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**The Linguistic Landscape Between English and Arabic in  
the Age of Technology: The case study of Saida city shop-signs**

**A thesis submitted as partial fulfilment of the requirements for  
the degree of *Master* in Didactics.**

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## **Declaration of Originality**

I hereby declare that this submission is my work and that, it contains no material previously published or written by another person nor material which has been accepted for the qualification of any other degree or diploma of a university or other institution.

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## **Dedication**

To my parents, whose love and support made this achievement possible. Thank you for your encouragement throughout my studies and always believing in me. Your sacrifices have provided me with the opportunity to pursue my education, and I am forever grateful.

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## **Abstract**

This study aimed to investigate and compare language preferences and usage between English and Arabic among residents of Saida City, Algeria in the modern digital era. With technology becoming increasingly integrated into daily life through devices, internet access, and social media, this research sought to understand the dynamics between global and local languages in this environment. A mixed-methods approach was employed utilizing a questionnaire and observation to gather both quantitative and qualitative data. 23 shop owners of Saida City ranging in age from 27 to 65 years old answered a questionnaire examining their language use across online and offline contexts. This included questions on language proficiency, domains of usage, access to resources, and motivations. In addition, Public social media posts from a sample of users were also analyzed to observe language trends on platforms. The results indicated that while Arabic remains the dominant language for daily life interactions, English is more commonly used for internet-based tasks and accessing digital content and services globally. Younger generations exhibited higher English skills but retained Arabic for personal communication. Access to English education and online resources was growing yet remained limited. Overall, the study provided valuable insights into current bilingualism in Saida City in the digital era with implications for language policies, education systems, and technology design supporting both local and global linguistic needs.

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# **General Introduction**

## **General Introduction**

### **General introduction**

With the rapid advancement of technology in the 21st century, communication across borders and between cultures is easier than ever before. However, some languages still face greater challenges than others in the digital sphere. This thesis will examine the relative positions of the English and Arabic languages in the modern technological landscape.

As the dominant language of business, science, and popular media online, English currently enjoys widespread support from technology companies and platforms. Websites, software, devices, and services overwhelmingly use English as their primary language interface. In contrast, support for Arabic is still developing and lacks the scale and resources of English online.

By analyzing trends in social media content and other technology domains, this research aims to understand the current state of each language and how users are experiencing them. It will consider factors like the availability of content and services in each language, the development of language-enabled technologies, and perceptions of each language's functionality and prestige online.

The goal of this thesis is to shed light on the challenges still facing the Arabic language compared to English in the age of technology. It also seeks to identify opportunities to strengthen Arabic's digital position and better serve online communities that use it as their primary means of communication. The findings will help inform discussions on language equity and inclusion as technologies continue to shape global communication.

The present study addresses three main questions:

**Q1.** What factors influence an individual's use of and preference for English vs. Arabic online in Saida?

**Q2.** How has the use of English in commercial signage and advertising impacted the linguistic landscape of Saida over time? Has Arabic decreased or English increased in visible domains?

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**Q3.** How has the rise of technology and social media impacted the use of English vs. Arabic in public spaces and the linguistic landscape? Are certain domains like signs, advertisements, etc. shifting more towards one language?

As a first attempt to answer the research questions, the hypotheses below were provided:

**H1.** Factors like higher education levels, higher socioeconomic status, religious beliefs, and gender may influence greater use of and preference for English over Arabic online in Saida

**H2.** The increasing use of English in commercial signage and advertising in Saida over time has likely impacted the linguistic landscape by gradually decreasing the use of Arabic in visible commercial domains. Stores and businesses may use more English signs and ads to target customers with higher incomes and education who speak English well.

**H3.** The rise of technology and social media has probably impacted the use of English vs. Arabic in public spaces and the linguistic landscape of Saida by normalizing the use of some English in daily life. Platforms like Facebook, Twitter, YouTube etc. default to English interfaces which could influence language choices even in public offline spaces over time.

The accomplishment of this study requires the researcher to follow a mixed-methods approach to present the research dilemma. Two data-gathering tools are selected as the main methods to obtain the essential relevant data. A structured questionnaire is designed for 23 shop owners in Saida City. It aims to provide insights into people's language preferences and proficiencies in both English and Arabic. Understanding which language people are more comfortable with for things like the internet, social media, education, work, etc. Additionally, an observation of shop signs across Saida City was conducted, it is used to examine the linguistic landscape of the city and find what languages are dominating it.

To achieve the aim of this study the present work was divided into three different chapters. The first chapter is an overview of the background of English and Arabic as well as definitions of some keywords that the research is based on.

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The second chapter is a review of the literature, which deals with the competition between Arabic and English, their status, advantages and limitations with an introduction to the field of linguistic research that is being studied. In addition, it discusses the methodology of the research as well as presents the used research tools, sample and population and the purpose for which they are used.

The third and last chapter is a data analysis and discussion chapter, which deals with the analysis of the research gathering tools besides the discussion of the findings. Additionally, some recommendations were suggested by the researcher based on the research findings.

# **Chapter One:**

## **Historical and**

### **Linguistic Overview**

## **1.1. Introduction**

Languages are an integral part of human civilization, serving as a means of communication, expression, and cultural identity. Two of the most prominent and widely spoken languages today are English and Arabic. These languages boast rich histories and fascinating origins that provide insight into the cultural, historical, and linguistic forces that shaped them.

The origins of English and Arabic are rooted in the need for humans to communicate and express themselves. Languages are not static entities; they evolve and transform over time due to a variety of factors, such as cultural interactions, historical events, and technological advancements.

English, a West Germanic language, emerged from the language spoken by the Anglo-Saxon tribes that migrated to the British Isles around the 5th century CE. Over time, English absorbed new vocabulary, grammar, and cultural concepts from the Vikings, Latin-speaking missionaries, and the Norman French.

Similarly, Arabic, a Semitic language, originated from the dialects spoken by the Arab tribes on the Arabian Peninsula. The emergence of Islam and the revelation of the Quran in the 7th century CE led to the development of Classical Arabic, which became the foundation of the language.

The need for humans to communicate and express themselves has been the driving force behind the creation of languages. Language serves as a tool for social interaction, expression, and cultural preservation. The evolution of languages is shaped by a variety of factors, including cultural interactions, historical events, and technological advancements.

## **1.2. Definition of key terms and concepts**

### **1.2.1. Language**

Language can be defined as "a systematic means of communicating ideas or feelings by the use of conventionalised signs, sounds, gestures, or marks having understood meanings" (American Psychological Association, 2023, para. 1). Language allows humans to

communicate and exchange information through a system of symbols, sounds, gestures and visual symbols (American Psychological Association, 2023). It is one of the defining characteristics of humans that separates us from other animal species (Fromkin, Rodman, & Hyams, 2014). Language has both linguistic components such as phonology, morphology, syntax and semantics, as well as social aspects that allow for communication between individuals (Fromkin et al., 2014).

### **1.2.2. Linguistic landscape:**

Linguistic landscape refers to "the visibility and salience of languages on public and commercial signs in a given territory or region" (Landry & Bourhis, 1997, p. 25). It involves the observation and analysis of the languages used on signage in a particular public space (Shohamy & Gorter, 2009). Examples of signage included in linguistic landscape studies are street names, commercial signs, public signs, and other texts visible in outdoor public spaces (Backhaus, 2007). Analyzing the linguistic landscape can provide insights into the official language policies and the de facto language use of an area, as well as the relative power and status relationships between languages (Cenoz & Gorter, 2006).

### **1.2.3. Digital linguistic landscape**

Digital linguistic landscape refers to "the language of text in new media technologies and how it creates online representations of languages" (Lambert et al., 2019, p. 1). As technologies have advanced, the linguistic landscape has expanded from physical signs in public spaces to include digital platforms like websites, social media, applications, and other online environments (Pietikäinen et al., 2011).

The digital linguistic landscape allows for documentation and analysis of the visibility and prominence of languages in virtual spaces (Lambert et al., 2019). Studies have examined how languages are represented on websites for cities, universities, and companies to understand language policies and practices in digital contexts (Pietikäinen et al., 2011). Social media in particular has become an important part of the linguistic landscape, as platforms like Facebook and Twitter provide insights into language use by social groups (Androutsopoulos, 2013).

With the rise of multilingualism online, the digital linguistic landscape offers opportunities for language maintenance and revitalization but also new challenges of linguistic imperialism

(Lambert et al., 2019). Overall, it provides a lens for understanding how languages and linguistic diversity are negotiated and navigated in technology-mediated environments.

