Linguistic Landscape: A New Approach to Multilingualism



Linguistic Landscape

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Linguistic Landscape A New Approach to Multilingualism

Edited by Durk Gorter

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Introduction: The Study of the Linguistic Landscape as a New Approach to Multilingualism

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Language is all around us in textual form as it is displayed on shop windows, commercial signs, posters, official notices, traffic signs, etc. Most of the time people do not pay much attention to the 'linguistic landscape' that surrounds them. However, in recent years an increasing number of researchers have started to take a closer look and study the language texts that are present in public space. This special issue of the *International Journal of Multilingualism* reports on a number of case studies around the world.

According to the dictionary, 'landscape' as a noun has basically two meanings. On the one hand the more literal meaning of the piece or expanse of scenery that can be seen at one time from one place. On the other hand, a picture representing such a view of natural inland scenery, as distinguished from sea picture or a portrait. In the studies of the linguistic landscape presented here, one can say that both meanings are also used. On the one hand the literal study of the languages as they are used in the signs, and on the other hand also the representation of the languages, which is of particular importance because it relates to identity and cultural globalisation, to the growing presence of English and to revitalisation of minority languages.

The concept of linguistic landscape, however, has been used in several different ways. In the literature the concept has frequently been used in a rather general sense for the description and analysis of the language situation in a certain country (e.g. for Malta by Sciriha & Vassallo, 2001) or for the presence and use of many languages in a larger geographic area (e.g. the Baltic area by Kreslins, 2003). An overview of the languages that are spoken is then referred to as the linguistic landscape. In this more or less loose sense of the word linguistic landscape can be synonymous with or at least related to concepts such as linguistic market, linguistic mosaic, ecology of languages, diversity of languages or the linguistic situation. In those cases linguistic landscape refers to the social context in which more than one language is present. It implies the use in speech or writing of more than one language and thus of multilingualism.

Sometimes the meaning of linguistic landscape is extended to include a description of the history of languages or different degrees in the knowledge of languages. Or more narrowly, it can refer to language internal variation in parts of just one language, in particular in relation to its vocabulary, but also in

other elements, even the words used in therapeutic communication (Fleitas, 2003). Sometimes it refers to the system of just one language, in other cases it indicates the spread and boundaries of dialects (Labov *et al.*, 1997). Linguistic landscape has even been used for a count of non-English speakers in primary schools in California (Tafoya, 2002).

A meaning that comes closer to the way it is used here is in reference to signage and place-names as Hicks (2002) does for Gaelic in Scotland. He also mentions campaigns of overpainting of signs in Wales, which can be seen as a literal expression of the symbolic struggle for space for a language. The definition given by Landry and Bourhis (1997: 25) is followed by all authors in this issue:

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.

Thus they are concerned with the use of language in its written form in the public sphere. It refers to language that is visible in a specified area (Bourhis & Landry, 2002). The number of linguistic tokens is especially high in shopping areas in cities. Instead of calling it the linguistic landscape it could also be named linguistic cityscape. In this special issue of the *International Journal of Multilingualism* it will be used in the sense related to commercial signage and place names.

The four papers brought together in this special issue deal with the linguistic landscape in five different societies: Israel, Thailand, Japan, the Netherlands (Friesland) and Spain (the Basque Country). All of them focus on the linguistic landscape of the cities (and in that sense are more studies of cityscapes than of landscapes).

The study of the linguistic landscape is a relatively new development. It enjoys a growing interest in sociolinguistics and applied linguistics. Backhaus (this issue) has a series of references to recent studies of the linguistic landscape in various places around the globe.

The introduction of digital cameras with sufficient memory for a reasonable price allows researchers to take an apparently unlimited number of pictures of the signs in the linguistic landscape. The technique of taking large numbers of photographs of signs and of putting them in a database on a computer in itself is relatively uncomplicated. But a researcher who does data collection in the form of large numbers of photographs faces a number of general and some special problems. The methodology of this field still has to be developed further.

First of all there is the problem of sampling. Where do you take pictures and how many? Is representativity for a certain city, an area or even a whole country a point of consideration? It is very well possible for a researcher to limit himself to one city or area, as Huebner and Backhaus do in their study of the linguistic landscape of Bangkok and Tokyo, respectively. Inside those large metropolitan areas they had to make a further selection. Huebner took samples from 15 neighbourhoods in central and suburban Bangkok and Backhaus surveyed 28 streets in Tokyo near the 28 stations of the circular

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railroad line of the central city. Still, as Huebner states, the data are not meant to indicate the linguistic composition of the city as a whole, but simply as an illustration of the linguistic diversity. For Ben Rafael et al. it was important to select localities which represent the ethnocultural and national divisions in Israeli society; thus they sampled four Jewish localities, three Israeli-Palestinian localities and one non-Israeli Palestinian locality. Their second step was to sample those parts of the cities where the major commercial activity takes place and the principal public institutions are located. They only sampled a limited number of all items in a specific site (30% of public and 70% of commercial sites). In contrast, Backhaus only sampled those signs that were classified as multilingual (according to his definition) and thus sampled around 20% of the total of almost 12,000 signs that he counted. For Cenoz and Gorter, representativity was not the most important concern. They took one main shopping street in the major towns of the Basque Country and Friesland and used them as a case for the exploration of the linguistic landscape. They were careful to record a complete inventory of all texts to be seen on those streets.

The problem of sampling points to a further issue which turns out to be a rather complex problem, although on the face of it it may seem simple and straightforward. One may say that the linguistic landscape refers to linguistic objects that mark the public space. But the question is what constitutes such an object or sign? In other words, what constitutes the unit of analysis? Different answers can be given. It has to be determined what belongs to the linguistic landscape. For instance, are texts on moving objects such as buses or cars to be included? For convenience sake they are probably not. Although the landscape may change from day to day, some posters will be removed or added, but other signs may be fixed for many years. Backhaus defines his unit of analysis as 'any piece of text within a spatially definable frame' from small handwritten stickers to huge commercial billboards. Cenoz and Gorter decided in the case of shops, banks and other businesses to take all texts together as a whole and thus each establishment and not each individual sign became the unit of analysis.

The next step is the categorisation of the signs. Each of the researchers here distinguishes between top-down and bottom-up. That dimension refers to a difference between official signs placed by the government or related institution and nonofficial signs put there by commercial enterprises or by private organisations or persons. For each, a sign coding scheme has to be developed, where a researcher can decide to make it more or less elaborated. This scheme includes elements such as how language appears on the sign, the location on the sign, the size of the font used, the number of languages on the sign, the order of languages on multilingual signs, the relative importance of languages, whether a text has been translated (fully or partially), etc. Ben Rafael *et al.* have developed a coding scheme that contains 16 variables; this scheme was also applied by Cenoz and Gorter.

The characteristics thus coded can be quantified and analysed. The theoretical framework in which the analyses are done differs among the studies presented here. The approach still has to be developed further. As said, the dimension of official or governmental versus nonofficial or nongovernmental is common to all articles because it indicates important languagerelated differences for the signs placed in the linguistic landscape. Ben Rafael *et al.* demonstrate the usability of existing sociological theories for the analysis as they make use of the work of Boudon, Bourdieu and Goffman. In his paper Huebner takes a more (socio)linguistic approach in which he looks in particular at phenomena of language mixing and language contact.

Issues which are not raised in the papers presented here, but which can also be of importance to the study of the linguistic landscape can be found in related branches of knowledge, such as psychological experiments in visual perception, studies of cityscapes in cultural geography and approaches to design and aesthetics. These will be left for future studies.

Overview of the Issue

The cultural, socioeconomic and political circumstances in the cities and the countries in which the studies are located, are quite divergent. On the one hand, multimillion cities are included such as Bangkok and Tokyo, on the other hand are small cities such as Ljouwert–Leeuwarden (less than 100,000 inhabitants) and Donostia–San Sebastian (around 200,000 inhabitants). At the same time the effect of globalisation, which might also be referred to as McDonaldisation of the linguistic landscape (Heller, 2003), has affected each case, which is reflected in the increasing space of the English language.

The paper by Ben Rafael, Shohamy, Amara and Trumper-Hecht compares patterns of linguistic landscape in a number of Israeli cities and small towns, and in East Jerusalem.

Of the eight localities, some are homogeneous and others mixed in terms of the groups that were studied. The study focuses on the degree of visibility on private and public signs of the three major languages: Hebrew, Arabic and English. There are different patterns in the various communities: Hebrew/ English signs prevail in Jewish communities; Arabic/Hebrew in Israeli– Palestinian communities and Arabic/English in East Jerusalem.

Further analysis also gives expression to differences between public (topdown) and private (bottom-up) signs. Taken together the linguistic landscape is not a true reflection of the diversity of Israel's languages. Three sociological perspectives are used to develop a number of research questions. It is hypothesised that the linguistic landscape should be explainable in terms of power relations between dominant and subordinate groups. Further that identity markers of communities would imprint themselves strongly on the linguistic landscape and finally, that different languages vary in attractiveness to different audiences. It is in this perspective that they speak of linguistic landscape in terms of symbolic construction of the public space.

Bangkok, a major city in Thailand, South East Asia, is the background of Huebner's study. He examines questions of language mixing and language dominance. He studies the linguistic landscape of 15 different neighbourhoods. By comparing the various neighbourhoods he makes visible the linguistic diversity in a large metropolitan area like Bangkok. He also provides a linguistic framework for the analysis of different types of codemixing. English as a global language turns out to have an important influence. He offers evidence of a shift from Chinese to English as the major language of wider communication in the city. From a linguistic perspective, the paper documents the influence of English on Thai, the state language, not just in the form of lexical borrowing, but also in aspects of orthography, pronunciation and syntax. At the same time, his study supplies proof of an emerging Thai variety of English. From an applied perspective, the data presented raise questions about the effects of the pervasiveness of English in the linguistic landscape of Bangkok on the language proficiency, both Thai and English, of its youngest citizens.

Also in Asia, but in quite a different socioeconomic context, the paper by Backhaus deals with multilingual signs in Tokyo, the Japanese capital. In his empirical study special attention is given to the distinction between official and nonofficial multilingual signs. He wants to shed some light on the relationship between two types of multilingual signs in Tokyo. It is demonstrated that the two types of signs show different characteristics with regard to the languages used and how they are arranged on the signs. The notions of power and solidarity are used to interpret the differences. Official signs do mainly express and reinforce existing power relations in Japan, but nonofficial signs make more use of foreign languages, mainly English, to communicate solidarity with non-Japanese things. Backhaus explicitly establishes links between his study of the linguistic landscape in Tokyo and the growing corpus of linguistic landscape research around the world.

The final paper by Cenoz and Gorter compares two regions in Europe. The authors examine the linguistic landscape in Friesland (the Netherlands) and the Basque Country (Spain). An analysis is given of the use of the minority language (Basque or Frisian), the state language (Spanish or Dutch) and English as an international language. Their study focuses on two streets in two multilingual cities where the minority language, Frisian or Basque, is in use. They compare both situations for the presence of the minority languages in the linguistic landscape as it relates to differences in language policy, as well as to differences in the spread of English. The data of languages signs are analysed to determine the number of languages used, which languages are on the signs and the specific characteristics of bilingual and multilingual signs. Their findings show that the official language, but at the same time that there are important differences between both regions.

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Linguistic Landscape as Symbolic Construction of the Public Space: The Case of Israel

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Linguistic landscape (LL) refers to linguistic objects that mark the public space. This paper compares patterns of LL in a variety of homogeneous and mixed Israeli cities, and in East Jerusalem. The groups studied were Israeli Jews, Palestinian Israelis and non-Israeli Palestinians from East Jerusalem, of whom most are not Israeli citizens. The study focused on the degree of visibility on private and public signs of the three major languages of Israel-Hebrew, Arabic and English. This study reveals essentially different LL patterns in Israel's various communities: Hebrew-English signs prevail in Jewish communities; Arabic-Hebrew in Israeli-Palestinian communities; Arabic-English in East Jerusalem. Further analyses also evince significant - and different - discrepancies between public and private signs in the localities investigated. All in all, LL items are not faithfully representative of the linguistic repertoire typical of Israel's ethnolinguistic diversity, but rather of those linguistic resources that individuals and institutions make use of in the public sphere. It is in this perspective that we speak of LL in terms of symbolic construction of the public space which we explain by context-dependent differential impacts of three different factors - rational considerations focusing on the signs' expected attractiveness to the public and clients; aspirations of actors to give expression to their identity through their choice of patterns that, in one way or another, represent their presentation of self to the public; and power relations that eventually exist behind choices of patterns where sociopolitical forces share relevant incompatible interests.

Keywords: linguistic landscape, English, Arabic, Hebrew, Israel, Palestinians

The Notion of Linguistic Landscape

This paper presents an empirical study of the linguistic landscape (LL) of Israel. By this notion we refer to linguistic objects that mark the public space and it is studied here in a variety of homogeneous and mixed Israeli cities, and in East Jerusalem. The groups involved are Israeli Jews, Palestinian Israelis and non-Israeli Palestinians living in East Jerusalem. The study focuses on the degree of visibility on private and public signs of the three major languages of Israel-Hebrew, Arabic and English. This LL study draws its conceptual framework from a few works about LL that preceded it, and its research questions from sociological theory.

In a paper published in 1997, Landry and Bourhis elaborate on the notion of LL, referring to the visibility of languages on objects that mark the public space in a given territory. Included in these linguistic objects are road signs, names of sites, streets, buildings, places and institutions as well as advertising billboards, commercial shop signs and even personal visiting cards. An important characteristic of LL is that it is comprised of both 'private' and 'public' signs: signs issued by public authorities (like government, municipalities or public agencies) on the one hand, and signs issued by individuals, associations or firms acting more or less autonomously in the limits authorised by official regulations. It is the conviction of Landry and Bourhis (1997) as well as of Spolsky and Cooper (1991) that LL functions as an informational marker on the one hand, and as a symbolic marker communicating the relative power and status of linguistic communities in a given territory. Focusing on Canada, Landry and Bourhis also emphasise the role of LL in language maintenance using the framework of ethnolinguistic vitality research in bilingual settings. On the other hand, Spolsky and Cooper focus on Jerusalem and emphasise the influence of political regimes on LL. While both approaches are fruitful, they also share manifest shortcomings.

The Landry–Bourhis approach sees LL as 'given' context of sociolinguistic processes and thus does not focus on the very factors which give shape to LL with limited consideration, if any, to the dynamics of LL. The Cooper–Spolsky approach turned more clearly toward aspects of change, but it does not pay attention to the complexity of LL with regards to the vast numbers of actors that participate in its moulding. Moreover, while both approaches do emphasise the *sui generis* interest of LL as a set of facts deserving study and research, they provide only a limited grasp of the genuine and far-reaching importance of LL.

LL, indeed, constitutes the very scene – made of streets, corners, circuses, parks, buildings – where society's public life takes place. As such, this scene carries crucial sociosymbolic importance as it actually identifies – and thus serves as the emblem of societies, communities and regions. Representations of Paris' scenery, including its LL, can be viewed as nothing less than emblematic of France, and the same is true, of course, of other major cities such as London for England or New York for the USA.

Of special interest in this respect is how the shaping of these sceneries and more particularly the LLs which they illustrate, are contributed by a large variety of actors such as public institutions, associations, firms, individuals, that stem from most diverse strata and milieus. These actors do not necessarily act harmoniously, nay even coherently but, on the other hand, whatever the resulting chaotic character of LL, the picture 8 that it comes to compose and which is familiar reality to many is most often perceived by passers-by as one structured space. We mean here a *gestalt* made of physical objects – shops, post offices, kiosks etc. – associated with colours, degrees of saliency, specific locations and above all, written words that make up their markers. These objects, indeed, are all toppled with linguistic elements indicative of what they stand for.

It is our contention that the study of these linguistic elements, when taken as a whole within a given setting, outline a field that may justify a systematic study as it may constitute an interesting way of uncovering social realities. In this era of modernity, globalisation and multiculturalism (Ben-Rafael, 1996), new institutions, branches of commercial activity, professional identities and demographic developments are legion. They transform the character, composition and status of quarters, neighbourhoods and cities while relations between groups as well as between the public authority and the civil society receive new contours. All these, in turn, find expression in the area of language activity – linguistic fashions, forms of speech, the expansion or regression of languages – within the public or among parts of it, and unavoidably imprint themselves in the (re)shaping of LL.

It is against this complex background that this study wants to read, in the very context of Israel, the drives and forces that stand behind its moulding. Through LL data gathered in different 'contextual constellations' where constituent groups of this society come into different kinds of relations, we expect to point out the LL-actors'¹ behaviours and choices. In this, we also speculate that LL research may well be revealing of more general processes flowing through the social setting.

This objective of reading the meanings of actors' behaviour in their very behaviour – i.e. the making and use of LL elements – requires from us to turn to the major – and divergent – hypotheses offered by sociological theories of social action, and consider their respective relevant validity in the present perspective. Three central and distinct hypotheses prevail in this literature which are proposed by different traditions (see also Archer, 1996):

(1) Bourdieu (1983, 1993) contends that social reality is to be seen as consisting of interconnected, yet possibly more or less autonomous, fields of social facts structured by unequal power relations between categories of participants. Each 'field' is to be analysed in terms of its own power dynamics that both affect, and are affected by other neighbouring fields.

(2) Goffman (1963, 1981) analyses social action as determined by the drive of presentation of self on the part of actors. This approach is privileged by researchers who investigate the contemporary importance of ethnic communities which aspire to assert themselves on the public scene (see for a review: Abrams & Hogg, 1990). A presentation of self that includes linguistic activity and is bound to strategies of inclusion and exclusion requested by members' commitments to primordial identities. The notion of presentation of self also implies, however, the possibility that behaviour is determined by actors' considerations and calculations. This aspect leads to the hypothesis associated with Boudon.

(3) Boudon (1990) starts from the premise that social action is accounted for by rational considerations of alternates – what he calls *good reasons* – on the side of actors. Following this methodological-individualism approach, actors' considerations – material as well as expressive – all inform about choices determined by interests in attainable goals.

Each of these hypotheses carries significance for LL analysis and research:

- From a 'Bourdieusard' perspective, the relation of different codes in LL i.e. which one predominates and which one holds but secondary importance, if any – should be explainable in terms of power relations between dominant and subordinate groups.
- (2) From presentation-of-self and primordialist perspectives, one would hypothesise that identity markers of communities would imprint themselves quite strongly on LL.
- (3) From the good-reasons perspective, one would be able to interpret LL's structures and characteristics in terms of the interests of LL actors vis-à-vis the public i.e. the attractiveness and expected influence of signs on eventual clients.

The testing of these hypotheses should throw light on the symbolic structuring of the public space, the decorum of public life, that is shaped – most often uncoordinatedly – by a myriad of LL actors operating under the influence of a myriad of motives. It tries, actually, to meet the challenge formulated by Henry Lefebvre (1991) a pioneer of environmental studies, who forged the notion of 'spatial practice' referring to the moulding of physical–geographical areas and who called for the investigation of individual motives and societal circumstances accounting for it.

One first step to put some order in the analysis of LL consists in distinguishing top-down and bottom-up flows of LL elements, that is, between LL elements used and exhibited by institutional agencies which in one way or another act under the control of local or central policies, and those utilised by individual, associative or corporative actors who enjoy autonomy of action within legal limits. The main difference between these two wide categories of LL elements resides in the fact that the former are expected to reflect a general commitment to the dominant culture while the latter are designed much more freely according to individual strategies. Both categories of LL items, however, offer themselves to the public who walks through, perceives and interprets the LL. 'Understandings' and appreciations of LL are clearly not necessarily unanimous and very different meanings may be attributed to signs from one population group to another. Similarly, the same signs may be variously attractive to different people. Yet, to all these, LL represents the décor of public life and as such it carries emblematic significance. It is in this sense that LL's composition – whatever its chaotic aspects – can be referred to as symbolic construction of the public space.

Methodological Considerations

The general strategy

In order to translate those research interests in LL into methodological considerations, we quantified our data concerning the distribution of signs, according to appropriate characteristics – in line with our specific interest, that is, the languages used on signs. We included in our study street signs, commercial signs, billboards, signs on national and municipal institutions, trade names, personal study plates or public notices. A first sampling selected

was localities according to their representativeness of the ethnocultural and national divisions of the society, that is, Israeli Jews, Palestinian–Israelis and non-Israeli Palestinians. A second sampling focused on those parts of the cities that have prolific LLs – that is, where the major commercial activity takes place and the principal public institutions are located. The data themselves were first categorised according to the top-down versus bottom-up distinction, and subsequently according to specific subareas of activity. Top-down signs were coded according to their belonging to national or local, and cultural, social, educational, medical or legal institutions. Bottom-up items were coded according to categories such as professional (legal, medical, consulting), commercial (and subsequently, according to branches like food, clothing, furniture etc.) and services (agencies like real estate, translation or manpower).

