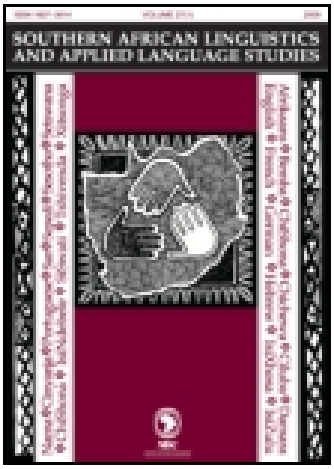

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Language accessibility of signage in public settings: A case study of a health care service

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Language accessibility of signage in public settings: A case study of a health care service

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Abstract: Looking at the linguistic landscape (LL) purely as a place where information is put into the public domain, a natural expectation might be that multilingual signage text should convey the same information in each of the languages of the text. Yet this expectation of symmetry is often violated (Kallen & Dhonnacha, 2010). The study of multilingual signs does not usually take into account the extent to which the signs serve minority groups – hence, the signs' language accessibility (LA). The study suggests a method to assess the LA of public signs using the basic methods of LL studies as well as content measures taken from the field of Translation Studies, to evaluate translation equivalence. The LA concept was tested on the linguistic landscape of Hadassah hospital in Jerusalem, Israel, which is visited by more than 50% of non-Hebrew speakers, mainly Arabs. During a four-month period, 251 signs were documented, followed by two supporting interviews with the functionaries in charge of the hospital signage. The analysis suggests parallel trends: a growing awareness of the need for signs that are linguistically accessible but at the same time a lack of attentiveness to the overall meaning of linguistic access. LA analyses allow for greater understanding of concepts and processes related to language practice and management and also permit more complex and nuanced explanations of the LL.

Introduction

The linguistic map of Israel reflects the presence of many indigenous and migrant minorities. Among the indigenous minorities, and its largest, are Arabic speakers, followed by smaller communities such as Yiddish-speaking Ultra-Orthodox Jews.[1] The migrant group includes Jewish immigrants: mainly from the former Soviet Union but also from Europe, North and South America, Northern Africa and Ethiopia. Guest workers come from East and Southeast Asia, South America, Eastern Europe and recently, migrant workers and asylum seekers from Africa (State of Israel, Population, Immigration and Border Authority, 2011).

All inhabitants of Israel have the right to equal access to healthcare (State of Israel, 1994). However, language access to care was not guaranteed until February 2011, when the Ministry of Health issued requirements for linguistically and culturally accessible services (State of Israel, 2011).

This article aims to test one aspect of 'language access' (LA) to healthcare, that is, the linguistic landscape (LL) of Hadassah Hospital in Jerusalem. Hadassah is a public hospital in which 55% of the clients are language minorities. By reviewing the linguistic access of Hadassah through its public signage, we extend the use of the term 'language access' to the context of LL in public domains. Using the LA analysis proposed here, we can gain an understanding of concepts and processes related to language practice and language management, and provide an explanation for some of the complexities of LL.

To analyse the LA of public signs in public institutions, the following parameters will be analysed:

(i) Reflection – does signage reflect the client population?
(ii) Distribution – which parts of the facility are signed according to the linguistic map?
(iii) Translation equivalence – is the translated text in each language equivalent to the source text, both in meaning and function (Baker, 1992; House, 1997)?

These three dimensions will determine whether signs enable accessibility to services for language minorities. The level of accessibility of the multilingual signs will provide further dimensions of analysis for language policy and practices of the relevant institution and authorities. Furthermore, the discussion of LL can now be enriched with the discipline of translation studies.

Theoretical framework

The current study examines the language accessibility (LA) of a healthcare service, Hadassah hospital in Jerusalem, Israel, through its linguistic landscape (LL). Thus concepts from LL, combined with the concept of 'translation equivalence', will be used to evaluate the service's accessibility to language minorities.

Language accessibility

Accessibility refers to the degree to which a product, service or environment is available to as many people as possible. The concept of 'accessibility' is often used to refer to people with special needs, and to address their ability to receive services in an equal, respectful, safe and professional manner, and to the maximum extent of independence, as reflected in the Israeli Law for Equal Rights for People with Disabilities. (State of Israel, Ministry of Justice, 1998). In order to meet this goal, entities are required to take appropriate measures to ensure that persons with disabilities have access to all public facilities and services (United Nations, 2008).

Taking accessibility into the linguistic domain, we would define language accessibility then as the degree to which a product, service or environment is available to speakers of minority languages. The end goal would be to enable speakers of minority languages to receive products and services in an equal and respectful manner as those of the majority.

