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CHAPTER THIRTEEN

LINGUISTIC LANDSCAPES
AND ENVIRONMENTAL PRINT AS A RESOURCE
FOR LANGUAGE AND LITERACY
DEVELOPMENT IN MULTILINGUAL CONTEXTS

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13.1 Introduction

Everyday contexts are filled with texts which are visible in public and private domains. These texts constitute Linguistic Landscapes and Environmental Print. The terms “Linguistic Landscapes” and “Environmental Print” come from different scholarly traditions, but they both address bilingualism and multilingualism, language awareness, multilingual competence, concepts of print and literacy development through visual textual forms in public domain and informal learning environments. The classical definition of Linguistic Landscapes (LL) comes from Landry and Bourhis (1997):

The language of public road signs, advertising billboards, street names, place names, commercial shops signs, and public signs on government buildings combines to form the linguistic landscape of a given territory, region, or urban agglomeration. (Landry and Bourhis 1997: 25)

In the context of globalization and ongoing geopolitical, economic and demographic changes around the world, with new developing nations, immigration and migration, the issues of bilingualism and multilingualism become increasingly important in education, social and political domains. These may involve local and national languages, international multilingualism, and English as the language of globalization.

Visibility of textual forms and print in particular provides naturalistic environment for language and literacy development (Goodman 1980).
Growing studies on the role of multilingual multimodal (written and images) texts in bilingual and multilingual language and literacy development (Cenoz and Gorter 2008; Huebner 2006; Kenner 2004; Liu 2004) stress a “broader social context” (Moll, Saez and Dworin 2001: 438) and “highlight and support the features of LL [Linguistic Landscape] as an appropriate learning context” (Shohamy and Waksman 2009: 326).

Language and literacy development and everyday language use take place in multiple formal and informal learning environments and multiple domains: family, neighborhood, school, wider community (Fishman 1965, 1991). Multilingual multimodal texts in publicly displayed signs and advertising reveal linguistic creativity (Bever 2010; Cenoz and Gorter 2008; Lehrer 2007; Piller 2003), and are socially constructed and socially shaped through ideologies, discourses, and social practices (Barton and Hamilton 1998; Bever 2010; Fairclough 1995; Kress and Van Leewen 2006; Scollon and Scollon 2003). Drawing on Ruiz’s (1984) view of “language-as-resource” in developing conceptual skills and multilingual skills in particular, this chapter demonstrates that visible linguistic spaces in the world communities serve “as important source of expertise” (Ruiz, 1984: 17): they contribute to language and literacy acquisition through “interaction” with the texts using “resources available... in the environment” (Moll, Saez and Dworin 2001: 442).

### 13.2 The importance of examining environmental learning contexts

Bilingualism and multilingualism involve multi-faceted cognitive, linguistic and contextual factors, and are linked to in- and out- of school language and literacy development. Cook (1991) introduces “multi-competence” as “knowledge of two or more languages in one mind” (cited in Cook 2003: 2). Knowledge, sensitivity and consciousness about language and how language works constitute language awareness and metalinguistic awareness, which are critical dimensions of linguistic and cognitive development (Bialystok 2001; Bialystok, Luk and Kwan 2005; Jessner 1999, 2008; Kenner 2004). Research on multilingual language and literacy development explores the role of “out of school”, “informal” experiences with languages and print, where multiple forces and print in particular mediate learners’ experiences with the social world. It considers the role of these experiences in meaning making and in constructing knowledge about the world, and literacy and biliteracy development (Barton and Hamilton 1998; Bloch 1999; Gonzalez, Moll and Amanti 2005; Goodman 1980; Hull and Schultz 2001; Kenner 2004; Wells 1986).
Bloch (1999) argues that in language and literacy development “the critical area to consider is the nature of environments that young children explore” and “related print” (p. 119). Thus, research on bilingual, biliterate and multilingual development suggests a broad range of cognitive, linguistic and socio-cultural perspectives, where the overarching premise lies in recognition of the role of environment in language development and language use. Bialystok (2001), referring to “functional” theories of language acquisition, states that “language proficiency is the reflection of cognitive processes that extract regularities from the environment and record those generalities as knowledge” (Bialystok 2001: 11-12). This is in line with Haugen’s (1972) notion of language ecology as “the study of interaction between any given language and its environment” (cited in Hornberger 2003: 320), and Aronin and O’Laoire (2003) “ecological model of multilinguality”, where “the social and cultural environment plays a decisive role in the structure ... of multilinguality” (Jessner 2008: 273).

