MEDIA CREATION AND SHARING FOR INTERCULTURAL COMPETENCE DEVELOPMENT: IMPLEMENTATION OF M-LEARNING WITH LINGUISTIC LANDSCAPE

JACEK WALIŃSKI
UNIVERSITY OF ŁÓDŹ

Abstract:

New media shape the intensity of intercultural contacts, which results in a greater than ever before heterogeneity of modern societies not only through content consumption, but also through content creation with modern mobile technologies. This enables citizens to participate in the exchange of content in the Web 2.0 paradigm (audiences as both media consumers and media creators), which is prevalent in modern online services. This study demonstrates an application of the linguistic landscape approach to exploration of cultural diversity with m-learning in a foreign environment, i.e. a location unfamiliar to learners in a foreign country. The application is shown from the pedagogical perspective of authentic, informal, and situated learning activities conducted with the use of mobile devices. The study shows that learning activities of this kind offer the potential to change students’ perception of the cultural diversity, which is a sound starting point for the change of cultural attitudes and further intercultural competence development.

Keywords: mobile learning, intercultural competence development, situated learning, informal learning, linguistic landscape

1. Introduction

Observing the ongoing process of globalization it is not difficult to predict that contacts between people from different cultures will intensify in the years to come. This escalating intensity of intercultural contacts results in a greater than before heterogeneity of modern societies. There is a growing awareness that cultural diversity carries
an enormous inherent potential for progress and expansion in the future. Thus, a recurring topic in various EU and US state publications has been the importance of *intercultural competence development*, which is perceived as the basic condition for peaceful and prosperous existence of the society at both the local and global level.

For example, the European report on the role of intercultural competence in compulsory foreign language education LACE (2006) emphasizes that foreign languages should be taught so as to improve and develop not only the linguistic proficiency but also intercultural competence, which is seen as a key feature of the European multilingualism strategy. Another report on European mobility policies RHLEFM (2008) outlines the need to forge a new generation of citizens equipped with multicultural cooperation skills for intercultural dialogue, which is necessary for European development. Yet another report anticipating Europe’s occupational skill needs CEDEFOP (2009) advises European citizens to develop adequate linguistic and intercultural skills in order to act successfully in the global occupational market. Across the Atlantic, the American state agency publication CEDRPC (2006) advocates equipping citizens with the knowledge and skills to behave in culturally aware manners to gain competitive advantage in the ever globalizing society.

In light of these publications, the ability to deal with cultural diversity is no longer required only of business professionals working in international settings, but has become a key qualification required of all individuals to act productively in the modern world. This trend has been confirmed in research (Deardorff and Hunter 2006; Hulstrand 2008) showing that the ability to handle interaction in culturally diverse environments has become a major skill employers seek. As put by Spitzberg and Changnon (2010, p.4.), “With ample opportunities for employment overseas, it has become important for internationally competitive business to hire interculturally competent employees, if only for the future success of the business”.

2. Intercultural Competence Development

Despite the above-mentioned calls for the development of intercultural competence, it seems that a clear-cut definition of *Intercultural Competence* (henceforth IC) has not been fully agreed between various disciplines and theoretical frameworks (Deardorff 2006; Stier 2006). As summarized by Spitzberg and Changnon (2010, p.9), terms such as *intercultural competence, intercultural effectiveness*, and *intercultural adaptation* trace back to the 1970s and 1980s. At that time, various
efforts were undertaken to develop a list of intercultural competence characteristics, which mainly indicated that any comprehensive measure applied in this context must be multidimensional in nature.

From the 1990s a range of elaborate conceptual models of intercultural competence have been developed (e.g. Byram 1997; Byram, Nichols and Stevens 2001; Hajek and Giles 2003). They reflect different theoretical perspectives and methodologies ranging from simple models involving only one dimension to more complex ones that incorporate multiple dynamic agents involved in the IC. This proliferation of studies resulted in a number of different definitions of intercultural competence proposed in literature, often under different labels. For instance, Heyward (2002, p. 10) defines intercultural literacy as “understanding, competencies, attitudes, language proficiencies, participation and identities necessary for successful cross-cultural engagement”. His definition focuses on gaining knowledge rather than skills, which contrasts with the definition of intercultural effectiveness proposed by Stone (2006, p. 338), who defines it as “the ability to interact with people from different cultures so as to optimize the probability of mutually successful outcomes”. Hunter et al. (2006, p. 270), despite noticing the discrepancy in nomenclature, propose another definition, namely of global competence, which is “having an open mind while actively seeking to understand cultural norms and expectations of others, leveraging this gained knowledge to interact, communicate and work effectively outside one’s environment”.