The term 'language accessibility' has been in use, mainly in the context of translation and interpreting services, as a means of overcoming language and cultural barriers in the consumption of public services (Australian Department of Immigration and Citizenship, 2011: 5; Migrant Friendly Hospitals Project Group, 2004; US Department of Justice, 2000, 2011; US Department of Health, Office of Minority Health, 2001). In many Western countries, language access services have become part of language management, particularly in the medical and legal areas, where mutual understanding is critical to one's health and to justice (Spolsky, 2009b).

Language accessibility in Israel

Hebrew and Arabic are official languages in Israel, due to a British Mandatory Order (League of Nations, 1922), that was incorporated into Israeli legislation after its establishment in 1948 (Deutch, 2005). In fact, this equal status is not realised in the public space, and Arabic is marginalised (Deutch, 2005; Yitzhaki, 2008). In spite of the status of Arabic as an official language, most Israeli Palestinians have knowledge of Arabic and Hebrew.

With regard to Russian, the mother tongue of the major Jewish immigrant group, the state does not object to preserving it *de facto*, as long as preservation is implemented by the Russian community itself. The state wants the Russian immigrants to integrate into the Israeli society, and would not encourage the use of Russian in public institutions serving the general public (Bareket, 2007: 24). Other languages are not officially recognised in Israel's language policy, and their public use is limited.

Apart from Hebrew, the most dominant foreign language is English. The presence of English is apparent in commerce, business tourism and on public signs (Ben-Rafael *et al*., 2004: 13), despite not being an official language. The role of English grew due to the British Mandate for Palestine (1917–1948) and has remained strong even though English lost its official status. English serves as a language for access to business and industry, science, education and travel and is taught from primary school on (Spolsky & Shohamy, 1999: 23). To sum up, in Israel there is formal recognition of an official role for Arabic, and there is *de facto* recognition of the relatively limited use of Russian and widespread use of English (Spolsky & Shohamy, 1999: 26).

Language accessibility in the Israeli healthcare system

Given the many linguistic and cultural communities in Israel, it may be surprising that the impact of linguistic and cultural aspects on healthcare has been acknowledged only in recent years. This lack of recognition is influenced by social, economic and political factors (Schuster, 2009). The use of language access tools in healthcare, such as interpreting services, professional translators or multilingual signage, was not institutionalised until February 2011, when the Ministry of Health issued requirements for linguistically and culturally accessible services. Until then, the only basis for interpreting in healthcare settings appeared in the Patient's Rights Act (State of Israel, 1996), that states the providers' obligation to provide medical information 'in a manner that maximises the ability of the patient to understand the information and to make a free and independent choice,' in order to render informed consent to medical care (Chapter 4, paragraph 13C). Consequently, institutionalised language services are rare, and in most cases patients and providers rely on broken communication or the aid of non-professional interpreters (Shlesinger, 2008). The few professional language services are cultural mediators from the Ethiopian community, a telephone interpreting service in Amharic-Hebrew for the same community (Schuster, 2009), and a relatively new commercial telephone interpreting service. In the Hadassah Mount Scopus hospital, the field of the current study, trained volunteers interpret for Russian and Arabic speakers and their care providers (Hadassah Medical Organization, 2011). This service is part of a larger initiative to improve services or patients from diverse groups, and includes training for staff members.

Regarding signage in healthcare settings, the recent directive from the Ministry of Health states that

> *healthcare institutions should adapt the signage to the linguistic composition of the main groups among the service recipients. The signage will be posted, where possible, in three languages: Hebrew, Arabic and English* (State of Israel Ministry of Health, 2011: 4).

English is referred to as a 'bridging language' to non-Hebrew speaking immigrants who neither speak Hebrew nor the other languages mentioned specifically in the directive, which are Arabic, Russian and Amharic. It is noteworthy that the directive does not set a minimum threshold of language speakers according to which signs will be translated, nor does it specify which signage types should be translated.

Studies analysing signs in hospitals in Israel are scarce. An exception is an MA thesis (Bareket, 2007), examining the signage in one public hospital in Jerusalem. The study revealed a prevalence of Hebrew in all signs while Arabic appeared in 50% of the directional signs and in all the warning signs; English appeared in 75% of the directional signs and 30% of the warning signs; Russian did not appear in any signs. The study included feedback regarding the signage from 22 Arabic and 33 Russian speakers. Respondents from both language groups reported difficulties in understanding the signs, and expected their mother tongue (as well as English and Hebrew) to appear on the sign in order to enable proper functioning (ibid).