Hornberger (1989, 2003) introduced a model of continua of biliteracy: “The continua framework represents a synthesis of key findings on multilingualism and literacy” (Hornberger 2003: xii). This situates bilingualism and biliteracy development as a dynamic system of intersecting continua, which involve individual and societal factors across linguistic, cognitive and contextual dimensions. The continua of biliteracy framework integrate multiple interrelated aspects of bilingualism and biliteracy in formal and informal contexts. This stresses that language and literacy practices and language learning are facilitated through everyday socially and ideologically facilitated linguistic and cultural resources. Thus, Linguistic Landscapes and Environmental Print offer a critical resource for cultural and linguistic input, facilitate the development of linguistic and cultural awareness and meaning making, and serve as a medium of communication and social interaction between the reader (or viewer) and surrounding world. As Goodman (1980) states,

... just as a tree is influenced by the soil in which its roots grow, the maturing roots of literacy in the young child respond to the variety of nutrients in their soil – the written language environment (Goodman 1980: 3)

On this view, linguistic landscapes, outdoor media and environmental print serve as a critical aspect of language development (Goodman 1980), and an “additional source of input in second language acquisition” (Cenoz and Gorter 2008).
13.3 Engaging publicly displayed texts

As Goodman (1980) noted, "The environment of three and four year olds in many places in the world is filled with the settings, signs and implements of a print oriented society" (p. 1). The environment in which the young child is interacting and continuously organizing and analyzing "includes all the embedding of print in different kinds of settings" (Goodman 1980: 5). Heath (1983) points to the importance of the "contexts of print" in the reading and writing skills development in adults and children:

... there are numerous ... reading materials in the community: boxes and cans of food products, house numbers, car names and license numbers, calendars and telephone dials ... In the home, on the plaza, and in the neighborhood, children are left to find their own reading and writing tasks... (Heath 1983: 190)

Recent studies show that the visibility of public spaces, public signage and advertising, and various forms of print constitute a critical aspect of language and literacy development. Visibility of publicly displayed texts with written language and images constitute “outdoor media” (Crystal 1997/2003), and represent an essential part of everyday environment and “ecology of language” (Haugen 1972). Linguistic Landscapes (LLs) and Environmental Print constitute a “sociolinguistic ecology” in multilingual societies (Huebner 2006; Pavlenko 2009), an essential domain for language and literacy development (Goodman, 1980; Cenoz and Gorter 2008; Reese and Goldenberg 2006; Hornberger 1989, 2003), especially for linguistic minorities and immigrant communities (Cenoz and Gorter 2006; Landry and Bourhis 1997). The texts in LLs reflect multifaceted social practices and processes, the state of literacy and language awareness in individuals and communities, and represent local, national and global ideologies and discourses.

Multimodal, multilayered texts are constructed as configurations of print and images with languages and scripts in contact. Print and images on display are used for varieties of purposes and are represented through visual spaces of public signage, media and advertising; the public and private agencies (bills, letters, bank statements, instruction manuals, etc.), educational settings (schools) and other social spaces. Households, neighborhoods and larger communities provide a context and a medium for production, interpretation and communication through the texts. In turn, the languages and linguistic forms used in the texts offer a multiplicity of print resources, enhancing valuable input for language acquisition and
literacy development, and raising language awareness and multilingual competence.

Bialystok (2001) stresses the importance of "relation between the two languages and writing systems" (p. 43) on bilingual proficiency in early biliteracy development. Different languages may employ different writing systems (e.g., alphabetic vs. characters, Cyrillic vs. Roman), and recognition of commonalities and differences between writing systems plays an essential role in the development of language and print awareness, the concept of correspondence between language, script and phonological awareness and reading skills (Bialystok 2001; Goodman 1980; Moll, Saez and Dworin 2001).