Among other variables we also focused on the very languages appearing on signs, their saliency, the relative size of fonts of the different languages, their order of appearance, location on the sign, and the like. At the centre of the research was the relative importance of Hebrew, Arabic and English in the various LL sites we investigated.

Background of the research

Hebrew, Arabic and English are the three predominant languages in Israel's LL. As just mentioned, it is on the variations of their relative predominance in different LL sites that the present research focuses. To provide some background information, it is important to note that Israeli society consists of numerous groups of very different ethnic, linguistic and cultural backgrounds (Ben-Rafael, 1994; Spolsky & Shohamy, 1999). Of the Jewish population of 5.5 million (2003, according to the Israeli Bureau of Statistics, 2004), one million are immigrants from the former USSR who arrived since the late 1980s, and the overwhelming majority of the rest of the Jewish population (first and second generations) originated from over 60 counties around the globe. Palestinians – including Israeli and non-Israeli (East Jerusalemite) citizens – constitute 1.1 million (81% Muslims, 10% Christians and 9% Druze). In addition, about 250,000 are foreign workers living in Israel, coming from a diversity of non-Western countries.

Despite this enormous diversity, Hebrew has positively become the predominant language among Jews. This ancient language was adopted at the turn of the 20th century by the then tiny Jewish population of this country – at the exception of an old ultraorthodox community – and ever since, this predominance of Hebrew has rarely been challenged by immigrants. This is due to the fact that Hebrew, which is the language of the Bible, though hardly used for the last 20 centuries outside rabbinic or scholarly milieus, has always been regarded by Jews as the language of their common religious and cultural legacy. The great achievement of the 20th century Hebrew renaissance has been that to those born in Israel the language has functioned as a genuine mother tongue.

This, however, is not to gainsay that for some groups of immigrants, it was also important to retain their home languages and to continue to use it in family life and cultural consumption in addition to Hebrew. This was the case of German immigrants in the 1930s, and this is nowadays the case of immigrants from the former USSR. Moreover, Amharic is not neglected either in the Ethiopian community, nor has Yiddish been forgotten by the ultraorthodox. Furthermore, some variants of Jewish-Arabic are still spoken by the elderly among immigrants from North African and Middle Eastern countries. Numerous other languages, however, from Rumanian to Polish and from Kurdish to Iranian, are becoming extinguished, exemplifying what Romaine and Nettle (2000) call 'vanishing voices'.

On the other hand, English is gaining growing importance in contemporary Israel, which is experiencing intense globalisation. A small country tightly connected to the outside world, especially to the USA and to Jewish communities elsewhere, it is certainly one of the most extreme examples of globalisation. Among many other manifestations, this is evident in the significant role English plays in Israeli society. The fact that Hebrew is rarely known outside Israel also widely explains the popularity of English among Israelis. Hence, English has in fact become the second or additional language in all areas of life, to the point that it can hardly any longer be seen as a 'foreign language' but would be better described as a 'nonforeign language'. English is learned in both Jewish and Arab schools from Grades 3 or 4 up. It is a compulsory subject in all types of high-school graduation, a condition for academic studies in all fields and a requirement for all jobs middle-rank up. A substantial part of all books published in Israel are in English, and so is one of Israel's major dailies, the 'Jerusalem Post'. In brief, English is widely viewed as the principal international language and as the principal conveyor of scientific, technological and business knowledge – despite the fact that it has no official status. Yet, the prevalence of English in the school system is differential; while in the Jewish schools where Hebrew is the main language of instruction, English comes before Arabic as a compulsory subject; in the Arab schools, where Arabic is the main language of instruction, English comes after Hebrew, which puts it in a third position among languages.

Arabic, the second official language besides Hebrew, is another important language in Israel. This is firstly due to the fact that the Israeli-Palestinian population makes up 18% of the country's overall population. Palestinian Israelis strive to maintain their Palestinian identity, as is illustrated by the fact that many of them prefer to be addressed as Palestinians living in Israel rather than as Israeli Arabs, which has been their prescribed identity since the establishment of the State of Israel. The group's self-perception is influenced by its status as a national minority within a Jewish state and by the on-going Jewish-Palestinian conflict. Palestinians in Israel reside mainly (90%) in their own villages and towns. The rest live in mixed Jewish cities like Haifa, Acre or Tel Aviv–Jaffa. With respect to this population, Israel is pluralistic in the sense that it sustains Arabic-speaking institutions in the realm of education, culture, media, politics, religion and intracommunity public life (Saban, 2000). The official status of Arabic is most manifest in the Arab educational system, where Arabic is the language of instruction (while, on the other hand, in Hebrew-speaking schools, Arabic is compulsory only at the junior high level, for two years and optional later on); public radio and television where time is allocated to Arabic programmes; currency and postage stamps on which

bilingual Arabic–Hebrew inscriptions appear; and Knesset laws which are published in Arabic in addition to the Hebrew version. Recently, due to Supreme Court rulings, Arabic also appears on numerous road signs around the country. All this does not prevent the disadvantage of Arabic vis-à-vis Hebrew, as an official language. To cite but two examples: many public services have no Arabic-speaking employees to help Arab customers in their own language, and national events are, as a rule, held in Hebrew only.

The wide majority of Israeli–Palestinians – especially among the -50 age category – however, are fluent in Hebrew which is widely used by them outside their villages and cities, leaving Arabic mainly for family and community life. As about 90% of the employed Palestinian population work outside the community and come in contact with the Jewish population on a daily basis, Palestinians are undergoing a far-reaching process of language and cultural exposure concurrently with modernisation and urbanisation, and it is in this context that they have developed an 'Israeli–Palestinian' variety of Arabic characterised by frequent codeswitching and borrowing from Hebrew (Amara, 1999a, 1999b; Koplewitz, 1992; Spolsky, 1994; Spolsky & Shohamy, 1999).

All in all, Palestinian Israelis in Israel represent a deprived minority. The standard of living of large strata among them stands substantially below the average level of the Jewish population while the definition of Israel as the homeland of the Jewish people entails preferential treatment in several respects for the Jewish majority and its symbols (Ben-Rafael, 1994). Palestinian Israelis also suffer from the relatively low status given their language by Jews in comparison to Hebrew (Shohamy & Donitsa-Schmidt, 1998). They, actually, give Arabic high emotional value for religious, cultural and national reasons (Koplewitz, 1992; Shohamy & Donitsa-Schmidt, 1998). Though, at the same time and despite the clear social boundaries, there still is a fundamental cultural convergence of Palestinian Israelis towards the Jews (Ben-Rafael, 1994) manifested, among other forms, in the ever larger use of Hebrew and the adoption of many a pattern of life that are learned from Jews (work outside the community for womer; a smaller number of children per family; middle-class consumption habits and the like).

The above description, however, does not hold as regards to the Palestinians of East Jerusalem. East Jerusalem, was annexed by Israel in 1967 and its 200,000 Palestinian inhabitants, whose vast majority is Muslim (93%), were offered Israeli citizenship. The largest number, though, preferred to express their loyalty to Palestinian nationalism, by refusing Israeli nationality. It is with this context in mind that we choose to refer to Palestinians in East Jerusalem as a distinct category which we term 'non-Israeli Palestinians'. The Palestinians of East Jerusalem are indeed bound, in many ways – institutional and noninstitutional – to the Palestinian Authority. One example is the schools in East Jerusalem, which follow the Palestinian Authority's educational programmes and which do not include Hebrew. On the other hand, here too, the impact of globalisation is evident. East Jerusalem, indeed, is the site of major symbols of Judaism, Christianity and Islam and is a hub of tourism from all over the globe. Hence English plays an important role here, both as a token of prestige and as a means of communication.

Proceedings and research questions

The purpose of this study is to examine the LL of Israel as shaped by 'topdown' and 'bottom-up' forces in the context of the complex relationship between Israeli Jews, Palestinian Israelis and Palestinians in East Jerusalem. The results report on the distribution of Hebrew, Arabic and English in LL items in different locations and areas of activity. LL, as defined here, refers to any sign or announcement located outside or inside a public institution or a private business in a given geographical location. The documentation of LL items was collected via digital cameras and the data, in the form of photographs, were stored in CD-Rom files. These items were then categorised using a coding system developed for this study. The parameters included languages used; order of appearance of the signs and the amount of information.

In order to represent the complexity of the public space, a distinction was made between a number of different domains in the top-down flow and bottom-up flow according to types of services and areas of activity. Table 1 describes the type of items, the sampling criteria and categories of LL items.

Top-down and bottom-up

The 'top-down' LL items included those issued by national and public bureaucracies – public institutions, signs on public sites, public announcement and street names. 'Bottom-up' items, on the other hand, included those which were issued by individual social actors – shop owners and companies – like names of shops, signs on businesses and personal announcements.

Category	Type of item	Sampling criteria
Top-down	1. Public institutions: religious, governmental, municipal–cultural and educational, medical	20-30 items at each site (30% of all items in each site)
	2. Public signs of general interest	
	3. Public announcements	
	4. Signs of street names	
Bottom-up	1. Shop signs: e.g. clothing, food, jewellery	70–100 items in each of the main streets of the sites and/or in commercial areas (70% of all items sampled at each site)
	2. Private business signs: offices, factories, agencies	
	3. Private announcements: 'wanted' ads, sale or rentals of flats or cars	

Table 1 Categories of LL items and criteria of sampling

Domains and areas

Both 'bottom-up' and 'top-down' items were further subdivided according to areas of activity. Hence, bottom-up items were broken up into clothing and leisure, food, house-ware, and private offices. 'Top-down' items were divided according to type of institution: religious, governmental, municipal, cultural, educational and public health. However, in practice we often neglected this categorisation for purposes of statistical analysis because of the restricted number of items obtained in the different categories.

The geographical dimension

The geographical localities sampled represented the following typical settings – Jewish, Palestinian Israeli and non-Israeli Palestinian. Table 2 describes the main characteristics of each of the localities in terms of types of setting and demographic characteristics. Six of the localities are homogenous: one non-Israeli Palestinian (East Jerusalem), three Israeli–Palestinian (Nazareth, Tira and Jaffa) and two Jewish (Kfar Shmaryahu and West Jerusalem). The two other locations (Upper Nazareth and Tel Aviv–Jaffa), though they have a mixed Jewish–Arab population, are predominantly Jewish, and will be regarded as such whenever a comparison is conducted

Name of place	Type of setting	Characteristics of population	
Jewish localities			
Kfar Shmaryahu	Town	Jewish upper class (total population = 1702)	
Tel Aviv–Jaffa	Metropolitan city	Jewish with small Arab minority (3.7%) (total population = 348,245)	
Upper Nazareth	City	Jewish majority with Arab minority (9%) (total population = 37,271)	
West Jerusalem	Capital city	Jewish (total population $=$ 417,102)	
Israeli–Palestinian localities			
Tira	Small city	Palestinian Israelis – all Muslim (total population = 15,565)	
Adjami– Jaffa	Neighbourhood in Jaffa– Tel Aviv	Palestinian Israelis (Muslim and Christian) (total Arab population around Adjami = 11,199)	
Nazareth	City	Palestinian Israelis with Muslim majority and Christian minority (35%) (total population = 51,946)	
Non-Israeli Palestinia	Non-Israeli Palestinian locality		
East Jerusalem	Neighbourhoods	Non-Israeli Palestinians – Muslim majority with Christian minority (6.5%) (total population = 198,000)	

Table 2 Sampling of LL items by localities, settings and populations

between Jewish and Arab Israeli localities as a whole. However, when LL is presented in the context of specific localities it will be important to bear in mind the unique demographic characteristics of these cities. Upper Nazareth, for example, is a predominantly Jewish city with a total population of 37,000, including a strong Russian-Jewish component (about 30%) and a relatively recent Palestinian-Israeli population (about 10%) scattered in most parts of the city. The second mixed city included in this study is Tel Aviv-Jaffa, Israel's major metropolitan city, where the population is overwhelmingly Jewish (96%), but, unlike in Upper Nazareth, the Arab population is concentrated in a historically Arab neighbourhood in Jaffa (Adjami) where Palestinian Israelis form a majority (80%). Because of its unique place within the city of Tel Aviv–Jaffa, the Adjami neighbourhood is considered here separately from the remainder of the city and added to the category of Israeli-Palestinian localities, while the rest of Tel Aviv-Jaffa is considered a Jewish locality. All in all, the localities selected for this study are aimed to represent the diversity of the human landscape of Israel.

It is this apparatus that served us to check the validity of our three divergent hypotheses about the moulding of LL. To remember, the Bourdieusard hypothesis expects LL configurations to be accounted for by power relations; the presentation-of-self hypothesis expects the multiplication of community markers where relevant communities do exist; the good-reasons hypothesis expects that benefit considerations explain LL choices of LL actors. From these hypotheses, we may now formulate appropriate related research questions.

- (1) From the Bourdieusard hypothesis we ask if Hebrew, which is the language of the stronger population group in Israel, plays the predominant role in all LL sites investigated even where populated by Palestinians Israeli or not.
- (2) From the presentation-of-self/primordialist hypothesis, we ask whether or not LL sites where members of the Arab minority are numerous, let alone the majority of the population, the multiplication of Arabic markers challenge the overall predominance of Hebrew.
- (3) From the good-reasons hypothesis, we ask whether, independently of power relations and presentation-of-self drives, LL expresses sheer interests in benefits attached to language uses – including the use, for instance, of a nonlocal language like English, due to both its attractiveness to tourists and the prestige attached as such to the use of this language in this country.

Findings

The general picture

Table 3 shows integrated LL profiles (i.e. adding up bottom-up and topdown items) in the different demographic categories of localities.

(1) Within Jewish localities, Hebrew is the predominant language appearing, either with or without English, in nearly 100% of LL items. English is

second, appearing in nearly 50% of LL items. Arabic appears in less than 6% of the LL items in Jewish localities.

- (2) Within the Israeli–Palestinian localities, similar to the Jewish localities, Hebrew is strongly present as it appears in nearly 94% of LL items. Arabic is much better represented than in Jewish localities, but still appears in only 70% of LL items. English plays more of a tertiary role by appearing in only 25% of all LL items.
- (3) In East Jerusalem, Arabic is the dominant language appearing in all LL items, English is in second position, appearing in about 75% of the items, and Hebrew is hardly present at all.

Contrary to the patterns found in both Palestinian-Israeli and Jewish localities, in East Jerusalem, Hebrew never appears as the only language and when it does appear, it does so in trilingual (Hebrew, English, Arabic) LL items. English in East Jerusalem is much more salient than in both Israeli-Palestinian and Jewish localities. The prevailing pattern in East Jerusalem is bilingual, 'Arabic-English', while in Israeli-Palestinian localities the dominant pattern is 'Arabic-Hebrew', and in Jewish localities the recurrent bilingual pattern is 'Hebrew-English'. Hebrew is thus the dominant language in both Jewish and Israeli-Palestinian localities, but the 'Hebrew -Arabic' bilingual pattern is frequent only in Israeli-Palestinian localities. In Jewish localities, LL bilingual items that include English are much more frequent than bilingual LL items including Arabic. Interestingly enough, in Israeli-Palestinian localities bilingual LL items containing English are far less frequent than in East Jerusalem, where English appears in bilingual 'Arabic-English' items in half the LL items. On the other hand, trilingual LL items involving English, Hebrew and Arabic are frequent in both Palestinian localities, but rare in Jewish localities. Surprisingly enough, LL items with Hebrew as their only language are far more frequent in Israeli-Palestinian localities than Arabic-only items.

Languages of LL items	Localities		
	Jews	Palestinian Israelis	East Jerusalem Palestinians
Hebrew only	49.6 (<i>n</i> = 337)	24.1 (<i>n</i> = 58)	_
Arabic only	$0.1 \ (n = 1)$	5.0 (<i>n</i> = 12)	20.9 (<i>n</i> = 18)
Hebrew–English	44.6 (<i>n</i> = 303)	6.2 (<i>n</i> = 15)	_
Hebrew–Arabic	$0.9 \ (n = 6)$	39.4 (<i>n</i> = 95)	5.8 $(n = 5)$
Arabic–English	_	1.2 $(n = 3)$	55.8 $(n = 48)$
Hebrew–Arabic–English	4.9 (<i>n</i> = 33)	24.1 (<i>n</i> = 58)	17.4 (<i>n</i> = 15)
Total	100.0 $(n = 680)$	100.0 $(n = 241)$	$100.0 \ (n = 86)$

Table 3 LL items by languages in the three areas (no. of items and %)

 γ^2 (10df) = 1088; p < 0.0001.

LL in specific localities

When turning to specific localities in the three sectors under study, we made some additional observations with regards to LL.

Jewish localities

LL languages	West Jerusalem	Tel Aviv–Jaffa	Upper Nazareth	Kfar Shmaryahu
Hebrew	40.1 (<i>n</i> = 85)	52.1 (<i>n</i> = 172)	66.7 $(n = 70)$	38.5 (n = 10)
Hebrew–English	49.1 (<i>n</i> = 104)	46.1 (<i>n</i> = 152)	29.5 (<i>n</i> = 31)	61.5 $(n = 16)$
Hebrew–English– Arabic	10.8 $(n = 23)$	1.8 (n = 6)	3.8 (<i>n</i> = 4)	_
Total	100.0 (<i>n</i> = 212)	100.0 (<i>n</i> = 330)	100.0 $(n = 105)$	100.0 $(n = 26)$

Table 4(a) LL items by languages in Jewish localities (no. of items and %)

 γ^2 (6df) = 42.2; p < 0.0001.

Focusing on the Jewish localities of the sample as presented in Table 4(a), it transpires that in a small affluent residential town like Kfar Shmaryahu, there is a strong presence of English (about 60%) alongside Hebrew predominance. In lower and lower-middle-class towns, like Upper Nazareth, by contrast, there is a much weaker presence of English (about 33%), thus leaving Hebrew predominance unchallenged. In addition, when comparing a major metropolitan area like Tel Aviv to an area like Jerusalem, that is more tourist oriented, one finds in the latter a stronger presence of English through bilingual Hebrew–English and trilingual Hebrew–English–Arabic items.

Russian, the language of the largest Jewish immigrant group, also has some LL visibility in all Jewish localities investigated – especially in Upper Nazareth (10%) where Russian immigrants constitute a large proportion of the population. In the same town, moreover, 9% of the population are Arab but Arabic appears in only 4% of LL items. Arabic has a very low presence in Jewish localities in general. For example, in Tel Aviv–Jaffa, Israel's largest metropolis, Arabic appears in only 2% of LL items; in Jerusalem, the capital of Israel and a mixed metropolis since 1967, Arabic has a rather low representation (about 11%) in the Jewish areas of the city.

Israeli–Palestinian localities

As shown in Table 4(b), there exists substantial LL diversity in Israeli– Palestinian localities as well. Hebrew is strongly present in nearly all LL items in all Israeli–Palestinian localities, but with varying degrees of salience. The more distant they are geographically from Jewish centres, the less dominant is the presence of Hebrew in the LL of Israeli–Palestinian localities. In Nazareth, a large Arab city, quite distant from the centre of Israel but a major site for religious tourism, Hebrew is present in most LL items, but nearly always alongside Arabic (with or without English), and only rarely (5.3%) in Hebrewonly items. In Tira, an Israeli–Palestinian town situated in the central region of

LL languages	Ajami–Jaffa	Tira	Nazareth	East Jerusalem
Hebrew	74.1 $(n = 40)$	20.7 (<i>n</i> = 12)	5.3 $(n = 6)$	_
Arabic	_	3.4 (<i>n</i> = 2)	8.8 (<i>n</i> = 10)	20.9 (<i>n</i> = 18)
Hebrew-Arabic	16.7 $(n = 9)$	63.8 (<i>n</i> = 37)	43.0 (n = 49)	5.8 (<i>n</i> = 5)
Arabic–English	_	_	2.6 (<i>n</i> = 3)	55.8 (<i>n</i> = 48)
Hebrew–Arabic– English	9.3 (<i>n</i> = 5)	12.1 (<i>n</i> = 7)	40.4 (n = 46)	17.4 (<i>n</i> = 15)
Total	100.0 $(n = 54)$	100.0 $(n = 58)$	100.0 $(n = 114)$	100.0 $(n = 86)$

Table 4(b) LL items by languages in Palestinian localities (no. of items and %)

 γ^2 (12df) = 316.9; p < 0.0001.

the country, which has a reputation as a centre of craftsmanship attracting Jewish clients from Tel Aviv and the surrounding areas, Hebrew is more salient with 20% Hebrew-only items, and 64% bilingual Arabic–Hebrew signs. As one draws closer to large Jewish centres, though, the salience of Hebrew in the LL of Arab localities becomes more evident. In Adjami, the old Arab neighbourhood in Jaffa, Hebrew-only signs constitute 74% of all LL items. In comparison, Arabic appears in only 26% of LL items in Adjami and always together with Hebrew. In more remote communities like Nazareth and Tira the presence of Arabic is stronger with 94.8 and 79.3% respectively.