Linguistic landscape

This article examines one aspect of language accessibility – the multilingual signage of a public facility. This links us to the field of LL – the representation of language in the public space. The current analysis will be based on previous studies linking LL to the language policy of the official authorities (Shohamy, 2006), to language management (LM) at the local and national level (Spolsky, 2009a), and to manifestations of power relations between various languages and communities (Landry & Bourhis, 1997; Trumper-Hecht, 2009), as well as between the authorities and the public (Ben-Rafael *et al.*, 2004; Spolsky & Cooper, 1991; Spolsky, 2009b). LL may also be analysed as a manifestation of a claim of ownership (Spolsky & Cooper, 1991; Spolsky, 2009a) and an organisational standpoint regarding the choice of languages in a certain social domain (as defined by Spolsky, 2009b).

Most of all, signage in the public setting serves functional purposes: direction, information, instruction, warning, prohibition, as well as symbolic or commemorative functions (Landry & Bourhis, 1997; Shohamy & Gorter, 2009; Spolsky & Cooper, 1991). Public signs issued by official authorities constitute a sub-group of the LL. This type belongs to the so-called top-down flow category, and is

supposed to adhere to different rules and constraints than signs aimed for commercial forces, e.g. top-down items are more often trilingual than are bottom-up signs (Ben-Rafael *et al.*, 2004).

Linguistic landscape in Israel

The prevalence of Hebrew in the Israeli public space is manifested in LL. Studies of LL in Israel show that within the Jewish population, Hebrew signage has the highest representation, while English is second, and Arabic is very limited. In the Jewish sector, Hebrew-Arabic appears mainly in top-down signs, as an expression of the official policy that respects the status of Arabic as a legitimate language in Israel. In the Arabic sector, Hebrew is widely used, prevailing both in quantity and language order (Amara & Saban, 2004). The presence of English is strong in all areas, indicating that English is a 'non-foreign language' in Israel (Ben-Rafael *et al*., 2004). Russian rarely appears in top-down LL and is moderately represented in the bottom-up LL in areas where Russian immigrants concentrate. Many languages spoken by different immigrant communities in Israel do not appear in LL data (Ben-Rafael *et al*., 2004: 32–33).

Court decisions about the state's obligation to include Arabic in road signs (State of Israel, High Court of Justice, 1999) and public signs in mixed cities (State of Israel, High Court of Justice, 2002) were meant to shape language management of public signage. However, even four years after the deadline of implementation, some municipalities have not changed the signage in spite of the court decision (State of Israel, High Court of Justice, 2011).

Translation equivalence

The analysis proposed in the current study combines concepts from LL, as discussed above, and from Translation Studies. The following sub-section will clarify the concept of translation equivalence, which will assist us in the investigation.

Vinay and Darbelnet (1995) view equivalence-oriented translation as a procedure that 'replicates the same situation as in the original, whilst using completely different wording' (Vinay & Darbelnet, 1995: 342). House (1997) argues that the original text and the translation should also match one another in function. If the two texts differ substantially on situational features, then they are not functionally equivalent, and the translation is not of a high quality. Baker (1992) elaborates on the analysis of translation equivalence, adding the dimensions of lexical, grammatical, textual and pragmatic equivalences.

The field of study

The domain chosen to test the language accessibility model is the Hadassah Hospital (Mount Scopus campus) in Jerusalem. The hospital is located in the northern part of the city. In 2010, there were 32 000 hospitalisations, 80 000 outpatient visits, and 60 000 visits in the Emergency Medicine Department (personal communication, Prof. Zvi Stern, Director of Hadassah, March 2011). It is a non-governmental organisation, like all the hospitals in the city. Some 55% of the visitors at the Mount Scopus campus speak Arabic at home, and 5% speak Russian (Epstein, 2010).

A survey conducted in 2008 (Epstein, 2010) among 550 patients on the two Hadassah campuses, indicated that over 55% of the patients contended that they experienced problems in understanding the staff. Most Arabic speakers (75%), and more than half of the Russian speakers (55%) did not fully understand the medical information they had received (Epstein, 2010: 314). Care providers were also asked about difficulties caused due to communication problems, with 70 percent responding that language barriers hamper the quality of care (ibid).

The fact that more than half of the visitors are not native Hebrew speakers renders the hospital suitable for examining the existence of language management processes and products. Conclusions from the analysis will shed light on the connection between LL and language access to healthcare.

Methodology

During four visits in December 2010 to February 2011, 251 digital photos were taken. Since during the collection and analysis period some signs were removed or replaced, this article may be seen as documenting 'work in progress'.

Documentation included all the signs containing verbal information in four areas of the 'visitor's track': parking, main entrance, Emergency Medicine Department and a pediatric department, as well as the routes approaching them.

