature before it and the feature after it. We can see in these three images that each could stand in place for a linguistic feature that, together, complete a meaningful message or sentence. This successive decoding and reading of the semantics of billboards on the horizontal, syntagmatic axis is only half of the unconscious story, however, as humans do not just combine linguistic elements to form the sentences of our lives; we also have creativity to say things in different ways, to make choices about the content, to select the language used, and to craft specific messages through these alternative choices. This is the other axis of language, the paradigmatic axis.

SIGNS Element # 7: Paradigmatic Axis of Language

Linguistics scholars, including Przymus myself, have written about the monolingual paradigm (Przymus, 2016; Snetselaar, 2014; Yildiz, 2012) as an overwhelming and, at times, unconscious decision and choice to both communicate/teach in one language at a time and to also privilege one language over another. This term and concept of paradigm comes from the second semiotic axis of language production and reception, the paradigmatic axis: “Just as every word must relationally/syntactically work with the word before it and the word after it, in a contiguous manner on the syntagmatic axis, each one of those words can be replaced, substituted out, alternated for a similar word on the paradigmatic axis” (Przymus & Solmaz, forthcoming). In considering the paradigmatic axis in the linguistic landscape, it is imperative to acknowledge that every linguistic choice is meaningful in which language is used and which is not used by theme. This helps explain the shock that we, as residents of Fort Worth, have felt upon seeing billboard after billboard in Spanish about beer, liquor, and legal issues. At some point, the unconscious rises to the conscious, and we are awakened from our perceptual slumber to ask certain questions: “Why are the majority of Spanish language billboards about these themes?” “What is behind that linguistic choice?” and “How would language ideologies and cultural/linguistic perceptions in Fort Worth change if these linguistic and thematic choices were different, resulting in fewer Spanish language billboards about beer and more billboards about educational achievement (see Image 12), leadership in Fort Worth, and other more positively viewed themes?”

Image 12

Cristo Rey private school billboard, highlighting students in uniforms and advertising unique education, with tested results



Regarding SIGNS elements #6 and #7, we can say there exists a certain syntax or grammar in the sentences of billboards and choices/decisions in these sentences that students, educators, families, etc. interact with each day on their way to school and work. Finally, we claim that these sentences tell a certain story about the community and neighborhood in which people live. For humans, this story is familiar, as it both replicates and continues to form how we use language in our daily lives.

SIGNS Element # 8: Reverse Indexicality

Regardless of the above-discussed unconscious messages (both negative and positive) that Spanish language billboards give off in Fort Worth, one might at least expect to find Spanish language billboards in historically Mexican-American neighborhoods of the city. Our year-long ethnography of the Fort Worth LL, however, demonstrates that these Spanish language billboards and their majority beer, liquor, and social issue themes are found in all quadrants of the city. For example, in the West-Central part of the city, such as zip code 76129, where the Hispanic population percentage is significantly below city and state averages, there was an equal amount of these Spanish language billboards as in Northside neighborhoods, such as zip code 76164, where the Hispanic population percentage is far above the city and state averages (<http://www.city-data.com/zips/76129.html>). Although as social scientists we should continue to ask critical questions about the influence of majority beer-related advertising on Spanish language billboards in Spanish-speaking neighborhoods, we believe we need to ask additional questions regarding why these same linguistic decisions are made and displayed in non-Spanish-speaking neighborhoods.

Reverse indexicality (Przymus, 2016 [originally 2017]; Weidman, 2014) is a social semiotic concept that explains how individuals can position themselves with desired identities by claiming spaces for themselves via the LL that index and make “the foreign and distant, familiar and present” (Jaworski & Thurlow, 2010, p. 8). Above we point to the Alvarez et al. (2017) study showing how reverse indexicality is used in English advertising in Latin American countries to index linguistic,

cultural, and status stereotypes for the people who use the advertised brands, shop at the stores, and live in certain neighborhoods. Our own LL analyses of cities in Latin America (see Images 13 & 14) confirm this practice of indexing wealth, high class, and an identity of stylishness and social capital through the use of English.