In 2006, Deardorff noticed that problems involved in defining intercultural competence stem from a multitude of components that play significant roles in this concept. Accordingly, she conducted a comprehensive research to identify components that should be incorporated in this notion. Her outcome-based definition, which has achieved wide consensus among most intercultural scholars, defines intercultural competence as “the ability to communicate effectively and appropriately in intercultural situations based on one’s intercultural knowledge, skills and attitudes” (Deardorff 2006, p. 247). Additionally, Deardorff’s definition is accompanied by an extensive, multidimensional, cyclical model, shown in Figure 1, which visualizes the development of intercultural competence as a cyclic spiral leading from the personal to interpersonal level of interactions.
The model shown in Figure 1 visualizes the continuing process of intercultural competence development, which is viewed as a progress from individual internal outcomes, characterized by personal intercultural reflection and attitudes, to external outcomes, which result in effective interaction in intercultural contexts. Moreover, the model assumes that it is possible for an individual to achieve external outcomes without fully achieving internal outcomes, but in that case intercultural competence may be not entirely effective and appropriate. Deardorff’s (2006) study identifies 22 various elements of intercultural competence commonly agreed upon by the international scholars and professionals in the field, which include knowledge, skills, attitudes, comprehension, tolerance, etc.

The model assumes that the development of IC skills is an on-going learning process that involves, among other crucial elements, curiosity and discovery, which are viewed as necessary to transform one’s attitude, knowledge and skills to become sensitive to cultural differences in situations where linguistic communication functions as a means of interaction. This view is congruent with Byram’s proposal (Byram et
al. 2001, Byram et al. 2002), which postulates developing *intercultural dimension* in language teaching to prepare learners for interaction with people from other cultures and to make them understand and accept people from other cultures with their distinctive perspectives. Among crucial skills involved in intercultural competence development, Byram (et al. 2002, p. 14) includes *skills of discovery and interaction* (savoir apprendre/faire), which involve “the ability to acquire new knowledge of a culture and cultural practices and the ability to operate knowledge, attitudes and skills under the constraints of real-time communication and interaction”.

Therefore, a fundamental element in the intercultural competence development is the opportunity to *discover and observe* as well as to *analyze and interpret* phenomena related to other cultures. Acquisition of intercultural competence (including knowledge, comprehension, and skills) takes place through *discovery, interaction, and interpretation* of other cultures manifestations, which are key components in the practice of intercultural competence development. This chapter demonstrates an example of learning activities designed to develop the intercultural competence through discovery, discussion and interpretation with the use of linguistic landscape methodology.

### 3. Linguistic Landscape

*Linguistic Landscape* (henceforth LL) is a rapidly growing domain of research, which has recently gained enormous popularity in a variety of different disciplines such as linguistics, semiotics, sociology, politics, economics, communication, urban planning, and other fields of study. It is based on the study of written displays of minority languages in the public space (Shohamy and Gorter 2009). The concept of linguistic landscape was initially used in sociolinguistics by Landry and Bourhis (1997, p. 25), who described it 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”. This description is widely regarded (see Gorter et al. 2012) as the reference point for the subsequent development of the field, which has provided a broader picture of the linguistic landscape. It concentrates on counting languages on written signs in the streets, inside and outside various types of buildings, and subjecting them to different levels of linguistic analysis.

However, studies in LL are not limited exclusively to counting languages on public street signs. They often embrace *qualitative data* in
the form of background interviews and thorough examinations of collected language samples. Combined with other sources of information, for example, spoken language traditions of a region or language legislation, the systematic analysis of linguistic landscape takes into account ways in which the linguistic landscape does or does not reflect language demographics, attitudes and policies (Gorter et al. 2012, pp. 3–4). In this manner, linguistic landscape research comprehensively contributes to a better understanding of the dynamics of minority language situations of a given area.