13.4 Research site

To explore the relations between language learning and environmental print, I use data collected in an urban area of the eastern part of post-Soviet Ukraine. Historically, Ukraine is a multilingual state with two dominant Slavic languages, Ukrainian and Russian, and widespread Ukrainian-Russian bilingualism. After the break-up of the Soviet Union in 1991, Ukraine became an independent state with Ukrainian as an official and national language. Russian received the status of minority language with significantly reduced functions in official and educational domains. Despite continuous efforts of de-Russification (Pavlenko 2006, 2008), Ukraine remains a de-facto Ukrainian-Russian bilingual state with the Russian language dominance in east and southeast of Ukraine (Bever 2010; Sovik 2010). In the context of globalization and post-Soviet socio-political and economic transformations, the English language and Roman script became visible in Linguistic Landscapes in Ukraine. Today, language policy and language use in post-Soviet Ukraine represents a contested linguistic space (Bilaniuk 2005; Bilaniuk and Melnyk 2008; Bever 2010; Pavlenko 2008, 2009; Sovik 2010) with ongoing negotiation of local, national, and global ideologies and discourses (Bever 2010). These involve political, economic, social and educational domains, where negotiation of the use of Ukrainian, Russian or both, is accompanied by the rapid spread of English.

In the context of "competing" and "coexisting" national, local and global language ideologies in Ukraine, the "one state–one language" official language policy (Ukrainian only) is confronted by multilingual language practices with the Ukrainian, Russian and English, and Cyrillic and Roman scripts on display. The local community becomes aware of heterogeneity of the textual forms in public spaces with multilingual
multimodal texts. Thus, Linguistic Landscapes are constructed mainly with three languages, Ukrainian, Russian and English, and Cyrillic and Roman scripts (Bever 2010). The following discussion presents and analyzes a number of photographs of public signs selected from a much larger collection taken at the center of a city in the eastern Ukraine. The main street of the city provides a high density of displayed signs, representing governmental and private establishments, banks, financial institutions, stores, and multiple businesses.

Based on previous research on Linguistic Landscapes (Backhaus 2007; Bever 2010; Ben-Rafael, Shohamy, Hasan Amara and Trumper-Hecht 2006; Cenoz and Gorter 2006, 2008; Gorter 2006; Huebner 2006; Pavlenko 2009; Shohamy and Gorter 2009), the signs are analyzed in relation to the configuration of the languages and scripts, the combination of symbols and morphemes, and discourse levels. The following discussion demonstrates how linguistic and textual analyses of these texts contribute to language and literacy development in the context of genetically close languages.

13.5 Bivalency

Russian and Ukrainian are genetically close languages (both are east Slavic languages) with shared orthography and significant overlap on multiple levels of representations (syntactic, lexical, morphological, graphemic). The result of this closeness is that bivalent elements are frequently common to both Ukrainian and Russian. As Bilaniuk (2005) states,

There is no simple way to characterize the degree of mutual intelligibility of Ukrainian and Russian... The grammatical structures of Ukrainian and Russian are mostly very similar, but some differences do exist... In some cases written language may be easier to understand ... because some words appear identical in writing. (Bilaniuk 2005: 203)

The interpretation of the message in either language is often possible because of the typological closeness of the two languages (Russian and Ukrainian), similar orthographic system (Cyrillic), wide-spread bilingualism, and historical coexistence of the two languages in the society over a long time (Bever 2010). Ukrainian and Russian lexicon “differ by 38%; the 62% of the lexicon that these languages have in common consists of 44% morphemically identical and 18% morphemically similar terms” (Bilaniuk and Melnyk 2008: 344).
In this essay, I emphasize the use of a more analytic tool, bivalency, to analyze the internal structure of signs, particularly relevant for LLs in Ukraine. I use the concept of “the shared territory between two languages” (Woolard, 1999:11) in written messages to analyze the language contact phenomena in LLs. Bivalency refers to the “simultaneous membership of an element in more than one linguistic system” (Woolard 1999: 6). This has been recognized as a socially and linguistically significant aspect of bilingual practice in bilingual communities (Woolard 1999; Woolard and Genovese 2007). In her influential article, Woolard (1999) expands on Bakhtin’s (1986/2006) vision of simultaneities in two languages applied to bilingual practice, framed into “a new focus on bilingualism” (Woolard 1999: 4) and “more fluid visions of the linguistic structures” (Woolard 1999: 5). She offers the term bivalency, for cases where the text forms are identical in two languages, “the use by a bilingual of words or segments that could “belong” equally, “to both codes” (Woolard 1999: 7).

