Multilingualism in the Ancient City of Madaba:
A Look into the Linguistic Landscape

تعدد اللغات في مدينة مأدبا القديمة: دراسة المشهد اللغوي

Prepared by:

Roaa Yousef Maayah

Supervised by:

Dr. Mohammed Yousef Nofal

A Thesis Submitted in Partial Fulfillment of the Requirements

for the Master's Degree in English Language and Literature

Department of English Language and Literature

Faculty of Arts and Sciences

Middle East University

June, 2023

Authorization

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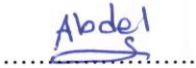
Name: Roaa Yousef Maayah

Date: 03/06/2023

Signature:

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Thesis committee		**Signature**
1. Dr Mohammed Nofal	Supervisor	
2. Dr Wajd Al-Ahmad	Chairman	
3. Dr Abdelkarim Al-Lababneh	Internal examiner	
4. Dr Ayman Yasin	External examiner	

Acknowledgements

First and foremost, all praise and thanks be to Allah, Almighty, who has taught man that he knew not and gave me the strength to complete this work.

Words cannot express my gratitude to my supervisor, Dr Mohammed Nofal, for his invaluable patience and feedback. I could not have undertaken this journey without my professors in the department of English at MEU for their support and also for the knowledge they have offered me throughout my study.

I would be remiss not to mention my family, especially my parents, sisters, brothers, my sister-in-law, Eman Al-Bakheet and best friend, Rewaa Al-Tamimi. Their belief in me has kept my spirits and motivation high during this process.

Finally, I extend my deep gratitude to the shop owners on Touristic Spine and everyone who works in Mount Nebo and Madaba Visitor Center for their cooperation and moral support in helping complete this work.

Dedication

This work is dedicated to all my family members, especially my mother and my father, whose full support gave me the opportunity to pursue the highest level of education.

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Multilingualism in the Ancient City of Madaba: A Look into the Linguistic Landscape

Prepared by: Roaa Yousef Maayah
Supervised by: Dr. Mohammed Nofal
Abstract

This study aims at investigating multilingualism in the linguistic landscape of the ancient city of Madaba. In order to achieve the objectives of the study, the researcher posed two questions concerning multilingualism in top-down and bottom-up signs and official language.

The study adopts a mixed approach to data analysis, both quantitative and qualitative analyses. The analysis of monolingual and multilingual signs is based on a sample of 261 signs collected from three touristic places in Madaba, namely Mount Nebo, Madaba Visitor Center, and the Touristic Spine, by taking photos of these signs and then recording them in Excel sheet. The signs identified include two main types: top-down (official) and bottom-up (non-official) signs.

Results show two main categories of signs regarding the languages used in them, namely, monolingual or multilingual signs. What is remarkable is a high extent of multilingualismin Arabic and English languages. In addition to Arabic and English, it displays some ancient languages such as Greek, Latin, Moabite, Aramaic, and Roman. Results also show that although Arabic is the official language of Jordan, English enjoys higher visibility than Arabic on both top-down and bottom-up signs. The researcher suggested several ideas for further research like conducting similar studies on other touristic signs in Madaba such as the Dead Sea and Ma'in Hot Springs.

Keywords: Multilingualism, Ancient City of Madaba, Linguistic Landscape.

تعدد اللغات في مدينة مأدبا القديمة: دراسة المشهد اللغوي

إعداد

رؤى يوسف معايعة

إشراف

الدكتور محمد يوسف نوفل

الملخّص

تهدف هذه الدراسة إلى دراسة تعدد اللغات في المشهد اللغوي لمدينة مأدبا القديمة. من أجل تحقيق هدف الدراسة، طرح الباحث سؤالين بشأن تعدد اللغات في العلامات من أعلى إلى أسفل ومن أسفل إلى أعلى وسياسة اللغة الرسمية وفقاً للممارسة.

تعتمد هذه الدراسة نهجاً مختلطاً لتحليل البيانات، التحليلات الكمية والنوعية. ويعتمد تحليل العلامات أحادية اللغة ومتعددة اللغات على عينة من 261 علامة تم جمعها من ثلاثة أماكن سياحية في مأدبا، وهي جبل نيبو ومركز زوار مأدبا والعمود الفقري السياحي، من خلال التقاط صور لهذه العلامات ثم تسجيلها في ورقة إكسيل. تشمل العلامات المحددة نوعين رئيسيين: علامات من أعلى إلى أسفل (رسمية) وعلامات من أسفل إلى أعلى (غير رسمية).

تظهر النتائج فئتين رئيسيتين من العلامات المتعلقة باللغات المستخدمة فيها، وهما العلامات أحادية اللغة أو متعددة اللغات. ما يلفت النظر هو مدى عال من تعدد اللغات في اللغتين العربية والإنجليزية. بالإضافة إلى العربية والإنجليزية، فإنه يعرض بعض اللغات القديمة مثل اليونانية واللاتينية والمؤابية والآرامية والرومانية. تظهر النتائج أيضاً أنه على الرغم من أن اللغة العربية هي اللغة الرسمية في الأردن، إلا أن اللغة الإنجليزية تتمتع برؤية أعلى من اللغة العربية في كل من اللافتات من أعلى إلى أسفل ومن أسفل إلى أعلى. اقترح الباحث عدة أفكار لمزيد من البحث، مثل إجراء دراسات مماثلة على علامات سياحية أخرى في مأدبا مثل البحر الميت والينابيع الساخنة في ماعين.

الكلمات المفتاحية: تعدد اللغات، مأدبا القديمة، المشهد اللغوي.

CHAPTER ONE
Introduction

1.0 Introduction

This chapter starts with a background of the study followed by detailed information about the multilingualism and English in the Jordanian culture, and foreign visitors and the linguistic variety. After that, it sheds light on the statement of the problem, objectives, questions, significance, limitations and limits of the study.It ends with the definition of some terms.

1.1 Background of the study

Madaba Governorate is located 35 km south of Amman, the capital. The population of Madaba is about 219100 inhabitants, while the province's size is 940 square kilometers. The governorate is characterized by the diversity and plurality of forms of tourism due to religious, medical, recreational, cultural, or historical tourism. It had been built by the Moabite in the 9th century BC and was included within the lands of the Nabataeans State until 106 AD, when it was included into the Arabia reign. Madaba was the home of the tribes of the Ghassanids in the 6th century AD (*Madaba Governorate*, 2022). It is a combination of rural home life and a hot spot for religious tourism. It is known as the "City of Mosaics", rich in Byzantine and Umayyad mosaic paintings, which are still endemic locally today (*Madaba*, 2021). Most important sites in Madaba are Mount Nebo, the Church of the Map, The Church of the Apostles, Madaba Map, Maghtas (Baptism site of Jesus Christ), Folklore Museum, and Madaba Museum (*Madaba Governorate*, 2022).

Madaba won the Arab Tourism Capital for the year 2022 after achieving all the criteria and terms of reference prepared by the Arab Tourism Organization (*Madaba*, 2021).

1.1.1 Multilingualism and English in the Jordanian culture

Jordan's official language is Arabic, and official linguistic practices follow this policy. The value of English as an international language is frequently emphasized along with the growing corpus of linguistic landscape (LL) studies across the globe. It is 'widely viewed as the principal international language and as the principal conveyor of scientific, technological and business knowledge despite the fact that it has no official status' (Ben-Rafael et al., 2006).

According to Brown (2003), the development of the English language was strongly related to the expansion of British colonial power and later, the military, political, and economic might of the USA. One third of the world's population, or seventy-five territories, utilize English as an official or co-official language (Crystal, 2003).

Since the Jordanian context is conceptualized linguistically as a contact context between Arabic and English, the country's educational policy aims to help Jordanians improve their communication and interpersonal English skills, which can serve as a good replacement for multilingualism in the Jordanian context (Alomoush & Al-Na'imat, 2018). In other words, when and where English comprises "a major part of language practices," multilingualism is encouraged in the Jordanian setting (Alomoush & Al-Naimat, 2020). This is amply demonstrated in commercial settings, "where a deliberate language decision has made English as visible as Arabic in commercial settings" (Alomoush & Al-Naimat, 2020).

Other languages might be used, even though English is the most common foreign language in Jordan. Following English, French is the second most significant foreign language in Jordan as seen by the rising number of students studying it at 80 private and public schools, many of whom are likely to pursue graduate studies in France (Dupire, 2018). In order to graduate multilinguals in both English and French, the University of Jordan Department of French and English Languages was founded in 2014 (e.g. tourist guides, translators, and linguists). The Department works to establish positive academic links with major universities in the USA, the UK, and France in order to achieve this goal (Alomoush, 2015).

1.1.2 Foreign visitors and linguistic variety

According to the Jordan Department of Statistics (2021), foreign tourists come from far and wide (see Table 1). As a result, they most likely speak many different languages, including but not limited to English, Spanish, Italian, Russian, German, and Chinese. Yet, for many non-native English speakers who visit the country, English is Lingua franca.

According to Jordan Department of Statistics, Table 1 does not show huge differences between the number of visitors coming to Jordan in 2021 from European nations (187827) and those coming from Asian countries (164241). According to the table, more visitors from North America, especially the USA and Canada (101035), arrived in Jordan in 2021 than from African nations (37283), Australia, and New Zealand combined (3599). Table 1 suggests that there are speakers with different linguistic backgrounds coming to Jordan.