Image 13

“El Pop Up Store” in Bogotá, Colombia



Image 14

Mr. Mostacho Barber Shop, Tuxtla Gutiérrez, México



What, however, could be the motivation and perceived social capital benefit of using Spanish on billboards to advertise beer in non-Hispanic/Latine, English-speaking parts of Fort Worth? It is possible that this could serve a couple of motives. First, this could act to make the partying, cool, crazy, “*loco*,” and part of something linguistically foreign, distant, and exotic; it becomes something familiar and present, through strategies of condescension, such as propinquity (Bourdieu, 1989), which is the concept of reaping the benefits of appearing to be close to the cultural aspects of a different group of people, without actually having to physically live close to them or among them. This might explain the practice of non-Spanish-speaking individuals partying on Cinco de Mayo, dressing in sombreros, and trying (but not seriously) to use Spanish while partying. This leads to the next motive.

Secondly, and perhaps more influential for maintaining a status quo of power and morality in society, if this reverse indexicality is done in a jocular way (see “Mock Spanish,” Hill, 2007) or in a way that is overwhelmingly disproportionate in its common themes of beer, liquor, etc., then this would always work to keep Spanish as the language of vice, lower status, and questionable legal and social value, all the while placing this same identity positioning upon Spanish speakers. At the time of analysis, Image 15 (below) was displayed in the majority white, English-speaking 76129 zip code of Fort Worth.

Image 15

Coors Light beer billboard, “Tan Grande Como Texas (As Big as Texas)”



Conducting a synchronic analysis of Image 15, it would be easy to see the myths, metaphors, metonymies, syntagmatic axis, paradigmatic axis, and reverse indexicality in just this one sign, bringing together the elements of the SIGNS framework. For example, the mountain and state imagery synchronically place this sign with other “outdoor, *machismo*” themes and the co-existence of the Spanish language on yet another beer billboard reifies the myth of the Spanish language, as spoken in the U.S., being linked to a partying, vice-related lifestyle. This myth is first created through metonymic connections of yet another Spanish language beer billboard “standing in place” for all Spanish language billboards, which, in turn, builds and strengthens the metaphor of linking the abstract concept of vice, identity, etc. through the concrete use of the Spanish language, resulting in the SPANISH AS SPOKEN IN THE U.S. IS VICE metaphor. This conceptual language (myth, metonymy, and metaphor) gets strengthened by repeated use both on the syntagmatic axis of seeing this and other signs come one after another, like grammatical components in a sentence, and on the paradigmatic axis as unconsciously understanding that a decision was made to use Spanish (not English) for these beer billboards. Finally, all of this, then, can be concluded by asking what kind of identity is being created here by choosing to index something foreign and distant in familiar and local ways in neighborhoods where Spanish is not as frequently used (such as where Image 15 was found) but where these beer billboards exist.

Implications for Education: Recognizing and Confronting Threat Inversion

In preparing this manuscript, I have had several opportunities to present this research at professional and academic (linguistics, education, multicultural education) conferences. At every presentation, an iteration of a similar comment ultimately comes from white attendees during the Q & A segment of the talk: 1) “I don’t necessarily see race nor ethnicity in these findings,” 2)

“Doesn’t this have to do more with class than race?” or 3) “I think this is more about money and profit, then it is about race.” The need to disentangle language from race and ethnicity demonstrates the existence of a real (or imagined) threat to the linguistic, racial, power status quo, even among self-proclaimed, woke, well-intended academics. What makes these raciolinguistic ideologies (Alim et al., 2016; Flores & Rosa, 2015) even more profound is that I rarely bring up race in these presentations but rather first point to the findings that an overrepresentation of signs in Spanish are about beer and liquor. These responses are what Ruiz (2013) calls “threat inversion” and can be understood through a raciolinguistic lens (Richard Ruiz, personal communication/lecture PowerPoint slides, August 2013). Threat inversion is any kind of response to perceived threats to the functions or roles of a language in society. These often manifest as English speakers’ perceptions of threat to English’s role in society due to changes in demographics, reaction to immigration, racism, economic competition, or any kind of threat posed by different (non-English-speaking) groups in society. These responses can range from purposeful erasure of other languages to the purposeful hyper-indexicality of languages other than English in certain less valued and less respected ways (e.g., billboards about alcohol, legal issues, etc.).

