Multilingualism in the Linguistic Landscape of Yemeni Cities: A Bottom-up Approach

Mohammed H. Abdulsamad
Lecturer, University of Shabwah, Yemen
Ph.D. Researcher, Hadhramout University, Yemen
mohammadghareeb2017@gmail.com

Prof. Dr. Hussein Ali Habtoor
Professor of Applied Linguistics
Dept. of English, College of Education at Ataq,
University of Shabwah, Yemen
haahabtoor@gmail.com
ORCID http://orcid.org/000-0002-5146-0774

Abstract

Yemeni society is Arabic-language speaking with very little attendance of minorities. However, English language appeared alongside Arabic in Yemeni linguistic scene due to its importance in commerce, marketing and tourism. This study investigates the phenomenon of multilingualism in LL in three cities, viz. Aden, Mukalla and Sieyun since they are the largest southern cities with the biggest displayed LL, and which are still untouched in relation to LL in general and multilingualism in particular. This bottom-up study adopts Reh's (2004) typology of signage, which is based on three criteria: mobility, visibility and informative aspects of content. This study answered two main questions 1) What are the characteristics of multilingual signage in Aden, Mukalla and Sieyun? And 2) How are these characteristics of multilingual signage distributed in the three targeted cities? It is a mixed-methods study which randomly collected 435 photos of signage from the three cities. The findings showed that (100%) of those signs are overt in terms of multilingualism visibility. As for mobility, it also revealed that fixed signs represent the overwhelming majority of signs (97%). The informative multilingual criterion marked a distribution of signs where most of them are either fragmentary (52%) or duplicated (40%) while only small and equal portions were found as overlapping (4%) and complementary (4%).

1. Introduction

Language is the main distinctive and important element in people's daily dealings, which in turn is divided into a spoken and written forms. According to Bousquet (2018), spoken language is the most used among people, but it quickly fades away in the same situation after the task for which it was said; having only its trace remaining forever. As for written language, that has an official and extensional usage, it remains displayed and visible for long periods in books, signs, manuscripts, commercial boards and public places.

The relationship between language and public space is utilitarian and reciprocal. Each of which needs the other to complete the performance of the message. Nash (2016) maintains that "language and landscape are obliged to each other. Language demands landscape, landscape expects language" (p.1). Regarding using multilingualism in specific places, Al-Athwary (2017) postulated that places and upper-class zones where many embassies and foreign companies located are suitable to exhibit multilingualism in signage. So, the motive behind the use of English as the original language of the sign is not only the desire to be more prestigious and fashionable, but also it is oriented to expatriates.

What is the linguistic landscape (henceforth LL) that appeared recently and was highlighted by many researchers? It is "The language of public road signs, advertising billboards, street names, place names, commercial shop signs, and public signs on government buildings combines to form the linguistic landscape of a given territory, region or urban agglomeration" (Landry and Bourhis, 1997, p.25).

LL is considered a new topic in the field of linguistics; therefore, it is worthy of research in all its aspects because it focuses on the written language and the way it is displayed. Moreover, LL explains and interprets linguistic implications as well as it shows the extent of people's interest about it. In addition, LL shows the extent of people's awareness of what these signs carry and reflect (Al-Athwary, 2017).

This study investigates multilingualism in the Yemeni LL in the three cities of Aden, Mukalla and Sieyun by manifesting the types that Reh (2004) authorized in her typology in terms of arrangement and appearance of multilingual writings in the signage. Three different parameters: mobility of multilingualism, visibility of multilingualism and types of multilingualism signage writings were highly displayed in the Yemeni society in a coincidence with Reh's (2004) typology. The researchers adopt this typology since it is more convenient and is based on multilingual LL of a community that has similar characteristics to the context of this study.

The appearance of a tremendous number of signs in cities of different places, some of which appear on the walls of stores and above the shop doors, expresses the extent of people's awareness of the importance of the displayed language to attract the attention of passers-by and perhaps as a commercial marketing (Sayer, 2009). Yemeni cities do not represent an exception; they have immense amount of multilingual LL. It is essential therefore to highlight the existence, characteristics and distribution of multilingualism in the LL of the three Yemeni targeted cities.