Table 1.1 Arrivals by Nationality Group and Means of Transport

Arab Countries	3287974
European Countries	187827
Asian Countries	164241
African Countries	37283
American Countries	101035
Australia & Newzeland	3599
United Nations	6370
Vatican	36
Not Coded*	9
Total	**3788374**

As far as the figures of international arrivals in Jordan are concerned, the leading European countries include the UK, France, Russia, Italy, Spain, and Ireland, whilst the leading Asian countries include Thailand, Malaysia, Turkey, India, Pakistan, China, Philippines, and Japan (*Statistical Yearbook of Jordan*, 2021). The American countries mainly include the USA, Canada, Mexico, and Brazil.

1.2 Statement of the problem

The problem of this study stems from the existence of several languages in one place (i.e. signs). While Arabic is the de jure official language of the country, English is the language of international communication. However, there are other languages that the majority of local people and tourists do not know such as Greek and Latin. This poses the question of why these languages are used on signs.

1.3 Significance of the problem

There is a number of studies of the linguistic scene in areas in Jordan such as Jerash (Alomoush, 2022), Petra (Alomoush & Al-Na'imat, 2018) and Aqaba (Amer & Obeidat, 2014). What distinguishes this study is that the tourist places studied in this research are linked to religion and the existence of languages from ancient times.

This study contributes to the growing body of LL research in the Middle East, which is considered an under researched region (Alomoush, 2022). The contribution of this study is both theoretical and methodological. The theoretical contribution lies in adopting a semiotic approach. Chandler (2007) observes that "semiotics is concerned with everything that can be taken as a sign".

The methodological contribution lies in the data analysis framework (indexicality of signs). The LL's primary function is to index the existence of particular communities. According to Landry & Bourhis (1997), the LL serves as a source of information. On the one hand, they contend that a language's predominance on signs suggests that it is actually used in both public and private settings. On the other hand, the variety of languages present on signs may reveal a territory's sociolinguistic make-up.

This study is of benefit to researchers as it helps develop research focus on religious and therapeutic areas in Jordan. This study is also beneficial to linguistic students with interests include multilingualism in public sphere

1.4 Objectives of the study

This study aims to investigate multilingualism in the linguistic landscape of the ancient city of Madaba. Particularly, it will look at the languages used in public signage, both official (henceforth top-down) and non-official (henceforth bottom-up) signs, in the ancient city of Madaba as a reflection of multilingualism in the area. The study also seeks to understand whether the official language policy accords with the practice or not.

1.5 Questions of the study

This study seeks to examine multilingualism in linguistic landscape in Madaba. To accomplish the objectives of the study, two research questions were posed:

1. To what extent is the linguistic landscape multilingual on the top-down and bottom-up signs in the ancient city of Madaba?
2. How does the official language policy accord with the practice?

1.6 Limitations of the study

This study is limited to investigating the linguistic landscape of the ancient city of Madaba. The findings of these study are confined to the time and place, i.e. Mount Nebo, Madaba Visitors Center, and Touristic Spine (Alsiyaha Street), as well as to the selected sample. So, it cannot be applied to Jordan's signs for other tourist attractions. It is restricted to the sample that were used.

1.7 Definition of terms

Linguistic Landscape: theoretically, the term refers to the language of public road signs, advertising billboards, street names, place names, commercial shop signs, and public signs on government buildings (Landry & Bourhis, 1997). Operationally, Linguistic Landscape refers to all semiotic signs in touristic places that are selected in this study, i.e. Nebo Mount, Mabada Visitor Center, and Touristic Spine.

Multilingualism: theoretically, the term refers to the capacity of humans to communicate in different languages, either individually or collectively (Solar-Carbonell, 2014). Operationally, it refers to using more than one language on signs.

1.8 Summary

This chapter included some information about Madaba, the cultures that lived in Madaba, multilingualism and English in the Jordanian culture, and foreign visitors and linguistic variety. The problem of this study stems from the existence of several languages in one place (i.e. signs). What distinguishes this study is that the tourist places are linked to religion and the existence of languages from ancient times.

CHAPTER TWO
Review of Literature

2.0 Introduction

Much research has been done on Linguistic Landscape across the world. This chapter covers some theoretical and empirical literature. The theoretical literature elaborates on the different terms used to describe the Linguistic landscape and the functions of the Linguistic landscape. It also addresses literature related to the semiotic approach. The empirical part describes studies that dealt with the linguistic landscape not only in Jordan and the Middle East but also in the world at large.

2.1 Review of theoretical literature

2.1.1 The concept of LL

There is no single definition that envelops all interpretations of 'linguistic landscape' "LL". However, we will identify some definitions of the term 'linguistic landscape'.

According to Landry & Bourhis (1997), the term "linguistic landscape" refers to a relatively recent method for studying multilingualism in speech communities. This method is used in the field of language policy and planning. Much acknowledgment has been attributed to Landry & Bourhis (1997) as the first to use the term and give a definition, which was afterwards expanded by many LL studies.

Spolsky & Cooper (1991) identify eight main categories of signs in the linguistic landscape: street signs, advertising signs, prohibition and warning notices, building names, informational signs (such as those that provide directions and opening times), commemorative plaques, objects (such as post boxes and fire extinguishers), and graffiti. They all combine to create the language landscape.

Similarly, according to Landry & Bourhis (1997), the linguistic landscape of a given territory, region, or urban agglomeration is comprised of "the language of public road signs, advertising billboards, street names, place names, commercial shop signs, and public signs on government buildings" (p. 25).

Ben-Rafael et al. (2006) maintains that the term 'linguistic landscape' is the study of 'linguistic objects that mark the public space'. It includes 'any sign or announcement located outside or inside a public institution or a private business in a given geographical location'. Their definition includes both outside and interior building signage.

Dailey et al. (2005) claims that in addition to signs found outside and inside stores and businesses, the LL may also include mail-order commercials, language heard while walking through one's neighborhood, language heard on television, and language used in the classroom instructors.

Shohamy & Waksman (2008) propose new dimensions of the LL. They demonstrate that:

"Linguistic landscape refers to texts situated and displayed in a changing public space, which is being redefined and reshaped. This public space is a fertile ground for the emergence of broad and infinite repertoire of text types. Such definitions of LL go beyond displayed written texts of signs in multilingual versions and include verbal texts, images, objects, placement in time and space as well as human beings."

Ben-Rafael et al. (2006) consider the LL to be "the emblem of societies, communities, and regions," serving as the focal point of a community's public life. The same has been emphasized by Huebner (2006), who argues that the LL 'may display the

grassroots cultural identity and aspiration of its members'. Shohamy et al. (2010) likewise, argues that the LL represents the multilingual nature of the community, where nationalistic and patriotic beliefs push people to speak official languages in public. In the LL of Trieste, Italy, Tufi (2013) claims that language and memory are closely related, with Slovenian acting as a powerful marker of both individual and social identity. Religious conflict might also emerge in the LL, as manifested by Woldemariam & Lanza (2012) in the LL of Addis Ababa where religious wars between the Ethiopian Orthodox Church and Protestant Christian communities emerge.

2.1.2 The functions of the LL

There are two main functions of LL: indexical and symbolic functions.

Indexical function

The LL's primary function is to index the existence of particular communities. According to Landry & Bourhis (1997), the LL serves as a source of information. On the one hand, they contend that a language's predominance on signs suggests that it is actually used in both public and private settings. On the other hand, the variety of languages present on signs may reveal a territory's sociolinguistic make-up. The LL is a crucial sociolinguistic component that is distinct from other kinds of language connections and contributes to the survival of competing ethnolinguistic groups in situations with many languages. Likewise, Dal Negro (2008) claims that bilingual indicators in the LL might be seen as a reflection of bilingualism in a society or group. However, because it is assumed that people's views, governmental policies, and personal strategies could all have an impact on the establishment of the LL, such a reading of the LL's function might be seen as simplistic. Based on a corpus of signs amassed and studied in Italy, Barni & Bagna (2009) conclude that the presence of

immigrant languages, their vitality, and their appearance in the LL are unrelated. However, a language's potential for vitality increases with how noticeable it is in the LL. Immigrant languages may be more visible in public settings due to a variety of circumstances, including the speakers' positive attitudes about their native tongues, the characteristics of the location in which immigrants dwell, and how long they have lived there (Barni & Bagna, 2009). In studying LL items, Scollon & Scollon (2003) examine this function using the indexicality framework. In light of this, the authors (2003) suggest that codes used on signage index specific communities as follows:

A code may be chosen because it indexes the point in the world where it is placed- this may be an Arabic speaking community (or business or nation) … or a Chinese restaurant because there is Chinese writing in the shop sign.

The concept of "indixicality," as proposed by Scollon & Scollon (2003) is not simple because it can be influenced by governmental and nongovernmental language policies, people's attitudes, and shared ideologies among community members. The relationship between language combinations in the LL and the composition of a community's linguistic repertoire may be a reflection of the codes used in a community.