The linguistic landscape approach has gained prominence not only in sociolinguistics, but also in other disciplines, theoretical frameworks, and methodologies. For example, it was employed successfully in econometrics (e.g. Nunes et al. 2008), political science (e.g. Sloboda 2009; Puzy 2012), and tourism (e.g. Kallen 2009). In linguistics, research in linguistic landscape goes along different directions. Some studies focus on the comparative aspect between different geographical regions (e.g. Coluzzi 2012), whereas others focus on situations of minority languages (e.g. Cenoz and Gorter 2006), multilingualism (e.g. Backhaus 2007; Shohamy et al. 2010), or practical application of LL in the Second Language Acquisition (e.g. Cenoz and Gorter 2008). Still, the underlying interest of all LL studies remains similar: “(1) they use written language in the landscape as a primary source of data; (2) that they analyze the data with regard to the presence, status or functions of minority languages” (Gorter et al. 2012, p. 3).

3.1 The concept of ‘minority language’

An important aspect of linguistic landscape research is a minority language in question, which can be approached from different perspectives. One major distinction made by Gorter (et al. 2012, pp. 5–6) concerns autochthonous (or traditional) and migrant (or new) minority languages. As emphasized by Extra and Gorter (2008, p.9), these groups have much more in common than is usually noticed. Another important distinction (Gorter et al. 2012, p.6) is the difference between unique minority languages, i.e., languages which exist only as minority languages (such as Basque or Welsh) and local-only minority languages, which are majority languages in another state (such as Polish in Lithuania). From this point of view, the division between majority and minority groups is not based purely on their numerical size, but on “clearly observable differences among groups in relation to power, status, and entitlement” (May 2006, p.255). However, since such
distinctions are not always easily applicable in practical situations, they remain arbitrary to some extent.

### 3.2 The unit of analysis in LL studies

Another central area of discussion in current research on the linguistic landscape methodology concerns the unit of analysis. Although all LL studies take into consideration language sings, there are different views on what should be counted as a valid language sign in the linguistic landscape. Although Backhaus (2007, p. 66) defines it very broadly as “any piece of written text within a spatially definable frame”, traditionally most LL studies are based on examples of written language on *static signs*. As argued by Gorter (et al. 2012, p. 6), this approach may be soon outdated because, especially in urban regions, we are often surrounded by flat screen displays and other *dynamic visual signs*, which have gained enormous popularity due to technological innovations. Focusing exclusively on static signs becomes increasingly problematic and incomplete, since it significantly limits the variety of signs that one encounters in metropolitan public space.

Moreover, the category of *moving signs*, which includes texts on cars, buses, clothes, bags, and other items carried by people in a particular area also deserves more attention as another category of written language signs, since they contribute to the observable linguistic landscape, too. The discussion on the unit of analysis is still far from reaching a definitive conclusion, therefore one is often confronted with taking arbitrary decisions about units taken into consideration. On the other hand, the open status of the unit of analysis offers flexibility for researchers, who can decide which elements should be taken into consideration depending on the particular perspective and objectives of a study.

### 3.3 Cultural diversity in LL studies

In the era of globalization, cultural diversity is manifested by the presence of minority languages (in all the above-discussed senses) in the linguistic landscape of a given region (Gorter 2006, pp. 81–82). Since linguistic landscapes are entirely human-made phenomena, they obviously pertain to the cultural reality of a given location. The inextricable link between linguistic diversity and cultural diversity is stated in the Universal Declaration of Cultural Diversity (UNESCO 2001) and the Convention on the Protection and Promotion of the Diversity of Cultural Expressions (UNESCO 2005). As put by Shohamy (et al. 2010, p.xiii), “Linguistic landscapes are molded by different circumstances
languages, cultures, media

– historical, social, political, ideological, geographic and demographic – and at the same time, illustrate processes that are inherent to their own dynamic, which in turn participate in melding of the wider social and cultural reality”. In this sense, the LL methodology can be used to investigate how a linguistic landscape reflects language demographics, use, attitudes, and policies of a given location to discover its underlying cultural diversity.

This study follows the assumption that activities involved in the linguistic landscape analysis conducted with proper interaction, collaboration, discussion, and interpretation of results can contribute to the elevation development of intercultural competence in their participants, especially if augmented with mobile learning. Application of mobile devices in linguistic landscape research has been advocated by Gorter (2006, p. 83–84), who emphasizes that “cell phone cameras do add another dimension and will probably change the ways people take pictures and share them, wirelessly, with others”.