East Jerusalem

In East Jerusalem, there is a clear and unambiguous predominance of the 'Arab–English' bilingual pattern (50%). Upon adding this pattern to the trilingual 'Arab–English–Hebrew', it was found in two thirds of all signs. In addition, Arabic-only LL items are found in 21% of the cases in East Jerusalem, whereas in Israeli–Palestinian localities like Nazareth and Tira, Arabic-only signs are much more rare (9 and 3% respectively). These findings strongly suggest a contrast between the LL patterns of East Jerusalem and those of Israeli–Palestinian localities.

Bottom-up versus top-down flows

Examining the LL items in bottom-up versus top-down flows, the findings, as displayed in Tables 5(a) and (b), again demonstrate significant differences.

- (1) In Jewish localities there is no systematic difference between bottom-up and top-down flows, though the top-down flow is more often trilingual while the bottom-up flow leaves more room to items in Russian and other languages. The representation of English, which in Jewish localities is nearly double that in Israeli–Palestinian localities, is more apparent in bottom-up than in top-down.
- (2) In Palestinian localities, there is a stronger presence of Hebrew-only items in bottom-up than in top-down LL items (40.7 and 3.9% respectively). This is paradoxical as Palestinian–Israelis could be expected to be more eager

LL languages	Top-down	Bottom-up
Hebrew-only	42.4 (<i>n</i> = 72)	46.9 (<i>n</i> = 265)
Russian-only or with other languages	3.5 (n = 6)	9.9 (<i>n</i> = 56)
Hebrew–English	35.3 (n = 60)	43.0 (<i>n</i> = 243)
Russian-only or with other languages	3.5 (n = 6)	9.9 (<i>n</i> = 56)
Hebrew–Arabic–English	18.8 (<i>n</i> = 32)	0.2 (<i>n</i> = 1)
Total	100.0 $(n = 170)$	100.0 $(n = 565)$

Table 5(a) Top-down versus bottom-up items: Jewish population (no. of items and %)

 γ^2 (3df) = 109.98; p < 0.0001.

Table 5(b) Top-down versus bottom-up items: Israeli–Palestinian population (no. of items and %)

LL languages	Top-down	Bottom-up
Hebrew-only	3.9 (n = 3)	40.7 (<i>n</i> = 55)
Hebrew–Arabic	59.2 $(n = 45)$	37.0 (<i>n</i> = 50)
Hebrew–Arabic–English	36.8 (<i>n</i> = 28)	22.2 (<i>n</i> = 30)
Total	100.0 $(n = 76)$	100.0 (<i>n</i> = 135)

 γ^2 (2df) = 33.04; p < 0.0001.

Table 5(c) Top-down versus bottom-up items: East Jerusalem (no. of items and %)

LL languages	Top-down	Bottom-up
Arabic-only	15.4 $(n = 4)$	20.0 (<i>n</i> = 14)
Arabic–English	19.2 $(n = 5)$	75.7 (<i>n</i> = 53)
Hebrew–Arabic–English	65.4 (<i>n</i> = 17)	4.3 (<i>n</i> = 3)
Total	100.0 (<i>n</i> = 26)	$100.0 \ (n = 70)$

 γ^2 (2df) = 44.2; p < 0.0001.

to assert their particular identity by the use of Arabic, with the State insisting on the use of Hebrew. Seemingly, Palestinians are willing to adapt to market forces in a society where the majority is Jewish and Hebrewspeaking, while the State is ready (in Israeli–Palestinian localities at least) to acknowledge the importance of Arabic. In top-down LL items, on the other hand, there is a substantially stronger presence of both bilingual (Hebrew–Arabic) and trilingual (Hebrew–Arabic–English) LL signs compared with bottom-up items. Contrary to what one would expect, top-down LL items in the Arab communities contain a significantly higher percentage of trilingual signs than can be found in the Jewish sector (36.8 versus 18.8%). Further studies are needed to find out whether this is the result of different policies for Israeli–Palestinians and Jews, or of a lack of official policies with regard to LL in the rest of the country.

(3) In East Jerusalem, the trilingual pattern, i.e. Arabic–English–Hebrew, is in 65.4% of all top-down items. The bottom-up flow on the other hand, is characterised mostly by bilingual Arabic–English items (75.7%).

LL by area of activity

In analysing the data according to flows, it soon emerged that in our particular study, the total number of top-down LL items was too limited for any meaningful comparison of subcategories. Hence, the following analysis considers only bottom-up items (see Tables 6(a), (b) and (c)).

LL languages	Clothing & leisure	Food & house ware	Private offices
Hebrew only	42.2 (<i>n</i> = 117)	60.4 (<i>n</i> = 125)	26.9 (<i>n</i> = 21)
Hebrew–English	48.4 (<i>n</i> = 134)	32.9 $(n = 68)$	55.1 (<i>n</i> = 43)
Russian (with other languages)	9.4 (<i>n</i> = 26)	6.8 (<i>n</i> = 14)	17.9 (<i>n</i> = 14)
Total	100.0 (<i>n</i> = 277)	100.0 (<i>n</i> = 207)	100.0 (<i>n</i> = 78)

Table 6(a) Bottom-up items: Jewish areas (no. of items and %)

 γ^2 (4df) = 32.7; p < 0.0001.

LL languages	Clothing & leisure	Food & house ware	Private offices
Hebrew-only	21.4 (<i>n</i> = 12)	41.2 (<i>n</i> = 35)	11.4 (<i>n</i> = 4)
Hebrew–English	10.7 $(n = 6)$	4.7 $(n = 4)$	5.7 (<i>n</i> = 2)
Hebrew–Arabic	55.4 (<i>n</i> = 31)	30.6 (<i>n</i> = 26)	37.1 (<i>n</i> = 13)
Hebrew–Arabic–English	12.5 (<i>n</i> = 7)	23.5 $(n = 20)$	45.7 (<i>n</i> = 16)
Total	100.0 $(n = 56)$	$100.0 \ (n = 85)$	100.0 (<i>n</i> = 35)

Table 6(b) Bottom-up items: Palestinian-Israeli areas (no. of items and %)

 γ^2 (6df) = 26.115; p < 0.0001.

Table 6(c) Bottom-up items: East Jerusalem (no. of items and %)

LL languages	Clothing & leisure	Food & house ware	Private offices
Arabic	34.3 (<i>n</i> = 12)	15.4 (<i>n</i> = 2)	_
Arabic–English	65.7 (<i>n</i> = 23)	84.6 (<i>n</i> = 11)	100.0 (<i>n</i> = 12)
Total	100.0 (<i>n</i> = 35)	100.0 (<i>n</i> = 13)	100.0 (<i>n</i> = 12)

The major tendencies reveal that when one considers 'food and house-ware' as one area of commercial activity, it is marked by a clear preference for Hebrew-only items in both the Jewish and Israeli–Palestinian localities (60.4 and 41.2% respectively). This type of commercial activity is also characterised, though to a lesser degree, by bilingual signs: Hebrew–English (48.4%) in Jewish localities, and Arabic–Hebrew (30.6%) in Israeli–Palestinian localities.

'Clothing and leisure' is primarily characterised by bilingual patterns: Hebrew–English among Jews (48.4%) and Hebrew–Arabic among Arabs (55.4%). The most common pattern for private offices in the Israeli–Palestinian sector is trilingual: Arabic–Hebrew–English (45.7%); whereas in the Jewish sector the prevailing pattern is bilingual: Hebrew–English (55%).

Russian LL items were also found in the Jewish sector mainly in offices such as manpower, real estate, tourist agencies, translation and legal services (17.9%), and to a lesser degree in areas of clothing and leisure (9.4%), or food and house-ware (6.8%). This shows, by and large, that Russian immigrants currently constitute an important portion of the market for personal services as well as for tourism, culture or other leisure activities.

In East Jerusalem, all areas of activity are characterised by the predominance of bilingual Arabic–English LL signs, and to a much lesser degree by Arabic-only signs.

Summary of the Findings

Our analyses can be summarised as follows:

- (1) Bottom-up LL items show that Hebrew is predominant in both Jewish and Israeli–Palestinian localities in Israel. This is particularly striking with respect to the latter where one could have expected some resistance to the majority language as a result of ongoing Jewish–Palestinian tensions within and outside of Israel. Yet, this kind of resistance is visible only in East Jerusalem, where Hebrew is conspicuously absent from the LL items. This linguistic phenomenon reflects the fact that, since the annexation of East Jerusalem in 1967, the overwhelming majority of its Palestinian inhabitants have refused to view it as a part of the State of Israel. As a result, Hebrew appears there mainly in top-down trilingual (Arabic–English–Hebrew) items.
- (2) In East Jerusalem, Arabic is clearly the predominant language, which again contrasts with the situation in localities inhabited by Palestinian–Israelis where Arabic is much less salient, while in Jewish localities, Arabic is hardly present at all in either bottom-up or top-down LL items. This gainsays, in effect, the status of Arabic as the second official language of Israel. Among Palestinian–Israelis, the Hebrew–Arabic bilingual pattern is clearly predominant but it is rare in the Jewish population and is quite nonexistent in East Jerusalem.
- (3) English, which is not an official language in Israel, has a solid presence in Jewish localities as well as in East Jerusalem. Apart from affluent Jewish localities, where English can also be found alone, its presence is the strongest in bilingual Hebrew–English items among Jews and in bilingual

Arabic-English items among non-Israeli Palestinians in East Jerusalem. In Israeli–Palestinian localities English is less frequent, and the explanation for that, as we understand it, is related to the fact that the role played by English among Jews and among non-Israeli Palestinians is held by Hebrew in the case of Israeli-Palestinians. English, among Jews as well as among non-Israeli Palestinians serves for communication with people from outside the community, and at the same time, represents, under the influence of globalisation, a status symbol per se. Hebrew, the first official language, also serves as a means of communication, among Israeli-Palestinians, with the many Israeli Jews who pass through Arab neighbourhoods and towns. Moreover, as a language that conveys modernity to them - under the Israeli version of this concept - it enjoys undeniable prestige in the eyes of the Israeli-Palestinian minority - the tensions between Jews and Arabs in Israel notwithstanding. At the same time, though its knowledge is much less widespread among Palestinian-Israelis that among Israeli Jews due to the general educational gap between these populations, English is not completely ignored either in Arab localities. This is observed in signs on offices of lawyers and doctors as well as in front of quite a number of shops where English often appears together with Hebrew and Arabic.

- (4) In some Jewish neighbourhoods and localities, where Russian immigrants live or go frequently for shopping, Russian was found on quite a few bottom-up LL items. In some areas such as book and music stores or real estate, manpower and travel offices and agencies, the presence of Russian is particularly pronounced.
- (5) Top-down LL items, as designed by central and local bureaucracies, are substantially different in each of the sectors of the population examined and especially with regard to immigrants, on the one hand, and the Arab minority, on the other. Hence, Russian, as well as other immigrant languages, are generally ignored even when a clear claim for cultural and linguistic recognition on the side of autonomous actors transpires in bottom-up LL items. As a rule, top-down LL items in Jewish localities tend to ignore immigrant languages and to make do with Hebrew and English. In contrast, in top-down LL items in Israeli–Palestinian localities, Arabic is nearly always included alongside Hebrew, or Hebrew and English, which is less the case in the bottom-up flow. In East Jerusalem, the total absence of Hebrew in bottom-up LL items which are either Arabic-only or bilingual Arabic–English, contrasts with the trilingual Hebrew–Arabic–English pattern that prevails in top-down items.

General Conclusions

In general terms this study points to the importance of LL as a means of investigating selected aspects of the social reality. We focused on three groups – Jews, Palestinian–Israelis and non-Israeli Palestinians – and their interactions as buffered through LL and their symbolisation by patterns of use of Israel's three principal languages – Hebrew, Arabic and English. The study of

LL, it appears, may effectively reveal aspects of the dynamics of these relationships that were never apprehended with the same accuracy.

To restate our research questions and their underlying hypotheses, we acknowledged that a Bourdieusard perspective expected here that Hebrew, the dominant group's language, has a predominant role in all LL sites; that from the presentation-of-self/primordialist perspective a multiplication of Arabic markers are expected wherever Arabs reside in important numbers; that the good-reasons perspective expects in any case that LL facts can be accounted for by benefit considerations of LL actors. What comes out from our data, we state here right away, is that these research questions and underlying hypotheses actually do not exclude each other and are all fully compatible with what we found in different LL sites.

The Bourdieusard perspective is compatible with the fact that despite the formal legal status of Arabic as an official language, its presence in LL where Jews are the large majority is much weaker than that of Hebrew. On the other hand, the good-reasons perspective is also most appropriate for interpreting the importance of English in this part of the society, especially in middle-class neighbourhoods. This importance can be firstly attributed to benefit expectations as some of these areas are populated by tourists in season time. Second, it is also to be attributed to the prestige itself of the language in a globalised country like Israel where the dominant language is spoken by very few people in the world, beyond the national borders. The role that English plays here has made it a genuine status marker and, among other manifestations, has become a 'natural' ingredient of LL of the greatest significance. This LL observation, actually, brings us to adjust our general appreciation of some essential sociological and cultural aspects of globalisation. It appears, indeed, that values linked to globalisation may literally 'invade' a small country strongly dependent on international scenes, as a factor of cultural transformation. The adhesion and devotion to national symbols are then, to be sure, challenged by the influence of global symbols, eventually conveying a genuine possibility – some would say, a threat - of cultural hybridisation. We learn in our study of LL how this general problem takes on concrete forms in the realm of daily life at the heart of the public space – even though Hebrew is still, as far as our own data may show, the predominant language of Israel.

This predominance, it should also be emphasised, is even the case in Palestinian–Israeli areas, even for bottom-up items – actually more than for top-down items – which again supports the good-reasons perspective. According to the presentation-of-self/primordialist perspective, one might indeed have expected that Palestinian–Israelis would insist here, in the frame of their own localities, on the use of an abundance of identity markers. That we rather found a contrary trend tends to demonstrate that Palestinian–Israelis are firstly interested in attracting the Jewish public. This relatively weak presence of Arabic in bottom-up LL, definitely shows that in majority–minority relations collective identities and identifications are not the only factors involved in the shaping of LL, and that benefit considerations, as insisted upon by the good-reasons perspective, are by no means of minor importance in the eyes of LL actors. Economic interests of Palestinian–Israeli traders or professionals may supersede the motivation of exhibiting identity markers in

front of 'nonmembers' of the community. At the same time, that Arabic LL items are here more numerous in top-down LL items expresses the official status of the language which is especially taken care of by public agencies when acting in areas populated by Palestinian Israelis. This aspect probably depends on political-benefit considerations on the side of the establishment. In any case, all these show that LL is a reality which cannot be mechanically reduced to a conflictual power relation.

More generally, these findings demonstrate that Jewish–Arab relations in Israel can by no means be defined as 'zero-sum' relations: Palestinian Israelis, indeed, appear to consider that their relations with Jews do offer potential gains – in spite of, and concomitantly with, the inequality that marks these relations. This aspect, it should be emphasised, is hardly perceptible through different methodologies which, as a rule – and in accordance with many works done on Israel's Arab minority in different fields – focus on the better known fact that Palestinian–Israelis use Arabic as their primary language for both high and low language functions, and hold this language in the highest regard, as a religious, cultural, national and social symbol.

However, the Bourdieusard hypothesis appears to be a more plausible explanation of LL in East Jerusalem where more determined national-conflicconflictual aspirations are perceptible. In stark contrast with Palestinian-Israelis in East Jerusalem, non-Israeli Palestinians – who, as we know, stand behind their refusal to accept Israeli citizenship² from the government, sustain a nearly total absence of Hebrew in bottom-up LL items. It is quite clear here that the population is not ready to make any public concession to Hebrew even after a whole generation has already experienced its incorporation in the Jewish state. LL analysis clearly indicates here that while Palestinian Israelis follow a basic accommodation pattern to their minority status, non-Israeli Palestinians in East Jerusalem make use of a strategy of resistance by denying the official language of the country any status in bottom-up LL, using instead Arabic as their first and primary linguistic marker. On the other hand, and this tends to give some credit to the good-reasons perspective even here, we have also seen that in order to preserve their economic interests as a centre of tourism, as well as - most plausibly - for the sake of instrumental communication with the Jewish population itself, Palestinians in East Jerusalem also use English a great deal in LL. English is a neutral linguistic resource – neither a priori associated with Jews nor with Arabs – and allows maintaining communication over the head of manifestations of animosity, preventing thereby a total cut-off between populations. This is evinced by the fact that not only tourist-oriented businesses exhibit English signs here but also offices, shops and stores that do not normally attract foreigners. LL analyses, in this context, shows that even in East Jerusalem, one cannot describe the relation of non-Israeli Palestinians with Jews in terms of total and unambiguous rejection - at least at this level of the symbolic construction of the public space. What is more, in the frequent use of English, non-Israeli Palestinian bottom-up LL actually converges toward the importance of English in the Jewish sector.

In brief, LL analysis reveals two contrastive models of relations of two groups belonging to the same minority with the same majority group. These



Figure 1 Patterns of plurilinguistic landscape in the three areas*

two groups see themselves as members of the same Palestinian people and share the same language and culture; moreover, they do have close contacts with each other, though, and due to their different positioning in the society, they develop very different relations with the same Jewish majority.

These conclusions, we are convinced, would not have been yielded with the same ease and clarity by alternate methodologies. LL analysis focuses on symbolic practices that give shape to spaces, while opinion surveys investigate subjective attitudes and not sheer facts which, in many respects, 'speak out' more faithfully the meanings of behaviours. Similarly LL analysis focuses on the way people use linguistic symbols in the framing of their environment, while investigations limited to language uses only indicate what languages people know and when they use them. Actually, the use of linguistic symbols in LL does not necessarily imply any knowledge of the language by LL actors, which, in this case, does not prevent them from acting. Last but not least, LL analysis focuses at the same time on the simultaneous actions of institutions and autonomous actors which together give shape to the linguistics of the public space. This, again, is out of reach of alternate methodologies of social investigation.

With respect to the cases which we have studied here, the present comparative study shows the special relations between the three sectors by evincing both the divergences and convergences among them. Each case, compared with the other two, presents – each time in a different manner – two divergent factors and a convergent one (see Figure 1).

- Israeli–Jewish LL and Israeli–Palestinian LL converge in their common emphasis on Hebrew but diverge in the roles they impart to Arabic and English – while the former neglects Arabic and emphasises English, the latter goes the other way round.
- (2) Israeli–Jewish LL and East Jerusalem LL converge in their insistence on English, and diverge in the roles they impart to Arabic and Hebrew – while the former neglects Arabic and insists on Hebrew, the latter goes the other way round.
- (3) East Jerusalem LL and Israeli–Palestinian LL converge in their insistence on Arabic and diverge in the roles they impart to Hebrew and English –

while the former neglects Hebrew and insists on English, the latter goes the other way round.

Without discussing the fundamental political problem itself that underlies Jewish–Palestinian relations, LL analysis allows us to point out patterns representing different ways in which people, groups, associations, institutions and governmental agencies cope with the game of symbols within a complex reality. This directly connects to Lefebvre's notion of 'spatial practice' (1991) and the challenge of 'deciphering' that space where power relations, the presentation-of-self principle and the notion of good-reasons intermingle in complex way to account for the richness of what may seem at first glance to be 'chaotic' and 'orderless'.