Multilingualism in LL has been the focus of many works in literature. In a recent study, Insyirah and Sudarwati (2021) shed light on the phenomenon of multilingualism on the LL in relation to the COVID-19 flyers in Pasuruan district in Indonesia. Their study concentrated on the usage of language on the COVID-19 flyers in Pasuruan, the impression of people regarding these linguistics signs and the preference of linguistics signs used on the COVID-19 flyers. The study revealed that the majority of society positively views the multilingualism phenomena on the COVID-19 flyers since it serves as intelligible, educational and effective means of the campaign to halt the spread of the virus. Moreover, Alomoush (2018) investigated LL in four Jordanian cities (Jarash, Almafraq, Zarka and Irbid) in terms of visual monolingual and multilingual practices enacted on shop fronts. He divided the signs into four categories: supermarkets, groceries, fashion stores and electronics. This study manifested a great presence of English language which constitutes an essential component of the construction of multilingualism in Jordanian LL. Also, Al-Athwary (2012) investigated the monolingual and multilingual signs in the LL of Sana'a city. He traced 1517 signs distributed on three main streets in addition to Sana'a University locality. This study manifested the high rate of Arabic language which was found in (97%) of the signs total, whereas English language was present in (53%). However, LL literature lacks investigating multilingualism in southern areas in Yemen like Aden, Mukalla and Sieyun. This paucity, in accordance with Al-Athwary's recommendation to conduct a comparative study of multilingualism in Yemeni LL, makes the researchers strongly believe that the study of such multilingualism in these cities is one of the urgent exigencies. Basically, this study seeks to answer the following two questions: what are the characteristics of multilingual signage in Aden, Mukalla and Sieyun? And how are these characteristics of multilingual signage distributed in the three targeted cities?

2. Literature Review

The term LL has been used in several ways. The prominent acknowledgement has been given to Landry and Bourhis (1997) whose definition of LL has emerged in multiple global studies. They defined it as "the language of public road signs, advertising billboards, street

names, place names, commercial shop signs, and public signs on government buildings combines to form the LL of a given territory, region, or urban agglomeration" (p.25). Similarly, Ben-Rafael, Shohamy, Amara and Hecht (2006) confirmed that the term 'linguistic landscape' is the study of any sign located outside or inside a public institution or a private business in any location.

2.1 LL categorization

There are different characteristics of signs suggested in the LL field. For instance, Ben-Rafael et al. (2006) put the first interesting distinction of linguistic landscape as "top-down" and "bottom-up". They also classified LL into two distinct groups: public and private. In addition, Backhaus (2007) used two similar terms for top-down and bottom-up in alternation with official and nonofficial signs.

2.2 Theoretical framework

The researchers adopt Reh's (2004) typology model of multilingualism for studying the characteristics of multilingual writings in LL in the context of this study. This model includes three parameters of multilingual writings: a) *spatial mobility* of signs in which signs are classified into two types: *stationary* (fixed) signs and *mobile* (moving) signs, b) *visibility of multilingualism* which divides signs into two types: *overt* (in which the same sign shows the text in more than one language) and *covert* (which refers to a sign written only in one language but has another counterpart in another language though in another place), and c) *information* arrangement on signs which distinguishes four types of signs: *duplicating*, *fragmentary*, *overlapping* and *complementary*.

2.3 Empirical background

Several linguistic studies have been conducted to examine the content of public signage and broaden the notion of multilingualism in LL. Some of these studies were international, and some cover regional and local aspects. For example, Backhaus (2007) in his study of multilingualism in Japan focuses only on multilingual signs in Tokyo's LL. He makes a clear distinction between public and private multilingual signs. This study revealed that, in terms of the number of languages and their arrangement on a sign, the two types of signs (i.e., official and non-official) are manifested differently in Tokyo's public sphere. These variations are justified in terms of "power" (expressed largely in official signs) and "solidarity" (expressed largely in non-official ones). Moreover, Brito (2016), in his investigation of multilingualism in Sweden, examines three neighbourhoods in the city of Malmö (Västra Hamnen, Möllevången and Rosengård) in order to investigate how multilingualism, specifically as a consequence of globalization, is negotiated within public space. The results of this study show that multilingualism holds a high value within the linguistic landscape of Malmö, Sweden, and that multilingualism is used in order to provide each neighbourhood with a unique sense of place.

