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Title:

A Geosemiotic Analysis of Multilingual Shop Signs in Tizi Ouzou Town Center

Presented by:

Ms. Briki Fadhila,

Ms. Chebli Rosa

Supervised by:

Pr. YASSINE Souryana

Board of Examiners:

Mr. CHETOUANE Madjid, MAA, Mouloud Mammeri University of Tizi Ouzou, Chair.

Mrs. YASSINE Souryana, Professor, MCA, Mouloud Mammeri University of Tizi Ouzou,
Supervisor.

Mr. AOUINE Akli, MAA, Mouloud Mammeri University of Tizi Ouzou, Examiner.

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To,
my beloved parents
LEILA & LARBI,
my cutest sister
SOUHILA,
my precious brother
YACINE

Briki Fadhila

To,
my beloved parents,
much beloved sisters,
my darling little niece,
all my family

Rosa Chebli

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This dissertation falls within the field of linguistic landscape, it deals with the Geosemiotic Analysis of Multilingual shop signs in TO town Center to investigate language hierarchy and arrangement. Its objective is threefold. It aims first to identify the preferred code(s). Second, it intends to uncover the sign writers' strategies to combine these languages. Third, it seeks to unveil the sign writers' ideologies and motives behind language choice. For this reason, a total number of 131 pictures of multilingual shop signs were collected in TO town mainly Centre-Ville and Nouvelle-Ville to serve as the corpus for this study. Moreover, 28 questionnaires were administered to 28 shopkeepers, in addition to a semi-structured interview held with two graphic designers. In order to carry out the Geosemiotic Analysis of the corpus, the 'code preference system' developed by Scollon and Scollon (2003) in their theory of Geosemiotic is used as a methodological toolkit. As far as the strategies followed to combine these languages, Reh (2004) and Backhaus (2006) models of typology of multilingual writing are used. To this end, the mixed method research is used to Analyse data both quantitatively and qualitatively. The Quantitative data involves the use of the rule of three to count the frequency of languages in each category and the closed-ended questions of the questionnaire, while the qualitative analysis uses the content analysis to interpret the qualitative data of the questionnaire and the interview as an attempt to understand the ideologies and motives associated with each language. The results show that foreign languages mainly English and French are privileged in multilingual signboards of TO due to the positive connotations associated with them like high quality, reliability, trendiness, etc. while Arabic and Tamazight are underrated because they do not serve commercial purposes. As strategy to combine these languages, shop writers rely more on Complimentary and duplicating information arrangement.

Key terms: code preference, language ideologies, Linguistic landscape, multilingual writing, shop signs.

Ar: Arabic

Bi: Bilingual

CV: Centre-Ville

Eng: English

Fr: French

It: Italian

LL: Linguistic Landscape

LWC: Language for wider communication

MSA: Modern Standard Arabic

NV: Nouvelle-Ville

RAr: Romanized Arabic

Spa: Spanish

Ta: Tamazight

TO: Tizi-Ouzou

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General Introduction

Statement of the Problem

The last two decades have witnessed an increasing interest in the study of signs in public spaces around the globe under the field of ‘Linguistic Landscape’. It has piqued the attention of a host of academics from all over the world. Its object of research is any visible display of written language in public settings. Laundry and Bourhis (1997) were the first to provide a clear definition of linguistic landscape and establish it as an independent discipline. Its main focus is on multilingual issues like language policy, language choice and language hierarchy in multilingual settings like TO in Algeria.

In fact, Algeria is characterized by the phenomenon of multilingualism where more than one language is at play resulted from language contact with the different invaders in the past, globalization and internet in present times. Accordingly, plurilingualism in the Algerian context is organized around two official languages: Modern Standard Arabic and Tamazight, spoken languages: colloquial Arabic and Berber dialects, and foreign languages: French and English (Nakla, 2021).

Like other towns and cities in Algeria, TO is plurilingual as it is the meeting ground for multiple tongues. This linguistic cocktail is visible in the real-life language practices of its inhabitants, as well as in its linguistic landscape. In fact, Kabyle and its sub-varieties is the most spoken language in Tizi Ouzou, in addition to French and ‘Zdimouh’ (a mixture of colloquial Arabic and Kabyle) (Helouane, 2008). As regards written languages in the public scene of Tizi Ouzou, it can be divided into two types: governmental signs written in three languages (trilingual): Modern Standard Arabic at the top, Tamazight (tifinagh script or Tama3mrith) in the middle, and French at the bottom. Private signs are either written in one language (monolingual), two languages (bilingual) or multilingual (more than two languages) depending on the owners' choices, ideologies and preferences. From what is seen, Private

signage in TO tends to privilege foreign languages over local ones this especially visible in Shop signs. Respectively, and from the comparison between the three situations, it is noticeable that there is no linguistic compatibility between what is written and what is spoken, and between what is written in governmental and private signs. While government signs are homogeneous and reflect language policy and hierarchy of Algeria, private signage shows a complete reversal of this policy as they are heterogenous written in different languages especially those written in shop signboards. Thus, the present study will focus on the study of languages on multilingual shop signs to look at language choices and language hierarchy.

The arrival of commercial signage in Algeria in general, and TO in particular is linked to the French settlement from 1830 to 1962 (Aissaoui, 2009), since then it was shaped and reshaped several times following the policy of each time. During the colonial period it was written in French following the policy of ‘Frenchification’ (Benrabah,2013). Then, it was shifted to be written in Arabic under the policy of ‘Arabization’ that was implemented just after the independence (Benrabah, 2013) by passing several laws that ban the use of any other language than Arabic in all domains of life including public signage like (loi n° 91 du 16 Janvier 91. Art 20 and 33). In the early 2000s, the Arabic only policy was removed because of its failure at all levels to a more linguistic diversity and tolerance as a consequence of international trade, globalization, and internet. (Ibid). This linguistic diversity is manifested in the spoken as in the written medium mainly in the languages displayed in the public spaces of the urban environments like in Tizi Ouzou town.

Indeed, when walking in the streets of TO one encounters a myriad of intricate, multimodal, and multilingual signs. Undoubtedly, commercial signage (shop signs) is the most dominant and prominent type since TO town is the economic and administrative capital of Tizi Ouzou region in general. As their main medium for advertisement, merchants in TO rely on shop signs to promote their businesses by designing signs that are mostly ‘eye

catching' combining different modes selected from a set of semiotic resources (verbal and non-verbal) to target their potential clients and convey their message effectively.

An appreciable amount of linguistic landscape of TO using shop signs as the main corpus can be found like those conducted at MMUTO including: in the Department of French, Kahlouche (1997) in a dissertation entitled '*Les enseignes de Tizi Ouzou: Un lieu de conflit linguistique*' (*Shop signs in Tizi Ouzou : A place for Linguistic conflict*) looked at merchants' ideologies behind language choices, wherein he concluded that French dominates the LL of TO because of prestige, the rejection of Arabic because of political tensions, and little display of Berber despite Kabylisians strive to recognize Tamazight. Halouane (2008) in '*Langues des enseignes en Kabylie: Arabe, Berbère ou français: nécessité commerciale ou choix culturels? cas de Tizi Ouzou et de Bouira*' (*languages of Shop Signs in Kabylia: Arabic, Berber, or French: Commercial necessity, or Cultural choice: the Case of Tizi Ouzou and Bouira*) compared the commercial signage of TO and Bouira to investigate the position that Berber language occupies within the linguistic landscape of the two cities as they both belong to Kabylia. The results have shown that Tamazight occupies the last position in both settings, while French Dominates, and Arabic comes in the 2nd position. In the Department of English, in a study conducted by Fodil (2019) entitled '*How English language transforms the Linguistic Landscape in Algeria*' investigated the reasons behind the incursion of English in Algeria through the analysis of all labelled shop signs in TO. The results have shown that the emergence of English in Algeria is an offshoot of Globalization, and the reasons behind the choice of English is that it is associated with fashion, novelty, high quality. Besides, he concluded that English is spreading fastly and starting to outpass French.

All the above-mentioned studies have investigated language use from a sociolinguistic perspective regardless the number of languages, and their position in the sign while the present work is in an attempt to investigate language use from a semiotic

perspective to look at multilingualism, and language hierarchy in the LL of TO by focusing on multilingual shop signs in Centre Ville (CV), and Nouvelle Ville (NV) following the Two perspectives that have emerged for analyzing multilingualism on signs. The first one deals with the semiotic emplacement of languages within the sign namely code preference system developed by Scollon and Scollon (2003), it is concerned with the physical positioning of languages on these signs as this can reveal the writer's preference for one code over another. The second assesses the degree of translation following the Reh Model (2004) and its refined version by Backaus (2006) to unveil the strategies followed by shop owners to combine these languages.

Aims and Significance of the Study

The aim of this research is to investigate language hierarchy in the linguistic landscape of TO through the analysis of multilingual shop signs in TO town (Centre ville and nouvelle ville). In order to achieve this aim, the 'code preference system' developed by Scollon and Scollon (2003) is followed. In addition to Reh (2004) and Backaus (2006) models of types of multilingual writings to assess the degree of translation.

Accordingly, the study sets four main objectives: First, it tries to examine the relation between language policy of Algeria, real-life language practices, and LL in TO. Second, it attempts to find which language(s) is (are) present in multilingual shop signs in TO and which language (s) is (are) privileged. Third, it attempts to examine the way these languages are combined. Fourth, it seeks to examine the merchants' ideologies behind language choices.

The purpose of this work is to arrive at a better understanding of each language within the linguistic landscape as well as to identify the different images that merchants from TO constitute about these languages. The choice of this town is privileged since it constitutes a plurilingual environment in which several languages are in a constant linguistic conflict. It is

different because it applies a theory of ‘Geosemiotics’ that, to our best knowledge, has never been used in MMUTO in general, and the department of English in particular. Hopefully, this humble work will contribute to the existing literature of LL of Algeria in general, and TO in particular. Besides, the present dissertation can be used as an authentic tool (material) in the faculty of letters and languages at MMUTO in the modules of translation, pragmatics, grammar, semiotics and multimodality, etc. in the five Departments (English, French, Arabic, Tamazight, Translation and Interpretation). Furthermore, this dissertation can be used as a guideline for language awareness and as a survey tool for language planning in Algeria.

Research Questions

This study seeks to answer the four following questions:

Q1. Is there a correlation between language policy of Algeria, spoken languages, and the multilingual shops in Tizi Ouzou?

Q2. Which language (s) is (are) preferred in multilingual shop signs in Tizi Ouzou?

Q3: what are the strategies followed to combine these languages?

Q4: what are the ideologies behind language choices?

Hypotheses

As an attempt to answer the asked questions, the following hypotheses are advanced:

Hp1. There is no correlation between language policy of Algeria, the real-life language practices, and the written languages in Multilingual shop signs in TO.

Hp2. Foreign languages are privileged over National languages.

Hp3. The languages are combined following the taxonomy of information arrangement in multilingual texts developed by Reh (2004), and Backaus (2006).

Hp4. Shop owners have positive attitudes for using foreign languages and negative attitudes for using national languages.

Research Techniques and Methodology

To conduct the present study, two theoretical frameworks are used: the first one is the Geosemiotic approach proposed by Scollon and Scollon (2003) mainly the ‘Code preference system’; the second is the Taxonomy of Multilingual Writings’ developed by Reh (2004) and its refined version by Backaus (2006).

In order to answer the research questions of the study, the mixed-method approach which combines the qualitative and quantitative research techniques is adopted to analyse the data obtained from the three main sources: the (131) captured photographs of multilingual shop signs, the semi-structured questionnaire distributed to 28 shop owners, and semi-structured interview held with 2 graphic designers. The photographs were coded according to language sequencing in the sign, type of activity, types of information arrangement. The quantitative method used the rule of three to analyze the photographs and closed-ended questions of the questionnaire; while the qualitative method is used to interpret the photographs, the open-ended questions of the questionnaire, and the interview.

Structure of the Dissertation

This dissertation follows the traditional simple model. It consists of a *General Introduction*, four chapters, and a *General Conclusion*. The first chapter is the ‘*Review of the Literature*’ that provides an overview of the linguistic situation of Algeria, the main points dealing with Linguistic Landscape, and outline the theoretical background of the study and. The second chapter is entitled ‘*Research Design and Techniques*’ and deals with the description of the data collection tools and data analysis. The third chapter is the ‘*Presentation of the Findings*’ and presents the data in forms of tables, and diagram for the

quantitative results, while the qualitative results are presented in the form of paragraphs. the fourth Chapter is '*Discussion of the Findings*' in which the results of the work are discussed and interpreted in details. It also brings answers to the advanced research questions and checks the accuracy of the hypotheses. The dissertation ends up with a '*General Conclusion*' that includes a summing up of each part, the limitation encountered while conducting this study, and recommendations for further studies.

Review of the Literature

Introduction

This chapter presents the theoretical underpinnings that the current study adopts to analyse multilingualism in shop signs in TO town in terms of code preference and types of multilingual writings. It comprises three sections: The first section presents an overview of the history of Algeria's linguistic diversity as it sheds light on the key factors that contributed in the multilingual situation of Algeria. The second section reviews the origins of Linguistic Landscape (LL) and the key concepts related to it as the present research falls within the field of LL. The third section deals with the theoretical frameworks of the present study namely Geosemiotics, and the typology of multilingual writings.

1.The Linguistic Situation in Algeria

1.1. Pre-Colonial Period

The linguistic situation in Algeria is varied and complex in the sense that several varieties are used today namely: Arabic and its varieties, Berber and its varieties, French and lately English. This linguistic hybridity is the result of language contact with the different colonizers in the past, globalization and internet in recent times.