Just as there is a close relatedness of Catalan and Castilian in Woolard’s case study, linguistic and structural similarities of the Ukrainian and Russian languages play an essential role, in relation to one another, employing those similarities in the local social and cultural contexts. Thus, overlaps between the properties of Russian and Ukrainian languages allow assigning linguistic items to one or another language, and even both: sometimes you cannot tell what language a sign is using. Woolard (1999) proposes “to move the ambiguous elements to the center of inquiry” (p. 9), as a “socially meaningful, potentially strategic form of language choice” (p. 9).

Thus, multilingual LLs may reveal the “chaos of interference” (Woolard 1999: 6) guided by strategic choices and linguistic devices employing languages and orthographic systems, and creating shared spaces or “contact zones” (Pratt 1991) on linguistic, social, political and ideological levels. In this way, the disagreement between monolingual language policy and multilingual language practices are negotiated across and within these spaces. Given two genetically close languages, LLs in Ukraine represent both “naturalistic” and “strategic” bivalency, revealing that bivalency is a highly contextualized phenomenon. “Naturalistic” bivalency is the property of the language as a system appropriated and habitually used by the community. In the case of Ukrainian and Russian, bivalency is embedded naturally as a property of both languages. “Strategic” bivalency is the intentional use of bivalent elements to negotiate and resolve contesting ideologies by creating “neutral”, “shared territory” (Woolard 1999: 11) in a linguistic domain to either lower or intensify the social, political and ideological purposes.
According to Woolard (1999), the terms “neutral” and “bivalent” are subtly but crucially different social readings of this kind of translingual simultaneity” (p. 11). I argue that “strategic” bivalency is a creative process of mobilizing and depending on already “naturalistically” or “organically” existing overlaps of linguistic systems of the languages. In other words, “naturalistic bivalency” provides conditions which insure copresence of both “the contact zones” (Pratt 1991) which neutralizes linguistic overlaps by “lowering of mental barriers” (Gardner-Chloros 1995: 68), and a “socially meaningful ... strategic form of language choice” (Woolard 1999: 9). Strategic bivalency invokes the intersection of structural and ideological processes by intentionally playing on overlaps and oppositions between linguistic codes which are “socially and ideologically activated” (Woolard 1999: 11).

13.5.1 Naturalistic bivalency

Bever (2010) introduced the trilingual diagram (Figure 13-1) as the inventory of Roman, Cyrillic Russian and Cyrillic Ukrainian alphabets with the shared characteristics on graphemic levels (Angermeyer 2005; Feldman and Barac-Cikoja 1996). According to the Feldman and Barac-Cikoja’s (1996) analysis (in Angermeyer 2005), in Roman and Cyrillic alphabets, some overlapping characters share phonetic values (e.g., A, E, K, M, O, T), while other have different phonetic value (e.g., B, C, Y, P, X, Y). 

Figure 13-1: Trilingual diagram between Roman, Cyrillic Russian and Cyrillic Ukrainian scripts.
The trilingual diagram (Bever 2010) demonstrates a complex relationship of shared and divergent characteristics on graphemic levels between all three alphabets. In Russian and Ukrainian, the divergent elements have their overlaps on phonetic levels: both Ukrainian І and Russian Ь І have the sound /y/, while Russian І has phonetic value /i/, which is the same as in Ukrainian І /i/. The letter E presents a similar bivalent effect: it corresponds to /e/ or /E/ in Ukrainian and /je/ in Russian. The following matrix demonstrates this phoneme-grapheme Ukrainian-Russian correspondence:

<table>
<thead>
<tr>
<th>Russian</th>
<th>Ukrainian</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ь І</td>
<td>І</td>
</tr>
<tr>
<td>І</td>
<td>І</td>
</tr>
<tr>
<td>І Ь І</td>
<td>Є</td>
</tr>
<tr>
<td>Є</td>
<td>Є</td>
</tr>
</tbody>
</table>

The major overlap in vowels is in the following graphemes:

<table>
<thead>
<tr>
<th></th>
<th>Russian</th>
<th>Ukrainian</th>
</tr>
</thead>
<tbody>
<tr>
<td>І</td>
<td>/i/</td>
<td>/y/</td>
</tr>
<tr>
<td>Є</td>
<td>/je/</td>
<td>/e/, /e/</td>
</tr>
</tbody>
</table>

Table 13-1. Phoneme-grapheme Ukrainian-Russian correspondence.