Regionally, the Jordanian researcher Alomoush (2015) carried out a PhD dissertation to investigate the extent to which multilingualism is reflected in Jordanian LL. The researcher selected ten streets in each of six major Jordanian cities, including Irbid, Salt, Zarqa, Amman, Karak and Aqaba. The findings of this study revealed that multilingualism is the most omnipresent in Jordanian LL. Likewise, there is a recent study conducted in Najran, Saudi Arabia, by Al-Athwary (2022) who investigated the multilingualism in bottom-up signs. The study concentrates on the linguistic diversity in 450 shop signs. The analysis reveals that Najran's LL is more multilingual than expected. In addition to Arabic and English, the study manifested some foreign languages such as Malayalam, Bengali, Tamil and Hindi. Arabic language was the most dominant language with both informational and symbolic (cultural) roles. English came second serving the function of commerce and advertisement which shop

owners considered as both fashionable and prestigious. The use of the minorities' languages serves mainly as a psychological tendency to compensate for the feeling of being homesick, and it partially performs an informational function directed to the expatriate groups.

Locally, there is a scarcity in LL studies except Al-Athwary (2012) and (2017) who investigated the LL monolingualism and multilingualism in Sana'a city. The researcher took the capital city of Sana'a as a representative case study. He traced the arrangement of information in the inscriptions of multilingual signs in a given LL using a number of criteria like duplicating, complementary and mimicry writing.

LL in general and multilingualism in particular as a new and recent field of research in sociolinguistics has not taken its fortune of attention in the whole Yemeni territories. Therefore, the researchers become initially satisfied to lay the basement stone of investigating such multilingualism in visible language in LL in the Yemeni sphere especially in the three southern cities (Aden, Mukalla and Sieyun) to manifest the characteristics and the distribution of multilingualism in terms of arrangement of contents according to their mobility, visibility and informative aspects as shown in Reh's (2004) typology.

3. Research Methodology

3.1 Research design

To build upon previous researchers' efforts in using appropriate research designs to obtain accurate and reliable results, the researchers follow Abas (2019), Alomoush (2015) and Brito (2016) who employed both qualitative and quantitative methods to achieve greater accuracy in their findings. The selection of a mixed-methods approach enables the researchers to diverse the data. According to Creswell (2012), when the researcher has mixed qualitative and quantitative data at some stage of the research process within a single study, s/he can resort to use such design in order to understand the research problem more rigorously. Depending on the aforementioned statement, this study adopts both qualitative and quantitative approaches for gathering the required data. In this case, the researchers believe that the mixed-methods design is the most appropriate approach for the current study in accordance with Griffee's (2012) advice of selecting the kind of design that addresses the researcher's purpose and answers the questions of the study.

3.2 Population and Sample

Given that the study focuses on LL, the researchers select 435 photographs representing various multilingual signs in the three targeted cities (Aden, Mukalla and Sieyun) through a random sampling approach. Reasonably, having random photographs from the targeted areas is the best way to ensure the representativity of the sample selected.

3.3 Research instruments

A mobile's high-resolution digital camera of 64 mega pixels F/1.8 is used as an instrument for taking the photographs of multilingual bottom-up signs from the three-targeted cities.

3.4 Data collection procedures

According to Creswell (2012), gathering and doing data require going around to the intended location. For that, the researchers walked around the targeted cities taking random photographs of visible multilingual non-governmental signs in order to obtain the required data. To do this well, the researchers followed the track of previous researchers who used their personal cameras or their mobile phone cameras to collect the intended data of LL such as Al-Na'imat (2015), Brito (2016), Gorter (2006) and Hult (2009). Following this convention, the

researchers used an LT NOTE 30 mobile's camera to pick up the photographs of multilingual bottom-up signage in the three-targeted cities (Aden, Mukalla and Sieyun).