Indeed, from the early ages, North Africa in general, and Algeria in particular have been the shelter for several civilizations. *'The first native inhabitants of Algeria were the 'Imazighen' or the 'Berbers'* (Benrabah, 2013:22), however; *'several invaders shaped more or less the socio-cultural history of Algeria and its linguistic profile'* (Ibid). the following passage summarizes the complex history of Algeria:

Several invaders more or less shaped the sociocultural situation of Algeria, as well its sociolinguistic profile. Berbers came under the yoke of Phoenicians who imposed their Carthaginian rule for about seven centuries, the Vandals and the Romanized Byzantines for about a century each, respectively, the Islamo-Arabo- Berbers for about four centuries, the Turks for about three centuries, and the French for more than a century and a quarter- Spaniards occupied enclaves along the Mediteranean intermingling between 1505 and 1792. (Benrabah, 2013: 22).

From the above passage, it can be concluded that Algeria was subject to several invasions and a crossroad of civilizations starting from the Phoenicians, Vandals, Romans, Arabs, Turks, and French. This is probably due to its strategic geographical location, variation of its natural resources, but also because of the weakness of its ruling system. All these invaders left behind their traditions, religions and above all their languages that were mixed-up together and through time they were rooted in the Algerian linguistic profile.

The result of this continuous mixture with other ethnicities was '*language contact and its by-product multilingualism Berber- Punic, Berber-Punic-Latin, Berber-Arabic, Berber-Arabic-Spanish-Turkish, Arabic*'. (Benrabah, 2013:23). this linguistic diversity instigates constant language mixing in both repertoires of its sociolinguistic (spoken languages), and linguistic landscape (written languages in public spaces).

1.2. Post-Independence Period

1.2.1. Language Policy of Algeria After the Independence

Just after the independence, the Algerian government launched a 'policy of Arabization' that aimed at promoting the Arabo-Islamic identity of Algeria by imposing MSA at the expense of Berber, and Arabic dialects in all spheres of life (Ibid). This policy was reinforced in the period extending from 1970 to 1997 by legislating several laws that generalize the use of Arabic and ban any use of any other language like the Article 3 of the second constitution that "*confirmed Arabic as the sole national and official language of the country*" (Ibid:59), and Act N° 05 91. In the early 2000s, this monolingual policy was abandoned because '*it reached its deadlock*' (Ibid:75), and replaced by a more tolerant policy that appeal for linguistic diversity to cope with modernization, globalization, and technological progresses. These decisions brought by the authorities '*paved the way for the post-Arabization era*' (Ibid: 86). Indeed, today, MSA is no longer the only official language of Algeria, but sharing the status with Tamazight which was declared as a national language

in 2001, and proclaimed as the 2nd official language in 2016, in addition to French which is regarded as the *de facto co official language*, and the emergence of English.

1.2.2. Current Linguistic Situation

1.2.2.1. Tamazight

Tamazight also called ‘Berber’ is the native language of many Algerians (*an extent of ancient varieties of languages in North Africa. It is considered as the oldest linguistic subtract of this region*) (Belaidi, 2020:16). After the independence, Tamazight was excluded, and even banned in Algeria because of the policy of ‘Arabization’, however; Tamazight ‘*survived despite the cultural and linguistic repressions*’ (Ibid:13). During this period, it was only manifested in the spoken medium in rural areas, and absent in cities due to the negative ideologies associated with it (Guerdjiba, 2013. Cited in Belaidi, 2020: 13). Despite these discriminations, it ‘*remains used by a lot of people*’ (Ibid) and consists of several varieties: Kabyle, Chawi, M’zab, and Targui (Ibid), and ‘*is proudly displayed in big cities*’ (ibid) especially after the proclamation of Tamazight as an official language in 2016 (Fodil, 2016:3). Presently, Tamazight is not limited to oral practices, but ‘*vividly displayed everywhere in public space*’ (Ibid).

1.2.2.2. Arabic

Arabic was introduced into Algeria through Islamic conquests, and imposed as the only official language after the independence. Presently, Arabic is the most spoken language in Algeria with its three varieties: ‘the Classical Arabic (CA) used for religious purposes, the Modern standard Arabic (MSA) reserved for formal settings like education, media, government, literature and the ‘Vernacular Arabic’ or ‘darja’ used for everyday situations in informal settings. The Algerian vernacular Arabic is divided geographically into sub varieties that differ from one region to another. For instance, the Algerois, the Oranais, Staifi. and

Zdimouh (the Arabic spoken in Tizi Ouzou), etc. Taleb-Ibrahimi (2006) cited in Belaidi (2020:6) distinguished: the Arabic spoken in the east around Constantine, Algerois as a central one, the west speaking: Oranais and the South Atlas Saharian speaking, which has a considerable diversity of dialects from east to west.

1.2.2.3. French

French was implemented in Algeria during the French colonization (1830-1962) through the policy of ‘Frenchification’ which aimed at eradicating the indigenous languages of Algerians (Arabic and Berber). After the independence, and despite the government’s efforts to get rid of French presence through the policy of Arabization, it remains present and plays an important role within the Algerian society and today can be safely labelled the LWC as it is the language used in universities, science, medicine, the dominante language in the linguistic landscape of Algeria, and social media. In May 2014, the French language is the most used language on Facebook with 76%. According to Benrabah (2013) Algeria is the second largest French community in the world.

1.2.2.4. English

Unlike Arabic and French which have found their ways to Algeria through military occupations, the presence of English comes peacefully through Globalization. Fodil (2019:7) affirms that *“It has become commonplace to link the expansion of English to the globalization of exchange, and to the political and cultural influence of the USA and Great Britain on the rest of the world. Algeria is no exception”*. This means that the spread of English worldwide including Algeria is the result of globalization linked with the two world superpowers namely the American and British political, cultural, military, and economic powers. Historically, the first contact of Algerians with English goes back to the landing of American parachutists in Algiers during WWII in November 1942 (Ibid: 1). As a result, new terms were injected into

the linguistic repertoire of Algeria like ‘*business, chewing-gum, cigarettes, whisky, dollar*’ (Fodil,2019:2). During the 2000s, the expansion of English has increased dramatically thanks to social media, internet, and the transnational companies in the south at a level it starts to out pass French. This position is mainly noticeable in the students’ enrollment in universities, private schools, and in its linguistic landscape.

Today, Algeria is enjoying the status of a multilingual country where several languages coexist as the result of language tolerance and diversity, this linguistic situation is manifested everywhere: education, media, everyday language practices, songs, etc. But above all in the languages displayed on signage in public spaces.

1.2.3. Language(s) of Signage in Post-Colonial Algeria

Signage was brought to Algeria from Europe by the French colonizer in 1830 (Aissaoui, 2009:35). During that period, it was written in French because of the policy of Frenchification. At that time, it was mainly used as an address or a place and street reference. For example, “Café de France”, “Hotel de France” (Ibid). After the independence, it shifted to be written in Arabic under the policy of Arabization that aimed to restore the Algerian identity. In fact, in 1963, the government declared the “*de baptismation of French named towns and cities*” (Benrabah, 2013:50) to replace them with “*their pre-colonial Arabic and Berber names if they had one, or by heroes of the revolution, or by other renowned Algerian*” (Ibid)

In January 1991, the parliament passed a law known as ‘Act N° 91-05 of 6 January 1991 aiming at the generalization of the use of Arabic in Public life (Ibid:71) including private signage (Art 20, Art 21, Art 22) with penalizing all those who violate this law (art 33). These articles dictate that Arabic should be the only language to be written in signboards, shop signs billboards, advertisements, logos, symbols, brand names, package, etc.

Starting from the early 2000s to nowadays, the restrictions regulating signage in Algeria were loosened. This is widely observable through the different languages displayed in the variety of signs that surround the public spaces of the Algerian cities like TO inner town. These languages are contributing in constructing and shaping the linguistic landscape of these cities which are qualified as being multilingual.

Toward the end of the 20th century, interest in studying language practices in society has shifted from focusing on the spoken medium to include the written one as well. This shift in interest means that the city is not only a '*place of talk*' (Halliday, 1978: 154), but also a place for reading and writing. This means that interest in studying languages in a given place from a sociolinguistic stand point only (oral languages) was extended to include the study of its LL (written languages).

2. Emergence of Linguistic Landscape

Though history approves that '*the existence of linguistic landscaping is old as writing*' (Coulmas, 2009:13) as one of its earliest functions '*were bound to public display*' (Ibid), it was until recently that interest in studying it was developed. The field of linguistic landscape tackles signs displayed in public sphere, it has evolved significantly as a field of inquiry since Landry and Bourhis's (1997) seminal work about linguistic Landscape in Canada. In their article entitled '*Linguistic Landscape and ethnolinguistic vitality: an Empirical study*' defines linguistic landscape as:

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

Following on their footsteps, several scholars have conducted numerous studies on linguistic landscape from different perspectives and provided different definitions: Ben Raphael, et al. (2006) define it as "*Linguistic Landscape (LL) refers to the linguistic objects*

that mark a given place”. for Coulmas (2009:14) “*linguistic landscape (LL) is the study of writing in the public sphere*’. Coulmas notices that all the studies that have been already conducted have focused on Urban cities this is why he preferred the term ‘*Linguistic cityscape*’(Ibid). Gorter (2006:2) defines the LL as the ‘*use of language in its written form in the public sphere*’, it also refers to ‘*language that is visible in a specified area*’ (Ibid). Kelly-Holmes (2010:136) defines the concept of linguistic landscape as ‘*an attempt to account for the visual presence of particular languages in the public space as a reflection of and contribution to ethnolinguistic vitality*’.

Although most researchers credit Landry and Bourhis’ (1997) article to be the origin of LL, sociolinguistic interest in the language of signs can be traced back to the 1970s as listed in Backaus (2006) several studies have been already dealt with the language on signs especially in ‘*regions of language conflicts*’ Masai (1972), Tulp (1978), Mounier (1989), Calvet (1990; 1994), Spolsky and Cooper (1991).

Since Laundry and Bourhis’s (1997) seminal work about LL, a growing interest in the field has spread all over the world as cited in Backaus (2006): Itagi and Sing (2002) have edited a publication about LL of India, Scollon and Scollon (2003) have developed an overall approach to the study of signs known in research as ‘Geosemiotics, Ben-Raphael, et al. have conducted a large number of studies in different cities in Israel, Reh (2004) has scrutinized the LL of Lira in Uganda and looked at type of translation in multilingual signs. In 2006, a renewed interest sparked worldwide after the publication of the edited book by Gorter ‘*linguistic Landscape: A New Approach to Multilingualism*’, since then, many other edited books have followed: *Linguistic Landscape expending the scenery* (2009) by Shohamy and Gorter, *Linguistic Landscape in the city* (2010) by Shohamy et al. *Semiotic Landscape* (2010) edited by Jaworski and Thurlow. All these studies have expended the notion of LL to include other methods, tools, and other types of signs in addition to the linguistic one. Despite the

different directions that each study has taken, they share two common elements: a definable public space and the linguistic sign.

2.1. Public Space

Public spaces are places that are freely accessed by citizens like streets, roads, parks. Madanipour (1996: 144) defines public space as 'the *space that is not controlled by private individuals or organizations, and hence open to the general public*' regardless their age, sex, level of education, status like roads, pavements, streets, parks. In LL, public spaces are defined as '*areas that are accessible for the 'crowd*' (Shohamy, et al.2010:12) made of '*streets, corners, circuses, parks, buildings- where society's public life takes place*' (Ben Raphael, et al.:8) perceived by the passers-by as a '*Gestalt*' (Ibid) composed of '*shops, post offices, kiosks, etc.* (ibid). These physical signs are combined with linguistic signs to indicate '*what they stand for*' (ibid). It is these combinations that make the essence of LL. The area where this research is conducted is the inner city of TO town, namely CV and NV due to the considerable number of shops that line in the main streets of the town and which display an array of languages written in the signboards of these shops. Besides, this city is the meeting ground for people that come from the different provinces because it hosts the main bureaucratic services and amenities (governmental or private) ranging from civic administrations, Hospitals, banks, institutions, and universities. These people bring with them their accents in addition to those already practiced in the township, this makes TO town a space for multilingual practices in the spoken like in the written one.

2.3. The Linguistic Sign

The main focus of LL is the linguistic sign which is defined as '*any piece of written text defined within a spacially definable frame. The underlying definition is physical not semantic*' (Backaus, 2006: 66). This means that the focus is not on the meaning of the sign but on its physical location. The sign can be meaningless, inappropriate, misspelled ranging from

scrabbles on walls, to a ticket on floor, the most important thing is where they are located in the world. For Ben Raphael, et al. (2010:11) the linguistic sign is *'inscriptions, -or LL items- any written sign found outside private homes'*, these inscriptions are visible in the different types of signs that construct the public space of the area where they are erected.

2.4. Types of Signs

In their definition of LL, Landry and Bourhis (1997) distinguished between two types of signs: *'governmental signs'* which are those issued by Governmental authorities like road signs, names of streets and buildings, a *'private signs'* that are issued by individuals like shop names, brand names. Prior to them, Calvet (1990,1994) refers to these two types as *'in vitro'* written by the authorities, and *'in vivo'* written by the citizens. Ben-Raphael et al. (2006:10) distinguished between *top-down* and *bottom-up* signs, for them *top-down* are those *'used and exhibited by institutional agencies'* and reflect *'the local or central policies'*, and *bottom-up* are those *'utilized by individual, associative or corporative actors'* who *'enjoy autonomy of action within legal limits'*. Backaus (2006) distinguished between *official* (governmental) and *nonofficial* (private) like shop signs which by so far, occupy more space in cities and which are considered to be an important tool for analyzing their LL.