Russian and Ukrainian use the Cyrillic alphabet with minor variations, and there is a significant overlap across both languages on lexical, syntactic and semantic levels. In the Ukrainian context, the overlapping properties of both languages allow speakers of both languages to recognize and understand the shared representations of Russian and Ukrainian. Some nouns have complete overlap in Russian and Ukrainian in their singular forms, while their plural forms have alternations or substitutions of the endings Ь І and І. Although these final consonants are represented by different graphemes, their phonetic value /y/ is almost the same in the two languages. So the languages (Ukrainian and Russian) have a significant overlap on different levels of representation and are mutually intelligible, in their written form in particular. This guides a reader (Russian and/or Ukrainian) towards the meaning from the bivalent elements (in Cyrillic) without attributing them particularly either to Russian or Ukrainian. The surrounding context gives a further attribution of the text to Russian and/or Ukrainian.
13.5.2 Strategic bivalency

In describing her visit to Kiev, the capital of Ukraine, in 2000, Bilaniuk (2005) noticed the use of bivalent Ukrainian–Russian words in advertising and billboards. As a result of her interviews with advertising firms’ employees, she pointed to the “strategies of linguistic minimalism” (p. 185) based on use of Ukrainian-Russian bivalency.

A few people I interviewed who worked in advertising firms said that they did try to find ways to appeal to both Russian and Ukrainian speakers by minimizing differences, often minimizing the use of words together. (Bilaniuk 2005: 185)

Although Bilaniuk (2005) concludes that “the strategy of minimalism ... allowed advertisers to avoid ethnic markedness” (p. 185), I argue that these strategies also allow delivering the message to both bilingual and monolingual speakers with respect to their linguistic faculties and language preferences in Ukrainian, Russian or both. The bivalent messages reach out to the maximum numbers of the population of speakers.
Figure 13-2 shows how bivalency plays out at the orthographic lexical levels: among eight larger signs surrounding the door, three ФОТО /foto/; АУДИО /audio/ and КРЕДИТ /kredit/ are bivalent and have an identical written form in Ukrainian and Russian; three signs GSM DECT, Beeline and LIFE:) are in English; one sign КИЄВСТАР /kijivstar/ is in Ukrainian; and one sign MTC is an abbreviation in Cyrillic for the telephone services, which is also bivalent in Ukrainian and Russian, although all three letters of the latter sign are also a part of the Roman alphabet.

Figure 13-3. Bivalent message © Copyright 2008 Olga Bever. All Rights Reserved.

Bivalency on the phonetic level is illustrated in Figure 13-3, which represents a name sign for the private shop. This bilingual sign involves language contact on the word and grapheme levels. This sign displays a combination of both Russian and English languages, and Cyrillic and Roman scripts in the same text. Here the lower line of the sign is written in English (DESIGN), when the upper line is written in Russian. The English letter ‘S’ is inserted in the red color across both Russian and English words in the name of the store (ТЕК- S- ТИЛЬНЫЙ DESIGN) [Textile Design]. Both words in the store name are borrowed to Russian and Ukrainian from other languages. The written language contact is represented in both Roman
and Cyrillic orthography in the sign; lexemes belong to all three languages (Russian, Ukrainian and English); and overlapping phonetic representations [s] and [z] of the Cyrillic “C” and English “S” in the words “textile” and “design”.

Figure 13-4 and Figure 13-5 show how naturalistic and strategic bivalency overlap in front signs of electronics stores: in Figure 13-4, in Ukrainian; Figure 13-5 shows a bilingual English-Russian sign with the international brand name in English BRAVIA and the lower informational line in Russian. Both signs contain the word ELECTRONICS in Cyrillic in the genitive case: Figure 13-4 in Ukrainian (U), and Figure 13-5 in Russian (R).