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Notes

- 1. We mean by 'LL-actors', actors who concretely participate in the shaping of LL by ordering from others or building by themselves LL elements according to preferential tendencies, deliberate choices or policies.
- 2. The Palestinian Authority has extended its own Palestinian citizenship to the Arab inhabitants of East Jerusalem but this is not recognised by the Israeli government.

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Appendix: Examples of Signs



Picture 1 A trilingual sign



Picture 2 A trilingual checking-point warning sign



Picture 3 A Hebrew official sign aside an English commercial sign



Picture 4 A store's monolingual English sign



Picture 5 A Hebrew-English/French sign of a garment store


Picture 6 A mini-marfect's Russian-Hebrew sign



Picture 7 An English–Arabic poster welcoming the Pope in Jerusalem



Picture 8 A bakery's Arabic-Hebrew sign

Bangkok's Linguistic Landscapes: Environmental Print, Codemixing and Language Change

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This paper examines the linguistic landscapes of 15 Bangkok neighbourhoods to explore questions of language contact, language mixing and language dominance. It provides a linguistic framework for analysis of types of codemixing. It highlights the importance and influence of English as a global language. It examines the signs from government sources versus those from the private sector. It also reveals the extent of linguistic diversity in a large metropolitan area like Bangkok by a comparison of various neighbourhoods. Moreover it offers evidence of a shift from Chinese to English as the major language of wider communication in the city. From a linguistic perspective, the paper documents the influence of English on the development of Thai, not just in the form of lexical borrowing, but also in the areas of orthography, pronunciation and syntax. At the same time, the study provides evidence of a nascent Thai variety of English. At the theoretical level, this study calls into question the boundaries of a speech community and even what constitutes a language itself. From a more applied perspective, the data presented raise questions about the effects of the pervasiveness of English in the linguistic landscape of Bangkok on the language proficiency, both Thai and English, of its youngest citizens.

Keywords: linguistic landscape, language mixing, Thai, English, Bangkok

Introduction: Globalisation and Language

The effects of globalisation of the world economy on English, now recognised as the dominant world language, have been well documented since the seminal work of scholars such as Bailey and Görlach (1982), Fishman *et al.* (1977), Kachru (1986), Platt *et al.* (1984) and Smith (1983). Professional journals such as *World Englishes*, *English World-Wide*, *English Today* and *Asian Englishes*, and professional organisations such as the International Association for World Englishes (IAWL) have provided outlets for continued research and discussion on the topic.

In recent years, the discussion around English as a world language has expanded in at least two directions. First, there has been increasing attention to the politics of English as a world language and issues of identity and power (Bex & Watts, 1999; Fishman *et al.*, 1996; McArthur, 1998; Pennycook, 1994; Phillipson, 1992, etc.). Second, research has expanded from a focus on what Kachru (1992) calls the 'outer circle', where English is taught as a second language (usually in postcolonial countries of Africa, South Asia and Southeast Asia), to the 'expanding circle', where English is taught as a foreign language (Kachru, 1986, 1992, 1997; e.g. Cheshire, 1991; Görlach, 1991, 1995, 2002, etc.).

Less attention has been paid, however, to the effects of globalisation on the use of other languages for wider communication, particularly in large cosmopolitan urban areas in expanding circle countries. Similarly, beyond studies of codeswitching and lexical borrowing, little research has documented the effects of language contact on indigenous languages as a result of globalisation. The current paper explores the linguistic landscape of Bangkok to address three questions.

- (1) What languages other than English are used as languages of wider communication in Bangkok?
- (2) How does the use of language in environmental print distinguish one area of the city from another?
- (3) What evidence is there to suggest that languages of wider communication, in particular English, influence the varieties of Thai found in environmental print in that city?

Linguistic Landscapes

Landry and Bourhis (1997, cited in Shohamy *et al.*, 2001) define 'linguistic landscape' as all linguistic tokens 'which mark the public sphere, including road signs, names of sites, streets, buildings, places and institutions as well as advertising billboards, commercials and even personal visit cards'. Large cosmopolitan urban centres are often culturally and linguistically diverse, composed of separate and identifiable neighbourhoods, each with its own linguistic culture, that is 'the set of behaviours, assumptions cultural forms, prejudices, folk belief systems, attitudes, stereotypes, ways of thinking about language, and religiohistorical circumstances associated with a particular language' (Schiffman, 1996: 5).

Linguistic tokens serve to delineate the geographical and social boundaries of these neighbourhoods. To the extent that linguistic tokens are artefacts of a central government, they may reflect the overt language policies of a given state. In this sense they are markers of status and power. But status and power are also reflected in the linguistic tokens employed by multinational corporations and established institutions such as religious establishments, cultural centres, banks, hospitals and the like. Other linguistic artefacts within a given linguistic landscape, for example signs and advertisements of local businesses, notices posted by individuals and other locally produced tokens, are a manifestation of the covert language policy of a community, and may display the grass roots cultural identity and aspirations of its members. Together, they provide a window into the power relations within the community. They also provide evidence for the effects of globalisation and language contact on the languages themselves.

The Linguistic Situation – Thailand

Smalley (1994) provides a useful taxonomy of languages in Thailand. The official language is Standard Thai. This is the language appropriate for all

political and cultural purposes including the conduct of internal governmental affairs, politics and 'high prestige cultural activities'. As the national language, it is a symbol of national unity and identification of the Thai nation. It may be the first language of upper class Thais, but for most Thais, it is learned in school, with a regional or marginal language learned as a first language and spoken at home and with friends.

In addition to Standard Thai, four major regional languages (Thaiklang, Lao, Kammüang and Paktay), all closely related to each other and to Standard Thai, but all somewhat distinct, are the dominant languages of each of the four major geographical regions (Central plains, Northeast, North and South, respectively) of the country. Smalley's taxonomy also includes 'marginal regional languages', usually limited to specific geographical areas of the country or to urban centres. These may be related to Standard Thai (e.g. Tai Yai) but needn't be (e.g. Northern Khmer, Pattani Malay). Of lesser influence are other languages limited to prescribed rural or urban enclaves (e.g. Kuy in the lower Northeast, Phlow in the Northwest). As Smalley points out, except in the case of Pattani Malay, the existence of these minority languages is not a cause of disunity in Thailand.

Smalley calls English the 'language of Thailand abroad', by which he seems to mean the chosen language for international communication. In the 1960s, it was spoken by only a few elite Thais; now, however, many people whose employment brings them into contact with the international community speak English with some degree of proficiency. Although the medium of instruction in most Thai schools is Standard Thai, English is a required subject from upper elementary school. At the higher levels of education, it is the language of specialised knowledge. It is also a symbol of modernity.

The Linguistic Situation – Bangkok

Walking the streets of Bangkok, one encounters a myriad of signs, many in Thai, but most in two or more languages. For the most part, however, the regional, marginal and other languages of Thailand are not represented, the exception being Chinese. In a study of three distinct streets in Bangkok, Smalley (1994) found three dominant languages represented in environmental print: Thai, English and Chinese. Charansanitwong Road, in a part of town neither extremely Chinese nor extremely European, displayed the vast majority of signs in Thai. Signs in English or Chinese were infrequent. On Yawarat Road, in a predominantly Chinese neighbourhood, both Thai and Chinese were the dominant languages. As Smalley (1994: 205) observed 'virtually no stores had signs ... in Chinese in non-Chinese areas surveyed.' On Sukhumvit Road, in a Westernised section of town, the majority of signs were in English or English and Thai. Smalley (1994: 204) concludes that 'English messages are directed at tourists and others from abroad.' It is true that the city relies heavily on tourism from Australia, Europe, North America and other parts of Asia. But it is also the capital of a major Southeast Asian country, and is a hub for global air travel, multinational corporations and international organisations. There are few neighbourhoods in Bangkok where the sight of a foreigner would turn a head or elicit a comment.

The Study

The current study challenges Smalley's claim that English in the public space is directed at foreigners. It describes a greater degree of linguistic variation across neighbourhoods than Smalley reports, highlighting the importance of sample selection in linguistic landscape research. Finally, it details the kinds of language mixing found in environmental print in Bangkok, suggesting that the spread of English is also having an influence on Thai.

The study was conducted by the graduate students in the Department of Linguistics and the Program in English as an International Language at Chulalongkorn University in July of 2002. During that month, students identified 15 neighbourhoods in central and suburban Bangkok which as residents they felt would reflect some of the linguistic diversity of the city.¹ The neighbourhoods analysed are shown on Maps 1 and 2.

In teams and armed with cameras, they photographed all of the signs within a given stretch of the main street of that neighbourhood.² These photographs were then analysed for their source, the language or languages used, and in the case of multilingual signs, the dominant language in each sign.³ A total of 613 signs were analysed.

Linguistic Dimensions of Linguistic Landscapes

Signs may be either monolingual or multilingual, as illustrated in Pictures 1 and 2 respectively. In the bilingual sign, both the Thai and the English in this sign are verbal plays on the fact that the shop is in an elevated train station. The Thai print reads 'khanom thai loy fáa' [dessert thai float sky], 'Thai sweets



Central Bangkok Area

Insight Pocket Guide, 2001



Greater Bangkok Area

Map 2

floating in the sky'. The bilingual sign also displays a clear separation of languages: the first line contains Thai script, lexicon and syntax; the second contains English script, lexicon and syntax. One can claim that in this sign, Thai is the prominent language, both by virtue of its placement above the English and by the size of its script.

Not all multilingual signs are so straightforward. Many multilingual signs exhibit some form of language mixing. A sign may be written in Thai script, but the words and/or syntax may be English. For example, the sign in Picture 3 'Ta Beauty' is written in Thai script; the vocabulary consists of the name of (presumably) the Thai proprietor and the English word 'beauty'. And the syntax, while lacking the possessive {-s} morpheme, retains the English word order of 'adjective + noun'. The sign in Picture 4, by way of contrast, reads [biuti aen] 'Ann's Beauty', where the script and syntax (noun + adjective) are Thai and the lexicon is English. In theory, Thai lexicon could also be transliterated in English (or Roman⁴) script, using English or Thai syntax. In fact, however, not all logical combinations are found. The possible and 'ungrammatical' combinations of Thai and English script, lexicon and syntax are discussed in the section on 'Language Contact, Mixing, and Change' below.

Determining language prominence in a given sign can be equally problematic. In Picture 2, prominence was determined by placement of text (top and left or centre for left-to-right reading scripts like Thai and English) and size of font. But placement and size can be offset by other features, notably colour,

Linguistic Landscape



Picture 1



Picture 2

images and amount of text. In the sign in Picture 5, for example, the English script maintains the preferred position of upper and centre. That it is written in red further contributes to its prominence. But the Thai script text below gives more information as to the nature of the business so that one could argue that Thai is the prominent language in this sign. However, the contents of the Thai script 'Golf Center Lynx' is a combination of English lexicon and both English (golf + centre = modifier + head) and Thai (golf centre + lynx = head + modifier) syntax. The image on the sign reinforces the fact that the Thai script is a play on the English homophones *lynx* and *links*.

Bangkok's Linguistic Landscapes



Picture 3



Picture 4

Sociocultural Dimensions of Linguistic Landscapes

An examination of the environmental print across neighbourhoods will reveal variation in the types of use (for example, official use versus commercial use) and in the patterns of languages used (for example, dominantly monolingual versus multilingual; which combinations of languages). From a synchronic perspective, such variation could reflect a disconnect between official versus de facto language policy. To encourage the use of the national language, the government provides a tax incentive for including Thai on



Picture 5

commercial signs in Bangkok. Not all businesses take advantage of these incentives, and when they do, they often relegate Thai to small print in a corner of the sign. The variation may also be a reflection of the relative power and social status of various groups within a given community, and/or the nature of the activities these groups are engaged in. From a diachronic perspective, variation in language use patterns across older versus newer neighbourhoods can provide a longitudinal picture of changing patterns of language use.

Examining language use patterns also raises questions of audience and accessibility: Who are the messages written for? And what meaning do the readers ascribe to them? This is particularly true of multilingual signs containing language mixing (Thai script, English lexicon and/or syntax). Does English lexicon in Thai script, for example, facilitate either the nature or extent of borrowing? Does Thai script with English syntax influence language change?

Results

The current paper reports on variation in use of script found among the signs examined. Of the 613 signs examined, 276 or 45% contained only one script. Of these 276 single-script signs, the majority (158 or 57%) were written in Thai script, with Roman script second (106 or 38%). The remaining single-script signs were in Japanese (8), Arabic (3) and Chinese (1). However the majority of the signs in the data base (337 or 55%) contain multiple scripts. The majority of these were either in Thai and English script or in Thai, Chinese and English scripts. Figures 1 and 2 show the distribution of signs by script and by source from the entire corpus.



Figure 1 Bangkok signs by script



Figure 2 Bangkok signs by script and source (government versus nongovernment)

37 (7%)

16 (3%)

89 (18%)

512 (100%)

169 (33%)

Government versus Nongovernment Signs

103 (20%)

98 (19%)

Non-govern.

While Table 1 suggests a degree of variation, that variation becomes more pronounced when official government signs and nongovernment signs are compared (Table 2). Of the signs examined, 101 were produced by the government, either national, provincial or municipal (see Figure 2). Sixty of these, or nearly 60%, are monolingual in Thai, while 34 are in Thai and English. This reflects the official Thai government policy of Thai as the official national language and English as the official language of wider communication internationally.

Among government signs, there is little variation across neighbourhoods in Bangkok. At the national level, signs announcing the names of national ministries or institutions tend to be in Thai and English. This is also true of street signs and traffic signs giving directions to neighbouring towns or neighbourhoods. Signs regulating traffic, such as no parking signs, signs announcing one way streets or no left turns, on the other hand, tend to be written in Thai only, regardless of the neighbourhood. The same is true for signs forbidding littering, digging in the street, selling wares on the sidewalk and the like. Signs announcing police stations tend to be monolingual in Thai in traditionally Thai neighbourhoods, and are more likely to be bilingual Thai and English in newer commercial neighbourhoods, and in areas considered tourist attractions. In this respect, language choice in government signs reflects the official language policy of the country – Thai as the official national language; English as the language of wider communication. It also supports Smalley's claim that English is for the benefit of foreigners.

An interesting exception to this pattern was found on Koh Kred, an island on the outskirts of the city which the local residents together with the Thai Tourist Organization are promoting as a tourist destination. Its main attraction is a settlement of Mon speakers. The Mon are a minority group whose ancestors came to Thailand from Burma in several migrations, beginning perhaps as early as the 16th century, C.E. (Smalley, 1994: 225). While Mon populations can be found in several provinces between Bangkok and the Burmese border, most of the long-standing Mon communities have been heavily assimilated into Thai culture. On Koh Kred, however, residents, with the support of the government, have worked to preserve their minority language and culture, and in particular a distinctive form of pottery. Koh Kred is the only neighbourhood in the study in which government use of a minority language (Mon) was found.

Variation by Neighbourhood

In contrast to the signs posted by the government, signs posted by the private sector show considerable variation across neighbourhoods. The 15 neighbourhoods display five patterns of language use in the use of language in commercial signs: (a) neighbourhoods with predominantly Thai monolingual signs; (b) neighbourhoods with a balance between monolingual Thai and bilingual Thai–English signs; (c) neighbourhoods with predominantly Thai–Chinese multilingual signs; (d) neighbourhoods with predominantly Thai–English bilingual signs; and (e) neighbourhoods with a preponderance of commercial signs in a language or languages other than Thai.

Predominantly Thai monolingual sign neighbourhoods

Three neighbourhoods were found to have predominantly Thai monolingual commercial signs: Thanon Pichai, Pathumthani and Koh Kred (see Figure 3).



Figure 3 Predominantly Thai monolingual sign neighbourhoods

Thanon Phichai is in a neighbourhood near the Parliament Building and the Residential Palace of His Majesty the King. The neighbourhood contains housing for many of the middle-level government workers. The commercial signs examined on this street were primarily for small businesses, in particular service enterprises such as auto repair shops, beauty and barber shops, pawn shops, law offices and the like. That one of the two restaurants found in this subsample was called the 'Fishy Fish Restaurant' suggests that the use of English on this sign is intended to convey a cosmopolitan air rather than to attract an audience proficient in English.⁵

Pathumthani was once considered a province quite apart from the capital city, but with the advent of urban sprawl, has become a commuter bedroom community for many middle and working class Thais employed in the city. The commercial signage here is for retail businesses such as appliance, auto supply, electronics and drug stores, as well as for services such as financial institutions, private schools and medical clinics. A number of signs, all entirely in Thai, advertise real estate for sale.

Both Thanon Pichai and Pathumthani are considered 'off the beaten path' of tourists to the city. The great majority of Thai–English script signs found in these neighbourhoods are for multinational corporations (autos, auto supplies, electronics, cameras, etc.) They contain very little English and appear to have as their goal product name recognition. Nevertheless, the sign in Picture 6 is from Thanon Phichai, suggesting that in this neighbourhood English has a cache among the residents.

In contrast, Koh Kred is a tourist destination, with the bulk of the signs advertising souvenir shops, restaurants and points of interest. To date Koh Kred had attracted a primarily local Thai population. Nevertheless, the use of English on signs in this neighbourhood is clearly directed toward the prospective international tourist. As tourism is further



Picture 6

developing, the signage pattern in this neighbourhood can be expected to change.

Neighbourhoods with a balance of Thai monolingual and Thai–English bilingual signs

Two neighbourhoods, Phra Athit Road and Henri Dunant Road, display an even distribution of commercial signs in monolingual Thai and in Thai and English. These two neighbourhoods both are home to a large proportion of government and nongovernment institutions and have relatively few commercial enterprises. Figure 4 shows the distribution of nongovernment signs in each of these four neighbourhoods.

Phra Athit Road, near the original Royal Palace, the Temple of the Emerald Buddha and older government offices, follows the path of the old wall of the city and was developed around the turn of the century, when a number of members of the royal family built their palaces there (Askew, 1994: 165). Many of these old palaces have become the home of religious and nonprofit institutions under Royal patronage and buildings designated as historical landmarks. Signs associated with these institutions were analysed as belonging to the government. The offices of the United Nations Food and Agriculture Organization, on the other hand, while noncommercial, were analysed as nongovernment. Signage for this organisation is both bilingual in Thai and English and monolingual in Thai. Bilingual Thai–English signage displays a strict separation of language, with a Thai text followed by an English translation.

Henri Dunant Road runs along the east of Chulalongkorn University and one of the most prestigious Thai preparatory schools. On the same street are



Figure 4 Thai monolingual and Thai-English bilingual balanced neighbourhoods

the venerable Bangkok Sports Club, serving the Thai upper class, the Chulalongkorn University Hospital, and several other medical institutions. Many of these institutions were established in the first two decades of the 20th century. There are few commercial establishments. Advertising banners hung from the wrought iron fences that surround these institutions advertise special educational programmes and other services.

The language use patterns of the signs announcing the institutions mentioned above reflect official government policy of Thai as the language of the nation and English as the language of international communication. The advertising banners, however, sometimes contain English script, lexicon and syntax interjected in the middle of a Thai message. In these cases, the English is not aimed at foreign readers, but rather at a class of educated Thais who can read both the Thai and the English.

Neighbourhoods where Thai-Chinese multilingual signs dominate

Two neighbourhoods in the sample display a relatively high proportion of Chinese language in the commercial signs found there (Figure 5). Yawarat and Charoen Krung Roads both date back to the mid-19th century (Bhamorabutr, 1987: 37), a time when Chinese played a much larger part in the commercial life of the city than it does now. From its founding, Bangkok has always had a large and influential Chinese (Teochew-speaking) minority. These two streets were home to many of those Chinese businesses. While the use of Chinese has diminished somewhat in Bangkok commercial circles as a whole, the older businesses in these two streets reflect the important role that the language played in earlier times.

The signs in the subsample for Yawarat Road announce both service businesses such as financial institutions, traditional massage parlours, pawn and printing shops, and retail shops selling food, jewellery and traditional medicine. Only three restaurants and two small hotels are included in the sample. Charoen Krung differs only in the proportion and variety of retail shops, including electronics stores, construction and beauty supply stores, and furniture shops in addition to the goods and services found on Yawarat.



Figure 5 Thai-Chinese multilingual sign neighbourhoods

In both neighbourhoods, Chinese continues to be an important language of commerce. Nevertheless, only one of the 51 signs in this sample is monolingual Chinese. All other signs containing Chinese are either bilingual (Chinese–Thai) or multilingual, perhaps reflecting among other things the Bangkok Chinese willingness to assimilate to Thai language and culture and the Thai willingness to incorporate them (Askew, 1994: 44).