#### **1.2.4. Multilingualism**

Multilingualism refers to "the ability of an individual or community to use two or more languages" (American Psychological Association, 2023, para. 1). Multilingualism is a growing phenomenon around the world as globalization and migration patterns have increased contact between languages and cultures (Wei, 2018). An individual may acquire multiple languages sequentially, learning additional languages after becoming proficient in their first language, or simultaneously, learning two or more languages from birth or early childhood (Wei, 2018). Multilingualism offers cognitive benefits such as enhanced executive function and mental flexibility compared to monolingualism (Bialystok et al., 2012). At a societal level, multilingualism can promote cultural understanding and economic opportunities for cross-cultural exchange (Wei, 2018).

#### **1.2.5. Linguistic diversity**

Linguistic diversity refers to "the coexistence of different languages within a community or social setting" (Cenoz & Gorter, 2006, p. 67). It involves the variety of languages spoken as well as the degree to which those languages are used among a population (Cenoz & Gorter, 2006). Linguistic diversity exists at both the global scale, with over 7,000 living languages spoken worldwide (Crystal, 2000), and within individual countries, regions, and communities where multilingualism is prevalent (European Commission, 2017). Factors such as globalization, migration, and language policies can impact levels of linguistic diversity over time (European Commission, 2017). Maintaining linguistic diversity has social and cultural benefits, as it preserves indigenous languages and cultural identities (Skutnabb-Kangas, 2000).

#### **1.2.6. Language globalization**

Language globalization refers to "the spread of English and a few other languages around the world, often at the expense of smaller languages" (Crystal, 2003, p. 3). It is driven by the increasing interconnectedness between countries through forces like international trade, migration, popular culture, and digital technologies (Pennycook,

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2007). As a result of globalization, English in particular has gained prominence as a lingua franca or common language of international communication (Crystal, 2003).

However, language globalization has also contributed to an ongoing shift away from the local use of indigenous and minoritized languages toward a few dominant global languages like English, Spanish, Arabic, Mandarin, and French (Pennycook, 2007). Some scholars argue this process threatens linguistic diversity and endangers smaller languages (Skutnabb-Kangas, 2000). At the same time, globalization has facilitated the spread of other languages beyond traditional geographical boundaries as well (Block & Cameron, 2002).

Overall, language globalization reflects the complex interplay between the spread of dominant languages, the maintenance of smaller languages, and the emergence of new linguistic practices in an increasingly interconnected world (Pennycook, 2007).

### **1.2.7. Language shift**

refers to "the process whereby a speech community gradually shifts allegiance from the use of one language to the use of another" (Fishman, 1991, p. 1). It occurs when a population gradually stops using their traditional language and transitions primarily to using a dominant or majority language instead (Fishman, 1991).

Language shift is often driven by social, economic, and political factors that make the dominant language more advantageous for domains like education, employment, and social mobility (Wright, 2004). It can happen rapidly over just a few generations or gradually over many decades as the use of the traditional language declines and a new language increase across different social functions and domains (Fishman, 1991).

A complete language shift occurs when the last native speakers of a language pass away and no one remains who uses it as their primary means of communication, resulting in language death (Dorian, 1998). Documenting and reversing language shifts are an important concern for maintaining linguistic diversity and the cultural heritage of minoritized language communities (Wright, 2004).

### **1.2.8. Code-switching**

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Code-switching refers to "the alternation between two or more languages or language varieties in conversation" (Myers-Scotton, 2006, p. 2). It involves a bilingual or multilingual speaker changing from one language or dialect to another within the same conversation or discourse (Grosjean, 1982).

Code-switching occurs for various social and linguistic functions like quoting others, emphasizing a point, or filling a lexical gap when a word is unknown in one language (Myers-Scotton, 2006). It is a natural part of conversation for many bilingual communities and helps facilitate communication across different social contexts (Grosjean, 1982).

While code-switching was once viewed negatively, it is now recognized as a rule-governed linguistic practice that demonstrates the complex language abilities of bilingual speakers (Myers-Scotton, 2006). Studying code-switching provides insights into the interaction between languages in the mind and the social motivations for language choice (Grosjean, 1982).

### **1.3. The Evolution of The Arabic Language**

The Arabic language, renowned for its rich literary heritage and widespread use across the Middle East and North Africa, has a fascinating development history. From its origins on the Arabian Peninsula to its various dialects and influences, the Arabic language has evolved. This essay will explore the development of Arabic, focusing on pre-Islamic Arabic, the Islamic Golden Age and Classical Arabic, as well as the diverse Arabic dialects and their influences.

The roots of the Arabic language can be traced back to the Arabian Peninsula, where the Arab tribes resided long before the rise of Islam. Pre-Islamic Arabic, also known as Jahiliyyah Arabic, refers to the language spoken during the time before the advent of Islam. It was characterized by its poetic traditions and the existence of various dialects across the Arabian Peninsula.

During the pre-Islamic era, Arabic was primarily an oral language, with tribal variations and dialects that differed in vocabulary, pronunciation, and grammar. These dialects included Najdi, Hijazi, Yemeni, and many others. The oral tradition of poetry and storytelling played a vital role in preserving and transmitting the Arabic language.

The emergence of Islam in the 7th century CE had a profound impact on the Arabic language. The revelation of the Quran in Arabic became a central pillar of the Islamic faith and a unifying force for the Arab people. Classical Arabic, also known as Quranic Arabic, evolved as the standard form of the language during the Islamic Golden Age. It was heavily influenced by the language of the Quran, which served as a model for linguistic purity and eloquence.

Classical Arabic became the language of administration, religion, science, and literature throughout the Islamic empire. Scholars and poets of the time contributed to the refinement and standardization of the language, ensuring its continuity and vitality. Classical Arabic's grammatical rules and literary excellence were codified in textbooks such as *Al-Kitaab* by Sibawayh, which provided a comprehensive guide to the language's structure and usage.

Despite the prominence of Classical Arabic, the Arabic language also developed numerous regional dialects over time. These dialects emerged due to geographic, cultural, and historical factors. Arabic dialects exhibit significant linguistic diversity, with pronunciation, vocabulary, and grammar variations. For example, Egyptian Arabic, Levantine Arabic, and Maghrebi Arabic are distinct, mutually intelligible dialects that differ significantly from Classical Arabic.

Arabic dialects have been influenced by other languages and cultures throughout history. Contact with neighbouring languages, such as Aramaic, Hebrew, and Persian, as well as the influence of conquerors and trade routes, contributed to the evolution of Arabic dialects. For instance, the colonization of Arab lands by European powers led to the incorporation of loanwords from French, English, and other European languages into some Arabic dialects.

Furthermore, Arabic dialects have been shaped by cultural exchanges and historical interactions. For instance, Andalusian Arabic, spoken in Al-Andalus (Islamic Spain), was influenced by Romance languages such as Spanish and Portuguese. Similarly, the Swahili language in East Africa emerged as a hybrid of Arabic and Bantu languages, resulting from centuries of trade and cultural exchange along the Indian Ocean coast.

In conclusion, the Arabic language has undergone a remarkable evolution throughout history. From the diverse pre-Islamic Arabic dialects to the emergence of Classical Arabic as a literary and religious language, and the subsequent development of regional Arabic dialects, the Arabic language has continually adapted and incorporated influences from various sources. Today, it remains a vital and vibrant language, connecting millions of people across the Arab world and beyond.

#### **1.4. The Evolution of the English Language**

The story of the English language begins long before the arrival of the Anglo-Saxons in the British Isles. English is a member of the Indo-European language family, which also includes ancient languages like Sanskrit and Greek. This family tree of languages traces its roots back thousands of years to a common ancestral language. Within the Indo-European family, English belongs to the Germanic branch, which also includes German, Dutch, and Scandinavian languages.

Around the 5th and 6th centuries, waves of Germanic-speaking tribes, known as the Anglo-Saxons, migrated to the British Isles from what is now Germany and Denmark. This marked the beginning of the Old English period. Old English, also known as Anglo-Saxon, was characterized by its complex inflectional grammar, including noun declensions, verb conjugations, and grammatical gender. The vocabulary of Old English primarily consisted of Germanic words, with influences from Celtic languages spoken by the native Britons.

During the Viking Age, Norse Vikings from Scandinavia began raiding and settling in England. Their impact on the English language was significant, introducing Norse words into the vocabulary of Old English. Additionally, Latin-speaking missionaries, such as St. Augustine, arrived in England, bringing with them Latin words, particularly those related to religion and learning. The influences of both the Norse Vikings and Latin-speaking missionaries shaped the linguistic landscape of Old English.

The Norman Conquest in 1066 had a profound effect on the English language. Following the Norman Conquest, French-speaking Normans ruled England, and French became the language of the elite. As a result, Middle English emerged,

combining the grammatical structure of Old English with a significant influx of French vocabulary. This period marked the transition from the inflectional grammar of Old English to a more analytic grammar, which relied on word order and prepositions.

Middle English also saw changes in pronunciation, grammar, and vocabulary. The Great Vowel Shift occurred during this period, altering the pronunciation of long vowels in the English language. Furthermore, Middle English borrowed words from various sources, including French, Latin, and Norse, further expanding its vocabulary.