(1) Ukrainian ЕЛЕКТРОНИКИ (U.) – Genitive case – actual text in figure (13-4)
   Ukrainian ЕЛЕКТРОНИКА (U.) – Nominative case
   Russian ЭЛЕКТРОНИКИ (R.) – Genitive case – actual text in figure (13-5)
   Russian ЭЛЕКТРОНИКА (R.) – Nominative case

The written forms (as well as the spoken one) are almost identical in Ukrainian and Russian with very low level of variation: the major interplay between language differences is in overlapping graphemic and phonemic representations of the following letters: the initial vowels, which is represented by Э and overlapping grapheme Е in its lower case e, which represents the same phoneme /ɛ/; the vowels И and І after the letter Н.

The letters И and Е overlap in Russian and Ukrainian in their written form, so that the written forms with those letters look identical and are recognized by speakers of both languages. Consider further the use of the Genitive case: on both pictures this is a part of a final position of a noun phrase with the predicate in Ukrainian and Russian and in both cases English is used as a heading sign. The use of English signals affiliation with the world market, and the lower texts in Ukrainian (Figure 13-4) and Russian (Figure 13-5) convey the content through the bivalent lexeme /electronika/. 
Figure 13-6 presents the sign of home appliances stores. As Figure 13-6 demonstrates, in many cases there is no direct translation between English and Russian or Ukrainian (e.g., company names, description of the businesses), so some concepts undergo linguistic and cultural adaptations. In this paper, I am not discussing the correspondence of the foreign establishments with their names or description of the retail businesses translated or transliterated to Ukrainian or Russian.
Detailed analysis of this sign is presented line by line where each line represents different discourse level: in (2) the nature of the store is specified; (3) contains the name of the store; (4) is the slogan with an air conditioner advertisement. First, I present each line in its original language (Ukrainian) on the sign, and then below each line I present the same line in the counterpart (Russian) language or associated (English) language. The divergent graphemes are in bold.

(2)  
a. **МЕРЕЖА СУПЕРМАРКЕТИВ ЕЛЕКТРОНИКИ**  
   - as presented in Ukrainian  
b. **СЕТЬ СУПЕРМАРКЕТОВ ЭЛЕКТРОНИКИ**  
   - as it would be in Russian

(3)  
a. **ДОМОТЕХНИКА** - as presented  
b. **ДОМОТЕХНИКА** - as it would be in Ukrainian Cyrillic  
c. **ДОМОТЕХНИКА** - as it would be in Russian Cyrillic
(4) a. КОНДИЦИОНЕР ЩЕДЕШЕВШЕ
   - as presented in Ukrainian
b. КОНДИЦИОНЕР ЄЩЕДЕШЕВЛЕ
   - as it would be in Russian

The first line, МЕРЕЖА СУПЕРМАРКЕТІВ ЕЛЕКТРОНІКИ (the chain of electronics supermarkets) has the second and the third bivalent words with the minor deviation (in bold) (see above discussion for Figures 13-4 and 13-5). The first word (the net, line or chain of stores) differs in its lexical representation:

(5) МЕРЕЖА /merezhə/ (U); СЕТЬ /set/ (R).

The second and the third words are in the Genitive case of adopted English words transliterated in Cyrillic /supermarket/ and /electronics/. The second line of the sign (lines 2, 2a, 2b), the actual name of the store, represents a unique case in which all of the graphemes except for letter I are bivalent in all three languages (see Figure 13-1), while the lexeme itself is bivalent in Ukrainian and Russian. The initial letter D in the Roman alphabet, signals the foreignness and affiliation with the world market. The last line of the sign (4a) also is in Ukrainian (the air conditioner is more inexpensive) where all three words are bivalent with minimal divergence, so that the meaningful part of the words (roots and stems) are identical in Ukrainian in Russian.