Symbolic function

Landry & Bourhis (1997) and Shohamy & Gorter (2009) identify 'language in the public space as a major indication of language attitudes and where the term was used'. The symbolic function, according to Landry & Bourhis (1997), denotes that the use of one's own language on signs may help one feel as though that language has value and prestige within the sociolinguistic context. According to Scollon & Scollon (2003), "symbolization" differs from "indexicality." They show how sign codes can represent things that have nothing to do with where people actually live. To evaluate if the

languages that appear on specific LL items are indexical or symbolic, the authors show that there should be evidence outside of these indicators. Specific codes may be used on commercial signage symbolically rather than indexically. For instance, the use of English in the LL of a Chinese-speaking community symbolizes foreign tastes and manners rather than indexes an English-speaking community (Scollon & Scollon, 2003). Building upon these ideas, Ben-Rafael et al. (2006) suggest that the LL reflects 'the symbolic construction of the public space' rather than language policies. More specifically, it is a sign of a sociolinguistic dynamism: the disappearance, marginalization, and dominance of specific languages or varieties in a community.

The use of the LL as a space of 'linguistic instrumentalism', a term used by Wee (2003), has been highlighted by many other LL research studies. This means that the employment of non-territorial languages in the LL is more associated with "instrumental" aims of "commodification" than with indexical ones (Heller, 2003). This somewhat supports Griffin (2004, P.3) who states that "English is a juggernaut whose sweep across the globe is marked not only by the ever-swelling ranks of those who speak it as a second language, but also by its intrusion into other languages and culture". Businesses use English to boost their profits because it is primarily influenced by economic factors in the LL (Cenoz & Gorter, 2008). Status, power, identity, and globalization—with a concentration on the spread of English in the LL—are therefore sub-functions of the LL's symbolic construction. These factors are explained below:

Status and power

As suggested by Scollon & Scollon (2003), it can be concluded from the theory of 'geosemiotics', 'the study of the social meaning of the material placement of signs in the world', that the choice of codes on LL items is a marker of status and power:

All semiotic systems operate as systems of social positioning and power relationship both at the level of interpersonal relationships and at the level of struggles for hegemony among social groups in any society precisely because they are systems of choice and no choices are neutral in the social world.

According to Reh (2004), the socioeconomic stratification of the society, the relative standing of various groups within a specific community, and the predominate cultural goals of the community can all be reflected in monolingual and multilingual writing in the LL. The same is true for language analysis of LL objects, which can assist to shed light on the social and political hierarchies of any particular civilization or group (Ben-Rafael et al., 2006).

LL is viewed as a linguistic tool by certain linguistic landscapers to investigate overt and covert language policy. For instance, Huebner (2006) asserts that a central government's "linguistic tokens" may represent the state's overt language policy. They serve as metaphorical indicators of rank and power in this perspective. On the other hand, the language used in ads and other commercial signs can give insight into a community's "covert language policies" and its power dynamics (Huebner, 2006). In addition, Cenoz & Gorter (2006) note that the LL is an approach that can provide details about how a society or a community manages its language.

The study of the LL can also be interesting because it can provide information on the differences between the official language policy that can be reflected in top-down signs such as street names or names of official buildings and the impact of that policy on individuals as reflected in bottom-up signs such as shop names or street posters.

Likewise, Dal Negro (2008) asserts that bilingual signs might be interpreted as a component of a clear language strategy. LL items may stand for the country's language

policy rather than necessarily the linguistic diversity or circumstances in a certain neighborhood. Because of this, LL plays a significant role in many minority communities; in these sociolinguistic situations, LL is essential to achieving or maintaining "political acknowledgment" (Dal Negro, 2008).

Cultural identity

According to Ben-Rafael et al. (2006), the LL serves as "the emblem of societies, communities, and regions" and is the site of a community's public life. In support of this, Huebner (2006) notes that the LL "may express the grassroots cultural identity and aspiration of its members." Shohamy et al. (2010) make a similar case that the LL reflects the multilingual nature of the community, where values like patriotism and national pride encourage the usage of official languages in public settings. According to Tufi (2013), there is a strong connection between memory and language in the LL of Trieste, Italy, and Slovenian is utilized as a powerful symbol of both individual and communal identity. As demonstrated by Lanza & Woldemariam (2013) in the LL of Addis Abeba, where religious warfare between the Ethiopian Orthodox Church and Protestant Christian communities arise, religious conflict may also manifest there.

2.1.3 Globalization and the spread of English in the LL

According to Crystal (2003), a language develops a unique role that is acknowledged in every nation before achieving the status of a global language. In this instance, whether it is as a second language or a foreign language, English has been acknowledged or even used by non-native English speakers. Crystal states that English has become a global language since politicians use it from across the globe to speak on television, is displayed on billboards and commercials in many nations, and is even written on a menu at a restaurant.

The LL could offer proof of how globalization has affected a community's language(s) and business competition (Huebner, 2006). In addition, it might signal support for globalization by employing the international tongue of English (Shohamy et al., 2010). On the one hand, he emphasizes the importance of English as the language of globalization in the LL. On the other hand, he considers how "regionalization" or "localization," a phrase that emphasizes both a regional identity and a regional language, has taken place. Glocalization is the term used to describe these two phenomena, globalization and localization. Cenoz & Gorter (2006) addresses two distinctive processes in this subfield of sociolinguistics.

English is becoming more and more important in the linguistic landscape as a result of globalization and modernisation. According to Backhaus (2006), who conducted research in Tokyo, there are more English speakers on the street because they are a more prestigious language. As a result, English starts to appear in daily life in Japan. The similar point was made concerning the English language in Huebner (2006) study in Bangkok. The evolution of the Thai linguistic system used on signs has been affected by English. As a result, English has an impact on both spoken and written languages around the world.

Signs reveal this linguistic diversity and the fact that economic variables significantly influence the LL when it comes to language use in signage (Cenoz & Gorter, 2008). According to Cenoz & Gorter (2008), "one of the most obvious markers of the process of globalization" is the widespread use of English on both public and private signs. In this region of the world, according to the author (2008), English is seen as "the language of upward social mobility, as new, prestigious, and desirable to learn."

Top-down and bottom-up

To distinguish between signs written by the government and those written by the people, there are two types of signs: top-down and bottom-up. Governmental signs are classified as top-down signs. Gorter & Cenoz (2007) also stated that "Top-down signs are 'government' signs." The names of buildings that belong to governmental institutions, street names, and road signs are examples of public signs or facilities. In contrast, bottom-up signs are non-governmental signs that are the property of specific companies or social actors (Ben-Rafael et al., 2006). The characters on the private sign change depending on the owner of the business. Therefore, top-down and bottom-up are the additional official and non-official names that are used to distinguish the group of signs (Zabrodskaja, 2007). Names of stores, signs on businesses, private offices, and personal announcements are examples of bottom-up signage.

Table 2.1. Categories of LL items and criteria of sampling (Quoted from (Ben-Rafael et al., 2006, p.14))

Category	Type of item
Top-down	Public institutions: religious, governmental, municipal, cultural and educational, medical Public signs on general interest Public announcements Signs of street names
Bottom-up	Shop signs: clothing, food jewelry Private business signs: offices, factories, agencies Private announcements: 'wanted' ads, sale or rentals of flat or cars

Coding preference

According to Kress & Van Leeuwen (1996) invention 'visual semiotic', examines 'the grammar of visual design'. They highlight 'the ways in which images communicate

meaning'. Kress & Van Leeuwen (1996) "visual semiotic framework" forms the foundation for the "code preference system" developed by Scollon & Scollon (2003).

According to Scollon & Scollon (2003) font size, color, and placement are the primary ways that "code preference" manifests itself. The preferred language is typically found in the top, left, or center of a sign, while the less prominent language is generally found on the bottom, right, or margin area of signs. When size and order convey different preferences, size takes precedence. However, the languages like Arabic are written from right to left.

Despite Huebner (2006) expands on Scollon & Scollon (2003) model of "code preference" and contends that the placement of text and the size of the font used are the main features used to determine the dominant language on multilingual signs, he asserts that these two features may be "offset" by other features such as "color, images, and amount of text." (Huebner, 2006).

Translation in bilingual sings

In the language environment, translation in signs is perhaps possible, especially in bilingual or multilingual signals. Translation is one of the most effective techniques to effectively convey information so that readers may interpret signs that are presented in a foreign language. Backhaus (2006) also discussed translation, which is a method of information organization. He uses Reh (2004) four categories of multilingual information arrangement in his research: duplicating, fragmentary, overlapping, and complimentary.

1. Duplicating: composing the same text in multiple languages. Which is intended to help the monolingual target understand the material.

2. fragmentary: The material is written in one language, but some specific terms have been translated into a different language. By doing so, the reader will either concentrate on the translated word or it will assist the reader in understanding the text's main point.

3. Overlapping: In this instance, there are two texts that are written in different languages and that either share content or each provide different but related information.

4. Complementary: Different languages are used to display the text. To comprehend the content, readers must be fluent in every language used in the document. A monolingual person will have difficulty accessing the material, nevertheless, in a straightforward and comprehensive manner.

2.1.4 Semiotics

Language, artifacts, images, buildings, or any any entity with meaning making potential are all together referred to as signs in LL. As a result, LL heavily references and depends on semiotics for its manifestation because the study of signs falls within the semiotics category. Chandler (2007) observes that "semiotics is concerned with everything that can be taken as a sign". According to Merrel & Cobley (2001), semiotics is best described as the study of signs. In addition to what we typically refer to as signs in spoken language, everything that denotes another meaning is included in semiotics (Chandler, 2007). It is no wonder Backhaus (2006), in his study of multilingualism in the LL of Tokyo, any written text within a spatially defined frame that consists of any meaningful unit understood to stand for something other than itself is regarded to be a sign. Since they cause meaning making to take place, all physical manifestations of LL tokens should therefore be thought of as signals.