4. Mobile learning

The term Mobile Learning (m-learning) is closely related to e-learning as well as distance education. It is commonly associated with learning delivered by mobile devices, such as smartphones, iPods, tablets, digital music players, etc., connected wirelessly to the Internet. Although these devices are central to conducting mobile learning activities, such technocentric conceptualizations have been recently viewed (e.g. Kukulska-Hulme 2010, JISC 2011) as rather superficial because a definition of mobile education in terms of utilized devices seems to be constraining as it is limited to current technological instantiations. At the pace of modern technological progress, devices become obsolete before they gain any widespread use in education.

Some proponents of mobile learning (e.g. Winters 2006, Sharples 2007) attempt to define m-learning in terms of learning mobility. From this point of view mobile learning can be delineated as “the processes (both personal and public) of coming to know through exploration and conversation across multiple contexts amongst people and interactive technologies” (Sharples 2007). Extending learners’ mobility changes both the nature of learning (e.g. both formal and informal learning can be supported) and the variety of ways in which learning can be delivered. However, as noted by Traxler (2009, p.15), the nature of learning mobility can be viewed differently by different learners. For some people, it means reading with a laptop computer on a train while...
commuting to school, whereas for others it is hands-free learning, e.g. listening to audiobooks or podcasts while exercising.

Because the above mentioned interpretations somehow limit the conceptualization of m-learning, it has become apparent that the final definition of mobile learning is still emerging. In comparison to other areas of technological advancement in education, the body of research available in m-learning is still relatively small and the distinction between m-learning and e-learning is somehow blurred. However, m-learning is more specific that e-learning in its focus on anytime, anywhere learning postulate, which denotes not just physical mobility, but most of all “the opportunity to overcome physical constraints by having access to people and digital learning resources, regardless of place and time” (Kukulska-Hulme 2010, p. 181). This greatly extends the control of time and location that learners have over their learning activity and substantially broadens learning opportunities in comparison to the traditional desktop-bound e-learning.

Moreover, as indicated by Traxler (2009, p. 14), this distinction may be only temporary because with the advent of portable devices, wireless connectivity, and extended battery life, these two concepts may soon merge into one. Accordingly, Traxler proposes a definition that views mobile learning in terms of the underlying learner experience. It distinguishes m-learning from other forms of electronic education by putting “emphasis on ownership, informality, mobility, and context that will always be inaccessible to conventional tethered e-learning”. For the above-discussed reasons, any attempts to develop a definition and implications of mobile learning must take into consideration that it has multiple meanings among different groups of people involved in education and occurs differently in different contexts.

4.1 Informal, personalized, situated mobile learning

The nature of mobile learning can be observed in activities undertaken in various learning contexts. They are characterized by unique attributes that are particular to different types of educational activities. Having analyzed the already available body of research in the field of m-learning, including a large number of pilots, case studies, and trials, Kukulska-Hulme and Traxler (2007) distinguish some emerging categories of mobile learning, including informal, personalized, situated mobile learning, which occurs when “mobile, wireless and handheld technologies are enhanced with additional functionality, for example, location awareness or video-capture, and deployed to deliver educational experiences that would otherwise be difficult or impossible” (Kukulska-
Hulme and Traxler 2007, p. 182). The research presented in this paper falls into this specific category.

Among different characteristics of mobile learning, one that is particularly significant to this study is the aspect of situated learning as proposed by Lave and Wenger (1991). It implies that learning takes place in appropriate and meaningful contexts. Situated mobile learning supports context-specific and immediate learning that situates and connects learners (Traxler 2009, p. 18). This aspect of m-learning is perfectly suited to the linguistic landscape methodology. Investigation of linguistic landscape with mobile devices enables students to act as apprentices in the process of hands-on exploration of cultural diversity, which results in their increased participation in the learning community.