The Modern English period, which began in the late 15th century, witnessed a series of transformative events. The Renaissance brought a renewed interest in classical languages, such as Latin and Greek. Consequently, a large number of Latin and Greek terms entered the English language, enriching its vocabulary and facilitating discussions on various subjects, including science, philosophy, and literature.

The expansion of the British Empire during the 17th to 20th centuries spread the English language to different parts of the world. English became the language of trade, diplomacy, and administration, leading to its adoption as a second language by many non-native speakers. As a result, English underwent further evolution and diversification through contact with other languages, leading to regional dialects, pidgins, and creoles.

In conclusion, the evolution of the English language is a testament to its dynamic nature and the historical and cultural influences that have shaped it. From its Germanic origins in the pre-English period to the impact of Viking invasions, the Norman Conquest, the Renaissance, and the expansion of the British Empire, English has continuously adapted and absorbed new elements. Today, it is a global language, spoken and understood by people from different cultures and backgrounds

### **1.5. The Sociocultural Significance of English and Arabic**

Language plays a fundamental role in shaping societies, cultures, and identities. English and Arabic, two prominent languages with rich histories and extensive usage, hold significant sociocultural importance. This essay will explore the sociocultural significance of English as a global language and Arabic as a language of culture and religion.

English has achieved the status of a global language primarily through British colonialism and subsequent globalization. The expansion of the British Empire in the 18th and 19th centuries spread the English language across various regions, making it a lingua franca for communication among diverse populations. Today, English continues to be widely spoken as a second language and has become a common means of communication between people of different linguistic backgrounds.

English's status as a global language has far-reaching implications. It serves as a medium of exchange in international business, trade, and diplomacy. Proficiency in English has become a prerequisite for many professional opportunities and higher education. Furthermore, English dominates the realms of science, technology, and academia, with a large majority of research papers, conferences, and scholarly publications being conducted in English. Its global influence has facilitated cross-cultural communication and facilitated the dissemination of knowledge worldwide.

On the other hand, Arabic holds immense cultural and religious significance. The Arabic language is deeply intertwined with Islam, one of the world's major religions. The Quran, the holy book of Islam, was revealed in Arabic and has been preserved in its original language. As a result, Arabic holds a sacred status among Muslims, and proficiency in Arabic is considered vital for understanding the Quran and engaging in religious practices.

Arabic's cultural significance extends beyond religion. It has a rich literary heritage dating back to pre-Islamic times, with contributions from poets, philosophers, and scholars. Arabic literature spans a wide range of genres, including poetry, novels, and philosophical treatises. The works of renowned Arabic writers and thinkers, such as Ibn Arabi, Al-Farabi, and Ibn Rushd, have had a profound impact on literature, philosophy, and sciences.

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Arabic also plays a crucial role in the arts and calligraphy. Arabic calligraphy, with its intricate and ornate designs, is revered as a visual art form. It adorns mosques, manuscripts, and various forms of artistic expression. Furthermore, Arabic music, with its distinctive melodies and rhythms, is celebrated for its cultural richness and has influenced musical traditions around the world.

In addition to its cultural significance, Arabic has contributed to various scientific disciplines. During the Islamic Golden Age, scholars in the Arab world made significant advancements in fields such as mathematics, astronomy, medicine, and philosophy. Many scientific texts from this era were written in Arabic and have since been translated and influenced the development of knowledge in other civilizations.

In conclusion, both English and Arabic hold immense sociocultural significance. English's global reach as a lingua franca and its dominance in science, technology, and business underscores its importance in a globalized world. Arabic, on the other hand, is deeply intertwined with Islamic culture and religion and has contributed significantly to literature, arts, and sciences. Both languages play vital roles in shaping identities, fostering cultural exchange, and facilitating communication among diverse populations.

### **1.6. English and Arabic Differences and Similarities**

While English and Arabic are very different languages, they do have some similarities, such as complex grammar and a rich vocabulary. They also share some linguistic and cultural influences, particularly due to the historical relationships between the English-speaking world and the Arab world.

#### **1.6.1. Differences**

##### **1.6.1.1. Linguistic origins**

English is a West Germanic language that originated in England and is part of the Indo-European language family. Arabic, on the other hand, is a Semitic language that originated in the Arabian Peninsula and is part of the Afro-Asiatic language family.

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### **1.6.1.2. Writing systems**

English uses the Latin alphabet, which consists of 26 letters. Arabic uses an abjad writing system that is written from right to left and consists of 28 letters. The Arabic script is also used to write several other languages, including Persian, Urdu, and Kurdish.

### **1.6.1.3. Vocabulary**

English and Arabic have very different vocabularies, with many words in one language having no direct equivalent in the other. This is due in part to the fact that English and Arabic come from different language families and have distinct histories and cultural influences.

### **1.6.1.4. Grammar**

English and Arabic have different grammatical structures, with English having a subject-verb-object word order and Arabic having a verb-subject-object word order. They also have different systems of inflexions and variations based on tense, mood, and case.

### **1.6.1.5. Sounds**

English and Arabic have different systems of sounds and phonemes, with English having a larger number of vowels sounds and Arabic having a larger number of consonant sounds.

## **1.6.2. Similarities**

### **1.6.2.1. Complex grammar**

Both English and Arabic have complex grammar, with several inflexions and variations based on tense, mood, and case.

### **1.6.2.2. Rich vocabulary**

Both languages have a rich vocabulary, with many words having multiple meanings and nuances.

### **1.6.2.3. Cultural significance**

Both English and Arabic have played significant roles in the cultural and intellectual development of their respective regions, and they have both been used as languages of scholarship and learning for centuries.

### **1.6.2.4. Historical influences**

Both English and Arabic have been influenced by several other languages throughout their histories, including Latin, Greek, and other languages of the Middle East and North Africa. This has contributed to the diversity and complexity of both languages.

## **1.7. Arabic and English in the World of Technology**

Arabic is the fifth most spoken language in the world and is used by millions of people around the world, including in countries where Arabic is the official language. As a result, Arabic has a significant presence in the tech industry, with many software applications, websites, and other technologies available in Arabic. This includes operating systems, productivity software, social media platforms, and more.

English, on the other hand, is the dominant language of the tech industry and is widely used in the development of software, websites, and other technologies. Many tech companies and startups are based in English-speaking countries, and English is the primary language used in the tech industry for communication, documentation, and development.

In addition to these differences, there are some similarities between using Arabic and English in technology. Both languages are used for communication and information sharing, and there are many resources and tools available in both languages to help people learn about and use technology.

Overall, both Arabic and English play important roles in the world of technology, and they are both widely used in the development and use of various technologies

### **1.8. Conclusion**

In conclusion, the English and Arabic languages have rich histories and cultural significance. English has evolved from its Germanic roots to become a global language, spreading through British colonialism and globalization. It serves as a lingua franca in various domains, including science, technology, and business. Arabic, on the other hand, has deep roots in Islamic culture and religion, with the Quranic heritage shaping its prominence. It has made significant contributions to literature, arts, and sciences.

Studying these languages is crucial for linguistic and cultural understanding. English, as a global language, allows for effective communication across diverse cultures and facilitates access to a wealth of knowledge and opportunities. Understanding English helps individuals navigate the interconnected world we live in.

Arabic, with its cultural and religious significance, provides insights into Islamic traditions and the cultural heritage of Arabic-speaking communities. It offers access to a vast body of literature, philosophy, and scientific advancements. Studying Arabic enhances cross-cultural understanding and fosters appreciation for diverse cultures and traditions.

Moreover, studying English and Arabic promotes intercultural dialogue and builds bridges between people from different linguistic and cultural backgrounds. It fosters empathy, promotes multiculturalism, and contributes to a more inclusive society.

In conclusion, the historical and linguistic backgrounds of English and Arabic demonstrate their profound impact on the global stage. Studying these languages is essential for linguistic and cultural understanding, promoting effective communication, and embracing the diversity of our interconnected world.

# **Chapter Two: Literature Revie**

**2.1. Introduction**

Language plays a crucial role in shaping societies and cultures, serving as a medium for communication, identity expression, and knowledge transmission. In the context of globalization and technological advancements, the prominence of certain languages, such as English, has increased significantly, leading to a complex linguistic landscape in many regions around the world. Algeria, as a multilingual country, experiences the dynamic interplay between Arabic, its official language, and English, a global lingua franca.

This literature review aims to explore the use and impact of English and Arabic languages in Saida City, Algeria, within the context of technology. Saida City, located in the western part of Algeria, is known for its rich cultural heritage and diverse linguistic practices. With the increasing influence of technology and globalization, it is essential to examine how these factors have shaped language use and attitudes towards English and Arabic in this specific locality.