2.2 Empirical studies

2.2.1 Local and regional studies

The phenomenon of signage has been studied by several scholars regional and local such as Amer and Obeidat (2014), Hussein et al. (2015), Buckingham (2015), Buckingham & Al-Athwary (2016), Jing-Jing (2015), Coluzzi and Kitade (2015), and Amos (2017).

Locally, Amer and Obeidat (2014) investigated the language of business in Jordan, in order to determine how much the foreign language, in this case English, has an impact on the local language, Arabic, in the business sector, and what controls the presence of foreign elements in business language. Is it the customers, the type of business, or something else? Another goal is to determine whether these foreign terms or phrases are unique to certain commercial situations or are utilized elsewhere in the local language. The current state of English in Aqaba and the opinions of store owners regarding English as a foreign language are the final objectives. They discovered that more than half of the store signs analyzed were in both Arabic and English, making up the majority of the sample's shop signage (58.1%).

Hussein et al. (2015) investigated the languages used in shop signs in Amman, Jordan from a sociolinguistic perspective. The researchers asked two questions about language choice and the factors that affected it in order to accomplish the study's goal. The survey covered 680 business signage spread throughout three distinct neighborhoods in Amman, Jordan, including Al-Wehdat Camp, Sweifieh, and Jabal Al-Hussein. Ninety participants were included in the convenience sample, and they were required to complete a three-part sociolinguistic questionnaire. Two tools were used by the researchers: a sociolinguistic questionnaire and a store survey. According to the

findings, store signs can be classified as either monolingual or multilingual depending on the languages they utilize. Additionally, the findings showed that prestige, favorable attitudes toward foreign names, business interests, the nature of the goods or services offered, and the socioeconomic status of the clientele all significantly increased the use of foreign names in store signage.

Alomoush (2015) investigated language practices in the linguistic landscape (LL) of Jordanian cities. This study is intended to fill this gap in LL research. By means of qualitative and quantitative methods, it aimed to discover the extent to which multilingualism is reflected in the LL. Ten streets were selected in each of six major Jordanian cities, including Irbid, Salt, Zarqa, Amman, Karak and Aqaba, sixty streets in total. 4070 signs were recorded as multilingual (c. 51%), whereas 3967 signs were categorised as monolingual (c. 49%). To discover correlations between types of signs and existing languages and scripts, and to measure these against conflicting language policies, signs are categorised as 'top-down' or 'bottom-up'. The main data findings indicate that minority languages are almost absent, so a questionnaire was introduced as an additional supportive source to the analysis of the findings, providing a qualitative dimension to the study. The study was conducted in July 2013, during which period the researcher interviewed 32 participants. The primary objective of this secondary study is to reflect on plausible reasons explaining the limited presence of minority languages in the visual public space. The main data indicate a dominance of both Modern Standard Arabic (MSA) and English on signs, because they are closely related to Arab nationalism and globalization respectively. Jordanian Arabic is deleted from the top-down LL, because it is closely linked to informal domains. Classical Arabic (CA) is mainly used to convey religious functions in the LL. Mixed codes, Romanised Arabic (RA) and Arabacised English (AE), are commonly used in the LL to reflect

'glocalisation'. French, German, Italian, Spanish, Turkish and Russian are found mainly to be used on brand name and business name signs for reasons of European linguistic fetishes and tourism. The data indicate that minority languages are significantly marginalised on both top-down and bottom-up signs. Several reasons lie behind the limited visibility of established minority languages in the LL. Spatial distribution of migrant communities, the small size of minority communities, lack of (sufficient) institutional and parental support, migration and absence of close ties with families and linguistic peers are behind different stages of language maintenance and shift among older migrant groups. Linguistic russification, hostility, instrumentality of both Arabic and English and top-down language policies enacted by the Jordanian government contribute to the limited visibility of minority languages in the LL. Although foreign workers' minority languages tend to be maintained, the instrumental functions of both Arabic and English, Islam, and the small sizes of economic minority groups have each played a key role in the limited visibility or invisibility of minority languages in the LL.

Alomoush (2022) explored multilingualism in the linguistic landscape (LL) of the historic city of Jerash. Based on a corpus of 68 signals gathered from the historical sites of Jerash, the examination of monolingual and multilingual practices was conducted. Official and unauthorized tokens are the two main categories of signs included in the LL items. What is striking is the high level of bilingualism and multilingualism, with the use of three main languages (Arabic, English, and to a lesser degree French). Jordan's official language is Arabic, but English is more visible than Arabic on unofficial signs and other languages are more visible on official signs. The findings imply that English has replaced other languages as the primary language in the official tourist discourse.

Alomoush and Al-Na'imat (2018) examined the linguistic landscape of Petra, Jordan. The study was an attempt to display English language use in commercial signs in one of Jordan's internationally recognized touristic sites. It also makes an effort to illustrate how businesses and organizations involved in the local tourism sector use English to create and mold the foreign visitor's perception of Jordan. Digital cameras were used to take pictures of all linguistic signs, which were then categorized by language and function (such as government and commercial signage) (e.g., English, Arabic, French, Spanish, etc.). The study's findings show that English is significantly more vital than other languages, including Arabic in the LL, in the touristic public space, indicating that English is primarily dominated and controlled by it. This has a strong connection to the participants' positive attitudes toward English, the reciprocal relationship between English and globalization, as well as their communicative and economic motives.

Regionally, Buckingham (2015) investigated the linguistic environments of business signage throughout Oman. The analysis of lexical features is based on data drawn from a corpus of over 1,600 signs photographed nation-wide. The processes noted include the lexicalization of cultural notions, lexical innovation and borrowing, foreign cultural referents, and the use of repetition, characteristics, generalization, and specification tactics to increase salience and explicitness. This study gives a clear understanding of how English is used in lingua franca settings in a region with significant ethnolinguistic diversity. English is utilized to express regionally specific cultural norms and values, and it may show Arabic and South Asian English dialect influences. The widespread use of specific novel lexemes nationwide, which points to their acceptability and emerging nativization within this genre, provides evidence for their stabilization. The findings showed that English, in addition to Arabic and South

Asian languages, is widely used in Oman and is used to communicate local cultural norms and values. The formation of creative lexemes reflects the language's substantial contribution to the design of store signage.

Buckingham & Al-Athwary (2016) explored the use of English and the inclusion of cultural references on commercial signs on small private enterprises in the capital cities of two neighbouring countries on the Arabian Peninsula, the Republic of Yemen and the Sultanate of Oman. This study intends to show how the characteristics of English use and the choice of cultural allusions on these signs are reflective of the different sociocultural realities in these two cities by analyzing the textual elements of bilingual shop signs photographed in Sana'a and Muscat. Many times, the public (and private) usage of English in the Peninsula States has been seen as a sign of the dominance of English over Arabic (the maintenance of other indigenous languages is not discussed). This study contends that due to its widespread use as a lingua franca by both the local population and the expatriate community, English in Oman has had an additive rather than a replacement effect; it has become for some sectors of the Omani population an additional language and has developed localized features as a result of language contact with, in particular, Arabic and South Asian English dialects. Contrarily, a much smaller proportion of Yemenis have access to English to the point that it can be regarded as a second language. This disparity explains why English is used differently in these two nations, which is evident in the linguistic landscape.

Al-Athwary (2017) investigated the multilingual written texts of the signboards in the public space of Yemen. Reh (2004) typology of multilingual writing is attempted to be applied. Reh presents the four multilingualism tactics of duplicating, fragmenting, overlapping, and complimentary. They refer to how information is organized on

multilingual signs in a particular language landscape (LL). A data corpus of 755 multilingual signs in Yemen's Lower Level (LL), the bulk of which are bilingual in Arabic and English, has been employed to accomplish this goal. The research showed that Sana'a's LL typically used all four multilingual writings strategies—duplicate, fragmentary, overlapping, and complimentary. While duplicating and fragmented multilingualism predominated over overlapping and complementing ones in bottom-up signs, overlapping and complementary multilingualism was completely missing in top-down signs. Given that the Yemeni speech community is monolingual in Arabic, the lack or rarity of overlapping and complementary signs in both top-down and bottom-up levels can be explained by the fact that these two types of texts assume multilingual readers because comprehension of the entire message necessitates familiarity with all of the languages involved. Sutherland's (2015) model of the writing mimicry system is also looked at. Writing mimicry systems were discovered to be a prominent aspect of Yemen's public realm, serving some specific objectives. However, they are solely employed for advertising and promotion, not to reflect the identity of ethnolinguistic minority. The study also showed that Sana'a's multilingual LL is distinguished by the employment of Arabicized English, glocalization, and multifunctional signs, all of which are used to promote and advertise goods as well as to demonstrate success and modernity. Almost all signage, both top-down and bottom-up, use standard Arabic. Yemeni Arabic is rarely used, which reflects the idea of Arab nationalism. Linguistic nationalism is the expression of national identification in the LL of Yemen through the communicative and symbolic uses of Standard Arabic.