Furthermore, this category of m-learning activities puts a strong emphasis on informal learning which can be basically defined as “any activity involving the pursuit of understanding knowledge or skill which occurs without the presence of externally imposed curricular criteria” (Livingstone 1999, p. 4). It should be noted that learning activities discussed in this paper fall into the sub-category of informal education because they were conducted under the guidance of institutionally-recognized instructor. They exemplify a transition from the knowledge production paradigm to the knowledge navigation paradigm (Brown 2005), where formal and informal learning techniques are mixed and the traditional teacher’s role changes to that of a coach and mentor. As pointed out by Vavoula and Sharples (2008), such blurring of boundaries between formal and informal education often adds certain value because in some learning situations it makes sense to incorporate both elements of formality and informality.

Another attribute of mobile learning particularly relevant to linguistic landscape investigations is the aspect of authentic learning (Donovan et al. 1999), which implies that learning should be centered around authentic tasks that enable students “to explore, discuss, and meaningfully connect concepts and relationships that are relevant to the real-world and are meaningful to the students”. As shown in this study, while investigating a linguistic landscape with mobile devices students are directly involved in exploration and inquiry of cultural diversity. Hence, they gain opportunities to pursue meaningful problems and become engaged in the social discourse.

This aspect is closely related to the concept of connectivism (Siemens 2004), which views learning as focused on connecting specialized information sets collected by individuals involved in the learning process: “Connections that are created in this process enable learners to gain new knowledge, which is more than their current state
of knowing”. In this study, personal experience of individuals involved in an investigation of the cultural diversity of a foreign location is fed back into a shared linguistic landscape to create a network of knowledge that provides further learning to all participants involved in the process. This cycle of knowledge development enables learners to gain new knowledge through the connections they have formed. Finally, the following research also contributes to a new trend recently observed in m-learning, which is adding mobility of the instructor.

5. Research

An experiment was designed to examine whether exploration of a relatively new location with the linguistic landscape methodology can reveal new perspectives on cultural diversity of a foreign region, and thus contribute to elevation of intercultural competence. The activities were designed to follow pedagogical approaches of situated, informal, authentic learning in the above-discussed framework of connectivism.

The activity described below took place on the 9th of September 2011, during the second edition of SILCC Summer Institute “Languages and Cultures in Contact / in Contrast”, which was organized in collaboration among Chemnitz University of Technology, University of Savoy in Chambery, Ege University, and University of Lodz. (For more information visit: http://silec.pl/2011/). A group that took part in the study consisted of 15 postgraduate and doctoral students, including 5 members from each participating country (Germany, Poland, Turkey), who participated in that SILCC edition to broaden their perspectives on various aspects of methods and applications of language and culture data. That edition was hosted by the University of Savoy in Chambery, France.

Chambery is a city located in the Rhone-Alpes region in southeastern France. It is the capital of the department of Savoie, with municipal population over 50 000. Chambery is a popular skiing resort which often attracts tourists from neighboring European countries. It is also an important academic center, which attracts a substantial number of foreign students. The University of Savoy has the fourth-highest number of Erasmus exchange students in France. (Wikipedia: University of Savoy). Because of these reasons, the city was expected to show some visible traces of cultural diversity in its linguistic landscape. On the other hand, taking into consideration the long-established and well documented policy of privileging the national standard language in France, it also was expected that traces of foreign languages in the
city might not be so overwhelmingly conspicuous as in other European locations.

5.1 Experiment

The experiment discussed below was aimed to demonstrate that informal, situated mobile learning activities can be used for cultural diversity discovery and reflection. The location for the linguistic landscape exploration was limited the central part of Chambery, more specifically a region that was clearly marked by a map included in the local tourist guide with which the SILCC participants were provided by courtesy of the University of Savoy organizers. These tourist guide booklets played an important role in the experiment as they helped in mapping spotted language signs, and prevented participants from wandering off the site.

The object of study concerned only migrant minority languages, whose visibility stems from mixing different cultures in modern Europe, disregarding any historical dialects possibly existing in that region. The participants were encouraged to look not only for signs in their native language but also in any other foreign language they could possibly recognize. As advanced students in cultural issues they were expected to have a fairly extensive knowledge of various foreign languages and cultures.

The unit of analysis for the LL methodology in the activities was specified broadly as “any visible foreign language sign that could be spotted”, including both outdoor and indoor locations in the vicinity of the city center. In fact, the participants were encouraged to look inside cafés, restaurants, shops, etc. to increase the opportunities for discovering linguistic diversity in the short period of time that could be devoted to exploration of the site.