From a raciolinguistic perspective, regardless of the response of either “not seeing” or not wanting to talk about race or the purposeful indexing of these non-English languages with a certain identity, racial and ethnic identities are “(re)created through continuous and repeated language use” (Alim et al., 2016, p. 5). In the case of our study (above), this is multimodal in nature and implicitly felt/understood daily via the linguistic landscape. Alim et al (2016) call for researchers to “[integrate] theoretical areas of *style*, *stance*, and *performance* (among others) in order to [understand] how these approaches might inform... processes of racialization” (p. 6) to which we, here, merge linguistic landscape and multimodal critical semiotic analysis to raciolinguistics. Alim et al. (2016) also implore the looking “comparatively across diverse ethnoracial and linguistic contexts to better understand the role of language in maintaining and challenging racism as a global system of capitalist oppression”(p. 6), to which we believe the linguistic landscape is a needed context for this kind of work.

Continuing their introduction of raciolinguistics, Alim et al. (2016) ask educators and scholars to “[emphasize] the linguistic and discursive construction of race and ethnicity while at the same time noting their endurance as social realities for subjugated racial and ethnic minorities, (im)migrants, and other oppressed groups” (p. 6) and to “[consider] implications of research for social transformation and develop various antiracist strategies to impact public discourses on language, race, and education” (p. 6). To these last two points, we see hope. We hope that critical scholars and educators, doing the work of critical language awareness with youth, can continue to raise students’ awareness of the discursive construction of race and ethnicity through messages in the linguistic landscape. It is true that the LL can act to subjugate racial, ethnic, and linguistic minoritized peoples, but it can also be sites of resistance, transformation, and the purposeful remythification (Przymus, 2024) of these discursive patterns toward a new language and new consciousness.

Examples of this new language and new consciousness are present in our data set. The representation of going beyond named languages (i.e., translanguaging) is an important aspect of much of the Spanish language LL in Fort Worth. Even though this is primarily done on billboards advertising beer, it is still a good example of local, regional, Texas, and Rio Grande Valle language use and borderland linguistic performance. Some examples include the above Bud Light billboard “Easy *de beber*,” a Dos Equis billboard that says, “Grab a Dos,” and the below Miller beer billboard in Image 16, “*Sabe a Miller Time*.”

Image 16

Miller beer billboard, “Sabe a Miller Time, Texas (Tastes like Miller Timer, Texas)”



Even though the themes may not appear to be topics for learning in schools, there is an opportunity here to have critical conversations with students about languaging beyond named language boundaries and about how Spanish is being positioned and indexed in Fort Worth.

Conclusion

“Just as we cannot think of spatial objects at all apart from space, or temporal objects apart from time, so we cannot think of *any* object apart from the possibility of its connexion with other things.”
(Wittgenstein, 2009, p. 6)

Our year-long, multimodal critical semiotic analysis of the Spanish language linguistic landscape of Fort Worth, Texas, revealed a troubling pattern of the Spanish language being primarily used as the language of alcohol consumption and legal and social issues, rendering the social message about Spanish “Easy *de traducir*.” Above we have described and explained how unconsciously this could position the Spanish language as a less valued, lower-class language, acting to position speakers of the Spanish language with the same identities. Even the most informal, implicit, and briefest of perusals of the Fort Worth linguistic landscape reveal that Spanish is used seemingly primarily on billboards for beer, liquor, legal problems, and other social issues. To return to the “chair at the table” metaphor from the introduction, not only is the Spanish language chair smaller than the English chairs around the table (in terms of use on the total billboards in Fort Worth), but it is also the type of chair that will break upon sitting on it, prompting the others at the table to ridicule the user for falling and lying on the ground. It is our hope this research begins to unearth implicit roots behind unfair treatment, inequality of opportunities, and the exclusion of historically marginalized populations, based on ethnicity, race, and language.