Neighbourhoods in which Thai-English bilingual signs are dominant

Figure 6 lists those neighbourhoods in which the majority of commercial signs were found to be bi- or multilingual in Thai and Roman scripts, all but one of the latter were in English. These neighbourhoods include Saphaan Han, Siam Square, Sukhumvit Road and the Sky Train.

The oldest of these neighbourhoods is Saphaan Han. The name refers to a bridge dating back to the establishment of the city in the 18th century. The bridge has long since disappeared, but the neighbourhood is still referred to by its name. The roads within the neighbourhood were built during the same period as Yawarat and Charoen Krung, and like them, the commercial signs in this neighbourhood are equally divided between local businesses providing financial, health and travel services, for example, and goods such as clothing and house wares. Unlike the other two neighbourhoods, however, there is considerably less Chinese used here.

Siam Square, a shopping district which appears on maps of the 1936 Plan of Bangkok (Sternstein, 1986: 47), is located in the heart of what has since become one of the major commercial centres of Bangkok. It contains businesses providing services such as graphics shops, medical offices, beauty and barber shops, financial institutions, and private schools for dance and music, language, the trades, etc. More than any of the other neighbourhoods discussed so far, Siam Square has a large proportion of its commercial space devoted to entertainment, particularly restaurants. It is also the first neighbourhood discussed so far in which Roman script was found for a language other than English or a transliteration of Thai or Chinese. One bilingual Thai/Roman script sign was in Thai and French.

Sukhumvit Road, a thoroughfare connecting Bangkok and the country's Eastern seaboard, also appears on the city's far Eastern edge on the 1936 maps,



* T/E/U = Thai / English / Urdu (n=2); T/E.J = Thai / English / Japanese (n=4); E/J = English / Japanese (n=2) ** In this table, the term "Roman" is used, since one of the signs in Siam Square containing Roman script was in French.

Figure 6 Thai–English bilingual sign neighbourhoods

but does not appear on the 'List of Place Names to Accompany the Plan of Bangkok' (Sternstein, 1986). Nor do the 1936 maps show any adjacent side streets, suggesting that while an important highway linking Bangkok to the country's eastern seaboard, Sukhumvit Road had not yet developed as a commercial area. That development began when middle-class Thais moved from central Bangkok beginning in the 1950s, and was accelerated in the 1960s, when foreigners also found the neighbourhood (Askew, 1994: 168). The vast majority of signs along this strip advertise and announce retail enterprises selling home furnishings, food, clothing, health and beauty products, photo and auto supplies, and the like. Service enterprises such as banks, beauty salons and travel agencies can also be found.

Finally, the Sky Train is an elevated urban light rail system that spans 23 km from Chatuchak Park on the north end of the city to Sukhumvit 77 in the Southeast. Although the Sky Train is not a neighbourhood *per se*, like physical neighbourhoods, it caters to a subset of the Bangkok population, in this case its middle class, foreign resident and tourist populations. It has been a symbol of modernity since it's opening in December of 2000. The signs in this subset of the data are both from advertisements inside the cars themselves, and from advertise international products and services independent of individual local stores, but the stations also contain shops selling food, books, photo supplies

and the like. While many of these signs are bilingual and are aimed at both local and foreign riders, the use of language mixing suggests that the intended Thai audience is a very restricted one.

In each of these neighbourhoods, the majority of signs examined are multilingual in Thai and English. The oldest of these neighbourhoods (Saphaan Han) displays the least amount of English. Following the development of the city from Saphaan Han to Siam Square, to Sukhumvit Road, one sees increasing use of English. The greatest amount of English is found in that 'neighbourhood' that is the quintessence of modernity, the Sky Train.

Non-Thai sign dominant neighbourhoods

Four neighbourhoods in the study contain a majority of commercial signs in languages other than Thai (Figure 7). The neighbourhood of what is now Khao Saan Road was established in the 1880s (Askew, 1994: 164). In the 1970s and 1980s it became a haven for European, American and Australian back-packers. Over the past few years, it has been promoted by the Tourist Authority of Thailand as a low-cost international travel destination, with a variety of restaurants and shops catering not only to back-packers but also to lower budget international travellers from all over. On Khao Saan Road, one can find any number of languages displayed, but the majority in this sample are English monolingual signs (n = 24). The commercial signs identified on Khao Saan Road reflect the tourist character of the neighbourhood with 13 signs devoted to entertainment (three from bars, nine from restaurants and one from a massage parlour); 14 to service industries (two for health clinics, two for laundries, one for a barber, three for travel agencies, two for currency exchanges, one for taxi service and three for prepared foods), and 20 for other retail businesses (six for jewellery stores, six for tailors, one for a souvenir shop, one for a photo shop, one for a health and beauty shop, and five for other



Figure 7 Non-Thai-dominant neighbourhoods

dry goods stores). Only one sign in the sample advertised a product independent of a retail business on the street, that for a popular high energy drink.

Thong Law is a commercial street adjacent to a residential neighbourhood that is the home of many foreign residents in the city. Again, while a variety of other languages are represented in the commercial signage (notably Japanese), monolingual English signs predominate. Over half of the signs in this subset of the data are devoted to services such as private schools for music, dance, language lessons and the like (9), banking (5), health and beauty (4), interior design, laundry, travel and message (4). About a quarter are devoted to retail businesses selling such goods as jewellery, gifts, auto supplies, drugs, toys, clothes, books and kitchen supplies. The remainder are for restaurants and hotels.

Thaniya Road is a short but very busy commercial road catering to Japanese businessmen. The majority of signs on this street are either monolingual Japanese (n = 8) or bilingual Japanese–English (n = 22). A common alternative pattern is monolingual Japanese (n = 10) with a Thai translation or transliteration in very small print, usually in the upper right hand corner of the sign. The motivation for this is monetary, namely the tax incentives mentioned above. Over half of the signs in the Thaniya Road sample (32) are devoted to bars, six to restaurants, five to massage parlours and the remaining to services (travel agencies, health clinics) or retail stores (convenience, jewellery, drug and book stores, for example). Of the four monolingual Thai signs, one announces no parking, one is advertising for a hostess at a night club, and one is for the local health clinic.

Finally, Soi Nana is a set of narrow roads and alleys off Sukhumvit Road. It is home to many Arab businesses, including restaurants, tailors, travel agencies, convenience stores and other commercial enterprises catering to both Arab residents and tourists from the Middle East. A large percentage (38%) of signs from this sample are in either Arabic (n = 3), Arabic and English (n = 9) or Arabic, English and Thai (n = 13). One Thai–Roman script sign in the data set was in Thai and French. In contrast to Thaniya Road, where there were bilingual signs in Thai and Japanese, the data set from Soi Nana contain no multilingual signs, for example. Half of the signs from Soi Nana are for services such as health and beauty, finance, medical, dry cleaning, travel, telecommunication and massage. The remainder are evenly divided between retail business advertising jewellery, clothes, perfumes and food, and entertainment venues such as restaurants, bars and hotels.

While these four neighbourhoods share with each other the fact that the majority of signs in the sample were non-Thai dominant, each has a very distinct pattern of language use in its nongovernment commercial signage. Khao Saan Road displays a variety of languages, but English is by far the dominant language of commerce. Thong Law also displays heavy English language use, but with Japanese also found to a great extent. Thaniya Road is predominantly Japanese in its use of language in commercial signs, while Soi Nana has a preponderance of Arabic in addition to English.

Script	Lexicon Syntax	
Thai	Thai	Thai
English	English	English
Thai	English	English
Thai	Thai	English
Thai	English	Thai
*English	Thai	Thai
*English	Thai	English
*English	English	Thai

Table 1 Possible types of mixing - Thai and English

Language Contact, Mixing and Change

Theoretically, language mixed signs could involve any combination of Thai or English script, lexicon and syntax. In fact, however, not all possible combinations were found (Table 1). With the exception of proper names, there are no instances of Thai lexicon or syntax rendered in English or Roman orthography.

This nonreciprocal relationship is a function of access and inequity. English script signs are intended for both foreigners and a class of educated Thais. Educated Thais have varying degrees of proficiency in English, many quite high, and most Thais are literate in Thai. At the same time, relatively few foreigners speak Thai, much less read it. Therefore, there is no need to include Thai lexicon or syntax in English script in multilingual Thai/English signs. Translation is the preferred strategy. Because most Thais are literate in Thai and the vast majority of foreigners are not, Thai script is intended virtually solely for Thai audiences. Inclusion of English lexicon and/or syntax adds a cosmopolitan flair to the message that isn't available in a sign using only Thai script, lexicon and syntax. Thai script signs containing English lexicon and/or syntax are, then, directed to a general, rather than a select, Thai audience. A follow-up to this study looks at who among Thai readers understands these signs and how.

The influence of the use of English lexicon and syntax with Thai script can be seen at all levels of linguistic analysis. At the syntactic level, it has been shown that branching direction (modifier-head word order) is affected. At the lexical level, use of English lexicon with Thai script both reflects and reinforces lexical borrowing. The use of English also influences the use of Thai at both the phonological and the orthographic levels.

The sign in Picture 7 reflects the influence of English on Thai at all of these levels. It reads 'K. L. Fashion House' [ke el fæšân haws]. The influence of English at the lexical and syntactic levels is obvious. What is less obvious is the influence English has at both the orthographic and phonological levels. Thai orthography uses no spaces between words, nor does it use punctuation such



Picture 7

as periods for abbreviations (or for that matter, to delineate syntactic units). Here we see both spaces and periods. At the phonological level, in Thai there is no syllable final [1] sound. Words written with the Thai equivalent of '1', namely the consonant [1 \supset liŋ], would be pronounced as syllable final [n]. In this case, however, most Thais recognising [ϵ] as an English, or at lease foreign, sequence will pronounce it as [ϵ w]. Similarly, Thai has no voiceless alveopalatal fricative [\check{s}], and the symbol used to transliterate that sound in the word 'fashion' would be pronounced as a voiceless palatal affricate. So Thais traditionally pronounce that word as [fæčan]. Increasingly, however, Thais with some knowledge of English will pronounce words spelt with that orthographic symbol as [\check{s}], even words of Thai origin, such as the word for 'elephant'. Similarly, Thai has no final [s], and all words spelled with the Thai equivalent of [s] in syllable final position would be pronounced with a final [t]. In words recognised as having an English origin, however, final [t] is giving way to either final glottal stop or to [s].

Implications

This study has examined the linguistic landscapes of 15 neighbourhoods in the Greater Bangkok area. In doing so, it highlights the importance and influence of English as a global language, a point that has been made in research on shop signs in other areas of the world (MacGregor, 2003; McArthur, 2000; Schlick, 2003). At the same time, this study expands on that line of research in several ways. First an examination of the signs from government sources versus those from the private sector points out the discrepancy between official government language policy and the language use patterns practised within the city's various communities and promoted by the commercial sector. Second, a comparison of various neighbourhoods within a given urban area reveals the extent of linguistic diversity in a large metropolitan area like Bangkok. Third, a comparison of language use across neighbourhoods offers evidence of a shift over time from Chinese to English as the major language of wider communication in the city.

The linguistic diversity in this study reflects the nature of each neighbourhood, its inhabitants and those it is intended to serve. It provides a picture of the social structure, the power relations, and status of various languages within individual neighbourhoods and the larger community. From a linguistic perspective, the paper documents the influence of English on the development of Thai, not just in the form of lexical borrowing, but also in the areas of orthography, pronunciation and syntax. At the same time, the study provides evidence of a nascent Thai variety of English.

At the theoretical level, this study challenges time-honoured linguistic notions. For example, it calls into question the boundaries of a speech community (commonly defined as a regionally or socially identified group who share a common language or variety) and even what constitutes a language itself. In multilingual neighbourhoods where not everyone shares a common language, does the use of multilingual signs function as a cohesive force among its residents? Do the tokens of mixing in the signs examined constitute a language variety? Where does one language end and the other begin? From a more applied perspective, the data presented here raise questions about the effects of the pervasiveness of English in the linguistic landscape of Bangkok on the language proficiency, both Thai and English, of its youngest citizens. This is an empirical question that calls for further research.

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Notes

- 1. Because the neighbourhoods studied were not randomly selected and represent only a small portion of Greater Bangkok, the data are meant to be not an indication of the linguistic composition of the city as a whole, but simply an illustration of the range of linguistic diversity that can be found in a city of this size.
- 2. In a few cases, involving for example a shopping complex (Siam Square), a small tourist island (Ko Kred), or a public transportation system (Sky Train), signs in the immediate environment were photographed and do not represent a single street.
- 3. Together, the data from all of the neighborhoods gives only a rough descriptive picture, rather than any statistically significant relative dominance of any of the languages, as the number of signs analysed in each neighbourhood varies and is in part a reflection of the commercial nature of each.
- 4. Technically English is written in Roman script. The vast majority of signs in this study written in Roman script, however, contain English lexicon, syntax, spelling

and/or orthographic conventions. Therefore the term 'Roman script' will be used only when discussing the entire data set and in those rare instances where Roman script is used with lexicon, syntax, spelling and/or orthographic conventions other than English (i.e. French, Japanese). In all other cases, the term 'English script' will be used.

5. In all dialects of English that I am familiar with, the adjective 'fishy' carries a pejorative connotation.

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Multilingualism in Tokyo: A Look into the Linguistic Landscape

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This paper is about multilingual signs in Tokyo. It is based on empirical research conducted in 2003. Special attention is given to the distinction between official and nonofficial multilingual signs. It will be demonstrated that the two types of signs exhibit some essentially different characteristics with regard to the languages contained and their arrangement on a sign. These differences will be interpreted using the notions of power and solidarity. While official signs are designed mainly to express and reinforce existing power relations, nonofficial signs make use of foreign languages in order to communicate solidarity with things non-Japanese. Both types of signs have their share in changing Tokyo's linguistic landscape.

Keywords: Japan, linguistic landscape, multilingualism

Introduction

Tokyo is not the first place that comes to mind when one thinks about multilingual cities. Indeed Japan as a whole has for a long time been known as one of the prototypes of a monolingual society. Though this view has of late become increasingly challenged by a variety of publications focusing on Japan's linguistic heterogeneity (e.g. Coulmas & Watanabe, 2002; Goebel Noguchi & Fotos, 2001; Maher & Yashiro, 1995), demographic figures still point at a considerably homogeneous population make-up. Even in the Tokyo Metropolitan Area, where the number of foreign residents is comparably high, there are no more than 2.8% registered foreign residents. The two largest linguistic minority groups, which each make up around one third of Tokyo's foreign population, come from Chinese-speaking countries or from the Korean peninsula.

Though compared to most other global cities the overall rate of registered foreign population in Tokyo is low, a look at the linguistic landscape reveals an impressive diversity of languages other than Japanese. This paper is about multilingual signs in the streets of Tokyo. It is based on empirical research conducted in spring 2003. I will start with a brief overview of previous empirical research into language on signs. Special attention will be given to the distinction between official and nonofficial signs and the different impacts of the two types of signs on the linguistic landscape. Discussing the methodology and the basic results of my own research, I will then take a closer look at official and nonofficial signs in Tokyo. It will be demonstrated that the two types of signs exhibit some essentially different characteristics. These can best be interpreted in terms of expressing power and solidarity through language choice on signs.

Previous Research into the Linguistic Landscape

Interest in language on signs has been particularly pronounced in regions of linguistic conflict such as Brussels (Tulp, 1978; Wenzel, 1996) and Montreal (Conseil de la langue française, 2000; Monnier, 1989; see Landry & Bourhis (1997) for more references). An important contribution to the topic has been made by Spolsky and Cooper (1991) in their book about the languages of Jerusalem. Also of special interest is Calvet's (1990; 1994) comparative approach to language on signs in Paris and Dakar.

Since the publication of Landry and Bourhis' seminal paper in 1997, research into the linguistic landscape has been enjoying growing interest in sociolinguistics. Itagi and Singh (2002) have edited a publication about linguistic landscaping in India (also Ladousa, 2002); Scollon and Scollon (2003) have developed an overall approach to language on signs, referred to as 'geosemiotics'; Ben-Rafael *et al.* (2004; present issue) have made a large-scale study of language on signs in Israeli cities and towns; Reh (2004) has scrutinised the linguistic landscape of Lira Municipality, Uganda, with special regard to the readership of multilingual signs; Collins and Slembrouck (2004) discuss variable ways of perceiving and construing multilingual shop signs in immigrant neighbourhoods in Ghent, Belgium; Born (2004) analyses the presence of written Italian and German in two South Brazilian cities; and smaller contributions about research into English on commercial signs at various places across Europe have regularly been published in *English Today* (e.g. Griffin, 2004; McArthur, 2000; Schlick, 2002).

An important variable in previous research into the linguistic landscape is the distinction between official and nonofficial signs. Calvet (1990, 1994) has referred to these two types of signs as 'in vitro' and 'in vivo' components of the linguistic landscape. The two terms make an overall distinction

between what is written by the authority (the names of roads, for instance, or traffic rules signs) and what is written by the citizens (the names of shops, graffiti, commercials, etc.). There are two different ways of *marking the territory*, two inscriptions into the urban space. (Calvet, 1990: 75, emphasis original, my translation)

Applying this distinction to his own research in Dakar, Calvet observes that judging only from in vivo aspects, the city gives a considerably multilingual impression. Though not all languages spoken are represented, French, Arabic and Wolof regularly appear on nonofficial signs. The in vitro image of the city gives a different picture. All official signs contain only the official language French, rejecting any concession to the other languages of Dakar.

A similar disagreement between official language policies and linguistic realities has been observed by Rosenbaum *et al.* (1977: 189) in their research into signs of shops, companies, and public and private offices in Jerusalem. The results of their survey point at a gap

between the official language policy, which was set at the independence of the State and which stresses the dominance of the national language, and the much higher tolerance towards foreign languages in general and English in particular that is expected by the general public today. Landry and Bourhis (1997: 27) summarise the interaction of official, government-related signs and nonofficial, private signs within the linguistic landscape as follows:

In some cases, the language profile of private signs and government signs may be quite similar and thus contribute to a consistent and coherent linguistic landscape. There are instances, however, in which the language of private signs is quite discordant with the language profile of government signs. More often than not, there is greater language diversity in private than in government signs.

Official and nonofficial signs hence make different contributions to the linguistic landscape of a given place. Tokyo is no exception in this respect. Before discussing the results from my own research, it should be mentioned that there exists already a considerable amount of previous research into language on signs in the Japanese capital, testifying to the high degree of public interest given to the issue in general. An early survey of shop signs in the Shinjuku area was published by Masai in 1972. His methodology was adopted by Lim (1996), who made a direct comparison of her results with Masai's findings. Other surveys into language on shop signs have been conducted by Oura (1997), Someya (2002) and MacGregor (2003). Language use on public toilet signs and on information boards in major Tokyo department stores has been examined in a series of articles about Tokyo language by the Japanese newspaper Yomiuri Shimbun (e.g. 1987a, 1987b, 1987c). More recently Kim (2004) has focused on Korean signs in Tokyo's Shin-Ōkubo area and the societal changes heralded by their growing appearance. Inoue (2000, 2001) has taken up the issue of multilingual signs in Japan and integrated it into his theoretical framework of language and economy.

Despite the variety of empirical research from Tokyo, the distinction between official and nonofficial signs has not been given much consideration so far. Most of the surveys have concentrated on nonofficial signs, without paying attention to the use of languages other than Japanese on signs provided by official agents. This paper sheds some light on the relationship between the two types of multilingual signs in the Japanese capital. Its chief intention is to establish a link between the situation in Tokyo and the growing corpus of linguistic landscape research around the world.

The Tokyo Survey

The survey of multilingual signs in Tokyo was conducted between February and May 2003.¹ In order to guarantee a sound way of data collection, three points were considered important: (1) the geographic limits of the survey areas; (2) a clear determination of the survey items; and (3) how to distinguish between monolingual and multilingual signs. As geographical orientation marker for an arbitrary determination of survey areas I selected 28 stations of the Yamanote Line, a circular line around the centre of Tokyo. The environments of the Yamanote Line stations provide a multilayered picture of the centre, including business and shopping districts, and less busy sites such as parks and residential areas. An English map of the Yamanote loop can be viewed at http://tekken.web.infoseek.co.jp/tokyomail/jr/yamanote.html.