The data collection was conducted with a simple yet efficient methodology. Pictures of spotted language sings were taken with participants’ cell phone cameras. Students marked their locations in the tourist guide maps they were equipped with. It must be emphasized that only personal mobile phones were used, thus no additional technical equipment was necessary to conduct the activities. The data collection could potentially be performed with less hassle with geotagging of pictures, i.e. automatic addition of geographical location metadata to photographs. However, since not all participants had cell phones supporting this functionality, it was not used for mapping linguistic signs in that particular session. Transfer of pictures and locations to a commonly shared linguistic landscape was achieved with the help of
Google Maps, which is a highly popular web service provided free of charge by Google. It enables marking locations on an electronic map as well as accompanying each location with a picture. Moreover, it allows for public sharing of such maps.

5.2 Procedure

The session was divided into three stages, which took altogether 4 teaching hours. The first part was devoted to the initial tutoring and instruction. Then the linguistic landscape exploration and data collection stage took place. The third stage of the session was devoted to mapping linguistic signs and analysis of the emergent linguistic landscape. Both at the beginning and at the end of the experiment, discussion sessions were held. The initial discussion focused on predictions of the cultural diversity of Chambery, which was intended to identify students’ cultural awareness. The final discussion was based on the analysis of the linguistic landscape. It was intended to compare the cultural diversity emergent from the empirically collected data with the participants’ previous predictions in order to check whether their perspectives on the cultural diversity in Chambery had changed, i.e. whether their intercultural awareness had been elevated.

5.2.1 Initial tutoring and instruction

The session started with a 30 minute classroom meeting devoted to presenting objectives of the experiment, as well as its basic methodology described in this paper. Next, a 15 minute slot was devoted to discussion about students’ predictions about the cultural diversity in Chambery. Each student was asked to make a list of five most conspicuous foreign languages they expected to observe in the city. Once their lists had been prepared, the participants had an opportunity to compare their predictions in a discussion. To invoke curiosity, it was explained to students that their initial predictions would be later used for comparison with the actual cultural diversity reflected in the linguistic landscape. It is noteworthy that all students who took part in the experiment had not previously visited Chambery, therefore none of the participants had extensive prior familiarity with the location. However, before the session was held the students had stayed in the city for a couple of days, so they had already made some observations and could move around the city center with certain confidence.
5.2.2 Exploration and data collection

The students were divided into 7 pairs and 1 team consisting of three members. Such grouping was intended to encourage informal atmosphere during the exploration activities, and to serve as a general safety measure against getting lost. Each team was requested to visit a different part of Chambery. Different exploration areas for teams were assigned as quadrants on the tourist guide map. The students were instructed that wherever they spot a foreign language sign, they should take a picture of it with their cell phone cameras, indicate its location on the tourist guide map, and take note of any interesting information associated with it. The participants were instructed to find “as many language signs as possible”, however, they were asked to continue exploration until at least five signs in different locations were discovered. The students were given 90 minutes (2 teaching hours) for exploration. After that time they were expected to return with their results to a common meeting place which was a café in the central market square of Chambery.

5.2.3 Mapping and outcomes

When the time for exploration had ended the teams returned to the meeting point for a mapping session. Locations of linguistic signs found in the exploration were mapped by the instructor in the Google Maps together with the pictures taken in the exploration. A tangible outcome of the experiment was a shared map in Google Maps, which included linguistic sign locations accompanied by pictures and short explanatory notes, which reflected the linguistic landscape of Chambery.

For the final 30 minutes of the session the students had an opportunity to compare their predictions made earlier with the linguistic landscape that emerged form the data obtained empirically. It was discovered that there were significant discrepancies between what students had predicted and the results of their collective findings, which is summarized the following observations.

5.3 Observations

The first observation that emerges from the experiment is that all participants rightly predicted that English would be ubiquitous in the linguistic landscape. However, other languages observed in the area differed from the students’ predictions as to their occurrence and prevalence. For example, besides English, only other popular European languages, i.e. German, Italian, Spanish, Russian, as well as the students’ native languages were included in predictions. Not even one participant mentioned Chinese, Japanese, Korean, or any other Asian language.
However, the linguistic landscape revealed that Asian languages taken as one occupy the runner-up position on the list of most visible foreign languages in Chambery. This glaring omission indicates that our perception of cultural diversity is significantly conditioned by personal/national cultural background. The experiment showed that what we conceptualize as important in the surrounding cultural diversity is what we recognize. If there is something that we do not fully grasp, e.g. Asian lettering, it gets somehow neglected as irrelevant in our mental image of the cultural reality, even if it occupies a prominent position in the actual linguistic landscape. The problem of Asian languages being treated as a single category is discussed further in Section 5.3.1 devoted to linguistic issues.