Alsaif and Starks (2019) examined the Grand Mosque in Mecca's linguistic landscape (LL) and demonstrates how this sacred building encompasses various realms, each with its own LL and favored means of display. By looking at the LL of the

mosque's five domains—holiness, education, the workplace, local government, and the public sphere—we can demonstrate this. We demonstrate how Arabic permeates all of the fields. In the area of holiness, we may discern both the enduring nature of Islam from the Classical Arabic inscriptions on the buildings and the transitory character of the pilgrims' journey from their temporary sticker postings. Monolingual Modern Arabic signs coexist in some areas with monolingual English signs. The status of English on monolingual signage is solitary, exhibited through just one medium, but the Arabic signage's medium fluctuates to express various types of messages. Electronic signs transmit equivalent messages in many languages in areas that support multilingual signage, reflecting the pilgrims' varied linguistic backgrounds and the transient nature of their journey. The findings highlight the significance of religious places as LLs and the necessity of taking language and medium into account when designing them.

İnal et al. (2021) analyzed how, in the Turkish context, variety brought about by migration and globalization has produced an intriguing blend of languages, scripts, and modalities headed by English. Turkish, English, and Arabic are used in conversation in different neighborhoods of Istanbul, according to data gathered from the streets, and behaviors of code-switching and translanguaging are revealed by sociolinguistic analysis. The pedagogical ramifications underline how crucial it is to advance WE/ELF-aware English language instruction by using a framework that takes into account both the multilingual conception of English and the ensuing sociolinguistic processes.

Al-Athwary (2022) aimed to look at the linguistic landscape (LL) of Najran, a city in southern Saudi Arabia. A sample of more than 450 signals is studied in order to accomplish this goal. The collected data are analyzed quantitatively and qualitatively by using excel sheets in such a way that helps answer the research questions addressed.

The study focused on shop signs, also referred to as "bottom-up signs". The investigation showed that Najran's LL is more multilingual than expected. It also showed various foreign languages spoken abroad, such as Malayalam, Bengali, Tamil, and Hindi, in addition to Arabic and English. English seemed to be the second most used language after Arabic, with the former serving both informational and symbolic (cultural) purposes while the latter serves a commercial and advertising purpose that allows store owners to project an image of prestige and style. The Indian subcontinent's expatriate languages are mostly used as a psychological strategy to counteract homesickness, with some of its use also serving an informational purpose for the expatriate community.

2.2.2 International studies

Jing-Jing (2015) examined the multilingual university campus signs in Japan. He also looked at how the college's linguistic landscape is created and how sign readers portray the multilingual nature of the campus they are residing in. He looked at indicators from the physical, political, and experimental dimensions that support the acceptance of multilingualism from these three primary angles. In addition, the researcher collected the languages used in signage in the main streets in the Ito campus of Kyushu University and employed quantitative methods in the form of a questionnaire to analyze different students' perspectives toward a multilingual campus. The study's findings highlight the fact that bilingualism is a skill that kids may acquire and use in their everyday lives. Additionally, people continue to use multiple languages to some extent.

Coluzzi and Kitade (2015) presented the results of a piece of research on the languages used in places of worship carried out in the Kuala Lumpur area (Malaysia). A mosque, a Sikh gurdwara, two churches, a Chinese temple, a Hindu temple, and a

Theravada Buddhist temple were chosen as the seven different places of worship. Brief interviews were conducted with people who held official positions within those institutions, and at the same time, digital pictures were taken of all the signs that were present inside the compounds where the places of worship were located. A brief survey was also conducted to determine how the believers felt about the languages used on the placards that were being photographed. They noted in their commentary on a mosque in Malaysia that while English predominates in most houses of worship due to its perceived prestige as the language of former colonial rule and its current role as an international language, it is used very little there because Malay is spoken there more frequently. The majority of people who worship Islam in this area speak Malay as their native tongue, according to the writers, who credit this.

Amos (2017) suggested a number of techniques for measuring the Occitan vitality found in street signs. It presented some fresh methods for categorizing and analyzed multilingual indications in the linguistic landscape based on current theories of code choice and inter-text translation. The city of Toulouse is a major contributor to the public visibility of Occitan, a regional language (RL) associated with southern France. While French legislation acknowledges the RLs as part of the nation's heritage, the official status of French is still undisputed under the constitution. This indicates that only French is officially recognized for street names and other public writings. In order to acknowledge this hegemony, multilingual street signs in central Toulouse always place French above Occitan. They also imply a subliminal bias for the RL, where Occitan predominates over French in the translation and modification of street names on the lower plaques, as well as in the meaning linkages of street names. This puts into question the order of languages according to preferred codes because Occitan emerges as a dominant code that is not readily apparent.

Fakhiroh and Rohmah (2018) examined the top-down and bottom-up sign proportions as well as the visible languages in Sidoarjo City. The signs' purposes are also identified. Data were gathered from signage along Sidoarjo City's main roadways and in various public spaces. The study's findings indicate that Indonesian is the dominant language in the world. Arabic is used less commonly than English. Despite being the majority language in Sidoarjo society, Javanese is rarely spoken. The shopping malls also seem to speak a few additional Asian languages. Additionally offered are a description and an explanation of the indicators' purposes.

Dong et al. (2020) analyzed the junction of linguistic practices and ideologies by investigating the language use and language preferences exhibited in public and private multilingual signage at cultural heritage sites and beautiful locations,. Data are gathered through individual interviews with locals and linguistic markers shown at the two locations. The linguistic environment in Bangladesh is complex, according to the findings. The sociopolitical dimension refers to officially established monolingual Bangla-oriented policies that emphasize the use of the national language, Bangla, as a symbol of Bangladeshi nationality and identity. Bangladesh presents English in a number of ways as a post-colonial reproducer of linguistic hegemony. Both the prominent usage of Chinese, a recently developed foreign language, and the utilization of Arabic, a representation of Islam, the primary religion in Bangladesh, are signs of the economic factor. The study offers a fresh perspective on Bangladesh's multilingual practices, as well as its language management and planning, in the context of globalization.

Yusuf et al. (2022) attempted to describe how the Arabic diaspora was represented in Sydney store signs in terms of language use and religious identification. The

information was made up of images that were gathered from stores along Sydney, Australia's Haldon Street. The research showed that there are many different linguistic options available for shop signs. Arabic is utilized in the area relating to religion, however English is the language that is most commonly used. This study also discovered that the usage of Islamic language in commercial signs serves a symbolic purpose in addition to providing information. Through the linguistic landscape of store signage, the usage of Islamic terms aims to portray their Islamic character.

Lee (2019) investigated at commercial signs in Myeongdong and Insadong, two of Seoul's most popular tourist areas. It examined featured languages, their content, and their functions in signage with a focus on the beauty and food industries. This article makes the case that business owners' linguistic preferences are influenced by their business types, specific marketing focus, and intended sales presentation. According to the study's findings, the beauty sector uses English more frequently than the gastronomy industry in general and more frequently than any other company category. Furthermore, compared to Myeongdong, Insadong exhibits more signs that are solely in Korean as a region that specializes in customs and cultural heritage.

Chali & Parapatics (2022) investigated the linguistic landscape of the town of Nekemte in the Oromiya region of Ethiopia. A qualitative research design was used to conduct the study. A digital camera was used to take the photos that served as the data collection method. The three linguistic communities that are anticipated in the town are Afaan Oromoo, Amharic, and English. The busiest commercial center's major streets were where the sample was chosen from and traveled from. The results were qualitatively analyzed. According to the study's findings, the majority of the business signs that were gathered were monolingual or bilingual, with very few being

multilingual. With few exceptions, signs written in Afaan Oromoo were translated straight from Amharic and were mostly fragmentary. The reason for this could be the lack of an explicit policy for bottom-up signs. To minimize this problem, the researchers made some recommendations.

What distinguishes the current study is that it lighted on the attitudes and factors responsible for language use in religious signs especially in Mount Nebo in Madaba since it is considered a religious and tourist site, and signs in touristic places in Madaba. In other words, it aimed at studying three major touristic areas in the Madaba that represented touristic places, whether related to religious, medical, recreational, cultural, or historical tourism.

2.3 Summary

This chapter contained some theoretical literature carried out by sociolinguists like Landry & Bourhis, Spolsky & Cooper, Crystal and others. It also includes many empirical studies, which were conducted by Alomoush, Al-Athwary, Hussein, and other sociolinguists. The literature reviewed in this chapter has helped the researcher in developing methodology in chapter three; presenting the results in chapter four and discussing the findings in chapter five.

CHAPTER THREE
Methodology

3.0 Introduction

This study adopts a mixed approach to data analysis. Both quantitative and qualitative analyses of the signs in the touristic sites of Madaba are offered. Additionally, this study analyzes the language on the signs in order to know the strategies used in writing them.

3.1 Population and sample of the study

The population includes all the signs used in Madaba. These signs are placed in touristic site. These signs vary in their content and languages, so they are classified according to their content, whether they are indicative, informational, or old languages, etc. Due to the inability to access all signs, a sample of 261 signs was taken. The sample was selected from each area in the tourist places of Madaba, namely, Mount Nebo, Madaba Visitors Center, and Touristic Spine (Alsiyaha Street). According to the Jordanian Statistical Yearbook (2021), these three regions were chosen because they are the most visited in Madaba.