2.5. Shop Signs

Although, people are moving towards a world of digital advertisement, business owners still rely on physical signage to promote their business, shop signs are the most prominent tools used to do so. El-Yasin and Mahadin (1996:407) state that *'the reason d'être of shop sign is to promote businesses'*. They define shop signs as *'all the linguistic material written to draw attention to a shop'* (Ibid:409).

The usability of shop signs for a LL analysis made it sensible to focus on them because of their considerable visibility. Accordingly, Landry and Bourhis (1997:27) state that *'Shop signs reflect most saliently the linguistic reality of a given territory'*. Consequently, a great

number of studies that have been already conducted in the field of LL in the world have used shop signs as their main corpus: Lou (2009), Finzel (2012), Nikolaon and Shah (2018), Alomoush (2019), etc. In Algeria, Kahlouche (1997) was the first to conduct LL research emphasizing language conflict between Arabic, Tamazight, and French in the naming of shops, Helouane (2008) looked at language choices in shop signs in Tizi Ouzou and Bouira. Fodil (2019) as part of his research program lunched in (2016) which looks at the reasons behind the expansion of English in Algeria and the status it is gaining through the examination of shop signs written in English in TO city centre. This research also uses shop signs as the main corpus to look at ‘code preference’ in bi/multilingual signs as they show more diversity and reflect individuals’ ideologies about these languages since they are authored by shopkeepers.

2.6. Functions of Signs in Linguistic Landscape

The main focus of LL is not just restricted to count the languages that are visible in a geographical area, but also to indicate their functions in that area. Laundry and Bourhis (1997) highlight two functions: the ‘*informative*’ and the ‘*symbolic*’ functions. The informative function concerns those signs which are used to transmit information or instructions (do not smoke), and symbolic function refers to the status and value given to a certain language(s) in a speech community. for instance, the use of Tamazight in shop signs in TO as a symbol of Amazigh Identity, or English as a symbol of high quality and modernity. Scollon and Scollon (2003) have also made a distinction between two functions: The ‘*indexical*’ function reflects the actual use of language(s) in a speech community. The symbolic function referring to language(s) non-spoken in a particular territory but used as a hint for implicit purposes for example the use of English in the signage of a non-English speaking community as a symbol of prestige, modernity, and globalization.

This paper explores multilingualism in TO mainly language hierarchy in Bi/multilingual shop signs following the two perspectives that have emerged for analyzing multilingualism on signs. The first one evaluates the semiotic emplacement of languages on the signs relying on code preference system developed by Scollon and Scollon (2003) in the ‘theory of Geosemiotic’, and the second assesses the degree of translation namely the model developed by Reh (2004), and its refined version by Backaus (2006).

3. Multilingualism

Multilingualism is defined as the ability to use more than one language to communicating. According to Carol Myers-Scotton (2006:44) “Bilingualism/multilingualism is the ability to use two or more languages to carry on a limited casual conversation’. Some scholars argue that bilingualism and multilingualism are used interchangeably to mean the same, and it does not require the full mastery of the languages; however, for Bloomfield “Bilingualism requires the full mastery of the second language being learnt in a native-like manner”. Wide (2010) distinguished between two types of multilingualism: individual multilingualism which is related to individuals’ ability to speak more than one language, and societal multilingualism which is related to countries that have two or more official languages like Canada, Switzerland, Algeria, etc.

4. Language Hierarchy

Language Hierarchy occurs in multilingual texts, it concerns the way these languages are arranged visually in the text from the most prominent to the less important one in terms of order, position, font, size, color and sometimes even the material used to write each language. Archeology gives evidence that Language hierarchy appeared since the invention of writing as it was first depicted in the ‘Rosetta Stone’ in ancient Egypt which was inscribed in three main scripts “*Egyptian rendered in the formal hieroglyphic on the top and the cursive*

demotic underneath, and Greek in the alphabet” (Coulmas, 2009: 18). This arrangement from top to bottom suggest a ‘*Meaningful order*’ (Ibid) which embodies “*many of the intricacies of language contact, language choice and linguistic hierarchy that form the substance of linguistic landscape research*” (Ibid).

5. Geosemiotics

Scollon and Scollon (2003:110) define Geosemiotics as “*the study of social meaning of the material placement of signs in the world, by signs we mean to include any semiotic system including language and discourse*”. This means that Geosemiotics deals with the study of signs (linguistic or non-linguistic) in relation to their setting (geographical location). Moreover, Scollon and Scollon argue that they preferred to call their theory ‘Geosemiotic’ to include other semiotic resources rather than just focusing on language by stating that “*we have not called this study ‘geolinguistics’ although we might have done that. To have called it that would have been to retain the focus just on language*’. The term Geosemiotics is composed of ‘geo’ which stands for geography or physical location of an object (sign) in the real world, and semiotics which Jakobson (1964: 289) denotes as “*the general science of signs which has as its basic discipline linguistics, the science of verbal signs*. Scollon and Scollon (2003:2) assume that ‘*all signs and symbols take a major part of their meaning from how and where they are placed*’. It means that the same sign can be interpreted differently depending on where it is located, thus being context bound. The Scollons called the property of context dependency ‘*indexicality*’ (ibid:3). They have distinguished three principles: interactional order, semiotic order and place semiotic. This study has focused on two aspects of the Geosemiotic theory namely ‘the code preference system’ drawn from Kress and Van Leeuwen (1996) ‘visual grammar’, and the functions of languages in the signs.

5.1. Code Preference in Geosemiotics

Code preference means the language that occupies the prominent and salient position in Bi/multilingual signs, ‘*Code preference concerns the physical positioning of languages on multilingual signs as this can reveal the sign writer’s ideology for one language over another*’ (Amos, 2013:19) Scollon and Scollon (2003) extended Kress and Van Leeuwen (1996) ‘visual semiotic framework’ namely ‘salience’ and ‘information value’ to create ‘code preference system’. For Scollon and Scollon (2003:20) ‘*code preference occurs when the text is written in two or more languages or orthographies. The **preferred** code is written in the **left, top, or center position** and the marginalized one is located in the **right, bottom, or margins position**. These combinations are associated with the informational value set in ‘visual grammar’ where in the upper/ lower (top/down) position is associated with ideal/real, left/right with given/new, center/margins (the center is the nucleus and more important, while the margin is just an addition and less important). Respectively, Scollon and Scollon (Ibid) emphasize that ‘*the producers of the sign put the preferred codes in patterns similar to the construction system*’*

5.2. Functions of signs in Geosemiotics

In the discussion of code preference, the author distinguished between two main functions of signs: indexical and symbolic functions. The indexical function is a ‘*reflection of the actual language uses of the community*’ (Scollon and Scollon, 2003:119). For instance, the use of Tamazight in TO as an index of Amazigh community, while the symbolic function is a hint about the product or the business which has nothing to do with the place where it is located (Ibid). The Scollons’ provide a distinction between indexical and symbolic function as follows “*A code may be chosen because it indexes the point in the world where it is placed, or it symbolizes a social group because of some associations with that group*”.

The other perspective that has been developed to examine multilingualism in signs looked at the degree of translation.

6.Types of Multilingual Writings in Linguistic Landscape

6.1. Reh Model (2004)

In a study of multilingual signs in Lira Municipality, Reh (2004) comes up with a model that involves three parameters: a) spatial mobility of signs (static or dynamic), b) visibility of multilingual signs (covert or uncovert multilingualism), c) information arrangement signs. Of the three parameters that she proposes, just the third one will be used in this study. Reh (2004) distinguished four language combinations in multilingual writing

6.1.1. Duplicating Multilingual Writing

Reh (2004:8) defines Duplicating Multilingual writing as ‘those practices in which exactly the same text is presented in more than one language’. That is to say a word for word, or equivalent translation. Reh points that this type of multilingual text acknowledges societal multilingualism, that is, the existence of more than one language in the target community.

6.1.2. Fragmentary Multilingual Writing

Fragmentary multilingual writing occurs when only part of the message is translated into other language or languages. As Reh (2004: 10) puts it “*the term fragmentary multilingualism is used for multilingual texts in which the full information is given only in one language, but in which selected parts have been translated into additional language or additional languages.*”

6.1.3. Overlapping Multilingual Writing

Overlapping multilingual writing occurs in case that part of information is translated in at least one additional language, and other parts of the text are interpreted in just one single

language. For Reh (2004) “*overlapping multilingual writing occurs if only part of the message is converted into another language occurs if only parts of the information are repeated in at least one more language*” (Ibid: 12).

6.1.4. Complimentary Multilingual Writing

Complimentary Multilingualism occurs when the different parts of the text are in different languages. In such a case one has to be familiar with all written languages to understand the message. According to Reh, complimentary multilingualism occurs in ‘*texts in which different parts of the overall information are each written in different languages*’ (Ibid: 14). Reh assumes that this practice corresponds to individual multilingualism.

Drawing on Reh’s (2004) model, Backaus (2006) refines and reduce it to include just three types as he noticed that there is no difference between fragmentary and overlapping multilingualism since both of them contain just parts of the information converted into other language(s)

6.2. Backaus (2006) Model

6.2.1. Complete Mutual Translation

Complete mutual translation occurs in Duplicating signs in which the original text is fully translated into one or more languages. Backaus termed this as homophonic texts which he defines as follow “*homophonic signs contain two or more languages or Japanese glosses that constitute complete translation or transliteration of each other*” (Bakhaus,2007: 91)

6.2.2. Partial Mutual Translation

Partial mutual translation concerns both fragmentary and overlapped text in which just some parts are translated into one, or other languages. He termed them as Mixed signs “*signs in a mixed style provide only some information in all the languages or Japanese glosses.*

These types vary widely with regard to the amount of translated or transliterated contents.”

(Bakhaus, 2007:93)

6.2.3. No mutual translation

No mutual translation occurs in Complimentary texts where the two or more languages are used to serve different contents. Backhaus called these type of signs “polyphonic signs’ and provide the following definition about them “*polyphonic signs contain several languages or Japanese glosses completely independent of each other in content, in other words, one version does not give away any information contained in the respective co-appearing version.*” (Ibid)

Conclusion

This chapter has reviewed the main theoretical points relating to the main concepts of this research. It started with a general overview of the linguistic profile of Algeria to find the origins and reasons behind linguistic diversity and the spread of multilingualism which was divided into two periods: pre-colonial period which listed the different invaders that occupied Algeria, and post -independence period which looked at the language policy of Algeria after the independence, the current linguistic situation. Then, in the second part, it moved to define some key concepts related to the field of the current study which is linguistic landscape like the emergence of LL, the definition of some key concepts like ‘public space’, ‘linguistic sign’, ‘types of signs’, ‘shop signs. The last section deals with the theoretical frameworks that will be applied in the analysis of the data in this research: the code preference system developed by Scollon and Scollon (2003), and the types of information arrangements in multilingual signs set by reh (2004) and Bakhaus (2006).

Research Design and Techniques

Introduction

This chapter is devoted to the research design. It presents the methodology used to reach answers to the research questions. First, it provides a description of the setting of investigation. Then, it lists the procedures followed for the data collection; the data is obtained in three ways: by capturing multilingual shop signs in TO town (CV and NV); the two other ways used to collect data consist of a questionnaire administered to 28 shop owners and an interview conducted with 2 graphic designers. The research uses a mixed method including both the quantitative and qualitative analyses. The quantitative analysis makes use of the rule of three to count the frequencies of languages in signs according to the different categories under which they are categorized, and the closed-ended questions of the questionnaire. The qualitative analysis makes use of the Qualitative Content Analysis (QCA) to interpret the data obtained from the pictures following the two frameworks set for this study: the ‘code preference’ system developed by Scollon and Scollon (2003), and the ‘typology of Multilingual Writing’ developed by Reh (2004), and Backaus (2006), and the opened-ended questions of the questionnaire and interview.

1. Description of the survey area

This research is carried out in the town center of TO province (Centre ville and nouvelle ville). TO is an Algerian town located 30Km south of the Mediteranean coast and 100Km far from Algiers. TO township is bounded by Mount Balloua in the North, by sikh-Oumeddour (Oued Aissi) in the East, by Boukhalfa in the Ouest and Ihesnaouene (Azib Lekhel and Azib h’med) in the South. It is composed of three main parts : la Haute-Ville, Centre-Ville and Nouvelle -Ville.

_La Haute ville (High Town) known also as ‘Dechra’ is located above “Boulevard Capitaine Nouri Mustapha”, it contains the oldest districts of Tizi Ouzou town like ‘Ain

Hallouf, 'Ain Soltan' and Thazougart. The commercial activity is limited to a small shop for daily necessities like Bakeries, fruits and vegetables, mini markets, etc., (this is why la Haute-Ville is not included in this study).

_Le Centre-Ville is mainly composed of districts that are approximate to la grande rue (the big street) like 'les Genets', 'Cité 20 Aout', 'le Marché', and periphery like M'douha, la Cité million, la Cité Bekkar, la Cité 5 juillet, la Cité Bouaziz, Les Tours Villas, Les Cadis, La Cité des Fonctionnaires. le Centre-ville is mainly composed of administrative and residential buildings, as well a great number of shops and supermarkets of all types.