Each survey area was part of a street between two consecutive traffic lights, within which all signs were counted. A sign was considered to be any piece of written text within a spatially definable frame. The underlying definition is rather broad, including anything from handwritten stickers to huge commercial billboards. Also such items as 'push' and 'pull' stickers at entrance doors, lettered foot mats or botanic explanation plates on trees were considered to be signs. Each sign was counted as one item, irrespective of its size. All items counted were categorised as either mono- or multilingual. A multilingual sign was determined to be a sign (as defined above) containing at least one language in addition to, or instead of, Japanese. A sign could thus contain just one language and still be categorised as multilingual provided that language was not Japanese. All signs categorised as multilingual were recorded by digital camera.

The main problem was how to decide whether the text on a sign was recognisable as a language other than Japanese or not. It is a well known fact that the use of foreign vocabulary, especially English, has high prestige value in Japan. The result is a considerable degree of language contact (Haarmann, 1989; Loveday, 1996; but see also Stanlaw, 2004), known to be particularly prominent in the commercial sector (Saint-Jacques, 1987; Takashi, 1992). Consequently, the streets of Tokyo are overflowing with commercial signs and billboards containing English words and phrases. It proved impossible here to categorise the data on the basis of linguistic aspects alone. Instead, some methodological rules were formulated to facilitate a unified classification. It was determined that anything written in Kanji (the Japanese adaptations of Chinese characters), Hiragana or Katakana (the two Japanese syllabaries) was counted as Japanese, even if terms of foreign origin were represented. Use of the Latin alphabet was not necessarily counted as foreign language use either. International measure units, abbreviations, and single English-looking terms integrated into Japanese text, for instance, or mere alphabet transliterations of Japanese terms were not considered sufficient to count a sign as multilingual. It goes without saying that these are practical rather than linguistic considerations.

Within the 28 survey areas a total of 11,834 signs were counted, of which 2321 were classified as multilingual. This amounts to a ratio of 19.6% multilingual signs in total. A first basic result thus is that even if relatively strict conditions apply to determine a sign as multilingual, around every fifth sign one encounters in the centre of Tokyo is likely to contain one or more languages other than Japanese. The fact that the number of multilingual signs would have been much higher if less strict rules had been applied is indicative of how much English and the Latin alphabet have become part of Japanese everyday life.

As a breakdown of the languages contained reveals, in most cases the foreign language is English. It was found on 97.6% of the signs of the sample, followed by Japanese on 72.1%. Apart from Chinese (2.7%) and Korean (1.7%), the signs of the sample contain 11 languages below 1%. The results are summarised in Table 1.

Language	Counted signs	(%)	Language	Counted signs	(%)
English	2266	97.6	Thai	5	0.2
Japanese	1674	72.1	Italian	4	0.2
Chinese	62	2.7	Persian	2	0.1
Korean	40	1.7	Tagalog	2	0.1
French	20	0.9	German	2	0.1
Portuguese	12	0.5	Arabic	1	0.0
Spanish	8	0.3	Russian	1	0.0
Latin	6	0.3			
			Total responses	4105	176.9
			Counted signs	2321	100

Table 1 Languages contained on the signs of the sample (n = 2321)

Official versus Nonofficial Signs

A basic qualitative distinction in linguistic landscaping is to be made between official and nonofficial signs. In the Tokyo survey all signs set up by governmental organisations have been considered official signs. Potential originators of official signs are the ward offices, the Tokyo Metropolitan Government and agencies of the national government such as the Ministry of Land, Infrastructure and Transport. Signs related to public transport facilities have been counted as official signs even if operated by private companies. All other signs have been categorised as nonofficial signs. The quantitative outcomes are given in Table 2.

Almost three quarters of the signs of the sample are nonofficial signs. This demonstrates that the multilingual landscape in Tokyo is determined more by the citizens than by the authorities. On the other hand, the present categorisation proves that with the residuary 25% of all multilingual signs, official agents have their share in the city's multilingual outward appearance, too. This is a difference to the situation in Dakar, for instance, where Calvet (1990, 1994) observed that despite the multilingual make-up of the population, official signs are available only in the official language. In Tokyo we find a reversed situation. Though the population of the city is by and large

Type of sign	Counted signs	(%)
Official	590	25.4
Nonofficial	1731	74.6
Sum	2321	100

 Table 2 Official versus nonofficial multilingual signs

monolingual, official language policies have been designed to include languages other than Japanese.

Which languages may or may not appear on official signs is clearly determined. This becomes obvious when taking a look at their distribution on the two types of signs which is given in Table 3.

Languages eligible to be used on official signs are Japanese, English, Chinese and Korean. In addition, Latin was contained on three official plates giving botanic nomenclature. The ten other languages appear only on nonofficial signs. Thus it is predictable that if a language other than Japanese, English, Chinese, Korean or Latin is contained on a sign, it is unlikely to be an official sign. The general tendency that language diversity is greater on nonofficial signs than on official signs is borne out in the case of Tokyo as well.

Japanese is found more frequently on official than on nonofficial signs. While only 64% of all nonofficial multilingual signs contain Japanese, official multilingual signs without Japanese are a rare sight. Hence there are almost no official signs – both monolingual and multilingual – not containing the national language. Even more frequent than Japanese, however, English is found on official multilingual signs. Of all 590 official signs of the sample only the three above mentioned Latin tree plates are without English text. Though it may come as a surprise that English appears more frequently than Japanese on

Language	Official (%)	Nonofficial (%)	Language	Official (%)	Nonofficial (%)
English	587 99.5	1679 97.0	Thai		5 0.3
Japanese	574 97.3	1100 63.5	Italian		4 0.2
Chinese	45 7.6	17 1.0	Persian		2 0.1
Korean	5 0.8	35 2.0	Tagalog		2 0.1
French		20 1.2	German		2 0.1
Portuguese		12 0.7	Arabic		1 0.1
Spanish		8 0.5	Russian		1 0.1
Latin	3	3			
	0.5	0.2			
			Counted	590	1,731
			signs	100	100

Table 3 Distribution of languages, official versus nonofficial multilingual signs

both official and nonofficial multilingual signs, it should not be forgotten that the overwhelming majority of the signs found in the survey areas are monolingual Japanese signs, which have not been included in the above analysis.

Interesting differences can be observed in the distribution of Chinese and Korean on the two types of multilingual signs. While the majority of Chinese signs are provided by official organs, almost all signs containing Korean are nonofficial signs. If Tokyo's Korean population did not put up Korean signs by themselves, their language would be virtually absent from the linguistic landscape. Contained on only five items, Korean on official signs is represented almost as weakly as Latin nomenclature on multilingual tree plates.

Mutual Translation

Apart from the languages used, there are some other tendencies distinguishing official from nonofficial signs. One point is the mutual relationship of the languages used as regards the question whether they constitute a translation of each other or not. Reh (2004) has distinguished four types of multilingual information arrangement: (1) duplicating; (2) fragmentary; (3) overlapping; and (4) complementary. Types (1), (2) and (3) refer to those signs where the languages contained either completely (1) or in part (2 and 3) constitute mutual translations of each other. An information arrangement of type (4), by contrast, gives two or more languages conveying completely different kinds of contents. The basic difference between types (1), (2) and (3) on one hand, and type (4) on the other is that the latter type requires a multilingual reader if it is to be fully understood, whereas the former three types do not.

The two examples given in Figures 1 and 2 demonstrate this. The explanation board about garbage collection found in the survey area in Nishinippori (Figure 1) is a sign of type (2). It contains four languages, in order of appearance: Japanese, English, Chinese and Korean. Most of the information is available in all four languages, though some contents such as the days of collection, 'TUE' and 'THU' (on the right), or the originator of the sign, Arakawa Waste Collection Office (in the bottom line), are given in Japanese and English or Japanese only, respectively. The foreign language are fragmentary translations of the Japanese text. This does not apply to the second example, a category (4) sign at a photo machine in the area in Yoyogi (Figure 2). As the two languages Japanese and English here fulfil complementary functions, none of the information provided in one language is contained in the respective other. The contents given in Japanese are as follows (top-down): 'Passport photographs'; 'Colour/Monochrome'; 'Natural portrayal, high quality'; and 'Ruler unnecessary, perfect size'. Information that the photos will be ready in one minute is available only in English.

There are thus two basic types of multilingual signs, those containing mutual translations – partially or in total – and those that do not. For the Tokyo survey the second type has been defined to include also those signs of the sample with only one language (other than Japanese). This yields the



Figure 1 Garbage collection point (Nishinippori area)



Figure 2 Photo machine (Yoyogi area)

following results: of all 2310 signs that could be classified, 1356 (58.7%) provide translations, while 954 (41.3%) do not. The interesting point about this classification is the differences between official and nonofficial signs. As can be seen in Table 4, the distribution of the two types of information arrangement is relatively equal for nonofficial signs. Producers of official signs, on the other hand, clearly prefer giving the two or more languages on a multilingual sign in mutual translation. Only 16 of all 590 official signs do not follow this pattern. This suggests that official multilingual signs address different groups of monolingual readers who do not know each other's languages. These signs have been produced in a multilingual format in order to be of use to people without proficiency in Japanese, foreign businessmen and tourists, but also foreign residents. This is much less the case for nonofficial signs, the majority

Information arrangement	Official (%)	Nonofficial (%)
Containing mutual translation	574	782
	97.3	45.5
Not containing mutual translation	16	938
	2.7	54.5
Sum	590	1720
	100	100

Table 4 Information arrangement, official versus nonofficial multilingual signs

of which presuppose a multilingual, presumably Japanese-English readership.

Direction of Translation

Another difference between official and nonofficial signs is the prominence of the languages contained. This question of 'code preference', as it is referred to by Scollon and Scollon (2003: 116–128), is an important and at times highly contested issue in designing multilingual signs. The fact that it is impossible to assign the same space to more than one language inevitably produces a visual hierarchy. Moreover, it suggests a direction of translation in making the language given in prominent position appear as the original version of the message to be conveyed, while the other languages contained are assigned the status of mere translations.

In the analysis of the Tokyo survey code preference has been determined through order and size of the texts given in the respective languages. In cases where the two variables express different preferences, size was considered to overrule order. Only those signs were analysed on which the two or more languages contained constitute translations of each other. In total, code preference could be determined for 1209 signs, on 950 (78.6%) of which Japanese is the prominent language. The residuary 259 items (21.4%) display a language other than Japanese in prominent position. An example of each of the two types of signs is given in Figures 3 and 4.

In the first example, a sign outside a subway station in the survey area in Harajuku (Figure 3), the order of the languages indicates that Japanese is the original language and the English version a translation thereof. In contrast, the sign of the French restaurant in the Nishinippori area (Figure 4) gives the French version before the Japanese one. The visual implication is that French is the original language of the sign, whereas Japanese fulfils merely supplementary functions.

Again it is interesting to take a closer look at possible correlations between the two ways of code preference and the official or nonofficial background of the signs of the sample. The data are given in Table 5. The differences between the two types of signs become obvious at first sight. While almost 40% of all nonofficial signs give a language other than Japanese as the prominent



Figure 3 Subway station (Harajuku area)



Figure 4 French restaurant (Nishinippori area)

language, there are only six out of 572 official signs on which Japanese is not the main language. Again the two types of signs are clearly distinguishable from each other. In the next section I will offer a possible interpretation for the differences between official and nonofficial signs observed so far.

Power and Solidarity

In their framework about language use on signs in Jerusalem, Spolsky and Cooper (1991: 74–94) formulate three rules to explain what factors make some languages but not others appear on signs in the streets of the city. The first two rules refer to the linguistic proficiency of the sign writer and the sign reader:

Code preference	Official (%)	Nonofficial (%)
Japanese	566	384
	99.0	60.3
Language other than Japanese	6	253
	1.0	39.7
Sum	572	637
	100	100

Table 5 Code preference, official versus nonofficial multilingual signs

'Write signs in a language you know' and 'Prefer to write signs in the language or languages that intended readers are assumed to read'. These two conditions may appear self-evident, but there is a third rule which in some cases may override either of the two. It is called 'symbolic value condition' and states: 'Prefer to write signs in your own language or in a language with which you wish to be identified'. The primary motivation of this rule is political or sociocultural. According to Spolsky and Cooper (1991: 84), it derives its value

from a desire to assert power (by controlling the languages of the sign, I declare power over the space designated) or to claim solidarity or identity (my statement of socio-cultural membership is in the language I have chosen).

Ever since Brown and Gilman's (1960) analysis of personal pronouns, 'power' and 'solidarity' belong to the set of recognised sociolinguistic variables. I argue that they can be fruitfully employed in the analysis of language distribution on signs in Tokyo. In brief, I will hold that language choice on official signs is determined by power relations, whereas nonofficial signs tend to make use of foreign languages in order to express solidarity.

A first point is the variety of languages. Whereas the nonofficial signs of the sample contain no less than 15 languages in total, the appearance of languages other than Japanese on official signs is more restricted. English, Chinese and Korean are the only three living languages considered eligible for public display. Language choice is much more subject to regulation on official signs than it is on nonofficial signs. This is an expression of power by the sign writer, who is in charge of determining what languages may or may not be used on official signs. As to the use of Japanese itself, care is taken that it is present on the overall majority of multilingual official signs (97%). In contrast, over one third of nonofficial multilingual signs do not contain Japanese. They can obviously do without asserting the power of the national language over the designated space.

Another noteworthy difference between official and nonofficial signs is availability of translation. Official policy for multilingual signage is to display more than one language if and only if there is a (perceived) need for translation. This is much less the case for nonofficial signs, the majority of which use foreign languages to convey complementary messages. These tendencies, too, can be captured in terms of power and solidarity. The information arrangement on official signs expresses a coexistence of monolingual individuals with differing linguistic backgrounds. Care is taken that the languages are visually kept apart and that Japanese appears as the main language, a point to which I will return shortly. The hierarchy of languages is at the same time an expression of power relations. Most nonofficial signs, in contrast, do not express hierarchies of distinct languages but allow for intermingling of different codes for different purposes.

The majority of these signs are Japanese–English or English-only signs outside ordinary Japanese-owned shops and businesses: hairdressers, drugstores, pachinko parlours, convenience stores, restaurants and pubs, real estate agents, banks and insurance companies, etc. Use of English on these signs can be interpreted as a symbolic expression by Japanese sign writers to join the English language community and to associate with the values that are typically attached to it (American/Western culture, internationalisation, etc.). That a sign may not be completely intelligible to parts of the Japanese population is consciously taken into account.

Use of Korean as the most frequent foreign language next after English on the nonofficial signs of the sample communicates a different kind of solidarity. Most of the signs were found in the survey area in Shin-Ōkubo, a district well known for its long-established Korean community. Korean signs here mostly belong to businesses run by people of Korean backgrounds. Unlike in the case of English shop signs, the relationship between sign writer and language on a sign is real rather than merely desired. The expression of solidarity with Korean is not symbolic but indexes a sizeable group of speakers of that language (see Scollon & Scollon, 2003: 119; 133f).

The power and solidarity relationship is even more clearly reflected in the order and the size of the languages. Of all analysed official signs, 99% display the Japanese version in a more prominent position than the other languages contained. This leaves little doubt about prevailing power relations in the city. Japanese is the language in which all places are originally named, and all rules originally written. Other languages appear as supplementary translations, and care is taken that this relationship is unmistakably expressed.

The situation of nonofficial signs is much more balanced. Almost 40% of all analysed items exhibit a reversed relationship between Japanese and the other language or languages. This may in part be due to the foreign background of the sign writer. The sheer number of these types of signs however makes it unlikely that they all would have been produced by foreign sign writers. The idiosyncratic use of the determiner in 'La Cuisine Française' in the discussed example in Figure 4, for instance, suggests that the sign has been written by a Japanese, because 'Cuisine Française' (without a determiner) would be standard French. The preference of a foreign language over Japanese can here be interpreted as an expression of desired solidarity by a Japanese sign writer with things non-Japanese, French cuisine or other. The reversed order of the two languages would not have had the same effect.

Conclusions

In this paper I have made a distinction between official and nonofficial multilingual signs. I have identified major differences between the two types of signs in Tokyo and interpreted these differences in terms of power and solidarity. The results of my survey suggest that there are two different types of multilingualism to be observed. On one hand, official agents have started providing for signs in English and, to a certain degree, Chinese and Korean. These signs are unequivocal as to the role of Japanese as the language of power, though it should be mentioned that the mere existence of official signs containing languages other than Japanese constitutes a noteworthy concession to linguistic minorities in Tokyo.

The use of foreign languages on nonofficial signs is mainly motivated by a desire to create an overseas atmosphere, even if there is no direct link to the world outside Japan. Rather than power, solidarity is the underlying motivation here. Juxtaposing these two types of multilingualism is not to say that they were always as neatly distinguishable as this paper would have it. Also it should be re-emphasised that around 80% of the signs in the centre of Tokyo are monolingual Japanese signs. Nevertheless, the two types of multilingual signs are recognisable and measurable in empirical terms. Though they are different in nature, they work in the same direction: towards an increase in linguistic diversity and a challenge to the existing monolingual language regime.

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Note

1. This paper gives a basic outline of one part of the survey only. For a full account confer Backhaus (2005). I would like to thank Florian Coulmas (German Institute for Japanese Studies, Tokyo), Tessa Carroll (University of Stirling, Scotland) and Durk Gorter (University of Amsterdam) for their comments on an earlier draft of this paper.

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Linguistic Landscape and Minority Languages

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This paper focuses on the linguistic landscape of two streets in two multilingual cities in Friesland (Netherlands) and the Basque Country (Spain) where a minority language is spoken, Basque or Frisian. The paper analyses the use of the minority language (Basque or Frisian), the state language (Spanish or Dutch) and English as an international language on language signs. It compares the use of these languages as related to the differences in language policy regarding the minority language in these two settings and to the spread of English in Europe. The data include over 975 pictures of language signs that were analysed so as to determine the number of languages used, the languages on the signs and the characteristics of bilingual and multilingual signs. The findings indicate that the linguistic landscape is related to the official language policy regarding minority languages and that there are important differences between the two settings.

Keywords: minority languages, linguistic landscape, English, Frisian, Basque

Introduction: The Study of the Linguistic Landscape

Multilingualism is a common phenomenon, which can be studied from different perspectives including the use of languages in the sociolinguistic context. One of the possibilities is to analyse languages in context by focusing on the written information that is available on language signs in a specific area. This perspective is known as the study of the linguistic landscape, which has been defined as follows:

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. (Landry & Bourhis, 1997: 25)

This paper focuses on the relationship between linguistic landscape and the sociolinguistic context. This relationship is bidirectional. On the one hand, the linguistic landscape reflects the relative power and status of the different languages in a specific sociolinguistic context. In this sense it is the product of a specific situation and it can be considered as an additional source of information about the sociolinguistic context along with censuses, surveys or interviews. The majority language of a language community is more likely to

be used more often in place names or commercial signs while the minority language or languages will not be as common (see for example Ramamoorthy, 2002; Xiao, 1998). On the other hand, the linguistic landscape contributes to the construction of the sociolinguistic context because people process the visual information that comes to them, and the language in which signs are written can certainly influence their perception of the status of the different languages and even affect their own linguistic behaviour. The linguistic landscape or parts of the linguistic landscape can have an influence on language use.

The study of the linguistic landscape is particularly interesting in bilingual and multilingual contexts. The linguistic landscape can provide information about the sociolinguistic context and the use of the different languages in language signs can be compared to the official policy of the region and to the use of the language as reported in surveys. The study of the linguistic landscape can also be interesting because it can provide information on the differences between the official language policy that can be reflected in topdown signs such as street names or names of official buildings and the impact of that policy on individuals as reflected in bottom-up signs such as shop names or street posters.

This paper focuses on a comparison of the use of different languages in the linguistic landscape of one central shopping street in Donostia–San Sebastian in the Basque Country and one similar street in Ljouwert–Leeuwarden in Friesland, The Netherlands.

The study of the linguistic landscape of a single street was also reported by Rosenbaum *et al.* (1977). This study analysed sign counts along with transactions, planted encounters and interviews in Keren Kayemet Street in Jerusalem. The study of language signs is limited to analysing the use of the Roman and the Hebrew script on the signs. The results of the analysis indicate that the Roman script is more common on bottom-up than top-down signs and show the differences between official language policy supporting the use of Hebrew-only signs and the most common use of other languages (mainly English) in commercial signs.