The researchers conducted fieldwork with a predetermined plan which guided the collection of LL bottom-up multilingual signs. This plan follows the procedure of taking a certain number of photos of multilingual sings from each city. Therefore, the researchers started taking photos one by one on a first-to-see manner till reaching the required number. The number of photographs picked from each city was 145. The purpose of taking photographs is to help the researchers find out the characteristics of multilingual signage as well as their distribution in the three targeted cities.

3.5 Ethical considerations and confidentiality

According to Creswell (2012), to respect the research site together with people, the researcher must obtain permission to use the site. Depending on that, the researchers of this study requested a verbal permission from each of the owners to take photos for their signs, and he explained how these photos would be employed in an academic study.

3.6 Data analysis procedures

To facilitate the mission of analysis of this study, the researchers adopted Reh's (2004) model to discover the characteristics and distribution of the collected multilingual signage. Each characteristic was investigated separately to manifest its ingredients in detail in terms of multilingualism displayed. The analysis process started by sorting the photos taken from each city according to three criteria: mobility, visibility and informative content. Then, the segmentation goes further into subtypes under each of these three categories. Mobility is subdivided into stationary and moveable, visibility is subdivided into covert and overt, whereas informative content is subdivided into four sub-types: duplication, fragmentary, overlapping and complementary. Once finishing the classification according to these characteristics, the researchers input the statistical data into Microsoft Excel sheets so as to make numbers and percentages as they are shown in the illustrative tables. In addition, the researchers expanded the analysis by thematic comments on the content of multilingual signages to help readers grasp the notional content of these LL signs.

4. Results and Discussion

This section presents the findings of multilingualism in Yemeni LL in the three targeted cities (Aden, Mukalla and Sieyun), and it answers the research questions adopting Reh's (2004) typology of multilingual signs that is divided into three main sections each of which has subsections. They are (1) *the spatial mobility of writings*, (2) *the visibility of multilingualism*, and (3) *the informative multilingual signs*. In the following lines, LL in each of the three cities will be tackled in detail.

4.1 Aden LL
4.1.1 Spatial mobility of the objects inscribed in Aden city.

As Reh's (2004) spatial mobility encompasses two types of inscribed objects (i.e., fixed and mobile). The fixed or stationary refers to the constant signs which are located on the shopfronts, buildings or large signboards, whereas the mobile indicates the portable inscribed objects and slogans as in the case of newspapers, T-shirts, vehicles and pushcarts. The results of this study displayed the characteristics of spatial mobility of multilingual signs in Aden city with a large difference between stationary signs 144 (99%) and mobile signs that represent only (1%). See Table 1.

Table 1
The distribution of spatial mobility of multilingual signs in Aden city

Type	Number	Percentage
Stationary	144	99%
Movable	1	1%
Total	145	100%

4.1.1.1 *Stationary multilingual signs.*

The researchers in this study gathered 145 of multilingual signs from Aden city. 144 signs (99%) out of the total number are stationary (see Table 1). This type of multilingual signs is more pervasive, more durable and consequently more expressive in conveying the symbolic message of a given public space than the non-permanent ones (Al-Athwary, 2012) (See Figure 1).

4.1.1.2 *Movable multilingual signs.*

The LL in Aden city manifests that there is a rare diversity of movable multilingual signs. Out of the total collected signs (145), there is only one movable inscribed object, (i.e., around 1%). This inscribed object manifested on movable vehicles hold multilingual writings. Reh (2004) praised such type of signs asserting that it attains its communicative goals only if the potential readership is mobile or if the text is repeated in a large number of locations. Figure 2 is an example of movable multilingualism signs in Aden.

Figure 1 Stationary multilingual sign in Aden city

Figure 2 Movable multilingual sign in Aden city

4.1.2 Visibility of multilingual writing in Aden.

In her typology, Reh (2004) distinguished between two types of visible multilingual writings: overt and covert. The first one is more pervasive. Therefore, it enables the passers-by to discern the visibility of multilingualism easily while the second one (the covert) needs some efforts to manage the multilingualism because its content is distributed between two segregate signs either at the same place or in two divergence places. This study displays the visibility of overt multilingual writings in Aden city in a high value which reached the peak (100%). However, unfortunately, there is no presence of covert signs in Aden LL.