_La Nouvelle-Ville. Located in the south of the city. It is called nouvelle-ville because it was constructed after the independence. It is composed of districts like, La Cité des 2000. La Cité des 600, 450 logements, Boulevard Krim Belkacem, Amioud, Bastos. Nouvelle-ville hosts the two compuses of MMUTO (Hasnaoua 1 and Bastos), in addition to a large number of commercial activities like shops, fairs, and supermarkets (like Dylia and Rahma).

The present study adopts the mixed method research design to gain an in-depth understanding.

2. Mixed Method Research (MMR) Design

Mixed method is a research design that involves the use of both the qualitative and quantitative in both collecting and analyzing data in social sciences for a holistic and in-depth investigation of a given topic. Tashakkori and Creswell (2007:4) define it as "*research in which the investigator collects and analyses data, integrates the findings and draws inferences using both qualitative and quantitative approaches or methods in a single study*".

2.1. Qualitative Research

Qualitative research is the process of collecting, analyzing, and interpreting non-numerical data such as text, videos, photographs, or audio recordings to gain an in depth understanding of a given phenomenon.

Qualitative research is multimodal in focus, involving an interpretive, naturalistic approach to its subject matter. This means that qualitative Researchers study things in their natural settings, attempting to make sense of, or interpret phenomena in terms of the people bring to them. (Denzin and Lincoln, 1994:2)

This means that qualitative research is context-bound, the results are subjective and cannot be generalized but limited to the setting, time and the sample studied. In fact, the results are influenced by the participants' behaviors, answers, points of views about a given phenomenon in given point of time in a specific location, etc. and also by the researcher's interpretations of these letter.

2.2. Quantitative Research

Quantitative research is a method of research that involves the collection of data in the form of numbers using surveys, and structured question and convert them into frequencies through referential and descriptive statestiques to present them in the form of tables, diagrams, pie charts, graphs. Creswell (2002: 18) states that quantitative research “*employ strategies of inquiry such as experimental and surveys, and collect data on predetermined instrument that yield statistical data*”.

3. Procedures of Data Collection

In Order to gain the holistic image of language hierarchy and code Preference in TO, the major Streets of the City Center were scrutinized, and pictures of any multilingual shop signs were captured. Furthermore, questionnaires were distributed to shop keepers and interviews were hold with graphic designers to find out the ideologies behind language

choices and the different attitudes assigned to each language from the standpoint of the two Actors who are responsible for creating and writing these signs.

3.1. Data collection tools

In order to gather the data in the present research, three main tools are used: the photography of the multilingual shop signs in TO town, a semi-structured questionnaire designed for shop keepers, and a semi- structured interview conceived for graphic designers.

3.1.1. Photography

Photography means to take a picture of any object using a camera. It is considered as an important tool used in linguistic landscape as it facilitates the process of collecting data in terms of time saving and storage. Respectively, Gorter (2009) describes how the digital camera is becoming an increasingly reliable tool in linguistic landscape in the following passage:

The introduction of digital cameras with sufficient memory for a reasonable price allows the researcher to take an apparently unlimited number of pictures of the signs in the linguistic landscape. The techniques of taking large number of photographs of signs and putting them on database on a computer in itself, is uncomplicated (Gorter, 2009:2).

As far as this study is concerned, the photography procedure was conducted from 15 to 21 June 2021 using the digital cameras of smartphones (OPPO A5S and Samsung M10). The pictures were collected from the main commercial streets of the **CV** (les tours villas, Boulevard Stiti, La Grande Rue, Les Batiments Bleu, la Rue de la Paix, Annar Amellal, M'douha) and **NV** (Krim Belkacem, Amioud, Bastos, Les 12 salopards). After getting the permission of the shop keepers, (131) pictures of shop signs were taken. (119) are bilingual (43 were captured in **CV** and 76 in **NV**) and (19) are multilingual (9 in **CV** and 3 in **NV**), then, the pictures were stored in a database in a computer. Unfortunately, some of the signs

that have been depicted were not photographed due to the disagreement of the shop keepers, some were hidden by trees, and others were damaged at a level of being unreadable.

3.1.2. Questionnaire

A questionnaire is a research instrument used in social sciences consisting of a set of questions in the purpose of gathering information from the respondent. The questionnaire can be divided into three types: first, the structured questionnaire containing pre-determined closed- ended questions like yes/no questions. multiple choices, Likert scale, check list and ranking. This type is used mainly for quantitative research. Second, the unstructured questionnaire composed of a set of open-ended questions where the respondent is given the opportunity to express his opinions freely. Third, the semi-structured questionnaire combining both structured (closed-ended) questions, and unstructured (open-ended) questions. According to Yakubu (2019:4) *the questionnaire is any written document that provides respondents with a sequence of questions or statements, in which they are to respond either by writing out their answer or choosing from an already existing or given answers*".

In this research, a semi-structured questionnaire is conceived, it contains 18 questions arranged in three sections. The first section entitled 'information related to merchants' relates to participants' profile like age, languages that they master. The second section is entitled 'information related to the shop' including type of activity, location. The third section is about 'the languages written on the signboard', it consists of 9 questions that were designed to find the shop owners' motives behind language choices as (what are the languages that you have used in your signboard? Would you justify?). The questionnaire was translated into French, then 60 copies were printed and distributed to shop owners in September 2021. Unfortunately, out of 60 questionnaires that were distributed, just 28 merchants have answered them, and the remaining 32 were not answered by the shopkeepers due to diverge reasons, some assert that they are busy, others because they are just employees and the owner is absent, some were

honest and declared that they are illiterate, others have refused without justifying. 6 participants have asked for more time, but when we returned to retrieve them, 2 were closed and 4 claim that they have forgotten. Then, we have abandoned and settled for the 28 answered questionnaires.

3.1.3. Interview

Another tool of data collection that was relied on in this study is the interview which is used to gather information from the graphic designers about their opinions on language choices. Maccoby and Maccoby (1954:449) define an interview as “*an interchange in which one person...attempts to elicit information or expressions of opinion or belief from another person or persons.*”. it means that the interview is a dialogue (oral exchange) between an interviewer (the person conducting the interview, and an interviewee (the person answering the interview). In this study, a semi-structured interview is designed, it is composed of 8 questions which seek to discover what are the languages demanded by shop owners to write their signs and what are the ideologies associated with them from the point of view of the graphic designer like (what are the most demanded languages? What are the criteria that determine the choice of language? Is the design of the shop yours or suggested by the merchant?).

The interviews were maintained with two graphic designers in their offices located in NV and were audio recoded in French and Berber using the smartphone OPPO 5. The 1st one was conducted on 29 September with the owner of ‘Nord Design’ agency who agrees to answer the interview without any appointment. The 2nd interview was conducted on 30 September with the owner of ‘Décor pub’ after getting an appointment with him.

It is crucial to mention that there are some factors that may affect the data in this study. Some signs must have been missed because of the reasons mentioned above. It is also

vital to mention that this corpus is just a representative sample of LL of TO in one point of time. In fact, it is possible that some existing multilingual signs have disappeared, while others have appeared between the data collection and the writing of the present dissertation. The interviews and the questionnaires that were supplemented to the pictures were planned to be conducted in July, but due to the COVID 19 pandemic, they were postponed until late September. Some answers to the questionnaires were not clear, it is unknown if it is because they were ill formed as the pilot study was missed out due to time limit. In addition, not all the merchants have agreed to answer the questionnaire due to the already mentioned reasons above.

4. Procedure of Data Analysis

4.1. The Coding Scheme

The coding scheme is defined as the process by which qualitative data are coded into categories. Gibbs (2007) provides the following definition of a coding scheme as “*how you define what the data you are analyzing are about*”. As far as this study is concerned, the first step for the data analysis was to develop a coding scheme to code the photographs according to language sequencing according to Scollon and Scollon (2003) top/down, left/right, center/margin positions. For instance: Eng/Fr, Fr/Ta, Eng/Fr/Ar, etc. type of Activity. Number of languages, and location of the shop, etc.

4.2. Simple Statistic calculation

The statistical calculation involved the use of the descriptive statistics (rule of three) to count the frequencies of languages according to the different categories in which they were classified (bilingual/ multilingual, code preference in bilingual and multilingual signs, code preference according type of activity, frequency of each language), and the close ended questions of the questionnaire which is used as follows: $X = (Z \times 100) \div Y$. X is the calculated

percentage, Z stands for the value of one category, Y is the total number of signs. For example, English has occurred as code preference in (66) signs among (131), the frequency is calculated (50,38%).

4.3. Qualitative Content Analysis (QCA)

Qualitative Content Analysis (QCA) which is defined as” a *research method for subjective interpretation of the content of the text data through systematic classification of coding and identifying themes, or patterns*” (Hsieh and Shanon, 2005:2). QCA was used to analyze the photographs according to ‘Code preference system’ of Scollon and Scollon (2003) like position and font size to find which are the preferred codes in the multilingual commercial signage of TO, in addition to Reh (2004), and Backhaus (2006) models of multilingual writing to find the way these languages are combined. To this end 15 pictures were selected and interpreted as a representative sample of the corpus (see appendix) in which these pictures were analyzed according to some features like position of languages, grammatical errors, scripts. Besides, QCA was also used to interpret the open-ended questions of the questionnaire and the two semi-structured interviews to unveil the motives of sign writers behind language choices.

Conclusion

This chapter has outlined the methodology employed in this study. First, it has described the survey area. Then, it has introduced the research design of this study which uses the mixed method research combining both qualitative and quantitative methods for the analysis of data. Then, it has introduced the data collection procedures which consist mainly in photography, in addition to the questionnaires and interviews. Moreover, it has laid out the techniques used for the analysis of the collected data, from the classification and coding of signs, the conversion of numbers into percentage through the rule of three, the QCA to

interpret the photographs and the qualitative data. These Analysis methods allow for the depiction of the preferred code in multilingual shops in TO and the interpretation of the ideologies and reason behind such choices.

Presentation of the Findings

Introduction

This chapter is empirical in nature, it is devoted to the presentation, organization, and description of the results obtained from the collected data in the three sources: the 131 photographs of shop signs gathered from 15th to 21st June 2021, the 28 answered questionnaires by shop owners distributed from 21st to 28th September 2021, in addition to Two interviews held with two graphic designers in 29 and 30 September 2021. This chapter is divided into two main sections: the first one deals with the presentation of the quantitative results; it involves a descriptive statistical analysis of the coded photographs and closed-ended questions of the questionnaire using the rule of three, then the results are presented in the form of tables and diagrams. The second section is devoted to the presentation of the qualitative findings obtained from the opened-ended questions of the questionnaire and semi-structured interview using Qualitative Content Analysis (QCA). The results are presented in the form of paragraphs.

1. Presentation of the Quantitative Results

1.1. The Photographs

1.1.1. Multilingual Shop Signs

Bilingual signs		Trilingual signs	
Centre-ville	Nouvelle-ville	Centre-ville	Nouvelle-ville
43 (32.82%)	76 (58.01%)	9 (6.87%)	3 (2.3%)
Total	119(90.83)	Total	12(9.16)
Total 131(100%)			

Table 1. Classification of Signs into Bilingual and Trilingual

Table (1) displays a corpus of (131) multilingual LL items recorded in two main parts of TO town. The signs were first divided into two categories: bilingual and trilingual. The statistics show that 119 items were classified as bilingual for a percentage of about (90.83%),

whereas 12 signs were recorded as trilingual for a percentage of about (9.16%). In addition, the items were further divided according to the location of shops into CV, and NV. As regards Bilingual Signs, 43 were visible in CV for a percentage of about (32.82%) for example, a Fr/Ar bilingual sign: Boulangerie/ مخبز ه (bakery) and 76 signs were recorded in NV with a percentage of (58.01%) an example of an Eng/Fr sign (London coffee/boissons et glaces). trilingual signs were just depicted in 3 shops in NV with percentage of (2.3%) Cremerie-لبان (creamery)-Yemma hebbu (dear mother). And 9 signs in CV for a percentage of about (6.87%) for instance, (pain traditionnel Abahri - خبز تقليدي-aghrum aqran-thamthount-mhadjeb-aghroum n temzin (traditional bread)

1.1.2. Language Frequency in Multilingual Shop Signs

The data collected in the two surveyed areas reveal the presence of 6 languages: French, English, Arabic, Tamazight, Spanish, and Italian. It is first pertinent to evaluate the frequency of each language in shop signs.

	French	English	Arabic/Romanized Arabic	Tamazight	Spanish	Italian
CV	50	34	16	8	4	2
NV	68	58	14	12	3	4
Total	118	92	30	19	7	6

Table 2. Language Frequency in Multilingual Shop Signs in CV and NV

Table (2) shows that French is the dominant language with the total of 118 occurrences in both settings (50 signs in CV, and 68 in NV). English comes in the second position with 92 signs (34 in CV, 58 in NV), followed by Arabic in the 3rd position with 30 signs (16 in CV and 14 in NV), then Tamazight in the 4th position with 19 signs (8 in CV, and 12 in NV). Spanish in the 5th position with 7 signs (in CV, and 3 in NV), Italian comes in the last position with 6 signs (2 in CV, and 4 in NV).