The sociolinguistic context in which our study was carried out is also based on one street in each city but presents important differences when compared to the study reported by Rosenbaum *et al.* (1977): (1) the two languages (Basque/ Spanish or Frisian/Dutch) are official languages; (2) there are no specific districts in the two cities (Donostia, Ljouwert) which can be considered Basque/Frisian or Spanish/Dutch in the sense of being inhabited predominantly by Basque/Frisian or Spanish/Dutch speakers.

Background Information on Both Language Groups

Friesland

Friesland is one of the 12 provinces of the Netherlands. The province is located in the Northwest. Its territory has a surface of 3360 km² (a bit more than Luxemburg). Friesland has a population of 643,000 (2004), which is equal to 190 inhabitants per km² (cf. the Netherlands: 16.0 million inhabitants; 470 per km²). The capital is *Leeuwarden* (Fr. *Ljouwert*), which has some 91,000

inhabitants. A dense pattern of over 300 villages with only a few larger towns is typical for Friesland; the tiniest villages may have less than 25 inhabitants.

Approximately 94% of the population can understand Frisian, 74% can speak Frisian, 65% can read it and 17% can write the language (Gorter & Jonkman, 1995). Over the last 25 years or so, a slow decline has been observed in speaking proficiency and some increase in writing abilities. There is, however, an increased language shift among the younger generations towards Dutch as a first language (Gorter, 2005).

The use of Frisian shows an uneven pattern over differing social domains. In the domains of the family, work and the village community Frisian demonstrates a relatively strong position, where still a small majority of the population habitually uses Frisian. In the more formal domains of education, media, public administration and law, Dutch dominates (Gorter *et al.*, 2001).

The Frisian language has been officially recognised as the second language of the Netherlands. That formal recognition has entailed moderate promotion of the language by the authorities of the state and the province. Certain provisions for the use of Frisian have been made in a process of legal codification. There is general political agreement that the government has a duty in protecting and promoting Frisian.

However, the policy plans have a noncommittal character and they have hardly been implemented (Gorter, 2001). The power of the taken-forgrantedness of Dutch appears stronger than the formal operation of the language policy intentions.

Basque Country

The Basque Country extends over an area of approximately 20,700 km² in the North of Spain and the South of France at the Atlantic border. It covers the Basque Autonomous Community, the region of Navarre and Iparralde. The total Basque population is approximately three million, 91% being Spanish citizens. The percentage of bilinguals (Basque–Spanish or Basque–French) for the whole of the Basque Country is 22% and 14.5% are passive bilingual (only comprehension skills in Basque and limited production). With a few exceptions, the rest of the population is monolingual Spanish or French. According to a recent survey (Euskararen Jarraipena, 2003), the number of bilinguals in the Basque Autonomous Community, where the city of Donostia–San Sebastian is located, is increasing and currently comprises 29% of the population. The number of bilinguals (Basque–Spanish) in the city of Donostia–San Sebastian is higher, 33% of the population. San Sebastian has approximately 180,000 inhabitants.

Basque and Spanish have been official languages in the Basque Autonomous Community since 1979. The Basque Government has actively encouraged the use of Basque as the language of instruction and at present 83% of kindergarten/primary schoolchildren and 65% of secondary schoolchildren have this language as a language of instruction (see also Cenoz, 2001, 2005). Apart from promoting the use of Basque in education, the Basque Government has created specific institutions to teach and promote the use of Basque in other sectors such as government services, the media or private companies. This policy has had some effect in restoring the status of Basque and reversing language shift, but in spite of the support given by the Basque Government, Basque is still a language at risk and according to the 2001 survey, only 11.9% of the population use it more than Spanish and 6.8% of the population consider that they use Basque as much as Spanish (Euskararen Jarraipena III, 2003).

The Use of English in Friesland and the Basque Country

The increasing spread of English in Europe can also be seen both in Friesland and in the Basque Country. In both regions English is becoming part of the linguistic landscape. English is taught at schools in Friesland from the end of primary school (10 year olds), whereas in the Basque Country, English is taught in most schools from the age of four. In Friesland the self-assessed ability in English is rather high as over 70% rates its knowledge of English as 'good' or 'very good' (Eurobarometer, 2001). The knowledge and use of English in the Basque Country is more limited as compared to other regions in Central and Northern Europe (see also Cenoz & Jessner, 2000).

The use of English in commercial signs does not seem to be intended to transmit factual information but is used for its connotational value. As Piller (2001, 2003) points out, the audience can recognise that the message is in English and this activates values such as international orientation, future orientation, success, sophistication or fun orientation.

Research Questions

This paper analyses the differences between Friesland and the Basque Country, mainly in an urban context. The study of the linguistic landscape is very interesting in the context of minority languages such as are in use in the Basque Country and in Friesland in order to see the relative use of the different languages (Basque, Spanish, English in the first case and Frisian, Dutch and English in the second) and the differences between official top-down and bottom-up signs and the use of English.

The specific research questions of this study are the following:

- (1) Which are the languages displayed in the linguistic landscape of Donostia–San Sebastian and Ljouwert–Leeuwarden respectively, and their relative weight?
- (2) What are bilingual and multilingual signs like?

Methodology

The corpus of this study includes a complete inventory of the linguistic landscape of just one street in the Basque Country and one street in Friesland, based on the example of the study of the use of English in Keren Kayemet Street in Jerusalem, Israel (Rosenbaum *et al.*, 1977). The streets selected for this study were 'Bulevar–Boulevard', one of the central shopping streets of Donostia–San Sebastian and 'Nijstêd–Nieuwestad' in the centre of

Ljouwert–Leeuwarden. Both of these streets have a length of approximately 600 m.

In contrast to the study by Rosenbaum *et al*. (1977), our approach involved taking digital pictures of all texts we saw on the street. We took a total of 975 pictures. In many cases we took more than one picture of the same text or sign or combination of signs. In the end we distinguished 207 different units, 104 in Donostia and 103 in Ljouwert.

The codification of the different pictures presents some difficulties and some decisions had to be taken. One of the most important decisions is to establish the unit of analysis. After excluding other possibilities it was decided that in the case of shops and other businesses each establishment but not each sign was the unit of analysis, that is, it was considered 'one single sign' for the analysis. So, when a bank or a shop had its name on the front but also a number of advertising posters on the windows it was considered one sign (or one unit). This decision is based on the fact that all the signs in one establishment, even if they are in different languages, have been the result of the languages used by the same company give an overall impression because each text belongs to a larger whole instead of being clearly separate. Therefore, we went to great lengths to even include in the pictures also very small texts such as those on the side of a sunshade or a safety-rack with the brand name which would hardly be noticed by someone passing by, but these texts were included in the larger whole of the establishment as unit of analysis. In spite of the decisions taken for the codification there is a degree of arbitrariness involved in the process but in coding them independently of each other both authors agreed in over 98% of cases.

We developed a coding scheme that included 16 variables (based on Ben-Rafael *et al.*, 2001; this volume) and we will refer to the most general ones in this paper. These include the type of sign, branch, the number of languages on the sign, the languages on the sign, top-down versus bottom up signs, first language on bilingual signs, signs of the languages on bilingual signs and type of font on bilingual signs.

The two streets are commercial streets and they have different types of shops: clothing (47 in Ljouwert; 32 in Donostia), books (1 in Ljouwert; 1 in Donostia), food (1 in Ljouwert; 6 in Donostia), furniture (7 in Ljouwert; 1 in Donostia), computers (2 in Ljouwert; 2 in Donostia), etc. By far most of them are independent small shops (73% in Ljouwert; 78% in Donostia) and few belong to a national or international chain. There is the category of 'other' into which 3% in Ljouwert and 12% in Donostia of the remaining signs were classified. These include graffiti, commercial and noncommercial posters.

Results

This section shows the results of the study, which have been arranged so as to answer the two research questions: (1) which are the languages displayed? and (2) what are the characteristics of bilingual or multilingual signs?



Picture A Monolingual Frisian text (translation: 'Buy a flower from Romke')



Picture B Monolingual Basque text (translation: Community meeting on the 5th of february, Thursday at 19.30 at the Ikatz community meeting place)

Research question 1: Languages displayed

The first question about languages displayed concerns the number of languages used in each unit of analysis (sign). Table 1 gives the results. Almost two thirds of the signs (64%) in Ljouwert only have one language, but 36% have two and 8% have three or more. So in Ljouwert most of the signs are monolingual. However, the overall picture in Donostia is quite different. Less than half (45%) of the signs are monolingual and almost as many (37%) have two languages and almost one in five (19%) have three or more languages. The overall impression in terms of bi- and multilingualism in Donostia is different from Ljouwert.

The next question is about *which* languages are being used and the results are given in Table 2. We are dealing with a minority language, either Frisian or Basque, with a dominant (state) language Dutch and Spanish and with English as an international language that has gained a certain presence in both contexts. Other international languages such as French or German take a modest place.

We can compare Ljouwert and Donostia for the place given to the minority language, the dominant language and English, respectively.

For the minority language we observe a substantial difference between Frisian and Basque. Frisian only appears on its own in 3% of cases and has a small presence as well in Frisian–Dutch bilingual signs and no presence in multilingual signs at all (see Picture A). The minimal presence of Frisian as a

Number of languages	Ljouwert	Donostia
1	64	45
2	36	37
3	6	12
4+	2	7
п	103	104

Table 1 Number of languages on the sign (percentages)

	Ljouwert	Donostia
Frisian/Basque	3	12
Dutch/Spanish	53	36
English	6	4
Frisian & Dutch/Basque & Spanish	2	22
Dutch & English/Spanish & English	31	6
Basque & English	_	2
Basque, Spanish & English	_	10
Other combinations & languages	5	8
11	103	104

Table 2 Language on sign (percentages)

written language on the signs reflects the modest place of the written language in society in general. Frisian is predominantly a spoken language (over half the population can speak Frisian) and the amount of documents, forms, books, journals, etc in Frisian is rather minimal when compared to Dutch (Gorter, 2001).

On the contrary, Basque has a stronger presence in monolingual signs with about one in every eight signs: 12% (see Picture B). When we take all signs together where there is Basque involved the total comprises half of all the signs (12% monolingual + 22% bilingual Basque–Spanish + 2% Basque–English + 10% Basque–Spanish–English + a few of the other combinations also involve Basque: together over 50%). We know that Basque is spoken by about one third of the population, but as a written language its importance is clearly shown in the linguistic landscape. The acceptance of Basque as a written language is high in all sectors of society. Here Ljouwert (Friesland) and Donostia (Basque Country) differ to a large degree.

When we turn to the socially dominant language in each case, that is Dutch in Ljouwert and Spanish in Donostia, we also see some differences, but they seem not as important. In Ljouwert Dutch is present in 91% of all signs, either monolingual Dutch in over half of the signs (53%) or bilingual or multilingual signs (31% + 2% + 5%). Dutch is not present in 9% of the signs (3% Frisian, 6% English). Therefore, Dutch is obviously the dominant language in the linguistic landscape of Ljouwert. Spanish is the most common language in Donostia with over one third of all signs in Spanish only (36%). If we add to



Picture C Monolingual English text in a clothing shop

this figure the bilingual and trilingual signs that also have Spanish, we see that Spanish can be found on 82% of the signs and in that sense Spanish is dominating the linguistic landscape (22% + 6% + 10% + 8%).

The difference between Ljouwert and Donostia as far as English is concerned in monolingual signs is small with 6% and 4% respectively (see Picture C for a monolingual English sign in Ljouwert). However, when we add all the signs with a presence of English on it then we see that English is present in 37% of all signs in Ljouwert (6% + 31%) and only in 28% of all signs in Donostia (4% + 6% + 2% + 10% + 6% of the combinations). Other foreign languages have a very limited presence, with some signs including some words in French or German.

We can conclude that Dutch and Spanish are the dominant languages and the linguistic landscape reflects this fact. Basque as a minority language also has a clear presence, whereas Frisian is hardly to be seen. English is the most important compared to other 'foreign' languages. English is stronger in Ljouwert than in Donostia.

The linguistic landscape seems to reflect the general sociolinguistic situation as well as the intensity of language policies for the minority language.

Research question 2: The characteristics of bilingual and multilingual signs

In this section we will have a closer look at the composition of the multilingual signs. Some examples of these signs can be seen in Pictures D, E and F. Picture D was taken in Ljouwert and it is in English and Dutch. Pictures E and F are from Donostia and the both have Basque and Spanish but Picture F also has four more languages: English, German, Italian and French. We can analyse the bilingual signs according to the place the languages occupy on these signs. The way the languages are displayed vis-à-vis each other will give us further information on the relative importance given to each language. We will first look at the first language on the sign, then the size of the lettering of the language and finally the fonts of the letters used.

First language on bi/multilingual signs

	Ljouwert	Donostia
Frisian/Basque	2	28
Dutch/Spanish	77	67
English	20	5
n	52	61

Table 3 The first/most prominent language on bilingual signs (percentages)

The first characteristic of the signs analysed was the order of languages in the bi/multilingual signs. The results corresponding to the first language on the sign (or the clearly most prominent one) are given in Table 3. The bilingual



Picture D Dutch-English text (translation: vanaf = from)



Picture E Bilingual Basque-Spanish text (Basque bigger; translation: put)



Picture F Multilingual text in 6 languages (Spanish, English, German, Italian, French and Basque)

signs in both cities clearly differ from each other again when it comes to place of the minority language as the first language on bilingual signs. Frisian is the first language in only 2%, but Basque is used in 28% of all cases. For the international language English it is almost the reverse: one in every five bilingual signs in Ljouwert has English as the first language, whereas English plays a much less prominent role in Donostia. Both majority languages Dutch and Spanish do not differ so much, both are dominating most bilingual signs, although Dutch takes even more prominence.

Size of text in bi/multilingual signs

The second step was to analyse the size of the fonts of each language in all the bi/multilingual signs. The results are given in Table 4. In the case of Ljouwert most commonly the size of the texts on bi/multilingual signs are not the same, in most cases the majority language is bigger and in just a few cases the minority language is bigger.

The results for Donostia show more variety. In over half of the cases the majority language Spanish takes the most prominent place in terms of size, but also a substantial part is where Basque takes prominence. English is again the language that takes a modest place.

	Ljouwert	Donostia
All the same	8	20
Minority bigger	3	14
Majority bigger	47	58
Majority + minority bigger	_	-
Majority + foreign bigger	42	3

Table 4 Size of languages on bi/multilingual signs (percentages)

Type of font on bi/multilingual signs

 Table 5 Type of font on bi/multilingual signs (percentages)

Type of font	Ljouwert	Donostia
Same all languages	6	22
Different	94	78
n	36	59

The next step is to look at the type of font used for the textual display of the language. The results indicating if the fonts are the same or not in the different languages are given in Table 5. The difference between Ljouwert and Donostia is obvious when it comes to the type of font. In the case of signs in Ljouwert, most signs in two or more languages have different fonts. In the case of Donostia it is quite common (22%) to have the same fonts in different languages.

Amount of information

Another characteristic of bi/multilingual signs that was analysed was the amount of information given in each of the languages. The results are given in

Information	Ljouwert	Donostia
Same all languages	6	15
Minority more	3	10
Majority more	72	63
Majority + minority more	_	9
Foreign more	17	3
Ambiguous	3	_
n	36	59

Table 6 Amount of information given on bi/multilingual signs (percentages)

Table 6. Again we observe an important difference between Ljouwert and Donostia when it comes to the amount of information provided.

In the case of Ljouwert, signs contain more information in Dutch than in other languages. The same trend can be observed in Donostia, but it is not as prominent. The information is repeated completely in one or more languages in a few cases. This repetition seldom happens in the case of Ljouwert but is more common in Donostia where it happens in one in every six bilingual signs. In a number of cases the information given in the foreign language, English, is more extensive than the information in the majority language Dutch. This hardly happens in Donostia.

Translation in bi/multilingual signs

A final characteristic included in this study was again the comparison of the information given in the different languages but focusing on the use of translation in the signs. The results are given in Table 7. In Ljouwert there is hardly any translation but there are a number of signs which have been classified as ambiguous because the text is in one language but it is not clear which language it is because of the similarities between Dutch, Frisian and English. The linguistic distance between Basque, Spanish and English avoids ambiguity regarding the languages in the signs in Donostia.

There is no official policy of dual language use in Friesland. The official policy has been for many years an 'either–or' system for language choice. Official government documents are published either in Dutch, or in Frisian. Using both Frisian and Dutch side by side in literal translation was seen as superfluous, because all inhabitants of Friesland were supposed to be able to read both languages. As mentioned above, only 67% of the population is able to read Frisian and in practice almost all official documents are published in Dutch, with the exception of a few documents in the field of culture.

The linguistic distance between Spanish and Basque is much larger and the official policy has been from the beginning to make all kinds of documents available in both languages. Even though the whole population can read Spanish, the translation is not considered superfluous. The official policy is reflected in the linguistic landscape not only in the case of official top-down signs but also in many cases when bottom-up signs are considered. In fact, the results indicate that in most cases we see some form of translation and only a bit less than one third of the signs have no translation. About 10% of the texts

Translation	Ljouwert	Donostia
Word to word	-	10
No translation	89	31
Partial translation	-	56
Ambiguous	11	_
п	36	59

Table 7 Translation of texts in bi/multilingual signs

are word-to-word translations, and most of them are official texts. In the case of partial translations the picture is less clear.

Conclusions

When we try to summarise the order of dominance of the three languages, we see that Dutch is by far the most prominent language in the linguistic landscape of Ljouwert, followed by English as the second language and in the third place comes Frisian with a marginal presence. The order of languages in Donostia is Spanish first, Basque second and English third.

In both cities the majority language (Dutch or Spanish) is also more prominent in the signs regarding the size of the fonts, the position of the text as compared to other languages and the information given in the text.

The main differences between the two cities are related to the use of the minority language in language signs. There are more signs in Basque than in Frisian and this difference shows the effect of a strong language policy to protect the minority language on the linguistic landscape. The effect of this policy is not only reflected in top-down signs designed by the Town Hall or the County Hall but also in commercial signs. It is also interesting to observe that the same information is given in both official languages quite often in Donostia but not in Ljouwert. It is interesting to observe that the use of Basque in writing in language signs is much higher than the use of Frisian while Frisian is stronger as a language of oral communication than Basque. These findings clearly indicate the differences in language policy between the two contexts and how the active policy to promote Basque in the Basque Country has an important effect on the visibility of the Basque language both in top-down and bottom-up signs.

Another important finding of this study is the spread of English in the signs analysed in this study (see also Bhatia, 1992; Martin, 2002; Takashi, 1990). There are two interesting points to be mentioned as related to this spread. English is clearly the language of international communication and other 'strong' languages such as German and French are only marginally found in the data even though Germany is close to Ljouwert and France very close to Donostia. The use of English is more prominent in Ljouwert than in Donostia but its use in 28% of the signs of a main shopping street in Donostia shows that English is no longer marginal. Donostia is more touristic than Ljouwert and our data may not reflect the use of English in other Southern European cities but they show the shift from French to English as the language of international communication.

This study shows that the linguistic landscape has both an information and a symbolic function (Landry & Bourhis, 1997, see also Ben-Rafael *et al.*, 2001). The informative function shown in the signs in the different languages indicates the language to be used in communication at shops and other businesses and also reflects the relative power of the different languages. The use of the different languages in the linguistic landscape also has a symbolic function mainly when language is a salient dimension of a linguistic group. According to Bourhis (1997: 27) the use of a specific language can 'contribute most directly to the positive social identity of ethnolinguistic groups'. For

example, the use of Basque in bilingual signs in Donostia is not only informative, because everybody can get the information in Spanish, but it has an important symbolic function which is related to affective factors and the feeling of Basque as a symbol of identity.

On the other hand, the use of English in commercial signs could be interpreted as informational mainly for foreign visitors but it is obvious that its increasing presence has a strong symbolic function for the local population as well in both Friesland and the Basque Country. Using English can be perceived as more prestigious and modern than using the local languages (see also Piller, 2001, 2003) but it can have important consequences for the future of the other languages present (see Ammon *et al.*, 1994; Phillipson, 2003).

This study is limited to the analysis of linguistic signs in only two streets but shows the important role of the linguistic landscape and its relationship to linguistic policy in multilingual contexts. The linguistic landscape can provide a different perspective when analysing the sociolinguistic situation (Williams & Van der Merwe, 1996: 56). The linguistic landscape does not necessarily reflect the use of the languages in oral communication but it provides information about written communication between language users.