The review will delve into various scholarly works, research studies, and relevant literature to provide a comprehensive understanding of the current linguistic landscape in Saida City. It will explore the sociolinguistic aspects of language use, language attitudes, language policies, and the impact of technology on language practices. By examining the dynamics between English and Arabic in Saida City, this review aims to contribute to the existing body of knowledge on language contact and language change in multilingual contexts.

Furthermore, this literature review seeks to shed light on the implications of language choices and language preferences in Saida City, particularly in education, media, business, and cultural domains. Understanding the patterns of language use and the attitudes towards English and Arabic in Saida City can provide valuable insights for language planning and policy-making, as well as inform educational practices and language revitalization efforts.

In conclusion, this literature review will critically analyze the existing research and literature on English and Arabic. By examining the sociolinguistic aspects and the impact of technology on language practices, this review aims to contribute to our understanding

of the complex dynamics between the mentioned languages in this specific locality. The findings of this review can have implications for language planning, education, and cultural preservation in Saida City and similar multilingual contexts.

## **2.2. Overview of the linguistic research area**

Linguistic research is a broad and diverse field that focuses on the scientific study of language and its various aspects. It encompasses a wide range of sub-disciplines, each exploring different aspects of language structure, usage, acquisition, and evolution. Here is an overview of some key areas within linguistic research:

### **2.2.1. Phonetics and Phonology**

Phonetics examines the physical properties of speech sounds, while phonology studies how sounds function within a particular language or language.

### **2.2.2. Morphology**

Morphology investigates the internal structure of words and how they are formed through the combination of smaller meaningful units called morphemes.

### **2.2.3. Syntax**

Syntax explores the rules governing the arrangement of words and phrases to form grammatically correct sentences.

### **2.2.4. Semantics**

Semantics focuses on the meaning of words, phrases, and sentences, and how meaning is constructed and interpreted in different contexts.

### **2.2.5. Pragmatics**

Pragmatics examines how context influences the interpretation of meaning, including the role of social and cultural factors in communication.

### **2.2.6. Sociolinguistics**

Sociolinguistics studies the relationship between language and society, including language variation, dialects, language attitudes, and language change.

**2.2.7. Psycholinguistics**

Psycholinguistics investigates how language is processed and represented in the human mind, including language acquisition, comprehension, and production.

**2.2.8. Neurolinguistics explores**

Neurolinguistics explores the neural basis of language processing, studying how language is represented and processed in the brain.

**2.2.9. Computational linguistics**

Computational linguistics combines linguistics with computer science to develop algorithms and models for natural language processing, machine translation, and other language-related applications.

**2.2.10. Historical linguistics**

Historical linguistics examines how languages change over time and investigates language families, language evolution, and language contact.

These are just a few examples of the diverse areas within linguistic research. Linguists employ various methods, including data collection, analysis, experimentation, and theoretical modelling, to gain insights into the nature of language and its role in human communication.

**2.3. English Dominance in the Digital Age**

English has firmly established itself as the dominant language of the internet and technology. One major contributing factor was the early commercialization of the Internet in English-speaking countries like the United States in the 1990s (Graddol, 1997). As the internet grew from its academic and military roots into a mass commercial medium, it was English-speaking companies like America Online, CompuServe, and Prodigy that drove its expansion and popularization (Crystal, 2003). These early internet companies established conventions and interfaces primarily in English, giving it an early advantage over other languages (Beinhoff, 1997).

Additionally, many of the foundational technologies and programming languages of the Internet were developed by researchers and engineers working in English-speaking nations. For example, HTML, the fundamental markup language of web pages, was

created by English speakers at CERN (Consortium for Open Scientific Computation) in the early 1990s (Berners-Lee, 1989). As a result, the internet's underlying infrastructure and protocols were largely English-based from the beginning.

English has also benefited from being a global lingua franca - a language widely adopted as a common means of communication between speakers of different first languages (Crystal, 2003). With no single dominant global power establishing its native language, English has filled this role due to its status as a common language in former British colonies and its continued prominence in fields like science, technology, aviation, diplomacy and business (Graddol, 1997). Its role as a shared language has lowered communication barriers between individuals and businesses internationally.

In summary, the early commercialization of the internet in English-speaking nations, the development of foundational web technologies by English engineers, and English's status as a global lingua franca have all contributed to it becoming the dominant language online and in the digital realm (Beinhoff, 1997; Berners-Lee, 1989; Crystal, 2003; Graddol, 1997). English's early advantages online have been difficult to overcome, cementing its continued primacy in technology and global digital communications.

#### **2.4. Challenges to English Dominance**

The rapid growth of technology use in non-English-speaking regions around the world has provided opportunities for local language revitalization (Warschauer et al., 2010). As access to the internet via mobile phones expands globally, more users can engage digitally in their native tongues rather than feel compelled to use English (ITU, 2020). For example, in the Middle East, where internet connectivity has increased substantially in recent decades, Arabic-language social media platforms and user-generated content have flourished (Ennaji, 2005). Platforms like YouTube, Facebook, and WhatsApp now host large Arabic-speaking communities (Ennaji, 2005).

Simultaneously, governments and companies have launched various initiatives to develop local language technologies. Governments in the Arab world like Saudi Arabia and the United Arab Emirates have funded projects to digitize Arabic content and localize software interfaces (Warschauer et al., 2010). Technology firms including Microsoft and Google have also expanded services into Arabic (Warschauer et al., 2010). Beyond Arabic, governments from China to Brazil have invested in creating localized digital tools

and interfaces in languages such as Mandarin and Portuguese to empower citizens in their native tongues (Warschauer et al., 2010). As localization efforts grow with advances in machine translation, the internet and its users are becoming increasingly multilingual (Hornberger, 2006). In summary, grassroots technology adoption and formal development efforts are helping sustain linguistic diversity globally (Ennaji, 2005; Hornberger, 2006; ITU, 2020; Warschauer et al., 2010).

### **2.5. Status of the Arabic Language in the Digital Age**

Before widespread internet adoption, the Arabic language faced various challenges to its vitality and modern relevance. Centuries of European colonialism eroded Arabic's status in government, education, and public life across the Middle East (Ennaji, 2005). By the late 20th century, many Arabic speakers were shifting toward English and French in professional domains (Ennaji, 2005). However, with rising connectivity in the new millennium, online platforms have provided opportunities for Arabic revival. User-generated social media content in Arabic has flourished, with platforms like YouTube, Facebook, and Twitter now hosting substantial Arabic-speaking communities (Ennaji, 2005). This grassroots online use among young Arabs helps maintain the language (Hornberger, 2006). Additionally, governments and technology companies have undertaken initiatives to develop Arabic-compatible technologies. For example, Saudi Arabia and the United Arab Emirates have funded efforts to digitize Arabic educational and cultural materials (Warschauer et al., 2010). Microsoft (2016) and Google (2018) have also launched programs to expand services and interfaces into Arabic. These combined formal localization activities and informal social media uses are helping secure Arabic's role for future generations in the digital world.

### **2.6. The rise of English in digital spaces and its influence on local linguistic landscapes**

The rise of the internet and online communication platforms has significantly impacted the linguistic landscape both online and locally. As English has become the dominant language of the digital world, its use has increased substantially across various online domains. Research shows English is now the primary language used on social media platforms (Statista, 2023), websites (DataReportal, 2022), and digital advertisements (eMarketer, 2022).

This increased prevalence of English online has influenced the linguistic landscape of Arabic-speaking regions. While Arabic remains the dominant language for everyday interactions offline (Central Intelligence Agency, 2022), the normalization of English in digital spaces has led to a "spillover effect" in local linguistic landscapes (Al-Issa, 2022). Studies have found a noticeable rise in code-switching between English and Arabic in public signage (Ennaji, 2005), product names (Al-Issa & Al-Bulushi, 2012), and even street signs in urban areas (Spolsky & Cooper, 1991).

In linguistically diverse communities, the online and offline linguistic landscapes reflect bilingual and multilingual realities. Research examining multiethnic cities found public signs and advertisements displayed languages according to the demographic composition to be inclusive of all language groups (Cenoz & Gorter, 2006). This visual representation of linguistic diversity online and in physical spaces fosters a sense of cultural pluralism (Landry & Bourhis, 1997).

In summary, as English usage has increased dramatically online, its influence is observable in the linguistic landscapes of both digital and local Arabic domains through code-switching and multilingual representation. Further research could explore how these correlations between online and offline linguistic practices may evolve with continued digital transformation.

### **2.7. The Impact of Technology and Globalization on the Arabic Language**

With the rise of technology and globalization, the Arabic language is facing challenges to its use and preservation locally. As younger generations increasingly use English and technology for education, work, and entertainment, their use of Arabic is declining (Abdulaziz, Al-Khalil, & Meo, 2010). This trend poses risks to maintaining Arabic as a living language within communities.