Since my prism for the data collection was the visitor's perspective, I ignored LL items that solely relate to the staff, e.g. billboards in the nurses' station. However, I did include items for staff that were found in areas accessible to both patients and care providers.

Every sign was given a number, defining it as a linguistic item. The coding method included the following parameters, which reflect the parameters of the LA model:

(i) Location
(ii) Communicative function
(iii) Choice of language/s
(iv) Order of language/s
(v) Content – grammar, style, and translation equivalence.

I used concepts from the LL field to determine the communicative functions and provide a linguistic map of the areas studied of the signs (parameters i–iv). I then proceeded to use the concepts of translation equivalence from Translation Studies, to evaluate the quality of translation (parameter v). Thus, the analysis of the signs will reflect the hospital's attitude toward language management from various points of view.

Semi-structured interviews with two administrative workers added insights regarding the language management process. One interviewee is in charge of all administrative processes in the hospital, and the other – the actual implementation of the signage (whether printed internally or outsourced). The interviewees were asked about the process of sign making – planning principles and specific considerations relating to non-Hebrew speaking visitors, implementation and limitations. The interview was also intended to check if the hospital has a policy regarding signage in general, and multilingual signage in particular.

My involvement in another project in the hospital, aimed at improving language services by establishing a volunteer interpreting service, and training the staff for more culturally appropriate care, has gave me a broader view on processes. My involvement in those two projects did not hamper the data collection or the objectivity of the analysis, since the collection was done independently, and the administrators I had interviewed were not involved in the training of interpreters or staff.

Findings

The 251 photos were taken in four main areas (distribution and totals in Table 1):

(i) Surroundings of the building – entrance to the hospital premises, security check area, parking area, and plaza of the main building
(ii) The main hall, containing information desk, food stands, and corridors leading to other parts of the hospital (outpatient clinics, inpatient units, management floor, etc.)
(iii) Emergency Medicine Department – located left of the entrance, and separated by automatic doors. Contains several sections (nurses' station, triage, waiting areas, children's ER); the back exit of the department leads to the X-ray room
(iv) Pediatric Department A – on the 5th floor. Contains waiting area, educational centre, nurses' station, inpatient rooms, intensive care unit and staff room.

The signs serve various functions: direction, information, instruction, prohibition, warning; signs of commemorative function and signs labeling objects (Table 2). The signs labeling objects were not included in the linguistic choice analysis (Table 3) – since their location on closets indicates that they are meant for the staff – resulting in 236 items. The directory signs have different styles (e.g. colour, font, layout, and language choice and order). The oldest directory sign is found in the main hall. Its age is reflected in the maintenance shape and missing letters (mainly in Arabic). One of the interviewees reported that the sign is to be replaced within months.[2] At least three other types of directory signs can be found in the same hall. A yet different directory type is found in the Emergency Medicine Department, and another one in the Pediatric Department. The external area of the hospital is signed either by new, trilingual signage, or older, much smaller signs, inconsistent

with regard to shape, design and language choice. This is also the case regarding the other types of signs in all four areas.

The order of the languages on the sign reflects a claim of ownership (Spolsky & Cooper, 1991; Spolsky, 2009a) and an organisational standpoint regarding the choice of languages. Thus, the fact that over 50% of the signs in Hadassah are in Hebrew only, reflects either an ideology, or unawareness of the need to translate signs in the inner parts of the hospital, such as inpatient units.

The Hebrew-only items prevail numerically (over 50% of all items), can be found in all locations, and carry various functions. This prevalence of Hebrew-only signs is congruent with the findings in other LL studies in Israel (Amara & Saban, 2004; Ben-Rafael *et al*., 2004).

Some spaces, like the Pediatric Department, are monolingual, thus totally inaccessible to non-Hebrew readers. The English-only items, which include medical information for staff as well as fire alarm instructions and a commemorative placard for donors, hang in a public space that is also used by patients. The bilingual Hebrew/English items are mainly directive signs within

Table 1: Distribution of signs according to location

Location	Number
Outside the hospital	22 (8.8%)
Main hall and corridors leading to Emergency Medicine Dept. and Pediatric Dept.	73 (29.1%)
Emergency Medicine Department	112 (44.6%)
Pediatric Department	44 (17.5%)
Total	**251** (100%)

Table 2: Communicative functions

Function	Number
Direction	99 [3] (39.4%)
Information	79 (31.4%)
Instruction	33 (13.1%)
Signs labeling objects	15 (6%)
Prohibition	11 (4.4%)
Symbolic	11 (4.4%)
Warning	3 (1.3%)
Total	**251 (100%)**