4.1.2.1 *Overt multilingual signs.*

LL in Aden city displayed entire visibility of multilingual signs; the study registered the total number of signs (145) as visible or overt (100%). This type of signs almost predominantly outperformed the covert type in many studies. Alomoush (2015) revealed that there were wide ranges of visible languages on bottom-up signs in Jordanian areas under investigation.

4.1.2.2 *Covert multilingual signs.*

According to Alomoush (2015), *covert multilingual writings* appear when LL items are solely displayed in one different code. Reh (2004) elaborated that if different versions of a text are given on separate carriers, a message is available in more than one language, but its

multilingual nature is not visible to the reader. Based on this, the researchers found no covert signs in the city under investigation (See Table 2).

Table 2
The number of visible multilingual objects inscribed in Aden city

Type	Number	Percentage
Visible or overt	145	100%
Covert	0	0%
Total	145	100%

4.1.3 Informative multilingual signs in Aden city.

This is the third type in the reader-oriented typology of multilingual writings presented by Reh (2004) which relates to the specific combination of languages and information in the text. This type includes four classifications pertaining to the multilingual writings that the signs reflect. These classifications are arranged as follows: duplication, fragmentary, overlapping and complementary. See Table 3 which illustrates the distribution of the four types in Aden city in Yemen.

Table 3
The distribution of the four informative multilingual types in Aden city

Type	Number	Percentage
Duplicating multilingualism	60	41 %
Fragmentary multilingualism	70	48 %
Overlapping multilingualism	8	6 %
Complementary multilingualism	7	5 %
Total	145	100%

The contents of Table 3 exhibit the total number of the four informative multilingual types in Aden city. They are 145 items distributed disparately and respectively as fragmentary (48%), duplication (41%), overlapping (8%), and complementary (7%). These signs are all included under the bottom-up approach. Moreover, the disparate numbers and percentages are attributed closely to the appearance of transcripts on the signs.

4.1.3.1 *Duplicating multilingual signs.*

In duplicating multilingual signs, the texts on the signs are exactly displayed in more than one language; no more no less items. Reh (2004) affirmed that such signs acknowledge the existence of societal multilingualism; that is, the existence of more than one language in the target community. Similarly, Backhaus (2007) confirmed that duplicating multilingual writings are homophonic signs, which show complete translation or transliteration of two different languages. This means that all codes on the sign are exactly translated. In Aden city, the current study revealed that the duplication multilingual writings gained moderate fortune i.e., it has 60 signs out of 145 (41 %) (See Table 3).

The sign in Figure 3 is an exact example of duplicating multilingual writings in Aden city in which there are two equal texts in Arabic and English languages. This sign displayed distinctly the name of the shop *rukn alwahhag littijarah* 'Al-Wahhag Corner for Trading'. The purpose of selecting equal items in the two languages is to serve both monolingual and multilingual people. The accuracy in translating each single segment from source language (SL)

to target language (TL) appears in the whole sign. Moreover, additional information is also added for contact like telephone and WhatsApp numbers as well as e-mail address.

Figure 3 Duplicating multilingual sign in Aden city

According to Alomoush (2015), shopkeepers may manifest their self-identification in the linguistic environment, paying attention to the local community's distinctive traditions and culture. Therefore, duplicating multilingual writings are sometimes employed for linguistic commodification purposes.

4.1.3.2 *Fragmentary multilingual signs.*

After sorting the multilingual signs that are related to it, Aden LL revealed that 70 items (48 %) out of 145 could be classified under the second type of informative multilingual signs (fragmentary). According to Reh (2004, p.10) "the term fragmentary multilingualism is used for multilingual texts in which the full information is given only in one language, but in which selected parts have been translated into an additional language or additional languages" (See Figure 4). Here, the fragmentary multilingual signs achieved the first rank in Aden city. This number converges nearly with Al-Athwary's (2017) study in Sana'a which revealed (46.62%).