Technology platforms that young people engage with heavily, such as social media, are dominated by English (Al-Issa & Al-Bulushi, 2012). Sites like Facebook, Twitter, YouTube, and messaging apps default to English interfaces and content (Al-Issa & Al-Bulushi, 2012). While Arabic content and interfaces exist, they are less widespread and promoted. As a result, youth spend more time reading, writing, and communicating in English online rather than in Arabic. A survey of Saudi university students found they

used English for 62% of social media activities versus 20% in Arabic (Abdulaziz et al., 2010).

In addition, higher education and the job market increasingly require proficiency in English rather than just Arabic (Al-Issa & Al-Bulushi, 2012). College textbooks and resources are primarily published in English, pushing students to read and take notes in English rather than Arabic (Abdulaziz et al., 2010). Workplaces also use English as the main language for communication, meetings, and business dealings (Al-Issa & Al-Bulushi, 2012). A study of working professionals in the UAE found that 80% used English as their primary workplace language compared to only 10-15% who used Arabic (Abdulaziz et al., 2010).

The preference for English in education and careers means younger generations do not strongly develop their Arabic language skills after childhood (Al-Issa & Al-Bulushi, 2012). They communicate more in English even within their families and local communities. A survey of high school students in Saudi Arabia found that while all spoke Arabic at home as children, only 60% continued to do so regularly, with the other 40% switching to English at home (Abdulaziz et al., 2010). If this trend continues, standard Arabic may become limited to formal settings and contexts with less colloquial and informal use over time.

In conclusion, increased technology integration and the rising prominence of English are impacting the intergenerational transmission and local use of Arabic (Al-Issa & Al-Bulushi, 2012). More can be done to promote and develop Arabic content and skills to preserve the language despite these challenges (Abdulaziz et al., 2010). Policies supporting Arabic education, media localization, and workplace language laws may help maintain Arabic as a living language for future generations.

## **2.8. Population and Sampling**

The target population is Algerian shop owners who are active internet and technology users. A sample of 23 shop owner were selected through stratified random sampling from across Algeria to ensure representation.

### **2.9. The Research Approach of this Study**

This study employs a mixed-method research design using a questionnaire to collect primary data. A mixed-method approach is suitable to gather numeric data needed to analyze language use patterns and preferences among the target population.

### **2.10. Data Collection Instrument**

A structured questionnaire containing both open-ended and closed-ended questions was developed in Arabic and English. The questionnaire gathered data on respondents' use of and attitudes toward English and Arabic across various technologies.

### **2.11. Data Collection Procedure**

Questionnaires were distributed in paper format to shop owners in Saida City. Respondents were briefed on the study's purpose and gave consent. Completed questionnaires were collected immediately.

### **2.12. Data Analysis**

Data from closed-ended questions was analyzed using the Statistical Package for Social Sciences (SPSS). Descriptive statistics including frequencies, percentages, means and standard deviations were used to summarize responses. Content analysis was used to analyze open-ended responses. Results were presented using tables, figures and narratives.

### **2.13. Ethical Considerations**

Necessary approvals were obtained from relevant authorities. Respondents' anonymity and confidentiality were ensured. Participation was voluntary with informed consent. The study posed no harm to participants

# **Chapter Three: Data Analysis**

### **3.1 Introduction**

This chapter will analyze the data collected from a questionnaire distributed to 22 Shop owners and the observation of the linguistic landscape of the city by providing pictures and photos of shop signs around the city. The questionnaire gathered demographic information such as age, gender, level of education, as well as preferred languages. The data will be analyzed to find patterns, and correlations and conclude. Basic statistical techniques will be used such as calculating percentages, averages, and variances. The results will help understand the views of the sample population. This introductory analysis lays the foundation for further exploration and inference covered in later chapters.

### **3.2. Signs analysis**

Saida city is no different from other Algerian cities, its diversity is shown clearly in the rich linguistic landscape that is well seen in the numerous signs and banners used across its urban spaces. As such, it incorporates different types of language signs such as monolingual, bilingual, hybrid and multilingual notices. Over 32 signs were pictured and shown as examples.

#### **3.2.1. Monolingual signs**

Monolingual signs refer to signs that are intended for an audience that understands only one language. They are designed to convey information to people who speak just one shared language, rather than being multilingual signs aimed at multiple language groups. According to the collected pictures and photos it was noticed there were 23 monolingual signs with the Arabic being the dominant language with 9 signs (39% of the monolingual signs), while English 8 (34%), French 5 (21%), Italian 1 (4%).

Arabic being the dominant language indicates that Saida city is not dependent on language diversity, as most of the population is familiar with the Arabic language as it is their native language. In addition, it was used to attract attention since that language has deep cultural and historical roots in the region. Arabic connects the people of Saida to their shared heritage and traditions. While diversity can be positive, the common language of Arabic still plays an important role in the local identity and culture.

While the authorities using the Arabic language in monolingual signs such as road signs and governmental buildings indication signs, is nothing but a confirmation of the unshaken status of this language, which was also reinforced by the culture of that region as well as the deep relationship it has with Islamic religion.

Analysis of monolingual signs written in Arabic

### مخبزه وحلويات



A bakery shop is owned by an elderly man, who thinks the Arabic language is most fit for business and advertisement in Saida city due to its deep roots in the society, as well as its simplicity compared to other foreign languages.

## مقهى



Even though this coffee shop is mainly for youth, it still embraces the Arabic language and connects culture with the future.

## القائد للسياحة والاسفار



This travelling agency is using the Arabic language despite having international destinations, which indicates the influence that language has not only in the city but also in other cities or even countries.

لالة العروسة، بوعزة شوب، ملابس عربية



Even clothing shops in famous streets of the city tend to use Arabic to attract customers, not only because it is understandable by all categories of society, but also because it is eye-catching and attractive.

The English language has increasingly emerged as an important second language in Saida, Algeria in recent decades. Traditionally, French was the dominant foreign language taught and used in the country as a legacy of the colonial period. However, since the 2000s there has been a noticeable rise in the study and everyday use of English.

Power gym



One of the coaches in Gym Power implied that using an English sign signifies that his gym offers training methods and services on par with top international standards.



Quick is a fast-food restaurant, the owner used the word “quick” to advertise his fast service and their varied menus.

### Kids Island



Kids Island is a shop that sells kids’ clothing not only cultural but also modern and western clothing which explains the choice of the name and the language used.

There has been a noticeable increase in the presence of French on signs around the city. Historically, Saida served as an important port city under French colonial rule, and the French remained influential in the area even after independence. In recent years, more shops, restaurants and businesses have chosen to include French translations or even solely use French on their signs.

### **Pizzeria Flamant Rose**



A restaurant that relies completely on French even in their menus and sometimes communication with customers.



Doctors always tend to use French in signs as they are adapted to it since their studies are made with the French language in the first place.

In the case of the Italian language, it's been seen only once in the entire city, depending on that it has been concluded that Italian is still an unrecognized language by the Saidian society.

**Milano**

It is a small restaurant named after an Italian city, The owner who has been passionate about anything with a relationship with Italy decided to invest his passion in his small shop.

### 3.2.2. Hybrid Signs

Hybrid signs in linguistic landscape refer to signs that combine elements of two or more languages within the same sign. These signs acknowledge and represent the multilingual nature of communities where more than one language is used. Hybrid signs can take many forms such as including words or phrases from different languages, using different scripts or transliterating words from one language into the script of another. They serve to include linguistic minorities and convey a sense of cultural blending. There were 4 (12.5%) signs with hybrid elements were found.

#### بو عزة شوب



This sign for a women's clothing shop used the English word “shop” written in Arabic with the name of the owner so it could combine the elegance of Arabic fonts and the sense of modernism of English.

### 3.2.3. Bilingual Signs

Bilingual signs refer to signs that contain text or wording in two different languages. They are a common feature of the linguistic landscape, especially in areas where more than one language is used regularly. The use of bilingual signs allows information to reach a wider audience as both language groups can understand the message. In the case of Saida city,

there were 5 signs found (15%) and they were mostly either Arabic and French or Arabic and English.





### 3.2.4. Multilingual Signs

Multilingual signs refer to signs that contain text or writing in two or more languages. They are a common feature of the linguistic landscape, especially in areas where there are communities of people who speak different languages. Most of the signs in Saida city were monolingual or bilingual, therefore no Multilingual signs were noticed in the city during the search.