3.2 Data collection

The researcher conducted a survey of signs in three tourist areas in the Madaba, which is Mount Nebo, touristic spine and Madaba Visitor Center, by taking pictures of the signs of each site. The researcher visited these sites more than one time to make sure if there is any new signs. After taking photos by a smart phone, the data were categorized into top-down (official/public) signs and bottom-up (non-official/ private) signs. The researcher noticed that in Tourism Street, which contains commercial stores, there are signs that contain languages other than Arabic and English, which are present in abundance, so the researcher asked the shop owners to find out the reason for the

presence of such languages. This was not confined to the Tourism Street only, but the researcher noticed the presence of signs in Greek and Latin in abundance in Mount Nebo, so she investigated the relation of these two languages to religion.

3.3 Representativeness of the data

After selecting three tourist areas in Madaba, signs have been taken in Mount Nebo, as well as the Madaba Visitor Center and Touristic Spine. It is feasible for a researcher to focus only on one city or region. For instance, Backhaus (2006) did his study of the linguistic landscape in Tokyo, respectively. He had to make another decision once he was inside vast city. In central and suburban, Backhaus (2006) surveyed 28 streets in Tokyo close to the 28 stations of the core city's circular railroad route.

Ben-Rafael et al. (2006) picked four Jewish locations, three Israeli Palestinian localities, and one non-Israeli-Palestinian area to illustrate the ethnocultural and national differences in Israeli society. The second stage was to sample the areas of the city where the main commercial activity and public institutions were located. Only a limited number of all the items in a particular site were sampled (30% of public and 70% of commercial sites).

In contrast, Backhaus (2006) included only signs in his sample that he considered multilingual, which amounted to only 20% of the almost 12,000 signs he counted overall. Representativity was not the main issue for Cenoz & Gorter (2006). To explore the linguistic landscape, they chose two large shopping streets in the Basque Country and Friesland as their examples. They took care to thoroughly list all the texts that could be viewed on those streets.

3.4 Data analysis

The researcher collected the raw data by taking photos of the signage and then analyzed the given data in terms of frequencies, percentages, and linguistics. Finally, she displayed them in Tables as follows:

1. All signs were recorded and categorized manually using an Excel sheet.

2. Results were presented quantitatively by offering simple descriptive statistics in Tables (frequencies and percentages).

3. Results were presented qualitatively by describing the special emplacement of languages, font size and multilingual writing patterns used on the signs.

4. The researcher interpreted the obtained data and highlighted their consistency or discrepancy with the findings of other researchers cited in the previous literature.

3.5 Procedures of the study

The following procedures were followed in the course of conducting this study:

1- General reading about the subject

2- Collecting a number of previous theoretical and empirical studies that are related to the subject

3- Setting up the objectives and questions of the study

4- Selecting the area to conduct the study

5- Taking photo of the signs

6- Recording, analyzing and interpreting the collected data

7- Drawing the main conclusions from the findings and then comparing them with those of other studies in the literature

8- Presenting some suggestions and recommendations for further research

3.6 Summary

This chapter showed the places where the study sample was taken and their numbers. It also explained data representation, how to analyze them, and the approach taken.

CHAPTER FOUR
Results of the Study

4.0 Introduction

This chapter provides answers to the two questions of the study drawing upon the data collected for this study. The chapter starts with answering to the first research question followed by answering the second question. The chapter ends with a summary.

4.1 Results related to the first question

This section presents an answer to the first research question, which seeks to examine the extent to which signs in ancient Madaba enact multilingualism.

To what extent is the LL multilingual on the top-down and bottom-up signs in the ancient city of Madaba?

To answer this question, a corpus of 261 bottom-up (non-official) signs, top-down (official signs), and temporary signs like advertisements and stickers were analyzed. As stated earlier, the data were collected from three touristic sites in the city of Madaba, namely, Mount Nebo, Madaba Visitor Center, and the Touristic Spine. The 261 signs were then categorized into multilingual and monolingual signs. After that, the researcher looked at the linguistic components of the signs in terms of (1) how languages are organized on the signs following Scollon & Scollon (2003) concept of 'code preference, and (2) Reh's (2004) typology of multilingual writing.

Table 4.1 shows that the collected signs were more multilingual than monolingual signs, reaching 52% multilingual signs of the total number of signs. Table 4.1 also shows that although the Arabic language is the official language of the country and the language spoken by Jordanian nationals, the English language is more present. Among

the signs that included English, the monolingual signs constituted 85 signs, i.e., 70 % of the total monolingual signs. Yet, the Arabic monolingual signs were only 12 signs, i.e., 10% of the total monolingual signs. This suggests that English is occupying a good status in touristic places, and is competing with Arabic, the official language of the country.

Table 4.1. The Multilingual Scene in the LL of Madaba City

LL languages	no.	%
Multilingual	137	52%
Arabic/English	125	91%
Arabic/English/Greek	3	2%
English/German	2	1%
Other	7	5%
Monolingual	121	46%
Arabic	12	10%
English	85	70%
Greek	9	7%
Latin	3	2%
Other	12	10%
Icon	3	1%
total	261	100%

Interestingly, Table 4.1 shows that among the monolingual signs, there were less common languages such as Greek and Latin, constituting 9% of the data. What is interesting here is that these languages are not considered international languages, and although they are ancient languages that have symbolic value, they are present on official signs.

Other languages such as Turkish, Italian, and Russian were also present on signs. The use of these languages was restricted to the names of the people who contributed to restoring in the site of the Mount Nebo. That is, the names were written in the respective alphabets of each language.

Regarding code preference, languages are typically regarded as "preferred" in bilingual and multilingual signs when their scripts are given more space, larger font sizes, and specific placements on the sign. This strategy is referred to as code preference, code priority, or even occasionally as language superiority in the LL literature (Backhaus, 2006; Scollon & Scollon, 2003; Shang & Zhao, 2017).

In fact, there were 137 multilingual signs divided into top-down (n=112) signs and bottom-up (n=25). The top-down signs were analyzed. Although there are few competing languages in Madaba's LL, it appears that Arabic and English are given code priority. Arabic appeared on 39 signs (See figure 4.2 for an example of Arabic as preferred code), whereas English appeared on 31 signs (See figure 4.3 for an example of English as preferred code).

Figure 4.1 Site Rules in Mount Nebo

The sign in Figure 4.1 shows Mount Nebo rules. Includes "No removing and harming the Olive Trees, Tour explanations are forbidden inside the church, The church is reserves for visitation, prayer and silence, and Smoking and consumption of food are forbidden in this area", is whole translated into Arabic as

يمنع خلع و إذاء أشجار الزيتون, التفسيرات ممنوعة داخل الكنيسة, الكنيسة مخصصة للزيارة والصلاة والصمت,

ممنوع التدخين و استهلاك المواد الغذائية في هذه المنطقة.

Remarkably, the use of horizontal emplacement of languages (Arabic and English wording) is noticeable on 39 signs equally (e.g. Figure 4.1). That is, on 39 signs from the total of the multilingual signs, the two languages are placed in horizontal order rather than a vertical one, which suggests the equal importance of the two languages on these signs to decision makers in the country.

Other languages, which consist of two German-English signs, one Greek-Latin, one Latin-Arabic, and one Italian-English-Spanish-French, are assigned in different ordering. In German-English signs, English appears on the top of the signs as will be shown later. In contrast with the Italian-English-Spanish-French sign, Italian is assigned the first position, followed by English. As for the Latin-Arabic sign, Arabic comes below the Latin language, in contrast with the Greek-Latin sign where Latin is assigned the last position and in a smaller font than Greek.

4.2 Results related to the second question

This section answers the second research question which examines the language practices in both official and non-official signs to gauge how the state language policy accords with the actual language use in public spheres.

How does the official language policy accord with the practice?

To answer this question, the corpus of 261 was analyzed and categorized following Ben-Rafael et al. (2006) who examined signs in two sections "top-down (official signs) " and "bottom-up (non-official signs)". After that, the researcher looked at the ordering

of the languages on the signs following Scollon (2003) with a focus on the position of the official language on the sign and the percentage of the official language.

4.2.1 Top-down signs

Owing to the multilingual and multicultural nature of the city in terms of its visitors who come from different backgrounds, the wide range of languages used on the bilingual/multilingual signs is a key feature of the LL of Madaba as the city is considered one of the most important religious and therapeutic tourist destinations in Jordan (*Madaba Governorate*, 2022). This is proven by the diversity of foreign languages used on signs in Madaba. Table 4.2 provides the occurrences of languages appearing on signs in the selected areas of Madaba.

Table 4.2. Frequency of occurrences of languages in the LL of Ancient Madaba

Language	Top-down	Bottom-up	No.
Arabic	118	22	140
English	142	73	215
Greek	11	1	12
Latin	3	0	3
German	0	2	2
Other[*]	18	1	19
Icon	3	0	3
Total	186	75	261

* These multilingual signs include Arabic (four occurrences), English (four occurrences), Latin, Italian, Spanish, German, Russian, Greek, Roman, Aramaic, French, and Moabite.

The data presented in Table 4.2 show that the majority of signs includes using both Arabic and English. While English appears on 215 signs, Arabic has 140 occurrences of all signs. This suggests the dominance of these two languages in the data due to the status they have in the country.