The sign in Figure 4 is an example of fragmentary multilingual signs in Aden city. It holds two clear texts in Arabic and English. The name of the restaurant and the services it provides are written in Arabic scripts (*mat'am Labeebah lilzurbyan – este'dad taam lilafraah walmunasabaat*). However, only the name of the restaurant is translated into English (LABEBA Restaurant). Such partial conveying for some information might reduce the message. Reh (2004) confirmed that local customers with a restricted knowledge of English will have access to information on such signs. However, the foreigner passers-by will never understand that this restaurant makes and serves only Adeni *Zurbyan* meal.

Figure 4 Fragmentary multilingual sign in Aden city

4.1.3.3 *Overlapping multilingual signs.*

In overlapping multilingual signs, only part of sign information is repeated in at least one more language while other parts of the text are in one language only. As Reh (2004)

elucidated that the notional content of the texts in the different languages is identical although their pragmatic form and, hence, their interpersonal meaning is not. For Backhaus (2007), there is no difference between fragmentary and overlapping signs In Aden city, the overlapping multilingual signs are not frequent like those appeared in Sana'a which were investigated by Al-Athwary (2017). (See Figure 5).

Figure 5 Overlapping multilingual sign in Aden city

Aden city registered eight signs out of 145 (6 %) of this type. The appearance of overlapping multilingual signs in Arabic LL is rare. Al-Athwary (2017) found the same scarcity of overlapping signs in Sana'a LL, i.e., around (0.2 %). In the overlapping multilingual sign in Figure 5 there are three scripts (*mat'am, PIZZA ISLAND* and *ai land*). The restaurant's name "*mat'am ai land*" was written in Arabic language on the two terminals of the sign while the notional content of the text "pizza island" is placed in the center of the sign in English language. Here the word "*mat'am*" was not translated. However, the word island has been transliterated in Arabicized English.

#### 4.1.3.4 *Complimentary multilingual signs.*
In this type of multilingual signs, the two written texts are used to complete each other. In other words, Reh (2004) clarified that complementary signs display texts in which different parts of the overall information are rendered in a different language. In such a case, one has to be familiar with all used languages in order to understand the sign, (Al-Athwary, 2017). Figure 6 shows an example of complementary multilingual writings in Aden city.

Figure 6 Complementary multilingual sign in Aden city

Such multifunctional sign is considered the typical example of complementary multilingualism in Aden city. It utilized English and Arabic to complete each other in performing the purpose. Arabic scripts are the master in the sign, so they are written in a thick font to indicate the shopkeeper's name "*ennahdy lil'asal*". However, the completion is in English to give the clients and passers-by more details about the quality of the provided products. In addition, there is exact translation for the upper left side statement *lilmontajat ettabe'ayah* "(for) natural products" to add a strong factor to entice people to buy (See Figure 6).

The LL in Aden city has shown its applicability in all divisions of Reh's (2004) typology according to which a varying share of each type is found. Commencing with the spatial mobility of the writings, it reaped a great number of *fixed* signs 144 (99 %), but only one *movable* sign was registered (1 %). Regarding the second section, the visibility of multilingualism on the signs, the *overt* subsection peaked 145 (100%) while there was no emergence for *covert* signs. For the third type of classification, the informational multilingual signs, the four types appeared in divergent rates: duplication 60 (41%), fragmentary 70 (48 %), overlapping 8 (6%) and complementary 7 (5 %). Flow chart 1 illustrates the whole pertinent information.
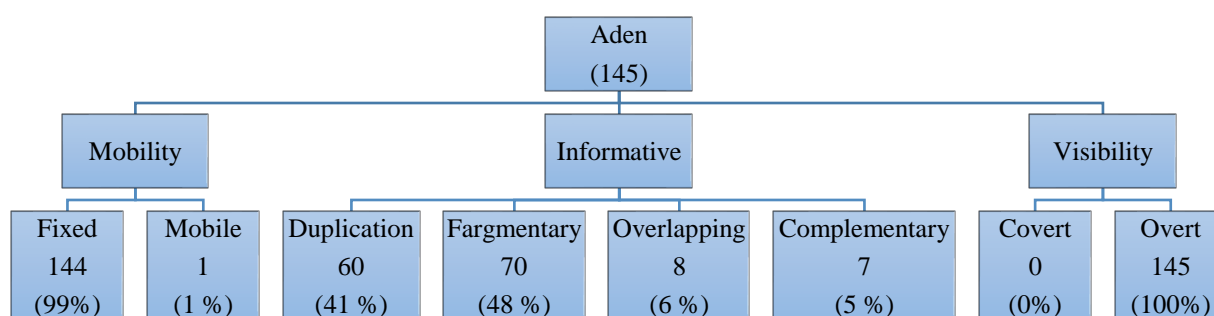
Flow chart 1 Distribution of multilingualism in Aden LL