### 3.3. Pictures collected





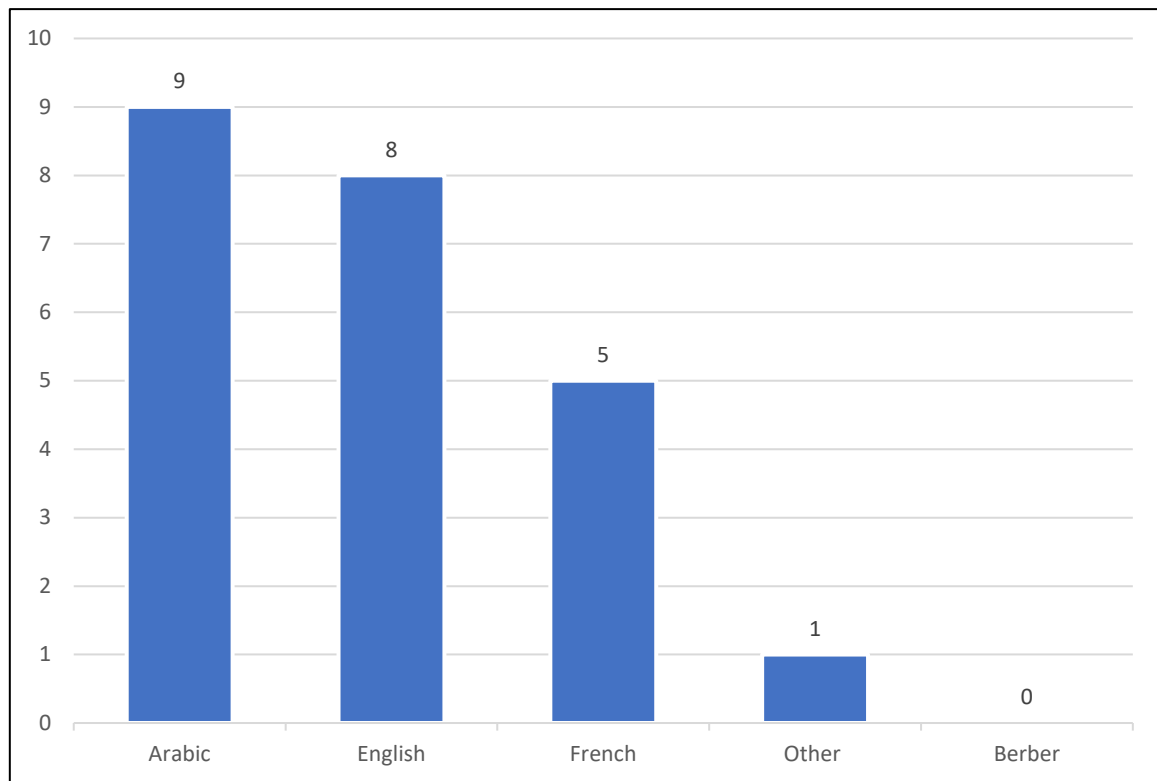




### 3.4. Questionnaire analysis

**Item 1.** What language(s) do you typically use in your signage/advertising?

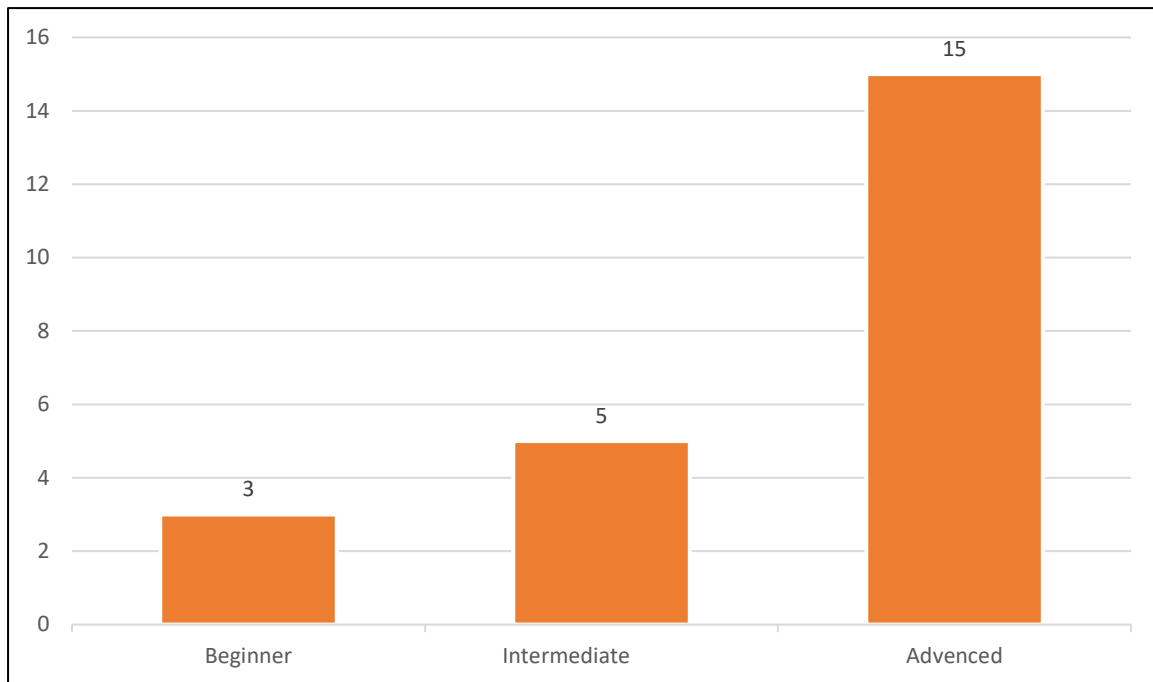
#### 3.1. Histogram: Sign languages chosen by shop owners



This question is a multiple-choice question; it intends to discover what is the most used language among shop owners in the area. It revealed some interesting results about the languages being used locally in in-store signs and advertising. While Arabic is an official language of Algeria and would be expected to dominate, it was found that only 9 of the 23 (39%) shops surveyed used Arabic exclusively in their signage and ads. A close second was English, with 8 (35%) shops opting to use English rather than Arabic or other languages. French was still moderately popular with 5 (22%) shops employing it. However, it was notable that 1 (4%) shop used another language besides these in their marketing. Berber, which is the first language of many Algerians, was surprisingly not utilized at all based on the responses. This data suggests that in the city of Saidia, English and French may be increasingly seen as more economically advantageous languages to connect with tourists and international customers compared to traditional Arabic or Berber.

**Item 2.** How proficient are you in that language (the language used in the sign)?

**3.2. Histogram:** Shop owner's proficiency in the selected language



The present question is made to determine the language levels of those using language in their store signs and advertisements. The results showed that 3 owners, which was 13% of respondents, were at a beginner level in the language used. Another 5 owners, making up 22% of the sample, were at an intermediate level. The majority, 15 owners or 65%, were at an advanced level of proficiency in the language displayed. In totality, the data demonstrates that while a small percentage of 13% were beginners, the vast majority of shop owners at 87% had at least an intermediate level or higher in the language featured on their storefronts and promotional materials

**Item 3:** Do you think that having signs in multiple languages could attract more customers?

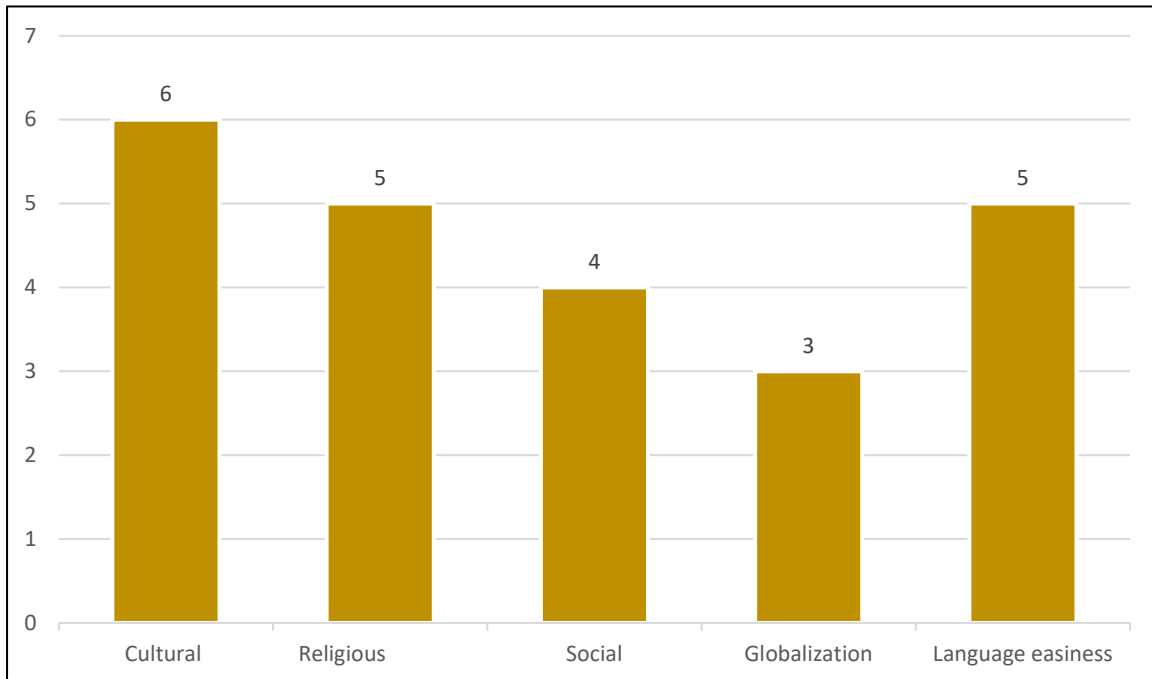
**3.3. Table:** The effect of multilingualism on social opinion