Finally, as teacher scholars, this kind of research could inform classroom readings, discussions, and lessons on the impact of language ideologies in a community on teaching practice and policy in schools. We call for a purposeful use of LL tools (e.g., Lingscape) and theoretical frameworks of LL analysis (e.g., SIGNS) with students to facilitate critical language awareness and culture lessons, and discussions about the impact of the LL on language ideologies, power, and identity positioning in U.S. communities.

References

- Ad Quick. (2023, January). *Billboard locations in Fort Worth, TX*.
<https://www.adquick.com/billboard-locations/texas/fort-worth>.
- Alim, H. S., Rickford, J. R., & Ball, A. F. (2016). Introducing raciolinguistics: Racing language and languaging race in hyperracial times. In H. S. Alim, J. R. Richford, & A. F. Ball (Eds.), *Raciolinguistics: How language shapes our ideas about race* (pp. 1-30). Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780190625696.001.0001>
- Alvarez, C. M., Uribe, R., & León De-La-Torre, R. (2017). Should I say it in English? Exploring language effects on print advertising among Latin American bilinguals. *International Journal of Advertising*, 36(6), 975-993. <https://doi.org/10.1080/02650487.2017.1401518>
- Anzaldúa, G. E. (1999). *La frontera: The new mestiza*. Aunt Lute.
- Barthes, R. (1972). *Mythologies* (A. Lavers, Trans.). Hill and Wang. (Original work published 1957)
- Benatar, P. (1983). Love is a Battlefield [Song]. *Live from Earth*. Chrysalis.
- Bergson, H. (1911). The Cinematographical Mechanism of Thought and the Mechanistic Illusion—A Glance at the History of Systems—Real Becoming and False Evolutionism. *Creative evolution*, 272-370.
- Blommaert, J. (2013). *Ethnography, superdiversity and linguistic landscapes: Chronicles of complexity* (Vol. 18). Multilingual Matters.
- Bourdieu, P. (1989). Social space and symbolic power. *Sociological Theory*, 7(1), 14-25.
<https://doi.org/10.2307/202060>
- Danesi, M. (1999). *Of high heels, cigarettes and other interesting things*. St. Martin's Press.
- Flores, N., & Rosa, J. (2015). Undoing appropriateness: Raciolinguistic ideologies and language diversity in education. *Harvard Educational Review*, 85(2), 149-171.
<https://doi.org/10.17763/0017-8055.85.2.149>
- Gal, S., & Irvine, J. T. (1995). The boundaries of languages and disciplines: How ideologies construct difference. *Social Research*, 62(4), 967-1001.
- Garcia, A., Seglem, R., & Share, J. (2013). Transforming teaching and learning through critical media literacy pedagogy. *LEARNing Landscapes*, 6(2), 109–124.
<https://doi.org/10.36510/learnland.v6i2.608>
- Gee, J. P., 2014. *An introduction to discourse analysis: Theory and method*. Routledge.
- Gorter, D. (2013). Linguistic landscapes in a multilingual world. *Annual Review of Applied Linguistics*, 33, 190-212. <https://doi.org/10.1017/S0267190513000020>
- Gu, X., & Catalano, T. (2022). Representing transition experiences: A multimodal critical discourse analysis of young immigrants in children's literature. *Linguistics and Education*, 71, 101083. <https://doi.org/10.1016/j.linged.2022.101083>
- Hackbarth, D. P., Silvestri, B., & Cosper, W. (1995). Tobacco and alcohol billboards in 50 Chicago neighborhoods: Market segmentation to sell dangerous products to the poor. *Journal of Public Health Policy*, 16, 213-230.
- Hill, J. (2007). Mock Spanish: A site for the indexical reproduction of racism in American English. In J. F. Healey & E. O'Brien (Eds.), *Race, ethnicity, and gender: Selected readings*, 270-284.
- Hill, J. H. (2009). *The everyday language of white racism*. John Wiley & Sons.
- Hobbs, R., He, H., & Robbrieco, M. (2015). Seeing, believing, and learning to be skeptical:

- Supporting language learning through advertising analysis activities. *TESOL Journal*, 6(3), 447-475. <https://doi.org/10.1002/tesj.153>
- Jaworski, A., & Thurlow, C. (Eds.). (2010). *Semiotic landscapes: Language, image, space*. Continuum.
- Jimenez, A., & Estaville, L. (2017). Alcohol billboards in San Antonio, Texas. *The International Journal of Interdisciplinary Social and Community Studies*, 12(1), 9-27. <https://doi.org/10.18848/2324-7576/CGP/v12i01/9-27>
- Landry, R., & Bourhis, R. Y. (1997). Linguistic landscape and ethnolinguistic vitality: An empirical study. *Journal of Language and Social Psychology*, 16(1), 23-49. <https://doi.org/10.1177/0261927x970161002>
- Lee, W. N., & Callcott, M. F. (1994). Billboard advertising: A comparison of vice products across ethnic groups. *Journal of Business Research*, 30(1), 85-94.
- Lowe, D. M. (1982). *History of bourgeois perception*. Harvester Press.
- Machin, D., 2013. What is multimodal critical discourse studies? *Critical Discourse Studies*, 10(4), 347-355. <https://doi.org/10.1080/17405904.2013.813770>
- Márquez, G. G. (2009). *Cien años de soledad/ One hundred years of solitude*. Vintage español.
- Moore, H., Jones-Webb, R., Toomey, T. & Lenk, K. (2008). Alcohol advertising on billboards, transit shelters, and bus benches in inner-city neighborhoods. *Contemporary Drug Problems*, 35(2-3), 509-532. <https://doi.org/10.1177/009145090803500214>
- Noriega, J., & Blair, E. (2008). Advertising to bilinguals: Does the language of advertising influence the nature of thoughts? *Journal of Marketing*, 72(5), 69-83. <https://doi.org/10.1509/jmkg.72.5.069>
- Nöth, W. (2008). Semiotic foundations of natural linguistics and diagrammatic iconicity. In K. Williams & L. De Cuypere (Eds.), *Naturalness and iconicity in language* (73-100). John Benjamin. <http://dx.doi.org/10.1075/ill.7.06not>
- Pavlenko, A., & Mullen, A. (2015). Why diachronicity matters in the study of linguistic landscapes. *Linguistic Landscape*, 1(1-2), 114-132. [10.1075/ll.1.1-2.07pav](https://doi.org/10.1075/ll.1.1-2.07pav)
- Peirce, C. S. (1988). Καινά στοιχεία (New elements). In Pierce Edition Project (Eds.), *The Essential Peirce, Vol. 2 (1893–1913)* (300–324). Indiana University Press. (Original work published in 1904)
- Przymus, S. D. (2016). Challenging the monolingual paradigm in secondary dual-language instruction: Reducing language-as-problem with the 2–1–L2 model. *Bilingual Research Journal*, 39(3-4), 279-295. <http://dx.doi.org/10.1080/15235882.2016.1220995>
- Przymus, S. D. (2017). The subliminal influence of street signs in schools: Elective vs. circumstantial reverse indexicality in a tale of two Tucsons. *Journal of Second Language Acquisition and Teaching*, 24, 4-24.
- Przymus, S. D. (2024). *American education mythologies: A remythification of the public language of U.S. schools*. Cambridge Scholars Publishing.
- Przymus, S. D., & Gutiérrez, J. O. S. (2022). It's all gone south! Applying Anzaldúan frameworks to metonymy, metaphor, and mythologies to understand the language about transnational youth. In G. S. Kasun and I. Mora-Pablo (Eds.), *Applying Anzaldúan frameworks to understand transnational youth identities* (pp. 133-154). Routledge. <http://dx.doi.org/10.4324/9781003191575-11>
- 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. <http://dx.doi.org/10.1016/j.linged.2017.10.002>