Table 3: Categorisation according to the language order of the item

Language order	Number
Hebrew	120 (50.8%)
Hebrew/English	32 (13.5%)
Hebrew/Arabic	22 (9.3%)
Hebrew/English/Arabic	20 (8.5%)
Hebrew/Arabic/English (Arabic and English on the same level, under the Hebrew)	19 (8%)
English	7 (2.9%)
Arabic	6 (2.5%)
English/Hebrew/Arabic	3 (1.2%)
Hebrew/Arabic/English/Russian	2 (0.85%)
Hebrew/Arabic/Russian	2 (0.85%)
Arabic/English	1 (0.42%)
Hebrew/French	1 (0.42%)
Russian/Hebrew	1 (0.42%)
Total	**236 (100%)**[4]

the Emergency Medicine Department, but also in the main hall. The trilingual Hebrew/Arabic/English items are mainly directive signs, with rare exceptions regarding prohibitions, and hardly any for information. The only Hebrew-Arabic-Russian item is a pain scale, aimed at self-assessment of pain. The Arabic-only items appear mainly in the educational centre within the Pediatric Department, as well as in externally produced signs, containing information about domestic accidents and domestic violence.

Russian is represented in only three signs. One is instructional, one is a warning and the third is the aforementioned pain-measurement scale. French appears in one commemorative placard, and other languages are not represented at all.

Discussion

As a domain, Hadassah Hospital follows the criteria of a social space (Spolsky, 2009: 3) with its own language policy, of which some features are managed internally, and others are under the influence of external forces.

Location and language choice and order

The space surrounding the hospital contains almost all types of linguistic items (excluding signs labeling objects). The new directive signage is trilingual, but the other types are inconsistent with regard to translation. For example, the information sign indicating that the electromagnetic gate does not harm pregnant women or wearers of pace makers, is not translated at all (item no. 242), even though some other information for visitors is indeed translated into Arabic (item no. 243).

The main entrance hall contains several main building directories, in different styles and probably from different periods. The older main directory (item no. 24) consists of Hebrew, English and Arabic information appearing separately, and the items are alphabetised respectively. The language order in the new directory is Hebrew-English-Arabic, and there's a difference in the colors of letters and background for each language. The directory also contains directional arrows. The secondary directory signs are mostly trilingual, and have the same style, showing a tendency to unify all signs of this type. Interestingly, the directive signs to the administrative functions of the hospital are only bilingual (Hebrew-English), as can be seen in item no. 26, referring the visitors to the hospital director, administrative director and nursing director, as well as to the finance department.

On my first visit to the hospital I was told by one interviewee that some of the signage will be replaced by trilingual signs, and some new signs will be added to improve orientation. The older main directory sign (item no. 24), non user-friendly and in bad shape in some places, is slated to be completely removed. Indeed, some changes and replacements of signs in this area did occur and the work is continuing. For example, an overhead directional sign was added in the lobby to the main hall (item no. 240), directing to the hospital's four main functions: Emergency Medicine Department, Rehabilitation Building, inpatient departments and outpatient clinics. Another (badly designed) trilingual sign, containing non-equivalent information regarding the admission to the Emergency Medicine Department, was completely removed (item no. 48).

The Emergency Medicine Department is almost invariably monolingual (Hebrew – 55%) or bilingual (Hebrew-English – 16%). The room names are not translated into Arabic, and according to the interviews, this is not expected to change. The items that contain Arabic are found mainly in the administrative space outside the department and refer mostly to visiting hours and payment arrangements. There is a new trilingual directive sign to the X-ray room, which was added after noticing that visitors had not found their way back to the Emergency Department, thus delaying treatment (personal communication with ER director, February 2011). One sign in the ER is quadrilingual (Hebrew-English-Arabic-Russian) and recommends speaking softly in order to be better heard.

The Pediatric Department is beautifully designed, to fit the needs of younger patients, but is almost inaccessible to Arabic speakers. All room names are in Hebrew, as well as a warning not to use toilets due to risk of contagion and other useful data for patients and families. The educational centre is mostly bilingual (Hebrew-Arabic), suggesting a large proportion of Arabic-speaking

inpatients. The quality of translation is sometimes problematic, but it is evidence of an effort to adapt to the needs of Arabic-speaking children.

Translation quality: Equivalence

The multilingual signs were content-analysed in order to examine the equivalence of the source (Hebrew) and target (English/Arabic/Russian) texts. I did not count how many times the phenomena to be discussed here occurred, but it was sufficiently often to make certain generalisations valid.