4.2 Mukalla LL
4.2.1 Spatial mobility of the objects inscribed in Mukalla city.

The city of Mukalla views a good percentage of spatial mobility of the multilingual objects inscribed especially movable multilingual signs (5%) in comparison with Aden (1%). The importance of spatial mobility according to Reh (2004) is to fulfil the goal of communication since it has functioning dissemination system. Regarding the fixed division of spatial mobility in Mukalla city, the findings exhibit (95%). Table 4 shows these divisions of the collected photographs from Mukalla city.

Table 4
The distribution of spatial mobility of multilingual signs in Mukalla city

Type	Number	Percentage
Stationary	138	95%
Movable	7	5%
Total	145	100%

4.2.1.1 *Stationary multilingual signs.*

The current study gathered 145 multilingual signs from Mukalla city. 138 signs (95%) out of a total number are stationary (see Table 4). This type of multilingualism signs is more pervasive, more durable and consequently more expressive in conveying the symbolic message of a given public space than the non-permanent ones (Al-Athwary, 2012) (See Figure 7).

4.2.1.2 *Movable multilingual signs.*

As Table 4 shows, within the 145 signs taken in Mukalla city, there are seven signs (5%) out of the whole total are considered movable inscribed objects. These inscribed objects were manifested on movable vehicles that hold multilingual signs. Reh (2004) encourages such type of signs asserting that it attains its communicative goals only if the potential readership is mobile, or if the text is repeated in a large number of locations. Figure 8 is an example of movable multilingual signs.

Figure 7 Stationary multilingual sign in Mukalla city

Figure 8 Movable multilingual sign in Mukalla city

4.2.2 Visibility of multilingual writing in Mukalla city.

With regard to visibility, Reh (2004) divided multilingual writings into two main types. The first type is the visible (overt) multilingualism, and the second type is the invisible (covert) multilingualism.

4.2.2.1 *Overt multilingual signs.*

The LL in Mukalla city exhibits the visibility of multilingual signs. The current study registered the whole number of signs (145) as visible (100%). This type of signs predominantly outperformed the covert type in many studies. It is also in line with Alomoush (2015) findings which revealed that the overt multilingual signs are predominant.

4.2.2.2 *Covert multilingual signs.*

According to Reh (2004) The presence of covert multilingualism signs in any linguistic sphere reflects the significance of increasing number of inscribed items in one linguistic community, and it also asserts the fact that the majority of readers worldwide prefers reading texts in their most fluent – typically first – language even if they have knowledge of a second. However, unfortunately there is no appearance of such signs in the city under investigation (See Table 5).

Table 5

The number of visible multilingualism objects inscribed in Mukalla city

Type	Number	Percentage
Visible or overt	145	100%
Covert	0	0%
Total	145	100%

4.2.3 Informative multilingual signs in Mukalla city.

This is the third type in the reader-oriented typology of multilingual writing presented by Reh (2004) which relates to the specific combination of languages and information in the text. This type includes four classifications pertaining to the multilingual writings that the signs reflect. These classifications are: duplication, fragmentary, overlapping and complementary. Table 6 illustrates the distribution of these four types in Mukalla city in Yemen.

The contents of Table 6 manifest that the total number of collected signs in Mukalla city is 145 items. The fragmentary type was found in more than half of the total number (51%) followed by duplicating type which has (42%). The other two types complementary and overlapping got only (5%) and (2%) respectively.