A further observation indicating that we perceive cultural diversity from the point of view of national/personal cultural perspectives is that the participants usually included their native language in predictions (though not at the top position and not all of them). Less popular European languages, e.g. Norwegian, Portuguese, Romanian, etc. were not mentioned in predictions, nor spotted in exploration. However, it does not mean that they are not present in the linguistic landscape of Chambery. It rather means that they are not widely recognized, therefore they escape the participants’ attention and perception. What further confirms this hypothesis is that during the exploration Polish language traces were discovered exclusively by Poles, and Turkish language traces were spotted only by Turks. They were easy to spot for native speakers of respective languages, but much more difficult to notice for participants to whom they were linguistically foreign.

Moreover, it seems that our perception of the cultural diversity of a foreign place depends to some extent on cultural importance, or proximity, of other cultures to ours. For example, Turkish was not included whatsoever in predictions made by Poles, and vice versa. This reciprocal omission indicates that these two cultures may be mutually recognized by their representatives as relatively irrelevant in the cultural diversity of Europe. It is explicable by the geographical and cultural distance that divides these nations (even if historically their mutual relations were closer through antagonism, e.g. the Battle of Vienna in 1683). On the other hand, German was included in almost all predictions and spotted by representatives of all participating countries. It indicates its prominent position in the mentality of young Europeans, which was accordingly reflected in the resulting linguistic landscape.

The experiment showed that cultures recognized as ‘important’ not only occupy higher positions in our mental image of the cultural diversity, but are also more easily discernable for us in the surrounding
reality. This conclusion is congruent with Piaget’s theory of schemata (Inhelder and Piaget 1958), Papert’s theory of constructionism (Harel and Papert 1991), constructivistic assertions that learning is based both upon experience of external objects and former knowledge (Jonassen 1991). It is also congruent with recent findings on the level of mental construal of distant and near phenomena (Trope and Liberman 2010).

Obviously, the above observations are not intended as any quantitative/qualitative evaluation of the cultural diversity in Chambery. The scope of the experiment was too limited (short time, low number of participants, small area of exploration) to make any serious claims about the actual cultural diversity in that town. Rather, the activities were intended as an eye-opening activity to demonstrate that the perception of cultural diversity, at least to a significant extent, lies in the eye of the beholder, and that there may be significant discrepancies between our subjective predictions and the objective reality reflected in the linguistic landscape.

We can assume that such activities change students’ sensitivity to other cultures, especially those that more distant in various aspects to their native culture. Expanding one’s cultural awareness is a sound starting point for further development of intercultural competence, which is required to transform attitudes to other cultures. As discussed in the introductory part of this paper, openness, respect, curiosity and discovery are fundamental factors in the development of the much desired internal outcomes of intercultural competence.

5.3.1 Linguistic issues

Usually linguistic landscape studies focus on a specific minority language observable in a given area. However, because the activity discussed in this study was intended to discover the overall cultural diversity of a foreign place, all modern languages were included in its scope. As an outcome, some pictures submitted by the students included signs that were difficult to qualify. For example, a stand with the inscription “Pub Irlandais” surrounding a shamrock was spotted (photograph A in Figure 2 below). In this case, the word ‘pub’ is an assimilated borrowing from English into French. From this point of view, it is not eligible for inclusion in the linguistic landscape. On the other hand, it clearly marks the presence of Irish culture in the linguistic landscape of Chembery, which reflects the overall purpose of the investigation. Another example is “Osaka” video games rental point, where the presence of Japanese culture is clearly marked by the geographical name and the logo resembling Japanese flag (photograph B in Figure 2 below). However, the sign is clearly not written in Japanese,
therefore its inclusion in the linguistic landscape was dubious. A similar problem occurs with “Restaurant Le Mekong” (photograph C in Figure 2 below). In that case there is at least some inscription in (supposedly) Vietnamese lettering below the restaurant’s name.