Concepts from the field of translation studies were used to assess translation quality (Baker, 1992; House, 1997) by looking for lexical, grammatical, pragmatic, register and stylistic equivalences. The examination of equivalence helps to determine whether the same message is conveyed to different audiences, in terms of meaning, function, coherence, level of politeness and the register (i.e. the language appropriate to a specific situation) (Baker, 1992; House, 1997; Vinay & Darbelnet, 1995).

The signage in the hospital carries mostly functional meanings. The register of the text in hospital signage is usually formal and impersonal, and contains specific medical terminology. Thus, their translation is straightforward, not requiring creativity, unlike, for example, translation of poetry.

Examination of the translation of the trilingual signs reveals many non-equivalences in the Arabic translation, and to a lesser extent in the English. The major problems in the translated texts are translation mistakes – wrong lexical choice in the target text, wrong collocation, or wrong word order. Some of the mistakes can be attributed to the influence of the source language (Hebrew) on the target text. In addition, the difference in politeness in some signs changes the goal of the text.

The translated text also contains incomplete or inaccurate information. In some cases, a source text is translated inconsistently in different signs (e.g. 'hospital' is sometimes translated as مستشفى and in other places as مشفى, although both are correct). As stand-alone texts, some signs contain spelling, stylistic and grammar mistakes. In most cases the mistakes do not impede text comprehension, but do clearly suggest lack of competent translation and quality control. (See Table 4 for examples of translation problems related to Arabic.)

Figure 1 illustrates some of the examples from Table 4.

Examination of the original message on the signs reveals problems with another aspect of accessibility: the size and types of fonts. In at least two directory signs (item no. 27 in the main hall, and item no. 115 in the back entrance to the Emergency Medicine Department) the choice of fonts reduces the readability of the text. That leads to the conclusion that language accessibility analysis should also consider criteria such as font size and type, and the text/background contrast.

Examination of the English translation of the signs reveals similar mistakes, though to a lesser extent (Table 5). One possible reason for the smaller number of mistakes compared to the Arabic texts, is that there are more English than Arabic readers involved in the process, or that samples of signs can be taken from hospitals in English-speaking countries, through the Internet.

Figures 2 and 3 show examples of translation problems in the identified signage.

Russian is hardly represented on the signs. One quadrilingual sign informs that 'in Hadassah [we] do not raise [our voice]. When you speak politely, you are speaking quietly, better heard' (item no. 18 – Figure 3). The translated texts are slightly different in each language. The English text requests to speak softly, the Russian text refers to 'speaking honorably in order to be heard better' and the Arabic text requests not to shout. In all cases, no full equivalence exists between the Hebrew text and the translation. The Arabic text adds information and the English uses different semantic fields (voice volume versus manner). The Russian text is relatively equivalent to the Hebrew one, but 'politely' and 'honourably' are not perfect equivalents since 'honour' refers to hierarchy, a meaning that does not appear in the original text. The punctuation in the Russian text is equivalent in form but not in function, and appears to be influenced from the Hebrew punctuation rules. This punctuation inadequacy may result in Russian readers not fully intellectually processing the text, and this in turn could lead them to consider its message as irrelevant.

To summarise, without a perfect formal and functional equivalence to the Hebrew text, the readers of signs in the other languages will not get the same information and may not react adequately to the text.

Linking content analysis to language management, the problems found in translations into Arabic,

Table 4: Examples of translation problems in Arabic signs

Phenomena	Hebrew text + English translation	Arabic text	Item no.	Function
Wrong lexical choice	מכון אי. אי. ג'י (EEG institute)	فحص السمع (Hearing test)	31	Directory
Wrong lexical choice	חדר מיון (Emergency Medicine Department)	عناية مكثفة (Intensive Care Unit)	115	Directory
Wrong Lexical choice	מרפאת הרדמה (Pre-operative Clinic)	عيادة الألم (Pain Clinic)	161	Directory
Wrong collocation	שחרור (Discharge)	ترك (Leaving/desertion)	43	Instruction
Wrong collocation	לבני משפחתו (to [patient's] family members)	أبناء عائلته (Family children)	14	Information
Wrong preposition	לבית החולים (to the hospital)	إلى المستشفى instead of للمستشفى	7	Instruction/ Prohibition
Missing information	Operative days/hours	Does not exist in the Arabic text	14	Information
Spelling mistake	מרכז בריאות האישה (Women's health centre)	صحة المرأة instead of محة المرأة	161	Directory
Spelling mistake	גסטרואנטרולוגיה Gastroenterology	جلسترو انترولوجي (Gastroenterology)	31	Directory

Figure 1: Directory sign in the main hall (item no. 161)