The sign in Figure 4.2 shows the Madaba Visitors Center sign, which was set up by Jordan Ministry of Tourism and Antiquities. The Figure clearly shows that the

Jordanian Ministry of Tourism and Antiquities is concerned with English and Arabic. The official language of the country is Arabic while English is the primary foreign language used for international communication. Although the Arabic text on the sign has a bigger font size, the English translation is capitalized.

Figure 4.2 Madaba Visitors Center sign

Most of the signs collected for the study are presented in a mutual Arabic-English translation pattern. The sign in Figure 4.3 shows the English wording, Madaba, and Arab Tourism Capital, and it has been fully translated into Arabic as " مادبا عاصمة السياحة العربية". What is notable is that the English text appears to be more important because of the font size and vertical position. This can be attributed to the assumption that such places appear to be densely visited by internationals. English signs are meant to draw attention to this important information about Madaba to the foreign tourists.

Figure 4.3 Madaba Arab Tourism Capital sign

Although bilingual signs in Arabic and English dominate LL in Madaba, there are also multilingual signs, as shown in Figure 4.4. This multiplicity dates back to ancient times, especially in Mount Nebo. In order to provide information for both domestic and foreign tourists, the sign in Figure 4.4 is primarily written in both Arabic and English. On the other hand, the visibility of a wider linguistic diversity may be an attempt to demonstrate the various civilizations that the city of Madaba went through such as Moabite, Ghassanids, Byzantine, and Umayyad.
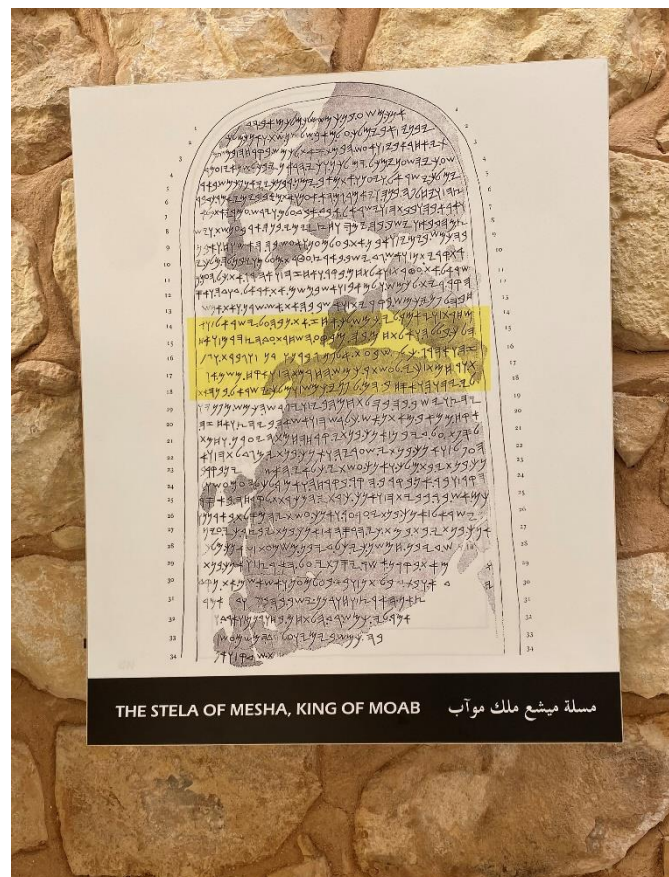

Figure 4.4 An Example of a Multilingual Sign

In addition, there are many informational signs in English and Arabic. Figure 4.5, which is found in touristic spine, is the entrance of Madaba Archaeological Park. The equal vertical placement of Arabic and English wording in Figure 4.5 and the similar

font size suggest that the Jordan Ministry of Tourism and Antiquities is fully aware of the advantages of using English in the LL of tourist destinations in Jordan.

Figure 4.5 Madaba Archaeological Park in Touristic Spine

Directive signs set up by the Jordan Ministry of Tourism and Antiquities were observed in the ancient city of Madaba. Four signs were collected expressing directives such as 'Our honorable references, in compliance with the instructions, it is prohibited to enter the directorate without wearing a mask and medical gloves, and under penalty of liability... We thank you for your kind cooperation' and 'Please keep it clean'. Arabic was the most occurring language as exemplified by the sign shown in Figures 4.6 and 4.7. The semiotics of the schematized picture in Figure 4.6 and 4.7 achieves near-universal understanding across most cultures.

This can be explained by the notion that these signs are not as significant as the other formal signs. For international visitors, they at minimal provide invaluable information. The use of 'Please' 'الرجاء' and 'prohibited' 'يمنع' may lessen the force of direction even though their primary purposes appear to be directive equally. Conversely, directive signs appear to have a very important semiotic message, indicating that local residents are responsible for site upkeep, as long as the initiator is the same governmental institution.

Figure 4.6 The main message exclusively provided in Arabic.

Figure 4.7 The main message exclusively provided in Arabic.

4.2.1.1 Religious signs

Mount Nebo is one of the religious places for Christians; it is the place where Moses thought about the Promised Land without being able to enter it. A monument on the top of Mount Nebo commemorates Moses' death after seeing Canaan, across the Jordan Valley. There is also a Christian church (Memorial Church of Moses) from the Byzantine era on the top of Mount Nebo, so it is considered one of the paths that Christian pilgrims pass through.

The researcher found that there are some languages related to religion such as Greek and Latin. Figure 4.8 shows the Greek language, which is found inside the Memorial Church of Moses. It is a mosaic sign containing the Greek language that dates back to ancient times. The text written in Greek describes the pictures below the text, which is the cycle of life. This can be attributed to the assumption that this language is associated with religion due to its presence in a religious place such as the church.

Figure 4.8 A monolingual mosaic sign in Greek in the Memorial Church of Moses

Likewise, for the Latin language, which was found within a context related to religion, as shown in Figure 4.9, the Latin inscriptions 'UNUS DEUS PATER OMNIUM SUPER OMNES' taken from the Bible form Ephesians 4:6: "one god and father of all: he who is over all, works by all, and dwells in all".

Figure 4.10 shows the two sides of the same sign shown in Figure 4.9. The Figure contains signs in Greek and Arabic. The Figures 4.9 and 4.10 are placed on the entrance of Mount Nebo. It shows how Mount Nebo and these languages are related to religion.

Figure 4.9 A monolingual sign
in Latin in Mount Nebo

Figure 4.10 The back side of the
sign translated into Arabic

4.2.2 Bottom-up signs

In comparison with official signs set up by the Jordan Ministry of Tourism and Antiquities, private signs originate from private-sector agents. Commercial establishments such as restaurants and shops are keen to use commercial signage in English only.

Table 4.3 shows that English has acquired great value in the tourism industry in modern Jordan. 49 signs in English only were recorded in Madaba, The Arabic–English bilingual pattern is the most occurring multilingual combination with 22 signs whilst monolingual English signs (49 occurrences) were the most occurring. This is not surprising as the LL manifests 'globalised power structures in a predominantly Arabic-

speaking country where international inbound tourism is primarily reflected through the extensive use of monolingual English signs' (Alomoush & Al-Na'imat, 2018).

Table 4.3. Frequency of languages for bottom-up signs in the LL of Ancient Madaba

Language	Bottom-up	%
Multilingual	**24**	**32%**
Arabic-English	22	92%
English-German	2	8%
Monolingual	**51**	**68%**
English	49	96%
Greek	1	2%
Other	1	2%
Total	**75**	**100%**

A large number of signs are characterized by the use English language: 49 English-only signs. On other hand, there are no signs in Arabic only. Arabic has only appeared in multilingual signs with English and it consists of 22 signs. It is found in various types of commercial activities including small businesses such as gift and souvenir shops, supermarkets, and pharmacies.

The sign shown in Figure 4.11 is a prime example of Reh (2004) duplicating multilingualism in which the business name displayed in both Arabic, ' بيت الجد للتحف الشرقية', and English, 'Joud home handicraft', is entirely similar. What is remarkable is that the business name in English appears to be the original version by the vertical order of languages.

The image of the Tree of Life mosaic in Figure 7 beside the business name in Arabic is an indicator of the identity of the ancient city, probably to draw the attention of clientele from the tourist populations.

Figure 4.11 A business name sign featuring Arabic and English.

In addition, the English language appeared in abundance on the Touristic spine, which contains many handicraft and mosaic shops, as shown in Figure 4.12 below. This indicates the interest in conveying the culture and crafts of Madaba to tourists.

Figure 4.12 A monolingual Sign in English

All signs presenting languages other than Arabic and English are some signs encountered in the touristic spine. Two signs in German with English except for one monolingual sign in Greek. Following up with shop owners, they said that the reason behind the choice of language, motives, and the importance of the existence of the language differed from one place to another.

One of the shops used German-English sticker (see Figure 4.13). The owner use the duplicating translation of the word 'stamp', due to German tourists' interest in the stamps, and correspondence via mail. The attention of tourists also draw one of the

interests of the owner. The presence of the German language attracts German tourists to the shop.

Figure 4.13 German-English Sticker

Another shop uses German-English signs (see Figure 4.14). The owner put in his shop sign "we speak German" 'wir sprechen Deutsch'. He uses a complementary translation so just the audience, which are German tourists, can understand what is written. The owner wants to attract the attention of German tourists that they can speak the German language by using German as 'symbolic capital', as this attracts German tourists to his shop. The owner shop also studies the German language and has relatives there.