1.1.3. Language Frequency as Code Preference in Multilingual Signs

Language Location	French	English	Arabic	Tamazight	Spanish	Italian
CV	18 (13.74%)	25 (19.08%)	1 (0.76%)	2 (1.53%)	4 (3.05%)	2 (1.53%)
NV	23(17.56%)	41(31.3%)	7(5.34%)	1(0.76%)	3(2.29%)	4(3.05%)
Total	41 (31.3%)	66 (50.38%)	8 (6.11%)	3 (2.29%)	7 (5.34%)	6 (4.58%)

Table 3. Language Frequency as Code Preference in Multilingual Signs

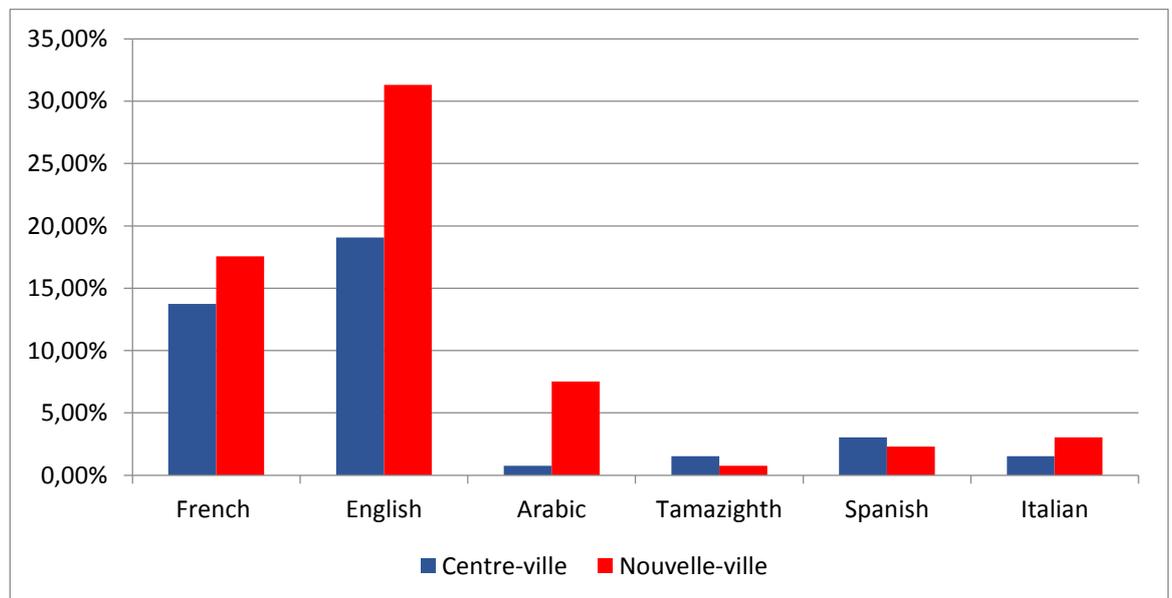


Diagram 1. The Percentages of Code Preference in CV and NV

Table (3) and diagram 1 show that the preferred code in bilingual and multilingual shop signs in TO township is English in both settings with the total of 66 signs (50.38%): 25 signs (19.08%) in the CV and 41 (31.06%) in NV. French comes in the second position with a total of 41 signs (31.06%): 18(13.74%) in CV, 24(18.32%) in NV followed by Arabic and Spanish in 7 signs with (5.4%) for each. Arabic occurred in 1 sign in CV with the percentage of about (0.76%), and 6 signs in NV with (4.58%). Spanish was recorded in 4 signs (3.05%) in CV,

and 3 signs in NV. Italian was depicted in 6 shops, 3 in CV with (1.5%) and 4 in NV (3.05%). Tamazight came in the last position with just 3 signs (2.29%), 2 signs in CV (1.53%), And 1 in NV (0.76%).

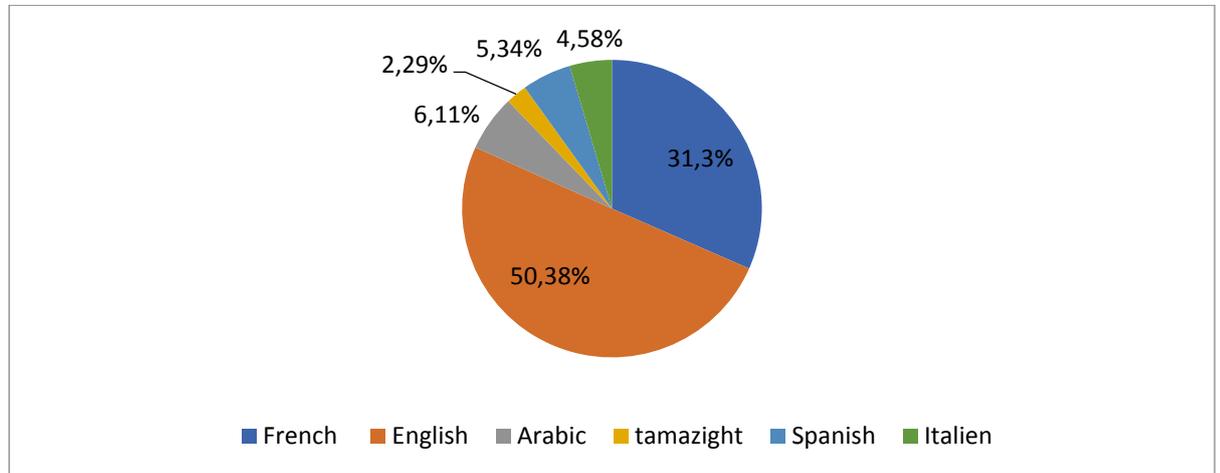


Diagram 2. The Total Percentages of Code Preference in CV and NV

The pie chart in Diagram (2) shows that English is the preferred code in the half of the total signs with 50.38%, followed by French with 31.3%, Arabic comes in the third position with about 6,11%. Spanish in the fourth position with 5.34%, then Italian with 4.6%, in the last position Tamazight with 2.29 %.

1.1.4. Code Preference in Bilingual Signs

	Eng	Fr	Fr	Ta	Ar	Eng	It	It	Spa	Fr	Ar/RAr	Ar	Eng	Spa
	Fr	Eng	Ta	Fr	Ta	Ta	Fr	Eng	Fr	Ar/RAr	Fr	RAr	Ar	Eng
CV	20	6	2	2	0	0	2	0	1	3	0	0	1	3
NV	37	14	4	1	3	2	2	0	1	6	0	0	1	3
Total	57	20	6	3	3	2	4	2	3	9	2	2	2	4
%	53.02	16.80	5.04	2.52	2.52	1.68	3.36	1.68	7.56	1.68	1.68	1.68	1.68	3.36

Table 4. Code Preference in Bilingual Signs

Table (4) displays language combination in bilingual shop signs. It reveals the presence of 14 language combinations: Eng/Fr is the dominant combination with 57 (63.02%) signs, Fr/Eng 20 signs (16.80%), Fr/Ta 6 signs (5.06%), Ta/Fr 3 signs (2.52%), Ar/Ta 3 signs (2.52%) Eng/Ta 2 signs (1.68%), It/Fr 4 signs (3.61%), It/Eng 2 signs (1.68%), Spa/Fr 3 signs (2.52%), Fr/Ar and RAr 9 (7.56%), Ar, RAr/Fr 2 (1.68%), Ar/RAr 2 (51.68%), Eng/Ar 2 signs (1.68%), Spa/Eng 4 signs (3.36%).

1.1.5. Code Preference in Trilingual Signs

	Eng Fr Ar	Fr Ar Ta	Fr Ta Ar	Fr Ar Eng	RAr Ar Fr
CV	4	3	1	0	1
NV	1	2	0	0	0
Total %	5 41.66	5 41.66	1 8.33	0 0	1 8.33

Table 5. Code Preference in Trilingual signs

Table (5) represents language combinations in multilingual signs, it reveals the presence of 5 trilingual combinations: Eng/Fr/Ar with 5 signs (41.66%) (4 CV, and 1 in NV). Fr/Ar/Ta in 5 signs (3 in CV and 2 in NV) (41.66%). Fr/Ta/Ar (1 sign) (8.33%). RAr/Ar/Fr in (1 sign in NV) (8.33%).

1.1.6. Code Preference According to Type of Activity in Multilingual Signs

	French	English	Arabic	Tamazight	Spanish	Italian
ICTs	1	5	0	0	2	0
Agencies (print, pub, travel, real estate)	1	6	1	0	0	0
Clothing Shoes, bags, Jewelry, and textile (men & women)	9	20	1	1	3	2
Restaurant, Cafés, ice cream, and tea	4	12	2	0	1	4

Cosmetic shops & Beauty salons	5	5	1	0		0
Home appliances & Deco	6	1	0	0	1	0
Foodstuff	7	1	1	1	0	0
Painting	0	4	0	0	0	0
Kid's stuff and clothing	2	5	0	0	0	0
Sport	0	4	0	0	0	0
Others	4	3	2	1	0	0
Total	41	66	8	3	7	6

Table 6. Code Preference According to Type of Activity

Table (6) Demonstrates that English is the preferred code in 66 signs: ICTs with (5 signs), agencies (11 signs), clothing, bags, shoes, and Jewellery (20 signs), cosmetics and beauty salons (5 signs), kids' stuff (5). Sport stuff (4 signs). French is preferred in 41 signs: (1 sign) in ICTS, 1 agency, clothing, shoes and jewelery (9 signs), Restaurant and café shops (4 signs), home appliances and deco (6 signs), Food stuff (7 signs), kids' stuff (2 signs), others (4 signs). Arabic is privileged in 7 signs: real estate agency (1 sign), clothing 1 sign, tea shops (2 signs), food staff (1 sign), others (2 signs). Tamazight is the preferred code in 3 signs: clothing (1 sign), food stuff (supermarket 1 sign), others (packaging) 1 sign. Spanish is the code preference in 7 signs: 2 signs in ICTs, 3 clothing, 1 restaurant, 1 home appliance. Italian is favored in 6 signs: 2 in Clothing, 4 in restaurant. In general, the table shows that English has the highest ratio as code preference in ICTs, Restaurant, clothing, sport, painting, kids 'staff. French dominates in home appliances, cosmetics, and others.

1.1.7. Types of Multilingual Writing

Type	Complimentary (no mutual translation)	Duplicating (complete mutual translation)	Fragmentary (partial mutual translation)
Percentage	92 (70.22%)	23 (17.55%)	16 (12.21%)

Table 7: Types of Multilingual Writings

The table (7) represents the type of multilingual writing in which complimentary (no mutual translation) was recorded in 70.72%, whereas 17.55% used duplicating (complete mutual translation), and 12.21% used fragmentary (partial mutual translation).

2.1. Questionnaires' Results (closed-ended questions)

Q1/How old are you?

Merchants				
Age	20-29	30-39	40-49	50 above
Number	5	14	5	4
Percentage	17.85%	50%	17.85%	14.28%

Table 8: Age of the Participants

Table (8) represents the age of the participants; it shows that 50% of them are aged between 30-39, 17.85% are aged between 20-29, and 17.85% are aged between 40-49, while 14.28% are more than 50 years old.

Q2/ what is your level of education?

Merchants		
Level	Number	Percentages
Elementary	00	00
Middle school	8	28.57%
Secondary school	13	46.42%
University	7	25%

Table 9: Level of Education of the Participants

Table (9) represents the level of education of the participants, it demonstrates that the majority of them 46.42% have reached secondary school. 28.57% are middle school, 25% have a university degree.

Q3/Where are you from originally?

Merchants		Percentages
Tizi Ouzou province	14	50%
Other provinces	11	39.28%
Outside Tizi Ouzou	3	10.71%

Table 10: Origin of the Participants

Table (10) shows that half of the participants 50% are originally from TO township, while 39.28% are from other provinces, and just 10.71% are from other wilayas.

Q4/What is your mother tongue?

Merchants		
Mother tongue	Number	Percentages
Kabyle	25	89.28%
Arabic	3	10.71%

Table 11. Mother Tongue of the Participants

Table (11) shows cases that the majority of the participants 89.28% have Kabyle as their mother tongue, and 10.71% are Arabophones.

Q5/Would like to mention all the languages you master and classify them according to their value from the more to the less important value?

	1 st position	2 nd position	3 rd position	4 th position
Tamazight	21	2	0	4
Arabic	4	14	7	2
French	1	10	12	5
English	2	1	4	5
Other	-	-	1	-

Table 12. All the Mastered Languages by the Participants

According to the results displayed in table (12), Tamazight is the most favored mastered language of the participants (21 participants) followed by Arabic (14 participants), French (12 participants), English (5 participants).

Q8/What are the languages that you have written in your signboard?

Language	Number	Language	Number
Ta/Fr	3	Eng/Ta	1
Fr/Eng	3	Eng/Ar	1
It/Fr	2	Eng/Fr/Ar	1
Eng/Fr	6	Fr/Ar	2
Esp/Fr	1	Fr/Ar/Ta	2
Fr/Ta	3	Ar/Ta	2
Fr/Ar/Ta	1		

Table 13. The Languages Written on Signboards

Table (13) demonstrates that the most used combination by shop owners to write their signboards is Eng/Fr (6 signs).

Q10/what are the language you use most with your clients?

Tamazight	23	82.14%
Arabic	3	10.71%
French	2	7.14%

Table 14. Most Used Language with Clients

Table (14) shows that 23 participants (82.14%) of the participants answered that Tamazight is the most used language when communicating with their clients, 3 (10,71%) of them use Arabic, and 2 (7,14%) use French.

Q11/What are the criteria that you consider to choose these languages?