Table 5: Examples of translation problems in English signs

Phenomena	Hebrew text+ English translation	English text	Item no.	Function
Wrong lexical choice	מרפאת פגים Premature babies clinic	NEWBORN CLINIC	161	Directory
Wrong spelling	מרפאת בריאות העובד Personnel clinic	PERSONAL CLINIC	161	Directory
Wrong collocation	מטבח חלבי Dairy kitchen	MILK KITCHEN	24	Directory
Politeness/ function	חל איסור מוחלט על הכנסת מזון מבושל לבית החולים! It is strictly forbidden to bring cooked food into the hospital!	it is forbidden to bring cooked food into the hospital	7	Prohibition
Wrong word order + spelling mistake	בניין שיקום וגריאטריה שיקומית Building of rehabilitation and geriatrics	BU(I)LDING OF REHABILITATION & GERIATRICS (instead of Rehabilitation and Geriatrics Building)	18	Directory
Wrong transliteration	קופת חולים מאוחדת Kupat Holim Meuxedet	KUPAT HOLIM MEUEDET	12	Directory
Stylistic mistake	מכון רנטגן X-Ray Dept.	X.RAY DEPT	165	Directory
Stylistic mistake	השכרת טלוויזיה למאושפזים TV rental for inpatients	T.V.'s FOR RENT	28	Information
Spelling mistake	ועדה Committee	COMMITE[E]	12	Directory
Inconsistencies	מחלקה Department	DEP./DEPT./WARD	24/81/113	Directory

Figure 2: Instructional sign in the Emergency Medicine Department (item no. 96)

Figure 3: Directory sign in the main hall (item no. 18)

English and Russian clearly indicate lack of awareness regarding the importance of using professional translators, as well as of quality control of the target text.

Linguistic landscape and language accessibility

In order to determine if LL is accessible to non-Hebrew speakers, the analysis of the linguistic items must be cross-sectional and refer not only to the location, function and language choice, but also to the content of the target text, in terms of clarity, grammaticality and equivalence to the source text.

Trilingual directional signage appears mainly in the entrance, and in spaces outside the wards. There is continuing work to replace the old signage, mainly with trilingual signs. Inside the wards, the signage is either in Hebrew only, or in Hebrew and English. According to the interviews held with staff responsible for it, the ward signage will not be replaced, due to budgetary constraints. We maintain that in order to ensure accessibility, functions inside the wards should also be translated, since non-Hebrew readers will not be more competent upon entering the wards. Correct translation is important for orientation purposes, but also for a more welcoming feeling, and reduction of tension that is almost inevitable for patients and families.

The analysis of linguistic landscape often lacks data about the process itself (Spolsky, 2009a, 2009b). We can, however, make some assumptions regarding the process of language accessibility by looking at the signage across time and interview sign makers about the process.

During the data collection period, more signs were added in central locations, such as the main entrance, at the exit from the ER to the X-ray room. Pictograms showing the function of the clinic or room were added to the trilingual main directory of the outpatient clinics. The pictograms were not included in the current analysis, due to methodological limits, but they should be noted as an effort to improve accessibility to services. A more comprehensive language accessibility index, referring to design criteria, will examine the suitability of the pictograms for the target audience.

Most of the hospital's signs belong to the top-down flow category (Ben-Rafael *et al*., 2004). These items are made by the hospital, the Ministry of Health, or other governmental agencies. According to Ben-Rafael (2009) top-down items are designed by experts appointed by functionaries and are committed to serve official policies and the 'dominant culture'. Examining the top-down signs in Hadassah shows that preserving the dominance of Hebrew may have been a goal, but it is doubtful whether the signs were designed by experts (as presumed by Ben-Rafael, 2009). The signs are manufactured by an external company and the many translation mistakes suggest lack of quality control. We may only assume a policy of non-control over the signs' content in languages other than Hebrew.

The bottom-up flow signs are designed more freely by autonomous agents (Ben-Rafael, 2009: 49), advertising local services. Some of the signs are unilingual, some bilingual and others trilingual. Since the bottom-up flow signs are not in an entirely autonomous space, but in a hospital, one may wonder if, for the sake of the accessibility, they should adhere to the same rules of the top-down flow signs.

The supporting interviews with staff members responsible for the signage reveal important facts about the process of translation, as well as the ongoing replacement of signage. The signs that contain Arabic texts are translated by an untrained interpreter from one of the wards, and then sent to an external company. Room signs are prepared in the hospital and contain numeric data (floor and room number), the name of the department, the function and the person. All the signs of this type are in Hebrew. The interviews reveal that their form and choice of language will not change.