Option	Respondents	Percentage
a. Yes	17	74%
b. No	6	26%
<b>Total</b>	23	100%

Based on the results of this question, 74% of respondents answered yes, that having signs in multiple languages could attract more customers, while the remaining 26% answered no. This clear majority suggests that most shop owners believe that using multiple languages for signs would appeal to a wider customer base and potentially bring in more business. By making information and offerings accessible to customers who speak languages other than the primary local language, shops may be able to attract those customers who currently do not frequent their businesses but would be more inclined to if they could easily understand what is being advertised or promoted through multilingual signage. The minority view of 26% who responded no may reflect that they feel their customer base is already established or that the additional costs of multilingual signs are not worthwhile for their particular business context.

**Item 4:** What other factors do you consider when deciding on the language to use in your signs in Algeria?

This open-ended question was conducted to discover what affects language choice of the used languages on signs the results were filtered into 5 major categories: Religious reasons, social reasons, cultural reasons, globalization and Simplicity or easiness of the language.

**3.4. Histogram:** Factors affecting language choice on signs

The question's results show that cultural reasons have the strongest influence on language choice for signs, accounting for 26% of responses. Cultural traditions and norms seem to be a major determinant for many people and businesses when deciding what language to use publicly. Religious reasons came in second at 22% of responses, indicating that language is still tied to religious or faith identities for many. Social reasons, such as communicating with certain demographic groups, were the third most common factor cited at 17%. Globalization and the desire to appear more international or appeal to foreign visitors was a factor for 17% of respondents as well. Finally, the ease and simplicity of a language factored into the choice for 22% of people. While modernism or progressive ideals did not make the top five categories, these results demonstrate that language is still strongly tied to culture, religion, and the social landscape for many. Tradition and identity play roles alongside practical concerns of communication and business when choosing what language appears in the public sphere on signs.

**Item 5:** Do you advertise your shop on social media (Facebook/YouTube/TikTok...)?

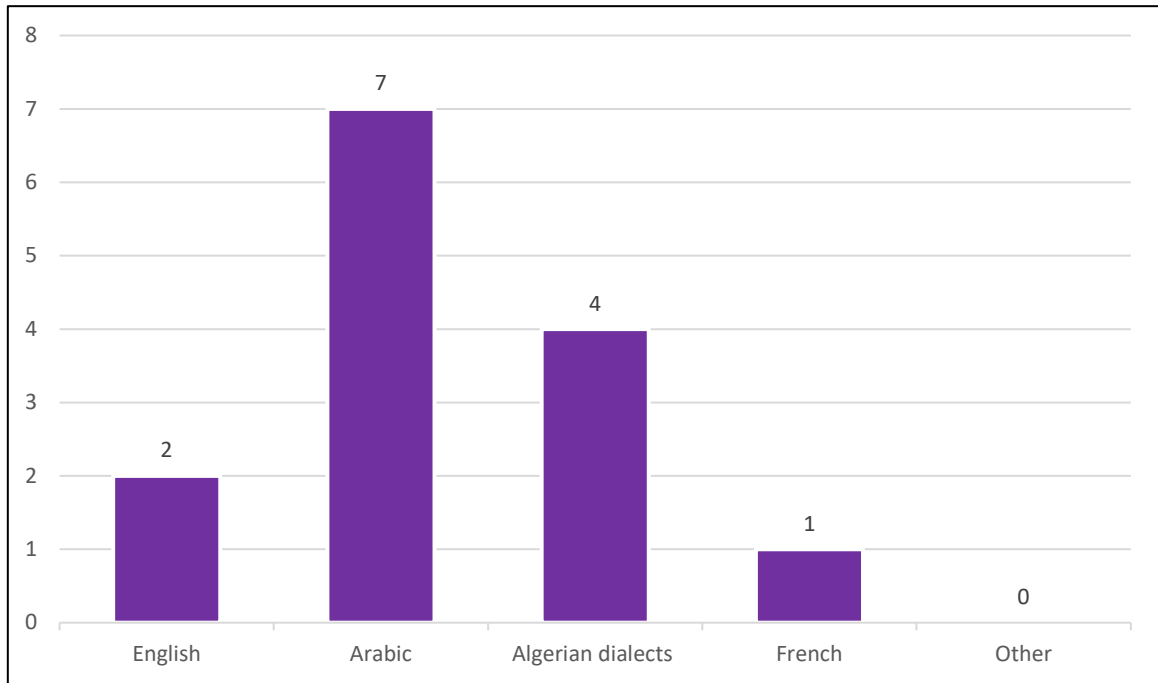
**3.5. Table: Shop owners' online advertisement**

Option	Respondents	Percentage
a. Yes	14	61%
b. No	11	39%
<b>Total</b>	<b>23</b>	<b>100%</b>

The question aimed to discover if shop owners utilize online advertising through social media platforms like Facebook, YouTube, and TikTok. Based on the results collected from 23 shop owners, it was found that 14 of them, which equates to 61% of respondents, said that they do advertise their shop on social media. Meanwhile, the other 11 shop owners, who make up 39% of those surveyed, indicated that they do not use social media advertising for their business. This suggests that the majority of shop owners, over half of those questioned at 61%, have adopted social media as a strategy for promoting their shop and reaching more customers online. However, the rest of the shop owners at 39% are not taking advantage of the marketing opportunities presented by platforms like Facebook, YouTube, and TikTok. Overall, the data demonstrates that while many local shop owners have embraced online advertising through social media, there is still a sizable portion that has not incorporated social platforms into their marketing approach as of now.

**Item 6:** What language do you use in online advertisements?

### 3.6. Histogram: Shop owners' online advertisement



The results of this question show that the majority (50%) of shop owners use Arabic in their online advertisements. Specifically, 7 out of the 14 shop owners surveyed utilize Arabic. The next most popular language is Algerian dialects, with 4 shop owners (28.6%) reporting they use a local Algerian dialect in their online ads. Two shop owners (14.3%) use English in their advertisements. Interestingly, only 1 shop owner (7.1%) reported using French in their online marketing. No shop owners selected "other" languages in the survey. In total, a minority of shop owners use languages besides Arabic in their online advertisements, with English and Algerian dialects being the next most common choices after Arabic. The data suggests Arabic is the dominant language used by shop owners in this sample to connect with customers through online advertising.

### 3.5. Conclusion

This questionnaire of local shop owners provided useful insights into the language choices being made for in-store and online advertising in the Saidia area. While Arabic remains an important language, especially for online marketing, English and French are increasingly

seen as beneficial for connecting with international tourists and customers. The majority of shop owners now have at least an intermediate level of proficiency in the languages they display. Most believe using multiple languages can attract wider audiences. Cultural and religious factors still strongly influence language decisions alongside practical concerns. However, over half of owners are embracing social media advertising, showing a recognition of its marketing potential. Overall, the data demonstrates a shift toward more multilingual approaches as shop owners strive to appeal to diverse customer bases in a globalized environment. Further research could explore trends over time and how language choices may change with evolving demographics and business needs.

# **General Conclusion**

## **General Conclusion**

### **4.1. General conclusion**

This study sought to compare and contrast the use of English and Arabic languages among residents of Saida City, Algeria in the age of modern technology. The findings revealed that while Arabic remains dominant for daily life interactions, English is more commonly used for technology-related tasks such as accessing information online. Younger generations showed higher comfort levels with English on the internet but still preferred Arabic for personal communication. Access to English education and resources online has increased in Saida City in recent years but remains more limited than availability in Arabic. Overall, the results provide insight into current language preferences and trends in technology usage in the local context

This research paper studied a hypothesis and conducted an experiment to test it. Below are the results that either confirm or disconfirm the original hypothesis based on the findings of the study:

The hypothesis that said: Factors like higher education levels, higher socioeconomic status, religious beliefs, and gender may influence greater use of and preference for English over Arabic online in Saida, is confirmed

The hypothesis that said: The increasing use of English in commercial signage and advertising in Saida over time has likely impacted the linguistic landscape by gradually decreasing the use of Arabic in visible commercial domains. Stores and businesses may use more English signs and ads to target customers with higher incomes and education who speak English well. Is disconfirmed as Arabic still hold its status as the dominant language of the city.