Criteria	Number	Percentage
Type of activity	21	75%
Location of the shop	2	7.14%
Level of education of the clients	3	10.71%
Age of the clients	1	3.57%
Others	6	21.42%

Table 15. Criteria in the Choice of Languages

Table (15) shows that the majority of the participants 75% agree that the type of activity is the main criterion for language choice, 21.42% have mentioned other criterion, level of education is considered by 10.71%, location of the shop 10.71%, and the age of clients 3.7%

Q13/How much do you agree on the fact that there is direct relation between the choice of languages and type of the activity

Degree	Number	percentage
Completely agree	19	67.85%
Agree	5	17.85%
Neutral	3	10.71%
Disagree	1	3.57%
Completely disagree	0	00%

Table 16. Degree of Agreement/ Disagreement of the Participants on the Fact that there is a Direct Relation Between Language choice and Type of Activity

The results displayed in table (16) show that the majority of participants 67.85% completely agree that there is a direct relation between type of activity and language choices, 17.85% just agree, 10.71% are neutral, only 3.57% disagree, and no one completely disagrees.

Q14/the overall design of the sign was it yours?

Yes	20	71.42%
Partially	7	25%
No	1	3.57%

Table 17. Yes/NO Answers to the Question 14

From the table (17), it is deduced that 71.42% of the participants have answered that the overall design of the sign is their choice. 25% answered that is partial, while just 3.57% answered that it is not their choice.

Q17/ Do you think that there is an implicit message behind the choice of languages apart from advertisement?

Yes	22	78.57%
No	6	21.42%

Table 18. Yes/No Answers to the Q20

Table (18) shows that the majority of the participants have an implicit message behind language choice apart from advertisement, while 21.42% have not any hidden one.

2. Qualitative results

2.1. Questionnaires (Open-ended Questions).

Q9/ Would you justify why you have used these languages?

All the participants who have chosen French to write their sign boards (either as the preferred code or additional code) agree that it is the language most used by the majority of Tizi Ouzens and their clients, one of these participants goes far to claim that it is “*the language of society*”. The answers concerning English were varied from because it is the international language, language of the new generation and technologies. As regards for Tamazight, the participants justify the inclusion of Tamazight in their shop sign because it is their mother tongue, and it should be given a chance to be represented in society, one of these

participants replied that it is “*a way to incite people to learn Tamazight*”. As far as Arabic is concerned, the participants who used it argue that Arabic was elected to target the clients who could not read another language, and also it is their mother tongue. Those who have used Italian and Spanish was because it is the original country where the products, they are offering are made in.

Q12/ Would you mention other criteria if there are any?

Out of the 6 participants that have opted for other criteria, just 3 of them have justified their choice: 2 argue that it is purely for advertisement and commercial purposes, and one of the participants has justified that she chooses English and French because English it is the language that the new generation likes more, and French it is the most used language by the majority of people.

Q14/ Would you complete the following sentence (optional)?

This question was optional and out of 28 participants just 7 have answered. 5 have a desire to add Tamazight to their signs because it is their mother tongue and the mother tongue of their clients, it represents their identity, however; they argue that it is not yet used in the professional domain, it is not read by most of people, and also because of lack of vocabulary, one participant adds that it is also due to lack of willingness from our parts to learn and use it. another participant wishes to add both Tamazight and Arabic to make all the clients at ease according to the language they master, however; he cannot due to lack of space. other one wanted to add Turk because he sells Turkish Products, but Turkish is a foreign language which is not used in TO. The last one wants to add English to distinguish himself from his competitors, but he said that English is not widely known and mastered in TO.

Q16/Would you justify why you have written it in this style?

The majority of the participants have argued that it was mainly for commercial and promotion goals, while some of them have personal reasons, for instance, the owner of the “Deco and Menage” shop states that he writes it in this style to symbolize his nostalgia to the period where he was a pupil. Another one relates it to his identity. The owner of the pizzeria “La Gioconda” argues that it was from his personal experience in Italy.

Q18/If the answer is yes, would you justify?

Most of the participants have associated the choice of languages in their signboards with high quality, originality, newness, difference especially when it comes to English and French. The use of Tamazight vehicle the message of identity and belonging. While the use of several languages like French, Arabic and Tamazight vehicle the sense of Union, equality and Anti racism of languages and clients.

2.2. Interviews

The two interviews were held with two graphic designers, the first one was conducted in 29 September 2021 with the owner of “Nord Design” agency located in Nouvelle-ville. The second one was held in the 30 September 2021 with the owner of the agency “Décor Pub” in his office situated in NV.

The results of the questions Q1, Q2, Q3 are presented in the following paragraphs:

graphic designer N°1 started working in the domain of signage since 2014, he asserts that he did not notice any changes in the languages used in this field in TO as French was and is still the dominant used language, he states that *"here in TO what works more is French, except governmental official signs that requires the use of Arabic Tamazight, and French"*. He adds that *"English is rarely used as 1 client out of 50 use English"*. According to his ranking of the languages that are present in the commercial signage of TO: French came in

the first position, followed by English, Arabic, and then Tamazight with its two scripts (Tifinagh and tama3mrith). He adds that generally, French is used to give detailed information about the type of activity, the offered services and products, the name of the owner, while English, Italian, and Spanish are mainly used for labelling the shop in some activities.

The graphic designer N°2 launched his agency in 1996, he affirms that he noticed a lot of changes in the languages used in the signage of TO "*as long as society advances, the communication also evolves*" by claiming that he notices the re-emergence of Arabic because of Syrian refugees, the rise of Tamazight "*but there is a contradiction between what is taught at school 'tama3mrith' and what is written on outdoor signs 'tifinagh' especially top-down signs*" and English, while French still the first used and dominant language with about 80% in all types of activities. He classified the preferred codes by his clients as follows English, French, Arabic and Tamazight.

Q4, Q5

The graphic designer N°1 points out that the choice of languages is "*dependent on the type of activity*". For instance, in clothing activity merchants opt for English because "*people are all connected to Instagram, Facebook, which operates more in English*". Besides the origin of the merchant can be also a criterion determining language choices by stating that Arabic is rarely used in TO except in few shops which are generally owned by merchants who are not from TO. Another important factor is that some shops are the representative of a given brand and they have not the right to change "*generally they follow the original brand*"

The graphic designer N°2 disagree on that there is a direct relation between the activity and language choices, he classified the criteria as follows: level of education of the clients, type of activity, age of the clients, location of the shop, he adds that sometimes it is just by imitation.

Q6, Q7, Q8

The graphic designer N°1 affirms that the design of the sign is completely his task, the shop owner gives him just the type of activity, the space of the sign, then he designs it basing on his imagination, inspiration, following the tendencies of the time without relying on any theory, because for him it is a waste of time and he has never heard about multimodality.

The graphic designer N°2 states that the overall design of the shop is generally suggested by him and sometimes is partially. He affirms that indeed there must be rules to follow when designing these signs like color combinations, composition and how to transmit a message by taking into account who are you, what you are doing, to whom you are writing. He states that he has never heard about Multimodality, but he was familiar with semiology and a theory known as ‘Conception’.

Conclusion

The main findings indicate the dominance of foreign languages and mainly European ones like English and French because they are closely related to globalization, modernization, while National ones are marginalized due to lack of vocabulary and literacy in Tamazight, and Arabic because of political tensions in TO.

This chapter has presented the results obtained from the photographs of bilingual and trilingual shop signs, the questionnaires answered by the shop owners and interviews held with the two graphic designers. The tools used allowed the collection of an appreciable amount of data that will be used in the coming chapter devoted to the discussion and interpretation of the findings obtained in the present chapter.

Discussion of the Findings

Introduction

The present chapter is devoted to the discussion and interpretation of the findings, it aims to answer the research questions raised in the General Introduction, and to check the validity of the formulated hypotheses, it comprises three main parts: The first part compares the merchants' actual language practices with their clients gained through the questionnaire, the top-down signs issued by government authorities and bottom-up signs issued by merchants gained from the analysis of the pictured Multilingual photographs of shop signs to see whether they are consistent or not. The second part provides a qualitative content analysis of some shop signs to find the preferred code in the commercial signage, and the types of information arrangements of these codes. The last part is concerned with the ideologies and factors behind language choices gained through the analysis of the questionnaires and interviews.

To check whether there is a correlation between the spoken languages, the language policy of Algeria and the commercial signage in TO, it is pertinent to compare between the Merchants' actual language practices with their clients, the languages written in top-down signs, and those written in multilingual signs.

1. Merchants' Actual Language Practices with Clients

From the results obtained in the questionnaire (question 10), 23 merchants (82.14%) declare that kabyle is the most used language when dealing with their clients, it can be argued that it is because Kabyle is their mother tongue (25 merchants) question 4 (see table 11), and it is their most mastered language (question 5 see table 12). 3 participants (10.71%) use Arabic because they are Arabophones, and Just 2 (7.14) have mentioned that they address their clients in French, these two merchants are managers in two travel Agencies, this is may

be due to the fact that most of their clients are immigrants in Europe. No participant has mentioned that they communicate with their clients in English.

2. Top-down vs Bottom-up Signs

One of the main interests in LL is to draw a distinction between the languages used on top-down, and bottom-up signs of a given area to see whether they are compatible or not. If compatible there is a linguistic homogeneity, if not there is a linguistic heterogeneity. According to Kellen (2010:42) “*drawing a distinction between top-down official and private bottom-up signs also implies that the LL is not a homogenous territory*”.

2.1. Top-Down Signs

Top-down signs in TO conform to the language policy of Algeria as they are written in three main codes and scripts: *MSA* at the *top* because it is the 1st official language of the state since the independence, followed by Tamazight as the 2nd official language, then French as the de-facto co-official language. Based on Scollon and Scollon (2003) ‘code preference system’, *MSA* is the preferred code in governmental signs. In fact, and since independence, Algerian language policy has favored the use of *MSA* to relate it to the Algerian Islamic-identity (Benrabah, 2013). According to Genoz and Gorter (2010:56) ‘*Governmental language policy is usually directed at official signs*’.

2.2. Bottom-up Signs

The languages displayed in the captured photographs of Multilingual shop signs in TO are more diversified than the language of the official signs, this means that the Algerian authorities do not intervene and impose any restrictions on the language of private signage. The results reveal that quantitatively speaking, French is the dominant language used in multilingual signs in TO which was featured in 118 signs followed by English (92) signs, then Arabic (30 signs), Tamazight (19 signs), in addition to the presence of Spanish (7 signs) and

Italian (6 signs). However, from a qualitative and multimodal perspective through examining the placement and order of languages in multilingual signs it is found that the English language overcomes French as being the preferred code in the half (50.38%) of multilingual shop signs with the majority (31.30%) located in NV because it is the host of two universities; Hasnaoua1 and Bastos, so most of these signs are designed to target students and youngsters. Followed by French (31.3%) with almost same amount in both settings, Arabic was featured as code preference in 8 items, Spanish and Italian are placed as code preference in all the signs in which they have occurred, Tamazight comes in the last position as code preference in just three signs. These results are in opposition with the findings of Nakla 2021 in his study of the LL of Sidi El Houari district in Oran in which he concluded that '*LL nearly mirrors the policy implemented by the local authorities in term of language use*' (Nakla, 2021: 47).

The comparison of the languages used in the three contexts shows that there is no conformity between *the real-life language practices, governmental signs, and languages written in multilingual shop signs in TO*. The letter tends to privilege the use of *foreign languages* like English and French at the expense of *national ones*. These results are consistent with those found by Edelman (2010:91) concluded that the '*LL only reflects the languages spoken by the speech community to some extent. Many other factors play a role, such as power relations, prestige, symbolic value, identity issues, vitality and literacy.*'

3. Language Hierarchy and Code Preference

Scollon and Scollon (2003:120) point out that code preference appears when a text in a given sign is written in two or more languages or orthographies as these codes cannot be placed in the same place at the same time within a single sign by stating that "*the mere fact that these items in a picture or in the world cannot be placed simultaneously produces a choice system*" (Ibid). Scollon and Scollon have distinguished three main positions to determine the preferred code in a multilingual sign: top/down, left/right, center/margins. The

empirical data in this research provide evidence for the dominance of foreign languages as code preference on multilingual signs. The results obtained from the corpus as displayed in figure 4 and 5 show that the most common used combinations are Eng/Fr (63.02%), Fr/Eng (16.80%) in bilingual signs. Eng/Fr/Ar (41.66%), Fr/Ta/Ar (41.66%) in trilingual signs.

3.1. Foreign Languages vs National Languages

Though constitutionally Arabic and Tamazight are the two official languages of Algeria, the photographs of the shop signs in TO show the marginalization of these former in the commercial signage. The results obtained approve the dominance of English and French as the preferred codes.

3.1.1. Foreign languages Fetishization

The results obtained from the captured photographs show the *dominance of English as code preference* in almost half (50.38%) (see table 2). It is noticeable that in all the instances (66 signs) where English occurred in the prominent position is mainly used to label the shop. the sign in figure (1) (see appendix) is a front of a shop specialized in selling and renting wedding dresses labeled 'Royal Dress' positioned in the *top center* and written With Bold Golden font. Following Scollon and Scollon (2003) *vertical top/down position* is to connote the high quality of the dresses. It can be argued that the function of the *English* text is just symbolic since it is always followed by a French text used to communicate the factual information. Kelly-Homes (2014) calls this phenomenon '*Linguistic Fetishization*' which she defines as '*using languages for symbolic rather than instrumental (communicative purposes) in commercial texts*' (Kelly-Holmes, 2014: 135).

A handful of grammatical mistakes and meaning ambiguities are found in the English texts displayed on shop signs in TO like in figure 2 and 3. Figure 2 (see appendix) is an Eng/Fr shop sign where English is the preferred code as it is positioned on the *top* and written

with *large font*. The English text KIDS*LAND) contains a *grammatical error* as it must include a possessive apostrophe after the s, so it must be written ‘KIDS’LAND’. Figure (3) shows a *lexical ambiguity* in which the equivalence of par facilit  in English is ‘installment payments’ and not ‘facility shop’. This shows a poor English proficiency from both the shop owner and the graphic designer, and the emphasis is on the appearance of English not in its accuracy.