Currently there are no clear instructions from state authorities for the production of the signage. Therefore, the hospital must set its own rules, based on the patient survey held in 2010, client complaints collected regularly, and the staff's common sense. The client survey in the hospital indicated a need to add signage for better orientation. Unfortunately, the data from this survey was not made available.

The guidelines for signage production as inferred from the interviews are:

(i) Prefer modular signage wherever possible
(ii) Translate into English and Arabic all signage in central areas

(iii) Add pictograms to some of the clinic names
(iv) Leave room signs in Hebrew only
(v) Keep the language composition in signs within the wards unchanged, for budgetary reasons (interview held in December 2010).

Conclusion

The LL of Hadassah campus on Mount Scopus manifests a changing policy towards linguistic and cultural access. Older directory signs reflect a lack of awareness of language accessibility issues. This unawareness is reflected in the large number of Hebrew-only signs. However, the fact that the number of Hebrew-English signs is similar to the Hebrew-English-Arabic (or Hebrew-Arabic-English) may suggest that non-accessibility is not a matter of a deliberate power ideology against language minorities, but rather a concept that visitors could manage with Hebrew-only signs. The ongoing process of replacing and adding trilingual signs, while adding pictograms in others reflects a changing attitude as well as the existence of a feedback mechanism, a work-plan and prioritisation. It may be noted that changes in the language profiles of the signs relate mainly to Hebrew items being translated into Arabic, and not into other languages (e.g. Russian). In addition, the lack of specific regulation with regard to signage leaves the inpatient and Emergency Medicine departments mostly inaccessible to non-Hebrew speaking patients and families. The main problem, according to the signage-improvement team, is budget constraints, but in my view no less severe is the lack of quality control over translation, shown by the many translation non-equivalences, mainly in Arabic but also in English. These formal and functional non-equivalences may prevent the readers of signs in the other languages from getting the same information as the Hebrew readers (in cases of missing or extra information). Alternatively, readers of the non-Hebrew signs may be disinclined to process the information, considering it irrelevant or culturally inappropriate.

The lack of detailed governmental regulations with regard to signage may hamper the ongoing change in Hadassah hospital. The governmental directive from 2011 requires translation of signage, but does not specify the minimal units for translation. The change in the hospital's language policy is therefore congruent with Cooper's notion (1989: 41) that language policy is 'messy' rather than a 'systemic, rational, theory-based planning'. In the absence of a national policy with regard to signage, and realising that changes do need to be made to attract clients, the hospital is trying to set up a prioritised plan, based on staff and customers' impressions, within budget constraints. The missing link in the language management plan may be a component of quality control, to ensure that signs are not only trilingual, but also correct, unified, and serving a similar goal.

The improvement in the accessibility of signs must be viewed as part of an overall language management change, encouraged by the hospital management, to improve the quality of care given to diverse patients. In Hadassah Hospital, the shift in language management started about a year before the official change of language policy, manifested in the directive issued by the Ministry of Health in February 2011. The administration of both campuses has initiated cross-organisational changes: the appointment of a social worker in charge of cultural competence; mandatory training for care and service providers on core issues of cultural competence; and the establishment of a voluntary interpreting service in Arabic and Russian. Hadassah is the first general hospital in Israel that has taken such steps.

Suggestions for extending the language accessibility model

The analysis parameters used in the current study derive from both the LL and Translation Studies fields. Based on the findings, a more constructed 'Language Accessibility Index', could provide a more detailed analysis of LA. The index would contain both verbal and non-verbal parameters. The verbal parameters would relate to the availability of languages of the text, the quality of translation, and required cultural adjustments of the text. The non-verbal components would relate to the process of signage production – the existence of guidelines according to which signs are translated, the process of quality control, and the professionalism of the translators.

Design criteria should also be included – suitability of pictograms for various audiences, font

type and size, contrast of text and background colours, and letter spacing. Research shows that a person's reading speed increases as the size of the text increases (Rubin *et al*., 2006).

Language accessibility could be further extended to cultural accessibility (i.e. the level of accessibility to clients from various cultural groups) – since language is always a part of cultural notions and since some people do speak the majority language but will need some cultural adaptations for the equal use of a product or a service.

Notes

[1] The various communities of Sign Language users (Israeli SL, Arabic SL, and Russian SL) may also be mentioned, since they view themselves as cultural communities. Deaf and Hard of Hearing are entitled to some communication aides and interpreting services under the Israeli Law of Equal Accessibility (1998).

[2] The sign was replaced in 2012.

[3] One sign carries both directional and instructional functions.

[4] Language choice analysis excluded signs labeling objects.

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