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Further Possibilities for Linguistic Landscape Research

Durk Gorter

Globalisation and the Spread of English

The study of the linguistic landscape in its own right is a relatively recent development. In sociolinguistics and applied linguistics there is a growing interest as is evident from an increasing number of publications (see Backhaus this volume for a brief overview), of individual papers and of special colloquia at conferences. There are several reasons why it can be expected that a trend for more attention will persist in the near future. In this chapter some possibilities for further study of the linguistic landscape as a means to increase understanding of multilingualism will be highlighted.

In the foregoing chapters we have seen some examples of the study of the linguistic landscape in different parts of the world. We saw that although Japan is known as the prototype of a monolingual society, the linguistic landscape of Tokyo shows a surprising degree of multilingualism. Moreover, English has a high prestige there and its increasing presence in the visual scenery of the streets of Tokyo has become part of everyday Japanese life, as the study by Backhaus makes clear.

The importance of English as a global language is also highlighted in the metropolis of Bangkok, in Thailand, another part of Asia. Huebner's study demonstrates that the 'environmental print' of the streets in Bangkok is completely multilingual. In addition to this, his chapter documents the influence of English on the development of the Thai language system, not just in the form of lexical borrowing, but also in orthography, pronunciation and syntax. He thus provides evidence of a nascent Thai variety of English.

The chapter by Ben-Rafael and others on Israel shows that this country with relatively many recent immigrants also has a strong multilingual appearance. The Jewish population originates from many different countries whereas Palestinians constitute about 20% of all citizens. Hebrew is the official state language and it is omnipresent in the linguistic landscape in both Jewish and Israeli-Palestinian areas, except for the disputed locality of East Jerusalem. Arabic is the second official language and it dominates in East Jerusalem, but not in other parts. A Hebrew-Arabic pattern predominates among Palestinian-Israelis. English is also well-represented in the signs in the streets, mainly in a bilingual combination with either Hebrew or Arabic. The geographic distribution of the different population groups is reflected in a stronger or weaker presence of the language (Hebrew or Arabic) in the street image according to which group inhabits a certain area. English is overall gaining importance due to globalisation. According to Ben Rafael *et al.*, English can better be called a 'non-foreign language'.

Multilingualism is an important aspect of all these studies, and at the same time the process of globalisation is made visible through the presence of English in the linguistic landscape. Next to globalisation there is also a process of regionalisation or localisation going on. Emphasis there is given to a regional identity and to a regional language. Together these processes have been called 'glocalisation'. The effects of these simultaneous processes can be seen in the streets of the towns of Ljouwert/Leeuwarden in Friesland and Donostia/San Sebastian in the Basque Country. In these regions in Europe a struggle for the survival of a minority language takes place. Frisian and Basque have been spoken in the area since 'time immemorial', but as minority languages they are threatened by the dominant state languages, Dutch and Spanish respectively. There are substantial differences between Friesland and the Basque Country. Frisian can be seen only to a modest degree in the linguistic landscape. Official language policy does not include the linguistic landscape, except for place names and street names. In contrast, in the Basque Country the promotion of the minority language in the linguistic landscape is an important part of language policy. Basque has obtained a substantial presence in the linguistic landscape, mainly side by side with Spanish, or in combination with, again, English. The linguistic landscape in the two cities of Ljouwert and Donostia seems surprisingly similar when it comes to the amount of English used on multilingual signs.

The studies as they have been presented in the earlier chapters do not just contribute to insight in the relative prominence of different languages as one sees them before ones eyes when strolling the shopping streets of these cities, but these studies also provide a better understanding of the spread of English. They are examples of what is possible now in the study of the linguistic landscape in relationship to gain more knowledge about multilingual phenomena.

Terminology: Etymology and a Neologism

In the Introduction to this volume the terminology and the semantics of the expression 'linguistic landscape' were discussed. An important point was made about the dictionary meaning of the word 'landscape', because it refers to a piece of scenery itself, as well as to the representation of the landscape. This duality of referral and representation is an important aspect of the different research projects at hand. The language signs in the cities can be taken as the literal panorama a spectator will see when walking the streets, but that same view reflects somehow the language composition of the inhabitants (and probably visitors) of the city. A sociological analysis of that representation can take different angles (see Ben Rafael *et al.*), but the texts can also be analysed according to their linguistic parameters (see Huebner).

The etymology of the word landscape and the use of the word in different languages are quite instructive in this context. The word landscape was first recorded in English in 1598. It is a loan from Dutch where it is a term used by painters who were around that time becoming famous for their skills in the land-scape genre. The Dutch word *landschap* means 'region' or 'tract of land' but in the 16th century obtained artistic significance as 'a picture depicting a scenery on land', which meaning then was brought over into English. It took 34 years after the first recorded use of *landscape* in English until the word was used for natural scenery, the description of the direct landscape as we see it before us (see www.bartleby.com).

The word for landscape is similar in the Germanic languages: Landschaft in German, landskab in Danish, landskap in Norwegian and Swedish and lânskip in Frisian. The root of the word landscape (land) was translated into the Romance languages as pays. The word was borrowed from the Northern countries to transfer the same double meaning of tract of land and a picture thereof. Thus the words paysage (French), paesaggio (Italian), paisaje (Spanish), paisagem (Portuguese), paisatge (Catalan) and peizaj (Romanian) (Lorzing, 2001: 28-29). Basque uses the loan from Spanish paisaia. Also the Finoergric languages Finnish (maisema) and Hungarian (tájkep) use the root 'land'. In Latvian it is ainava and in Lithuanian it is krastovaizdis. In Greek the word is topio referring to locus or site. In Slavic languages such as Polish (krajobraz) and Czech, Slovak and Slovene (krajina) the root for region or territory is used (kraj-). Serbian uses krajolik and the very similar Croatian nowadays prefers krajobraz. An exception is Russian which has both peyzazh and landshaft, which are loans from French and German. According to the landscape architect Lorzing (2001: 35) the first word peyzazh refers to the subjective aspect of landscape where the poetical, pictorial and emotional values are emphasised. The second meaning landschaft refers to an objective, technical approach, which makes it possible to change the landscape. These two dimensions, the more subjective emotional and the more objective technical, could also be used in studies of the linguistic landscape when it comes to distinguish between the dimensions of the symbolic or solidarity function and the informative or communicative function of language signs.

There is a similar understanding in all these languages in talking about 'a landscape' with its dual meaning of a tract of land as well as a painted representation. The linguistic landscape is then linked to both these qualities as it is the expression of written language before your eyes. A collection of signs with texts, however, is no so much encountered in the landscape in the literal sense, as found in the countryside, but much more inside urban areas. The number of linguistic tokens is especially high in shopping areas in cities. Therefore the word '*cityscape*' might be introduced as a better term. It is a term that is already in use in the fields of cultural geography and urban development with an academic journal with 'Cityscape' as a its title. Since in most places the cityscape due to globalisation will not be monolingual, the term '*multilingual cityscape*' would be the most precise. An objection against this neologism could be that it does not translate equally well into other languages.

Technological Advancements

Recent developments in digital camera technology make the study of the linguistic landscape possible at a relatively low cost. Of course, photography exists already over 150 years (with Daguerro types from the early 1840s), but to take large quantities of colour pictures was expensive and cumbersome until just a few years ago. The first professional digital camera dates from 1991 and such cameras arrived in the consumer market three years later. By 1996, 400,000 digital cameras were sold in the USA, against 15.6 million film cameras. In 2003 for the first time more digital than film cameras were sold and by 2005 these figures have almost reversed with an estimated 20.5 million digital cameras being sold (PMA Marketing Research, 2005: 4). Cell phone cameras do add another dimension and

will probably change the ways people take pictures and share them, wirelessly, with others.

Nowadays it is easy to collect, huge quantities of pictures. To store those pictures is no longer a problem with low cost storage devices and they can be stored on the web and shared with others (www.ofoto.com or www.flickr.com). Technology provides the means for new possibilities in the study of the linguistic landscape. The analysis of all those photographic data is an issue on which different angles can be taken. In the process of categorisation and interpretation the researcher (with the human eye) is still essential, but there are technological developments that can help with (semi-)automatic analysis.

Image processing and automatised analysis is a technical field which has not yet reached the study of linguistic landscape, but it may be of great relevance in the near future. Modern scanning techniques for microbiology, space research or medical purposes (CT, MRI, PET, etc.) result in new studies, also relevant for the field of language (e.g. already in studies of language production, bilingualism and language pathology). The human observer is fundamental to the advancement of image analysis, but computer systems and applications rapidly result in new insights into how humans see, perceive and know images (see for example Van den Broek, 2005). Further refinement of such techniques is expected in the near future and studies about visual communication and image representation can be of relevance for the study of texts in public space. Software for image analysis is commercially available by a firm such as Media Cybernetics (www.mediacy.com) but also in the public domain e.g. developed at the National Institute of Mental Health (NIMH) (http://rsb.info.nih.gov/nih-image/). There is good reason to believe that these tools can also be applied to study of the linguistic landscape.

An example of how this could work can be given by taking a look at the quite advanced technology of automatic number plate recognition (ANPR) alternatively referred to as licence plate recognition (LPR). This technology is able to identify car number plates with letters and numbers quickly and automatically. It is only very recently that this technology has come of age, but it is already in use for security, crime detection, traffic management and automatic payment systems at toll booths, car parks or petrol stations. When licence plates of many different countries and with many different styles can be recognised and 'deciphered' there is no reason why this could not be applied to most other signs that are visible in public spaces. The content analysis of signs could then be semi-automatised by connecting them to language databases.

Regulation and Policy

Governmental agencies regulate the use of signs to some extent and thus are part of what is categorised in the foregoing studies as 'top-down'. Some states, provinces or cities have developed more precise or far reaching legal measures than others. Among the more famous cases is the Charter of the French Language of 1977, better know as 'Bill 101' in Québec (Bourhis & Landry, 2002). The bill required, among other things, that advertising be done in French alone and that all commercial signs be in French. Later these measures were relaxed and English is now acceptable for the language of signs provided that French be given priority. Another well-known case is the so-called 'Toubon-law' introduced in France in 1994. The law insisted on the use of the French language in official government publications, advertisements, and other contexts in France. In Catalunya there is a legal obligation to have at least some presence of the Catalan language on all public and private signs. The linguistic landscape is closely monitored by the language policy department of the regional government. Studies have been done into the use of Catalan in displays of supermarkets, gas stations and Barcelona airport (e.g. Solé, 1997).

Traffic signs are usually an important part of the linguistic landscape and typically those signs are placed there by an official agency. Traffic signs have been under international consideration already for a long time. How these signs are designed and regulated has some impact on the outcome of a study into the linguistic landscape. Hence the study of the linguistic landscape can derive a benefit from the work done by traffic sign designers. Their opinions on how signs function, what 'good' signs are, and which criteria are used for the production of signs can be of relevance.

The United Nations Economic Commission for Europe (UNECE) developed in 1968, and amended in 1995, the Vienna Convention on Road Signs and Signals in which it distinguishes eight different types of sign (e.g. danger warning signs, regulatory signs, mandatory signs). The goal is to come to international uniformity in order to facilitate international road traffic and to increase road safety (UNECE, 1968). In the USA the Federal Highway Administration (FHWA) publishes the Manual on Uniform Traffic Control Devices (MUTCD), as the national sign code that 'defines the standards used by road managers nationwide to install and maintain traffic control devices on all streets and highways'. (FHWA, 2003). The MUTCD focuses on minimum standards for size, height, and illumination. To ensure public safety, the MUTCD calls for bigger, taller, more obvious, and more frequent signage in areas where driver confusion can result in a traffic hazard. The Federal Highway Administration has been studying the understanding of the symbols, their legibility and conspicuity for years. These studies can also be of interest to the general study of the linguistic landscape. Criteria for designing signs will influence the text that will or can be used on them. Among these criteria comprehension, legibility and conspicuity stand out. A sign must be easy to understand, be readable from a distance and within a very short time, and be distinguished from other signs.

Among American sign regulators and designers there is an interesting debate going on between two perspectives. One view is that signs primarily serve an indexing function telling people what to find where or what to do or not to do. According to this view signs have to be regulated and limitations can be placed upon them for aesthetic reasons. Signs, including private and commercial signs, are seen as a form of land use activity and governmental planners should play a role in controlling them (Mandelker & Ewald, 1988). The opposing view sees signs to 'serve multiple functions beyond indexing, including marketing, advertising, way-finding, providing information, building image, educating, and creating a visually stimulating retail environment' (Claus *et al.*, 2004: 1). In this perspective larger and more conspicuous signs are more valuable. Signs are conceived of as speech rather than activity. Thus, signs can be 'shouting' or 'screaming' for attention and the economic value of a sign becomes an important issue. Different organisations have extensive information on that issue (e.g. Small Business Administration www.sba.gov, International Sign Association www.signs.org and the Signage Foundation www.signagefoundation.org). The Small Business Administration offers a handy definition of a sign as 'any visual display with words or symbols designed to convey information or attract attention'.

In bilingual countries or regions signage can also be of great symbolic importance and dispute. In particular the use of place names in a minority language or in the dominant state language has been a regular issue of linguistic conflict (Gorter, 1997; Hicks, 2002). In Brussels there exists an elaborate set of regulations on the use of both Dutch and French in street name signs, metro stations, etc. Painting over of signs with the 'wrong' names has been popular among language activists in many minority regions of Europe. This clearly tells passers by about the struggle over language rights and ensuing claims to the territory. Even when the central government officially regulates and accepts bilingual signs, the conflict over which place names to use and how they are placed on the signs may continue vehemently at a regional level as the case of the use of German or Slovenian in Carinthia, Austria has shown several times in recent years.

The highest density of signs can be found in cities and towns, in particular in the main shopping streets and industrial areas. The average number of signs per stretching metre can be rather high. Roadsides, in particular motorways, also have a lot of signs. In the countryside and in natural areas which are largely uninhabited, there are no, or only a very small number of, signs. In our world today there is little pure nature in a literal sense left because almost every spot has been 'touched' by human beings and traces of their presence have been left behind and with it linguistic tokens.

Many regulations try to limit the spread of signs in order to avoid the presence of an abundant linguistic landscape everywhere. In particular the sprawl over natural areas is an issue that gets attention of policy makers. The European Landscape Convention – better known as the Florence Convention (Council of Europe, 2000) which entered into force in March 2004, points to the importance of recognising the value and importance of landscapes, and of adopting measures to maintain and improve the quality of natural, rural but also of urban landscapes.

Multiple Perspectives

As the foregoing sections show linguistic landscape research can take more than one approach. The development of technology may influence its direction in the future as was indicated above. Multidisciplinary approaches from linguistic, sociological or sociolinguistic perspectives are also relevant for a better understanding of the linguistic landscape. Moreover, for instance, certain perspectives in psychology and geography can give us more insight into possibilities for a deeper knowledge of multilingualism. Psychological experiments in visual perception or studies of cityscapes in cultural geography do raise issues which are not dealt with in the chapters presented here, but which can also be of importance to the study of the linguistic landscape. The study of visual perception is a field of specialisation in its own right. Gombrich (1982) has applied schemata to works of art and his interpretations of those paintings can also be useful for certain features of the linguistic landscape.

The linguistic landscape is, of course, closely related to city planning as well. Is it however remarkable that scale models of newly developed cities usually do not contain any or at least few elements of the linguistic landscape. When such scale models have any references or examples at all, usually they are limited and stylised. In reality those new shopping centres or a new building in the city centre will be surrounded by numerous signs. The view and appreciation of such structures will be influenced by such textual displays. Even a popular computer game as 'Sim City', on the simulation of city life, has only a very limited number of signs. This feature is shared by so-called virtual worlds on the internet. Such worlds may seem in many respects like the real world, but they miss a linguistic landscape as a basic feature. Examples of such virtual worlds are Secondlife (http://secondlife.com), Paxlair (www.paxlair.com) or There (www.there.com). These worlds thus offer few opportunities for studying their linguistic environment. It would, however, be interesting to study which signs are there and the messages contained on them.

Furthermore it can be helpful to look at the field of semiotics: the study of the signs and symbols what they mean and how they are used. Several studies are already available on advertising and on commercials. In the case of linguistic street signs focus can be on the linguistic expressions and how it conveys a certain meaning, in particular to understand the social and cultural context in which the sign is placed. Scollon and Scollon (2003) have developed an overall approach to language on signs, referred to as 'geosemiotics'.

In the context of second language acquisition studies questions can be asked such as 'How is the linguistic landscape perceived by L2 users?', 'What is the role of the linguistic landscape as an additional source of language input? Or 'What attitudes do these L2 users have towards the linguistic landscape?' (Gorter & Cenoz, 2004). It will also be worthwhile to explore in more detail linguistic processes of language contact, mixing and change as has been done in the chapter by Huebner. Signs in the linguistic landscape display different kinds of language contact phenomena either at the level of script, lexicon, morpheme or syntax.

The historical dimension of the linguistic landscape has not been explored in depth in the articles in this volume. Although Huebner has observed that the least amount of English is in the oldest neighbourhoods of Bangkok and the greatest amount in the 'Sky train', a light rail system, which he points to as 'the quintessence of modernity'. In another paper Backhaus (2005) uses the concept of 'layering' to dig out the diachronic development of some signs in the streets in Tokyo. His study shows that is can be valuable to take an historical angle and then see how the linguistic landscape has evolved over a specific period of time. When one takes a look at pictures or postal cards of shopping streets from one hundred years ago, one sees fewer signs, although sometimes there are quite a few already. It is obvious that the number of linguistic signs has increased enormously in the inner cities of the world. How the landscape has evolved and how it changes, and what the importance is of such developments over time, is a matter for further study. Even though photographs have only recently become available on a massive scale, there are now some huge photo archives that can be searched by topic (e.g. by Associated Press (www.apimages.com), or collaborative collections with pictures of cities in the whole world such as www.worldcityphotos.org and www.fotopaises.com or the European Visual Archive (http://192.87.107.12/eva)).

To study the linguistic landscape is also to study cultural heritage. Languages are part of the cultural heritage and the sustainable development of linguistic diversity is seen as an important aspect of our heritage. According to the Unesco Universal Declaration on Cultural Diversity 'all persons have therefore the right to express themselves and to create and disseminate their work in the languages of their choice' (Unesco, 2002). The sustainability of cultural diversity is an important issue for policy development. Perhaps some models of environmental economics can contribute to the discovery of non-market benefits and the added value of the multilingualism, in order to understand better the ways in which the linguistic landscape is an important part of the preservation and the continued existence of different languages.

It will be clear that the study of the linguistic landscape can be done from multiple perspectives. The list could be elaborated further to include the fields of landscape architecture, communication studies, discourse studies as well as media and cultural studies and disciplines dealing with the theory, practice and aesthetics of visual design. All those fields can have a lot to tell us about signs. It looks promising to combine a number of these perspectives for a more inclusive approach to the study of multilingualism.

This multilingual reality dictates that studies of linguistic landscape should aim at discovering patterns in the underlying diversity. It is of utmost importance that theoretical models and approaches, such as proposed by Ben Rafael *et al*. (in this volume) are developed further. Studies of the linguistic landscape can become a major locus of scholarly activity in the coming decade if ideas taken from sociology, linguistics, social geography, psychology, economy, cognitive science, technology and the study of individual language use are combined.

In a thorough sense of the word, our world at the beginning of the 21st century is a multilingual one. The idea of monolingualism by country – one state, one language – has become obsolete and has been overtaken by a complicated interplay of many languages. Truly monolingual countries were always an exception, but globalisation with its ensuing migration flows, spread of cultural products, and high speed communication has led to more multilingualism in stead of less. There are many ways in which ethnic, sociocultural, religious and commercial diversity are related to linguistic diversity. The process of 'glocalisation' in the international arena leads to new expressions of cultural mix in music, food and clothing, but also in languages. Innumerable language contact situations cause a high incidence of multiple forms of bilingualism.

Given this multitude of languages around us it does not come as a surprise that an increasing number of scholars become interested in the study of the linguistic landscape. They share a common definition of what constitutes their object of their study: the visible language texts on signs in public space (Landry & Bourhis, 1997), thus implicitly rejecting the much wider definitions of linguistic landscape sometimes used in the literature (see the Introduction to this volume). This concluding chapter wanted to show that there are many possibilities for relevant and interesting linguistic landscape research that will help to improve our understanding of multilingual phenomena around the world.

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