Kelly-Holmes (2014: 136) calls this phenomenon as ‘*Visual Multilingualism*’ which she defines as ‘*using language as images*’ where the form is more important than the content, she asserts that ‘*in linguistic fetishization symbolic meaning takes precedence over content and utility*’(Ibid:193). This means that the connotations associated to the language are more important than the meaning and spelling.

In addition to English, two other languages have imposed themselves as code preference in all the signs where they are depicted. Spanish was visible in 7 (5.34%) signs, and Italian in 6 (4.58%) signs. This can be best exemplified in figures 4 and 5. In figure (4) Spanish is the preferred code as it is positioned on the *top* and written with *large font* and *uppercase letters* ‘CASA MODA ZAPATO’ followed by the French text in the *bottom* ‘sacs et chaussure homme, femme, enfants) to give detailed information about the sold items. Here, the shopkeeper used Spanish in reference to Spain, the country where these shoes and bags are made in. Figure 5 is an It/Fr shop sign of a restaurant specialized in Italian dishes where Italian is the preferred code in terms of its *position, font, and color* as the Italian text ‘Casa Mia’ which is used to label the restaurant is placed in the *top*, written in *large font*, and *different colors* that symbolize the Italian Flag. Then, the Italian text ‘Casa Mia) is supplemented by a French text to transmit the factual information about the type of activity ‘restaurant Glacier’ and specialties ‘specialit  Italienne’.

The use of '*Fetishization*' by shop owners in TO was not limited to foreign languages, but was extended to include the *use of titles of famous foreign series* that have gained a worldwide audience like the use of 'la Casa del Papel' which was replaced by 'la Casa del Tacos' to name a fast food specialized in Tacos (see figure 6). 'Harim Soltan' is another title of a famous Turkish Serie about the king 'Soltan Soleiman' and his women who attracted the audience with their beautiful pearled dresses and lavish jewelries. It was used to name a clothing store specialized in 'haute couture' for brides like Caftans, and Saris. The shop owner used this title because most of their clothes are imported from Turkey, and also to associate the elegance of these dresses with that worn in the Serie. The two signs portray an exact duplication of the original titles. Al Athwary (2017: 56) when analyzing a shop sign in Yemen bearing the name of the US TV serial 'Friends' written exactly in the same way as the original title referred that 'The exact imitation of movies and series' logos' titles was interpreted by Buckingham and Al-Athwary (2016) in their study of street advertising in English in Yemen and Oman as '*the marketing strategy of associating a product or a service with a foreign culture called the country-of-origin effect*' which they define as '*a tactic used to imbue the marked product or a service with connotations of confidence and desirability*'. In another shop sign of a real estate agency, the owner opted for 'Bab El Hara' a Syrian Serie to be the heading of his shop (see figure 8 in the appendix). It can be suggested that the writer of the sign choose this title because of its relation with house Bab (door) and, Hara (neighborhood). Or it can also be suggested that 'El hara' is a loan word used in Kabyle and which has different meanings: yard, house or neighborhood. In pictures 7 and 8 the shop owners relied on Romanized Arabic (transliteration) as the Latin orthography dominates in TO Due to High Literacy in French.

3.1.2. French as Language for Wider Communication (LWC)

From a quantitative standpoint, French is the dominant language in bi/multilingual shops in TO as it was depicted in 118 items (see table 2). French was featured as code preference in 41 signs (31.3%), while in the remaining 77 items it was used to give factual information. This means that French has exceeded the *symbolic fetishized value* (as the French language is classified the first foreign language in Algeria thought from 3rd grade elementary school) to the *Utility value*. Kelly-Holmes (2014: 139) defines utility value the use of ‘*a language as means of communication between speakers*. French was used as code preference to highlight the type of activity, or products like in figures (9), and (10). The shop sign in figure (9) is composed of a French text ‘*Pieces de Rechange d’Origine*’ positioned in the *top* so here French is the preferred code and the importance is given to the type products sold in the shop. while Tamazight and Arabic came in the *subordinate* position as the *Marginalized codes* as they are written in underneath French. In figure (10), the focus is on the type of Activity (Boulangerie) as it is written in the *Top*, at the *bottom* its equivalence in Arabic(مخبزة) (bakery).

Despite having the status of a foreign language in Algeria, French plays the role of ‘*a language for wider communication (LWC)* to break down the linguistic barriers between the readers and these languages. *LWC* is defined as ‘*a language used by people as a medium of communication across languages or cultural barriers*’ (SurveyWiki: 2011). This is noticeable especially in the role of French within the multilingual shop signs in this research where in the majority of signs (118) French is used to transmit facts and decipher what is written not only in foreign languages (English, Spanish, Italian), But also what is written in National languages (Arabic, and Tamazight), figures

In general, from the photographs of the shop signs, it is concluded that the foreign languages namely English, Spanish, are used to label the shop. according to the answers of

merchants obtained from the questionnaire (Q9, Q17), the merchants justify their choices to be merely for commercial and promotional purposes as these languages are associated with high quality, originality, sophistication, internationalization, etc. This matches with El Yasin and Mahadin (1996: 415) who argue that ‘*it is this association between what is foreign, and what is good quality that businesses utilize by choosing a foreign name or using a foreign word in promoting their goods and services*’. Thus, their function is limited to promotional purposes. In this regard, Edelman (2009: 143). As far as French is concerned, despite having the status of a foreign language, it is widely used to transmit factual information. This is confirmed by the shop owners ‘answers to the questions (Q12, and Q18) by stating that it is the ‘*language of society*’, also the 2 graphic designers affirm that in TO ‘English, Spanish and Italian are just used to name the shop, while the details are given in French.

3.1.3. National languages’ Minor Role and Marginalization

The results indicate that national languages are marginalized as Arabic has occurred as code preference in 8 signs (6,11%) out of 30 occurrences, and Tamazight in 3 signs out of 19 occurrences. The display of these languages is related more to identity purposes.

Figure (11) is a sign of a well-known herbalist in Algeria named ‘Ibn Chanfara’ who has representatives all over Algeria. The sign is written in two languages, *MSA* is positioned in the *top* ((وكيل ابن الشنفرة لللا عشاب الطبيعية)) the representative of Ibn Chanfara for natural herbs’, in the *Bottom* its equivalence in *Tamazight* written in ‘*Tama3mrith*’. In this sign Arabic is the *preferred code* and Tamazight is the *marginalized one*. The sign writer justifies his choice of language because Arabic is his mother tongue and it is the language of his brand name, and Tamazight is addressed for the Kabyle clients since the shop is situated in a Kabylophone community. It can be suggested that the owner used both Arabic and Tamazight to index his identity, and the identity of his potential clients. Thus, according to Scollon and Scollon (2003) the two languages have an indexical function. In figure (12) the shopkeeper

used Colloquial Arabic ‘Lala La3roussa’ written in *Latin orthography* with *large font* and positioned in the *top*, the factual information is listed *below* using French to explain that the beauty salon is specialized in brides’ make-up and hair style. The use of Romanized Arabic is an ‘*accommodation for the majority*’ since in TO the Latin Script is more used due to the high literacy in French. ‘*Accommodation*’ is a term used by Edelman (2010:86) to interpret the use of Romanized Arabic in a shop sign in Amsterdam written in Arabic script and transliterated into Latin script (المتحجبة / Al Mutahajiba) to suit the Dutch readers who are Literate in Latin Script.

Same practices are noticed in TO where in transliterations from Arabic to Latin Scripts, or the use of Romanized Arabic were recorded in 6 signs: Harim Soltan/حريم السلطان, Hammam/حمام, Zlabia&Cheribat/زلابية و شريبات. El Khaima/الخيمة, Lala la3roussa, Bab El Hara. This can be interpreted according to spolsky’s (2009) o the presumed reader condition ‘write a sign in the language or languages that intended readers are assumed to read’.

As regards Tamazight, despite its proclamation as an official language in 2016, little attention is accorded to displaying it in the public space in TO. In fact, the results show that Tamazight was positioned as code preference in just 3 signs (2.29%). Thus, occupying the last position after English, French, Arabic, Spanish, and Italian.

In picture (13), is a shop sign of Berber dresses written in two languages: Tamazight and French. Tamazight (Tifinagh) occupies the *Prominent position* as it is positioned in the *center* of the sign and written with *large font* to name the shop ‘TALAVA’ meaning dress in English. Then, the factual information is given in French (Boutique, tenues traditionnelles Kabyles). In Figure 14 Tamazight is given priority by occupying the *left* position, whereas in Figure 15 it is positioned in the *top*. The signs demonstrate that Tamazight is always supplemented by a French text to decipher what is written in the sign due to ‘*high Tamazight illiteracy*’ among Tizi Ouzeens especially the old generation. Here, it can be concluded that

the display of ‘Tamazight’ is restricted to ‘*symbolic or fetishized function*’. it is just used to as a symbol of to represent and index Amazigh identity rather than communicate factual information, so the emphasis is on the visual form rather than the meaning and spelling. In fact, an amount of spelling mistakes has been detected, especially in the use of ‘O’, for instance, in figure (11) the term ‘Ougama’ meaning ‘natural’ in English is written with ‘OU’, however; Tamazight Alphabet does not have the vowel ‘O’, so instead it should be written ‘Ugama’. same mistake was noticed in Hebbou*/hebbu meaning ‘lovely’ in English, Aghroum*/aghrum (Bread).

4. Types of multilingual writing

Following Reh Model (2004), and Backaus (2006) taxonomy of information arrangement in multilingual signs: Duplication (complete translation), fragmentary overlapping (partial mutual translation), complimentary (no mutual translation), it has been found that the *complimentary type* is the most used with 70,72% (see table 7) like in figures (1), (2), (3). The sign writers leave the languages untranslated to imply that they are addressing clients that are proficient in both languages, so they are targeting a specific audience. Reh (2004) deduced that complimentary multilingualism reflects individual multilingualism. (17,55%) featured *duplicating multilingualism (complete mutual translation)* where in the original text (the preferred code) is translated into other language (s) like in Figures (9), (8), (11), (14), (15), or transliterated into another script like in Figure (7) to address clients from different backgrounds who are proficient in one of these languages, thus, the sign writer is addressing a large number of clients. Reh points out that duplication multilingualism is a reflection of societal multilingualism. *Fragmentary and overlapping (partial translation)* multilingual writing was used in 12.21% like in figure (3) in which the full text written in French ‘Electromenager par facilité’ was partially translated into English as just ‘par facilité’ was translated into English ‘facility shop’).

The results give evidence for the scarcity use of national languages in the commercial signage of TO, and the promotion of foreign ones due to commercial factors, and ideologies associated with each language. The answers of questionnaire and interview are used to infer these ideologies and criteria followed by the shop owners in order to select the languages to promote and identify their business (only the answers that have noticed to have an impact on language choice have been taken into account).

5. Ideologies Behind Language Choices

Language ideologies is a set of ideas and attitudes attributed towards a given language, it can be positive or negative. Lanza and Woldmarian (2009:1) define it as a “*set of shared attitudes and beliefs about language, underpinned by certain social/cultural values*”. For them, language ideologies are not free for all, but they are embedded and associated with its social and cultural values. Furthermore, they extended Woolard (1998:3) definition that “*language ideology is a link between language forms and expressions of talks*” to include “*forms of display (written languages), and hence linguistic landscape* (Lanza and Woldmarian, 2009:1).

From the answers to the questions (Q9, and Q18), shop owners hold ***Positive attitudes*** towards the use of foreign languages to serve commercial purposes as they are associated with ***high quality, originality, globalization, fashion, modernity, creativity, youth, etc.*** for instance, the owner of the pizza restaurant ‘La Gioconda’ associates the use of Italian to name his restaurant because Italy is considered to be the original country where pizza was first made, and ‘La Gioconda’ to associate it with art and thus with ‘savoir faire’. Another participant who owns a print agency named ‘Dream Print’ justified the use of English in her signboard because it is the language of the new generation and youth. El-Yasine and Mahadin (1996) in a study conducted in Oman (the Capital of Jordan) interviewed customers about which shops they think are prestigious, most of the respondent have opted for the shops

written in foreign languages mainly English to be more lavish. They concluded that foreign languages are ‘*associated with high quality products and prestige*’. Same results have been found by Fodil (2019) in a study aimed at investigating the reasons behind the use of English to label the shops in TO, he deduced that ‘*the shop keepers dub English with qualities such as Novelty, fashion, high class, reliability, etc.*’ (Fodil, 2019:6). In the case of French, the shop owners consider it as ‘*the lingua franca*’.

In contrast, the participants hold ‘*negative attitudes*’ towards the use of national languages because they do not serve their commercial purposes. **Tamazight** because of the **lack of vocabulary** and **illiteracy in ‘Tamazight**. One merchant declared that ‘*Tamazight is not yet introduced to the professional and commercial domain*’. This is confirmed by the graphic designer N°2 who claim that ‘*many of his clients wish to include Tamazight in their signs, but sometimes it is difficult because inspector in Tamazight who oftentimes do not have the right vocabulary*’. Arabic is rejected in TO because of political tensions except in shops owned by Arabophones, or those targeting clients from different backgrounds.