- Przymus, S. D. and Solmaz, O. (Forthcoming). Developing educational linguistic landscape (EdLL) materials and learning methods. In D. Gorter and J. Cenoz (Eds.), *Handbook of Linguistic Landscapes and Multilingualism*. Wiley-Blackwell.
- Scott, M. M., Cohen, D. A., Schonlau, M., Farley, T. A., & Bluthenthal, R. N. (2008). Alcohol and tobacco marketing: Evaluating compliance with outdoor advertising guidelines. *American Journal of Preventive Medicine*, 35(3), 203-209.
<https://doi.org/10.1016/j.amepre.2008.05.026>
- Share, J., Mamikonyan, T., & Lopez, E. (2019). Critical media literacy in teacher education, theory, and practice. In Oxford research encyclopedia of education.
<https://doi.org/10.1093/acrefore/9780190264093.013.1404>
- Shohamy, E. (2016, October 14). Linguistic landscape and the language classroom: Opportunities for critical engagement with society, technology, and place [Conference presentation]. Language Learning and Teaching with Urban and Linguistic Landscapes Convention, New York, NY, United States.
<https://www.youtube.com/watch?v=J9CjoCxRLsc>
- Shohamy, E. G. (2006). *Language policy : Hidden agendas and new approaches*. Routledge.
- Shohamy, E. G., & Gorter, D. (2009). *Linguistic landscape expanding the scenery*. Routledge.
- Slater, M. D., Rouner, D., Domenech-Rodriguez, M., Beauvais, F., Murphy, K., & Van Leuven, J. K. (1997). Adolescent responses to TV beer ads and sports content/context: Gender and ethnic differences. *Journalism & Mass Communication Quarterly*, 74(1), 108-122.
<https://doi.org/10.1177/107769909707400109>
- Snetselaar, R. A. (2014). La langue Française in a postmonolingual world: Two francophone novels against the backdrop of the monolingual paradigm [Master's thesis, Utrecht University]. Utrecht University. <https://studenttheses.uu.nl/handle/20.500.12932/19161>
- Sriwimon, L., & Zilli, P. J. (2017). Applying critical discourse analysis as a conceptual framework for investigating gender stereotypes in political media discourse. *Kasetsart Journal of Social Sciences*, 38(2), 136-142. <http://dx.doi.org/10.1016/j.kjss.2016.04.004>
- Touchstone, E. E., Homer, P. M., & Koslow, S. (2014). Spanish language billboard advertising in the US: Are there effects on Anglos? In F. Bargiela-Chiappini, & C. Ross Nickerson (Eds.), *Writing Business* (pp. 257-272). Routledge. <http://dx.doi.org/10.4324/9781315840246-11>
- The City of Fort Worth (2022). *Chapter 1: Population Trends*. The City of Fort Worth.
<https://www.fortworthtexas.gov/files/assets/public/v3/the-fwlab/documents/comprehensive-planning/2022/adopted/01-population-trends-final-2022.pdf>
- Waugh, L. R. (1994). Degrees of iconicity in the lexicon. *Journal of Pragmatics*, 22(1), 55-70.
[https://doi.org/10.1016/0378-2166\(94\)90056-6](https://doi.org/10.1016/0378-2166(94)90056-6)
- Weidman, A. (2014). Anthropology and voice. *Annual Review of Anthropology*, 43, 37-51.
<http://dx.doi.org/10.1146/annurev-anthro-102313-030050>
- Wittgenstein, L. (2009). *Major works: Selected philosophical writings*. Harper Perennial.
- Yildiz, Y. (2012). *Beyond the mother tongue: The postmonolingual condition*. Fordham University Press. <https://doi.org/10.2307/j.ctt13x0cqr>