The hypothesis that said: The rise of technology and social media has probably impacted the use of English vs. Arabic in public spaces and the linguistic landscape of Saida by normalizing the use of some English in daily life. Platforms like Facebook, Twitter, YouTube etc. default to English interfaces which could influence language choices even in public offline spaces over time. It is confirmed since the youth are changing their mindset to catch up with the wave of modernism, as a consequence they depend on English more.

## **General Conclusion**

### **4.2. Summary of key findings:**

Even though English is more commonly used for technology and internet-related tasks like searching for information, using social media, and accessing entertainment online. Participants reported finding more content available in Arabic compared to English for these purposes.

Arabic remains the dominant language for daily interactions like conversations with family and friends, interactions at work or school, reading newspapers/magazines, and watching television. Participants indicated feeling more comfortable expressing themselves in Arabic for personal matters.

Younger respondents aged 23-30 reported higher proficiency and comfort levels with English online due to increased exposure through education and independent use of the internet/social media. However, they still preferred Arabic in most offline personal contexts.

Access to English language education and online resources has grown in Saida City but remains more limited than availability in Arabic. Internet connectivity and digital skills also impacted individuals' ability to access content in English.

### **4.3. Significance of findings:**

The study provides insights into current language preferences and trends among residents of Saida City when using modern technology. It reveals both the ongoing importance of the Arabic language locally as well as the growing role of English online.

Understanding these dynamics can help inform education policies to ensure locals have opportunities to learn English while maintaining cultural and linguistic identity.

The findings also provide guidance for technology developers on best supporting user needs and preferences in this environment through content localization and interface design.

### 4.4. Suggestions for future research:

- Conduct a longitudinal study revisiting the research questions every 5-10 years to track how language preferences and usage may change over extended periods of time. This would help monitor trends, especially as the younger generations who are currently more comfortable with English online grow older.
- Expand the scope of the study to include comparisons between urban and rural communities. Saida City represents an urban environment but language use may differ in rural areas with less access to technology and English education. This could provide a more comprehensive picture of the national situation.
- Supplement quantitative survey data with qualitative interviews of key stakeholders from education, business, government, and community organizations. Interviewing leaders and policymakers would provide contextual insights into the challenges and opportunities around promoting both Arabic and English languages in a digital Algeria. Areas to explore include curriculum development, job skills training, technology infrastructure plans, and cultural preservation initiatives.
- Conduct case studies of specific industries like technology companies, call centers, universities, etc. to understand workplace language policies and needs. This could offer applied recommendations for developing a bilingual workforce with the right mix of language abilities.

### 4.5. Conclusion

As the use of technology and digital platforms becomes ever more ingrained in everyday life, this study has provided valuable insight into the current interplay between the English and Arabic languages among residents of Saida City, Algeria. The findings reflect both opportunities and tensions as globalization increases exposure to English while cultural traditions remain tied to Arabic. If left unaddressed, such dynamics could potentially hinder full inclusion and participation in the technology-driven future for some segments of society. However, with continued research exploring language trends, needs, and policy impacts, governments and organizations can ensure their approaches to education, business and development support rather than undermine local identities and heritages. By promoting balanced bilingualism and culturally-sensitive technologies, all people of Saida City will be empowered to engage as active citizens of Algeria's digital transformation.

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# APPENDICES

Appendix A: Shop owner questionnaire (Original Version)

انا طالب ماستر في جامعة سعيدة، هذا الاستبيان مخصص لجميع المعلومات حول المشهد اللغوي في ولاية سعيدة. لن تستغرق الاجابة على الاسئلة أكثر من 5 دقائق وضمن أن كل المعلومات المحصلة من هذا الاستبيان ستعمل ليحتي فقط مع ضمان سرية هوية المجيب لذلك من فضلك اجب على الاسئلة اسفله.

إعربي طارق

العمر: .....

الجنس: ذكر ☐ انثى ☐

المستوى الدراسي: .....

1- اي لغة(ات) تستعمل عادة في لوحاتك الاعلانية/ إظهارك؟

☐ العربية ☐ الانجليزية ☐ الفرنسية ☐ الامازيغية ☐ اخرى ☐

2- ما مدى اقبالك لهاته اللغة/ات؟

☐ مبتدئ ☐ متوسط ☐ متقن

3- لماذا استعملت هذه اللغة في لافتة محلك؟

4- هل تعتقد أن امتلاك لافتة بلغات متعددة قد صاعدك على كسب الزبائن؟

☐ نعم ☐ لا

5- هل تعتقد ان هناك فرصة أكبر للزبائن ان يشعروا من محلات تستعمل العربية بشكل رئيسي؟

☐ نعم ☐ لا

6- حسب رأيك ما هي بعض العوامل التي قد تساعد في اختيار اللغة المستعملة في المحلات الجزائرية؟

7- ما نوع الزبائن الذين تتعامل معهم غالبا؟

☐ رجال ☐ نساء ☐ كبار السن ☐ شباب ☐ فئات اخرى ☐

8- ما اللغة التي تستعملها غالبا لاجراء المحادثات اليومية مع زبائنك؟

☐ العربية ☐ الانجليزية ☐ الفرنسية ☐ الامازيغية ☐ أخرى ☐

9- هل تروج لمحرك عبر مواقع التواصل الاجتماعي (فيسبوك، يوتيوب، تيك توك...)

☐ نعم ☐ لا

10- ما اللغة التي تستعملها للإشهاريات على مواقع التواصل الاجتماعي؟

☐ العربية ☐ الانجليزية ☐ الفرنسية ☐ الدارجة الجزائرية ☐ أخرى ☐

## Appendices

### Appendix A: Shop owner questionnaire (Translated Version)

I'm a Master's student at the University of Saida, This questionnaire is conducted to collect data about the Linguistic landscape in Saida city. It will not take more than 5 minutes to answer and I guarantee that all the information collected will be used for my research only and will remain anonymous, I kindly request you to answer the following questions.

Larbi Tarek

Age: .....

Gender: ☐ Male ☐ Female

Level of Education: .....

1- What language(s) do you typically use in your signage/advertising?

☐ Arabic ☐ English ☐ French ☐ Berber ☐ Other

2- How proficient are you in that language?

☐ Beginner ☐ Intermediate ☐ Advanced

3- Why did you choose this language for the signs in your shop?

.....

4- Do you think that having signs in multiple languages could attract more customers?

☐ Yes ☐ No

5- Do you think customers are more likely to purchase products from businesses that use Arabic?

☐ Yes ☐ No

6- What other factors do you consider when deciding on the language to use in your signs in Algeria?

.....

7- What type of customers do you deal with usually?

☐ Men ☐ Women ☐ Elder People ☐ Young People ☐ Other

## Appendices

8- What language/s do you use more to communicate with your customers?

☐ English      ☐ Arabic      ☐ Algerian Dialects      ☐ French      ☐ Other

9- Do you advertise your shop on social media (Facebook/YouTube/TikTok...)?

☐ Yes      ☐ No

10- What language do you use in online advertisements?

☐ English      ☐ Arabic      ☐ Algerian Dialects      ☐ French      ☐ Other

## Appendices

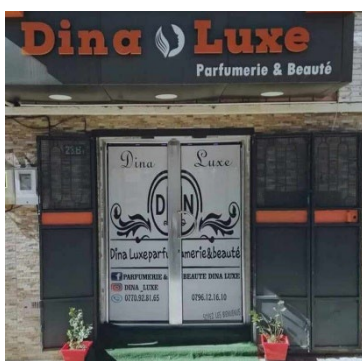
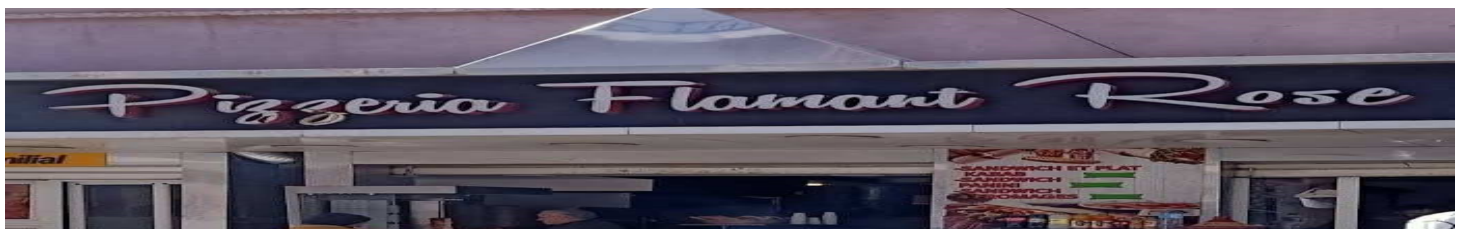
### Pictures used:



## Appendices



## Appendices



## Appendices