6. Criteria Determining Language Choices

6.1. Type of Activity

From the answers to (Q14, Q16) The majority of the shop owners affirm that the type of activity is an important factor (criterion) for the selection of the language that will be put in the prominent position to represent their business and attract customers. It has been found that English is the preferred code in (66 signs): 20 signs in clothing, shoes, and accessories due to the influences of the celebrities and social media stars on clients according to the graphic designer N°1, restaurants and fast food (12 signs) to relate it with high quality of foods and Mc’ Donaldization, ICTs (5 signs) because it is the language of technology and science. Printing, pub, travel agencies (5 signs), kids’ staff (5signs), cosmetic and beauty salons (5

signs). These results line up with Fodil (2019: 6) who has found that English was used in (38 signs) in clothing and fashion, 27 are related to ICTs, 18 trade in food. He adds that the use of English was largely preferred in clothing, ICTs because they are more frequented by youngsters who are addicted to trendy expensive clothes and mobiles associated with reliability and imported from Europe in order to be perceived as belonging to a high social class (Fodil, 2019:7). In addition, some shop owners argue that the use of English is a strategy to get away from the domination of 'French' which was given the prominent position just in the activities that are related to daily necessities like home appliances and deco (6 signs), groceries, and bakeries.

6.2. Mother Tongue of the Shop Owners

Out of the 28 participants, 5 have answered that they have opted for their mother tongue to be the preferred code in the signboard. 3 are Kabylphones: the first one is the owner of the shop 'TALABA' (see figure 13) who justifies the use of Tamazight with its two scripts to represent his identity, and also because of the type of activity since he is specialized in producing and selling traditional Dresses. The Two others are the owners of the shops in figures (14) and (15), they claim that 'we should give Tamazight its right position in the society', it should be put in the front of other languages, but the problem is that the majority of people in TO are illiterate in Tamazight especially Tifinagh. From the answers to the (Q17) which was optional, out of the 7 participants who have answered, 5 have expressed their deepest desires to add Tamazight to their shop sign because it is their native language and that of their clients, and represents their identity; however, they have found difficulties like lack of vocabulary, one said that it is not used in the professional domain, and the other one argues that it is because of the lack of willingness to learn and use it. The graphic designer N°2 put the blame on the paradox between what is taught at school and what is written in public spaces, that is, the problem comes from the Algerian policy which favor the teaching of

Tamazight in Latin orthography while displaying it publicly in Tifinagh. The two other participants who selected their native language to be the preferred position are from Belabas and Timimoune, their mother tongue is Arabic, this is why they have privileged Arabic, and also it can be because of the type of activity and clients. One of them is an herbalist and (see figure 11), and the other one is specialized in making tea ((شاي الجمر على النار)). This corresponds with Ben-Raphael (2006) ‘the *collective identity perspective*’ which is based on the notion that social actors use signage to index a belonging to a certain social group. Kelly-Holmes (2010:146) calls it ‘Authenticity in marketing’ and which she defines “*as using a language to indicate a cultural membership.*”.

6.3. The Country-of-Origin Effect on Language Choice

The original country of the products has two options. First, it refers to where the goods are first invented, for instance Italy is associated with the invention of Pizza. This is why some shop owners use Italian as in ‘Basilico: Pizza au petit feu’, or the use of Spanish to label fast food specialized in ‘Tacos’ as ‘la casa del tacos’ (see figure 38) as it is first made in Mexico. Another explanation is that the products are made in that country like in ‘Casa Moda Zapato’ or ‘la Donna’, la Felicita’. The Shop owners assume that they wanted to convey that these products are not fake and they are imported directly from the country where they are ‘Made in’. Kelly-Holmes (2005:29) defines country-of-origin effect ‘*a country which a consumer associates with certain product or brand as being its source, regardless of where the product is actually produced*’.

6.4. Signs Representing Brands

The graphic designer N°1 advance that Some shops are just representatives of a given brand, this is why they are not free to change the original name, however; in order to accommodate the needs of their clients in the language they understand, some shop owners

may rely on transliteration like in the shop sign representing a Turkish painting company named 'SILKCOAT', according to the manager in TO, the responsables of the company transliterated 'Silkcoat' into Arabic 'سيلكوت' as they consider Algeria is An Arabic country, and the manager in TO is preparing to add Tamazight (unfortunately, the sign was not yet ready when the picture was taken), some others compliment the original text with a language that is understood by the clients, like in the shop sign of a sport nutrition products, the English text ' sport nutrition: the future of sport nutrition' was complimented by the French Text 'point de vente agréé' underneath it is the phone number of the shop. it is noticeable that most of these brands are specialized in sport nutrition (4 signs) and painting (4 signs), and they are all labeled in English which was highlighted in the prominent position, then a French text was substituted to give extra information.

As regards age, and level of education of clients, and location of the shop. it was just considered by 5 shop owners: (3) level of education, 2 (Age). In contrast the graphic designer N°2 insisted on the fact that the shop owner must know who are his clients (age and level of education), he must know to whom he is writing.

Based on the outcomes resulted from the questionnaire and interview, the majority of shop owners prefer foreign languages to write their signs because of the positive impacts that they have on the reputation of the shop as they are associated with modernity, luxury, authenticity and reliability. While some others prefer local languages because it represent their identity and stimulate the sense of belonging on them and their clients.

Conclusion

In summary, the present chapter has discussed and interpreted the main findings obtained from the photographs, the questionnaire, and the interview. following Scollon and Scollon (2003) Code preference System, the results reveal the dominance of English as 'Code

preference' over French, Arabic, and Tamazight because of the different ideologies engraved in the English language in particular, and European languages in general. This speculates that shop owners appeal for foreign languages merely for commercial and promotional purposes with the exception of French which holds the position of a *lingua franca* and serve also communicative purposes. Thus, these results confirm the hypothesis number two as foreign languages are privileged over local ones.

Based on the participants' answers to the questionnaire, the majority of shop owners take first into account the type of activity to write their sign boards, then they follow the origin of the products, besides some consider it as way to present his identity.

The classification of signs according to Reh's (2004), and Backaus (2006) of information arrangement in signs reveals that most shop owner use complimentary multilingualism as an index for individual multilingualism by assuming that the targeted readers have a mastery of the different languages. So, the shop owners are addressing a particular audience. then duplicating multilingualism with a complete equivalence of the original text in one or different languages or transliteration to indicate societal multilingualism. Thus, shop owners are addressing a large audience from different backgrounds.

General Conclusion

The present study has endeavored to investigate language hierarchy in multilingual shop signs in TO province. More precisely it has dealt with code preference and types of multilingual writing to find out which codes are privileged, and what are the ideologies, and motives of the sign writers behind such choices.

Two main objectives have been set for this study to be achieved. The first was to compare between the languages displayed on top-down signs, real-life language practices and the languages displayed in multilingual shop signs to figure out whether there is a correlation between the three contexts or they are different. As a second objective, it attempted to analyze language sequencing in the captured photographs to find out the dominant preferred code(s), types of multilingual writing, and the ideologies behind language choices.

This study has adopted a mixed method research which integrates both quantitative and qualitative techniques for the analysis of data. The quantitative research techniques have been employed to examine language frequencies in signs, and the answers to the close-ended questions of the questionnaire using the rule of three. And the qualitative research techniques were used to Analyse the pictures of the signs and the open-ended question of the questionnaire, and of the semi-structured interview using Qualitative Content Analysis (QCA).

The comparison of the captured pictures with the top-down signs and the spoken languages in TO along with those practiced by shop owners with their clients has revealed that there is a gap between what is practiced in real life and what is written in official signs, and what is written in multilingual shops signs as it shows the dominance of foreign languages mainly French and English over local ones from both quantitative and qualitative standpoint.

The Geosemiotic Analysis of the 131 has provide evidence for the dominance of both English and French. It can be easily observed that the trend is numerically in favor of English as the preferred code, followed by French, far below is Arabic, Spanish, Italian, Tamazight. From the content analysis of the questionnaire and the interview, it can be reasoned that the derives behind the option for foreign languages is merely for commercial and promotional purposes as they are associated with modernization, high quality, originality, and trendiness, etc. it has been noticed that the use of foreign languages as the preferred code was reserved to label the shop with the exception of French that has been used to transmit factual information. As regard to the use of Arabic and Tamazight as the prominent code is to index the both communities in TO, and highlight the Arabic and Berber identity of the shop owners.

The typology of multilingual writing developed by Reh (2004), and in respect with Backhaus (2006) reveals that three strategies were used. the majority of shop owners rely on complimentary multilingualism (no mutual translation) where the different languages serve distinct functions. the most visible combination is Eng/Fr in which the use of English was symbolic, while French was used as an index to the presence of a Francophone community in TO. Some others have relied on duplication (complete mutual translation) and few have used fragmentary strategies (partial mutual translation) where just the main information was translated.

Accordingly, this study has confirmed the hypotheses set in the General Introduction as they have confirmed the non-conformity of the languages displayed in multilingual shop signs neither with the language policy of Algeria, nor with those practiced in TO or with the clients. Indeed, foreign languages are privileged by shop owners to identify their business at the expense of national languages.

It is crucial to mention that there are some factors that may affect the data in this study. Some signs must have been missed because of the disagreement of shopkeepers; some others were not accessible because they were hidden by trees. Others were damaged. It is also vital to mention that the Findings in this study are restricted to the time, place, and cannot be generalized on all the shop signs in TO. In fact, it is possible that some existing multilingual signs have disappeared, while others have appeared between the data collection and the writing of the present dissertation. The interviews and the questionnaires that were supplemented to the pictures were planned to be conducted in July, but due to the COVID 19 pandemic, they were postponed until late September. Some answers to the questionnaire were not clear, it is unknown if because they were ill formed as the pilot study was missed out due to time limit. In addition, not all the merchants have agreed to answer the questionnaire. Besides not all the principles of the theory of Geosemiotic were used.

Hopefully, the present paper has contributed to the field of the Linguistic/semiotic landscape of Algeria in general and TO in particular. This study was limited to one small urban area which is TO town, future studies may concentrate on the language hierarchy in Bi/Multilingual shop signs in rural areas and compare the existing languages with those of TO city, or compare language hierarchy in TO city with another city in another part of Algeria. Furthermore, this study has just focused on language hierarchy in the commercial signage, future studies may include other signs like graffitis and murals. Besides, as mentioned in the limitations, the present study is synchronic, future studies may make a diachronic study by comparing the present results with those that will be conducted in the future 5 or 10 years in the next studies, or look at language hierarchy from the point of view of the sign readers.

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Appendices



Figure 1: Eng/Fr sign



Figure 2: Eng/Fr sign



Figure 3: Fr/ Eng sign



Figure 4: Spa/Fr sign



Figure 5: It/Fr sign



Figure 6 : Spa/Eng sign



Figure 7: Ar/RAr sign



Figure 8 : RAr/ Fr sign



Figure 9: Fr/Eng sign



Figure 10: Fr/Eng sign



Figure 11 : Ar/Ta sign



Figure 12 : RAr/Fr sign



Figure 13 : Ta/ Fr sign



Figure 14 : Ta/Fr sign



Figure 15 : Ta/Fr sign

Questionnaire :

Dear participants,

This questionnaire is addressed to the shop keepers in Tizi Ouzou city center in order to collect data that will help in a research about the completion of a master dissertation entitled” A Geosemiotic Analysis of Shop Signs in Tizi Ouzou City Center (center-ville and nouvelle -ville)”. We promise that all the information you provide will be kept anonymous and confidential and will be used only for academic purposes. Your answers will determine the success of this research, therefore; please be honest and sincere.

Thank you in advance for your time and efforts!

Please put a tick (✓) on the option(s) that fit(s) your choice, and use your own explanations where required.

Section one: questions related to the shop keeper.

1-How old are you?	20-29	<input type="checkbox"/>	30-39	<input type="checkbox"/>
	40-59	<input type="checkbox"/>	50 and more	<input type="checkbox"/>

2-What is your level of education?

3-Where are you from originally?.....

4-What is your mother language?.....

5-Would you like to mention all the languages you master, and classify them according to their value for you from the most to the less important?

.....

Section Two: questions related to the shop.

6-Type of activity:

7-Location of the shop:

Section Three: questions related to languages on shop signs.

8-What are the languages you have used on your signboard?.....

9-Would you justify why?.....

.....

10- what is the language that you use most to communicate with your clients?

Tamazighth

French

Arabic

Others

11-Which criteria have you considered when choosing these languages? You can select more than one answer from the list below.

The shop's location.

type of activity.

level of education of clients.

Others

12-Would you mention other criteria if there is any.....

.....

.....

13-How much do you agree on that there is a relation between the language(s) choice and the type of activity?

Strongly agree

Agree

Neutral

Not agree

Strongly not agree

14-Would you Complete the following sentence: (optional question)

If I have to add another language to my front sign, it will be because.....

....., however;.....

.....

15-The overall design of your shop sign was it your choice?

yes

no

partially

16-Why have you chosen to write it in this font and style?.....

.....

.....

17- Do you think that there is an implicit message behind language choices besides advertisement? yes no

18-If the answer is yes, would you justify?

Interview with the graphic designer :

By giving your consent, you are participating in a study that aims at identifying the key motivating factors and ideologies behind shop signs design and language choices in Tizi Ouzou. The questions we are to ask you are purely intended for a scientific research. The information will be kept anonymous and confidential.

We really appreciate your collaboration.

Q1. How long have you been working in this domaine?

Q2. Have you noticed any changes since you have started this business to now?

Q1. What are the most demanded languages by your clients?

Q4. According to you, does the language(s) choice depend on the type of activity?

Q5. What are the other factors that determine language(s) choice?

Q6. The overall design of the sign is it yours, or suggested by the client?

Q7. Have you already heard about multimodality?

Q8. Which theories do you rely on when designing these signs?