Certain foreign languages were difficult to specify. Especially the characteristic lettering of Asian alphabets posed this problem. On one hand, Asian languages are easy to spot because of their idiosyncratic characters. On the other hand, without additional context their country of origin is difficult to specify for non-experts. In the experiment, one student submitted a picture (photograph D in Figure 2 below) that could not be assigned to any particular Asian culture for the lack of any further context. In the outcome, this linguistic sign was generically classified as ‘Asian’, without specifying its country of origin, which is a glaring oversimplification.

**Figure 2. Pictures exemplifying linguistic issues**

Another problematic aspect concerns moveable objects. For example, pictures of a shopping bag with English inscription and of a van with Japanese writing were submitted. On one hand, these objects were spotted in the exploration area, thus they belonged to the linguistic
languages. On the other hand, it could not be ruled out that they appeared in the area of exploration only temporarily by sheer coincidence. Consequently, their inclusion in the linguistic landscape was problematic.

The examples discussed above demonstrate some challenging cases that may crop up when using the LL methodology for investigation of cultural diversity. A full specification of units of analysis for cultural diversity exploration is clearly beyond the scope of this study. However, it seems that if the unit of analysis for a linguistic landscape study is specified too broadly, some problematic cases are likely to appear. Hence, the instructor should be prepared to explain the reason for arbitrary decisions, if some must be taken.

5.3.2 Technical issues

During the experiment the instructor was assisted by a highly-qualified IT professional who was a member of the SILCC staff in Chambery. Thanks to his help the instructor could focus on discussing the results of exploration, while the IT professional took care of mapping locations and picture transfer. Without that help the data collection would be much more time consuming. Moreover, it must be pointed out that while conducting such activities the instructor should be prepared to handle a variety of technical issues, which potentially poses a problem for less mobile technology savvy teachers.

6. Conclusions

The variety of languages used in the public space provides evidence on what cultures gain importance in the increasing diversity of the globalizing world. The study demonstrates that the linguistic landscape approach can be used to provide some empirical evidence on the position of migrant languages in culturally-diversified reality in order to raise the cultural awareness of students. Although the empirical data for this study originated from a rather limited experiment, the results indicate considerable differences between cultural intuitions of visitors to a foreign location and the actual cultural diversity of that place. According to Deardorff (2006), raising the cultural awareness of students is the starting point in the cycle of the intercultural competence development. As discussed in the introductory part of this study, attitudes of openness, respect, curiosity and discovery are viewed in that model as fundamental to the development of the much desired internal outcomes of intercultural competence.

Moreover, this study takes the still relatively young premises of the linguistic landscape research into the practice of intercultural
competence teaching by expanding its applications with the use of m-learning methodology. It shows that it is not the technology itself, but how we use it that counts in education. What is particularly valid in the activities presented in this study is the resulting contextualization of learning. An in-the-field exploration situates learners within the context of cultural diversity by providing authentic environmental cues for a better understanding of the phenomenon. The aspect of contextualization is strongly emphasized by Biggs (2003) who states that teaching intercultural competence must be identified in the curriculum with the context of intended outcomes to motivate students in their learning. As shown in the experiment, with m-learning such contextualization is achievable to a much greater extent than would ever be possible with the traditional teaching or desk-bound e-learning.

Furthermore, the study also demonstrates how mobile learning enables new forms of acquiring knowledge through tasks built around data capture, location-awareness, and collaborative learning. It shows that the use of mobile devices adds another dimension to the potential of situated learning in all domains of education, which brings the following tangible benefits:

- Abstract (representational) and concrete (environmentally-situated) knowledge can be integrated.
- Contextualization through location-aware features is available.
- Data can be recorded and learning processes captured wherever they happen.
- Reflection in close proximity to the learning event is encouraged.
- Active learning is promoted in activities.

The above-discussed ready made scenario of authentic, situated m-learning activities in the framework of connectionism may serve as a starting point for further research geared toward combining the linguistic landscape and m-learning methodologies in the area of intercultural competence development. The next logical step on this path is a more comprehensive account that applies measurements based on the INCA intercultural competence assessment framework (Prechtl and Lund 2007) in similar learning contexts for a more objective assessment of the advancement in intercultural competence.
REFERENCES