13.6 Conclusions

Linguistic Landscapes and Environmental Print offer significant resources for developing language and print awareness in monolinguals and bilinguals. Analyses of signs through deconstruction to smaller units reveal patterns of languages, scripts, linguistic and textual devices which involve different levels of cognitive, linguistic and cultural competence. An ecological approach to language and literacy, and multilingual development suggests considering multiple social, historical, economic, and political forces which affect language choice in multilingual texts. As Fishman (1991) notes, “A major part of the spread of English and other lingua francas... can be directly attributed ... to out-of-school societal reinforcements” (Fishman 1991: 371). As the above discussion demonstrates, in Ukrainian contexts multimodal, multilayered texts employ configurations of languages and scripts in contact. While these reflect local, national and global ideologies and discourses (Bever 2010), they offer a broad range of developmental and learning opportunities.
(Cenoz and Gorter 2008). As Bialystok (2004) states: “Different languages set out different phonological concepts as salient and different writing systems require different phonological and linguistic concepts” (Bialystok 2004: 593). This grounds Linguistic Landscapes and Environmental Print as a resource for development of orthographic and phonological awareness, and confirms Goodman’s (1980) view on multi-faceted role of “environmentally embedded print”.

Print and images on display are used for the varieties of purposes and are represented through visual spaces of public signage, media and advertising, public and private agencies (bills, letters, bank statements, instruction manuals, etc.) and other social spaces. Households, neighborhoods and larger communities provide a context and a medium for production, interpretation and communication though the texts. In turn, the languages and linguistic forms used in the texts offer a multiplicity of print resources, enhancing a naturalistic input for language acquisition and literacy development, and raising language awareness and multilingual competence.

The research on Linguistic Landscapes analyzes how written texts in everyday language practices contribute to language and literacy education, language awareness and identity and ideology construction. The analyses of languages and scripts in various domains of language use identify the complexity and multiplicity of resources and social, cultural, economic and political forces which construct the social space and represent environmental print. Language and literacy development are linked to examining ethnically and linguistically diverse populations, and how language use is articulated through identity construction, and local, national and global ideologies and discourses. These involve immigrant and indigenous communities, borderlands, and national and transnational ideologies and discourses. Linguistic Landscapes contribute to multilingual language and literacy development in several dimensions:

- Awareness of linguistic and cultural diversities.
- Language awareness.
- Print awareness.
- Awareness of linguistic and semiotic devices employed in the texts.
- Awareness of politics of language.
- Awareness of social activities in the community.
- Understanding of the cultural, symbolic, informational and communicative aspects of texts.
• Understanding of language contact issues reflected in public texts, and the associated with politics of language and multilingualism.
• Awareness of strengths of linguistic communities and heritage languages.
• Global impact of international signs and advertising.
• Awareness of English as a global language.

Thus, Linguistic Landscape and Environmental print are critical factors in developing linguistic and cultural awareness, multilingualism and multiculturalism across multiple discourses. They provide conditions for immersion to the naturalistic everyday social contexts, which mediate acquisition and learning processes of the functions and forms of language. Everyday multimodal texts present an essential resource for internalization and interpretation of signs, meaning making, and analyses of social and cultural practices and processes surrounding both the child and adult learner. An observer and a reader reflect, hypothesize, and build their theories about the surrounding world through the medium of the surrounding texts.

Examining multilingual spaces, forms and meanings of multimodal texts (print and images) reveal how language, texts, literacy and learning are interconnected in surrounding contexts. Deconstructing and evaluating texts “naturally” available through families’ and communities’ practices will bring better understanding of how and what impacts children and adults’ literacy development. Examining environmental texts grounds theory and practice in the immediate discourse of everyday language use, and contributes to a better understanding of the relations and connectedness between a learner, a community and everyday contexts. This brings a fresh innovative view of the resourcefulness of language as a text, practice, discourse and activity. Examination and evaluation of multiple resources of language and literacy development “outside” of the formal schooling domain will contribute to a better understanding of the complexity, heterogeneity, and multiplicity of paces and trajectories of learners’ skills development and learners’ ability to navigate across multiple cultural and linguistic domains. Linguistic Landscapes and Environmental Print representing everyday visibility of textual forms with written texts and images, can be utilized in the classrooms, and addressed in the curriculum as a “root of literacy” (Goodman 1980) and as a form of the “funds of knowledge” (Gonzalez, Moll and Amanty 2005). Educators should design their curriculum based on integrative approaches to multilingual education, where community resources, prior knowledge,
and everyday social, cultural and language and literacy experiences will be activated in the classroom and applied to language learning.

References