Figure 4.14 German-English Shop Sign

The third shop used Greek as monolingual signs (see Figure 4.15). The shop owner put a sign in Greek that means "Greek store!! Special prices for Greece". The reason for using the Greek language was that Greece was where the shop owner received his

university education. Despite the lack of Greek tourists compared to others, he wanted

to distinguish them with special prices for them.

Figure 4.15 Monolingual Greek Sign

4.3 Summary

This chapter answered the two questions of the study, and showed the results of the data

that were collected after categorizing them into two types: monolingual and multilingual

signs.

CHAPTER FIVE
Discussion, Conclusions and Recommendations

5.0 Introduction

This chapter renders a brief summary and a short discussion of the findings of the research questions. It also attempts to explain and interpret the results in light of the reviewed literature. The chapter concludes with a summary of the findings of the study and recommendations for future research.

5.1 Discussion

5.1.1 Discussion of the results related to the First Question

Results reported in Table 4.1, shows that the signs in the selected areas are divided into monolingual and multilingual, and that the collected signs are multilingual rather than monolingual. The results show that the multilingual signs are mostly used in a touristic place where visitors from a wide range of places come to visit these sites. This means the government takes into consideration the 'audience'. The ministry uses the symbolic function of some languages in signs such as Greek and Latin. These languages are associated with the Christian religion, and this was concluded from their frequent use in Mount Nebo, which is a religious touristic place through which Christian pilgrims pass. In addition, the Greek language was found inside the church located inside Mount Nebo, as well as at the entrance to Mount Nebo. A phrase quoted from the Bible was written on a large sign (see Figures 4.9 and 4.10), and this indicates the connection of these two languages with religion. The results in Alsaif & Starks (2019) show that Arabic has two different linguistic layering, Classical Arabic and Modern Standard Arabic. The using of Classical Arabic in the Grand Mosque in Mecca serves an aesthetic and spiritual function. That means as the using of Greek and Latin languages

in this study is related to religious, this result agrees with that of Alsaif & Starks (2019) who found that Classical Arabic was used in the religious site of Mecca. However, the using of Modern Standard Arabic is meant to convey information for pilgrims and workers. Similarly they are in line with Yusuf et al. (2022) who represented Arabic as a religious symbol.

The multilingual signs involved many languages, such as the official language of the country, Arabic, the lingua franca language, English, as well as other foreign languages, such as Greek, German, Spanish, French, Russian, Italian, Roman, Aramaic, and Moabite and Latin. According to Ben-Rafael et al. (2006), the multilingual signs are divided into top-down and bottom-up signs. The results show that these languages appear in varying proportions. However, compared with other foreign languages, English is mainly used with other languages, whether the official language (Arabic) or other less common languages.

The other languages in top-down signs, which appeared in Mount Nebo only, are Italian, Latin, Greek, French, Spanish, Roman, Aramaic, and Moabite. Some of these languages are old languages and not considered international languages. These languages have a symbolic function, and they appeared because of the civilizations that have previously lived in Madaba such as Moabite, Nabataeans, Ghassanids, Byzantine and Umayyad (*Madaba*, 2021; *Madaba Governorate*, 2022).

According to Scollon & Scollon (2003) concept of 'code preference' , Italian, Spanish, and French appeared in the same sign along with English. What is remarkable is that the Italian language came in the first position, then English, because most of people who refurbished Mount Nebo were Italians. The signs contained the names of the people to be honored.

The result also showed that there were two signs in the Touristic Spine, including German and English in the form of duplicate translation and complementary translation as Figures 4.13 and 4.14. This reminds us of Reh's (2004) typology of multilingual translation on signs. While English is a lingua franca, using German is motivated by marketing purposes. The shop owner knows the interest of the German tourists. So, these signs are mainly directed to them as an audience (not any other tourists). In contrast, the results of Alomoush & Al-Na'imat (2018) and Amer & Obeidat (2014) show that there no other languages shown in the shop signs, although Petra and Aqaba are considered tourist places in Jordan.

The monolingual signs show that there are many languages including Arabic, English, Greek, Latin, and names. What is interesting is that Greek and Latin are not international language. They are viewed as ancient languages that have a symbolic value in Christianity. According to Scollon & Scollon (2003), symbolization is how sign codes can represent things that have nothing to do with where people actually live. These two languages are related to religious domain due to their historical connections with the Christian religion. They are found in Mount Nebo, which is one of the religious trails according to Madaba Visitor Center trails. This result is comparable to what Alomoush (2022) found in the ancient city of Jerash in that that Jerash did not contain ancient languages, but images indicating civilization such as the image of a Roman army chariot. That is related to this study as both use ancient languages and images as a symbolic function to show the civilization of the places.

5.1.2 Discussion of the results related to the Second Question

Results reported in Table 4.2 suggest that there are two main types of signs: top-down (official signs) and bottom-up (non-official signs). Both types are multilingual in Arabic

and English but occasionally multilingual in other additional languages such as Greek, Latin, German, Spanish, Italian, French, Russian, Roman, Moabite, and Aramaic. What is striking is that English is the most common language in both top-down and bottom-up signs, even more common than the Arabic language. This may be ascribed to the status of English as the most popular language of 'international tourism' (Shohamy & Gorter, 2008). Seemingly, the Jordanian Ministry of Tourism and Antiquities believes that multilingualism, particularly in relation to English, is crucial for advancing the travel and tourism sector. On the other hand, in a directive governmental signage is less frequent in English, presumably, because these signs do not offer crucial factual information about the city's historic sites. The official language of the country, Arabic, in the official directive signs, indicates that these messages are addressing citizens and Arabic speaking visitors and/or an expression of sovereignty as Arabic is the official language of the state , as shown in Figure 4.6. This means that citizens are responsible for maintaining the place cleanliness as it is a tourist place that reflects the country's image. This result is in line with the results obtained by Alomoush (2022, p. 156) in his study of Jerash, where he stated that "English has a much stronger presence than other languages in both official and private signs and Arabic in private signs ". In addition, he added, "English is less common on directive official signs".

The researcher applies the Scollon & Scollon (2003) concept of 'code preference', and the results show that most top-down and bottom-up signs included the use of Arabic and horizontal ordering. The use of horizontal ordering on signs means even if Arabic is the preferred language, English is widely spoken and widely utilized as the language of international communication (i.e. lingua franca) of tourism in Jordan. This suggests that rather than just being employed for aesthetics, the English language in tourism signage appears to be used to convey information. The results showed that there are some

English-Arabic vertical multilingual signs, with the English translation capitalized. According to Scollon & Scollon (2003, p.120-125), when languages are ordered vertically, the preferred one would be on the top position of signs. If there is a conflict between the size of the fonts used and the top-bottom order, the former would outweigh the latter. This means that despite the presence of the English language in abundance, the Arabic language, which is the country's official language, has greater preference than the English language, which makes it in accord with the official language policy of the state. According to Reh's (2006) typology of multilingual writing, the results show that the selected signs are duplicated translations. This shows that the importance of the Arabic language is similar to English. Despite the presence of the English language in abundance, the translation of texts into the Arabic language is a duplicated translation that proves its importance and that the Ministry of Tourism and Antiquities is keen to translate the texts in the top-down signs to deliver information to those who speak both languages.

5.2 Conclusions

This study investigated the languages used in public signage, both official and non-official signs, in the ancient city of Madaba as a reflection of multilingualism in the area. Also, it sought to understand whether the official language policy accords with the practice or not. This study adopted a mixed approach to data analysis. Both quantitative and qualitative analysis of the signs in the touristic sites of Madaba were offered.

The analysis of the overall results of both the top-down and bottom-up signs indicates that a variety of languages are used in shop signs in the bottom-up signs in Jordan. As a matter of fact, this clarifies the bilingual and multilingual nature of signs in the country. The languages that are used in such signs are mostly Arabic and English.

The proposed research questions could be answered in the light of the findings of the study as follows:

1. The linguistic landscape is widely multilingual on the top-down and bottom-up signs in the ancient city of Madaba, and these languages include:

   - Arabic: the official language of the country and the means of communication among all Jordanians

   - English: a lingua franca in Jordan, promoting the tourism industry.

   - Ancient languages: Greek, Latin, Moabite, Aramac, and Roman are used because of the civilizations that lived in Madaba.

   - Other well-known languages, such as French, Italian, Russian, and Spanish, are also used.

2. The official language policy accords with the practice in the top-down that is shown in the language order in the signs, where the Arabic language appeared in the first position among the signs, and this indicates its importance, knowing that the English language was present in more proportions than any other language in the official and private signs.

5.3 Recommendations

Due to the fact that the present study has investigated the languages used in signs in only three touristic areas in Madaba, which are Mount Nebo, Touristic Spine, and Madaba Visitor Center, further research on signs in other touristic areas in the city of Madaba such as Dead Sea, and Ma'in Hot Springs is recommended. Further research can also be carried out on religious places such as Salah al-deen Al-ayyobi's castle in Egypt, Hagia Sophia Museum in Turkey, Vatican in Italy, and Al-maghtas in Jordan. It

is also recommended to use different methods of data collection and analysis such as discourse analysis, observations, and interviews.

5.4 Summary

This chapter discussed the findings of the study related to the questions, also showed how the finding are related to the previous studied. This chapter also included the conclusion of the research, and it ended with some recommendations to the future studies.

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