Table 6
The distribution of the four multilingual types in Mukalla city

Type	Number	Percentage
Duplicating multilingualism	61	42%
Fragmentary multilingualism	74	51%
Overlapping multilingualism	3	2%
Complementary multilingualism	7	5%
Total	145	100%

4.2.3.1 *Duplicating multilingual signs.*

This type of informative signs exactly displays the same text in more than one language. In other words, the sign in this type includes the same text translated in more than one language. The current study found that this type of multilingual writings in Mukalla city was displayed in 61 signs out of 145 (42%) (See Table 6).

Figure 9 shows an exact example of duplicating multilingual writings in which there are two equal texts in Arabic and English. This sign holds the name of the shop's owner and it illustrates the type of commercial activity the shop can perform. The accuracy in translating each single segment from SL to TL appears in the whole sign.

Figure 9 Duplicating multilingual sign in Mukalla city

4.2.3.2 *Fragmentary multilingual signs.*

This is the second type of informative multilingual signs which occurred in Mukalla city LL more than the other types. It has 74 items out of 145 (51%). According to Reh (2004), "the term "fragmentary multilingualism" is used for multilingual texts in which the full information is given only in one language, but in which selected parts have been translated into an additional language or additional languages", (p.10). Figure 10 represents an example of fragmentary multilingual signs in Mukalla city.

Figure 10 Fragmentary multilingual sign in Mukalla city

This sign is an instance of fragmentary multilingual signs in the sense that only one part of the inscription is converted into English (BASMAIL) while the remained parts are still in Arabic language. Reh confirmed that local customers with a restricted knowledge of English will have access to information on such sign. However, foreigners will never grasp what is presented in this shop in spite of its close relation to companies' services where it provides industrial and safety equipment.

According to Al-Athwary (2017), such signs of multilingual writings support the view that English language is used here to fulfil the inclination of being modern, prestigious, successful, but never meant to be directed to tourists or foreigners.

4.2.3.3 *Overlapping multilingual signs.*

In this type of multilingual signs, only a part of the sign information is repeated in at least one more language while other parts of the text are in one language only. As Reh (2004) elucidated that the notional content of the texts in the different languages is identical although their pragmatic form and, hence, their interpersonal meaning is not (See Figure 11).

Figure 11 Overlapping multilingual sign in Mukalla city

Mukalla has evinced three overlapping signs (2%) out of 145. The researchers found that overlapping multilingual signs are seldom repeated in Mukalla as did Al-Athwary in Sana'a LL where only (0.2 %) of signs are overlapping. Figure 11 shows a sign in which the shop's name "ASSALAM" was translated exactly while the other two items are translated notionally. He utilized the word limited to manifest the borders of his shop's services as being for only two sorts: *ood and otoor* 'oud and perfumes'.

### 4.2.3.4 *Complimentary multilingual signs.*

In this type of multilingual signs, the written languages used to complete each other. In other words, Reh (2004) clarified that complementary signs display texts in which different parts of the overall information are rendered in a different language. In such a case, one has to be versed in the utilized languages in order to understand the contents of the sign (Al-Athwary, 2017). Figure 12 is an example of complementary signs in Mukalla city.

Figure 12 Complementary multilingual sign in Mukalla city

This multifunctional sign is the best example of complementary multilingualism. It utilized English and Arabic languages to complete each other and to perform the purpose. The sign involves four portions, each language has two. The English portions on the top "Eat it" are very clear and the transcripts are neat to reflect the shop name. The completion language (Arabic) only refers to some details about the services provided by this place; quick food. Such signs require complete knowledge of the two languages in order to understand and interpret the message reflected by the sign.

The LL in Mukalla city showed the presence of all divisions of the Reh's (2004) classification of multilingualism characteristics, as it achieved a varying share in each of them. The distribution of spatial mobility of the writings found that *fixed* type reached (95%), but the *mobile* signs have only (5%). With regard to the second section, the visibility of multilingualism on the signs, the subsection *overt* reached the peak (100%) while no portion for *covert* type. For the third type of classification, the informational multilingual signs, which contains four sections, the distribution is: duplication (42%), fragmentary (51%), overlapping (2%) and complementary (5%). Flow chart 2 illustrates the completely pertinent information.
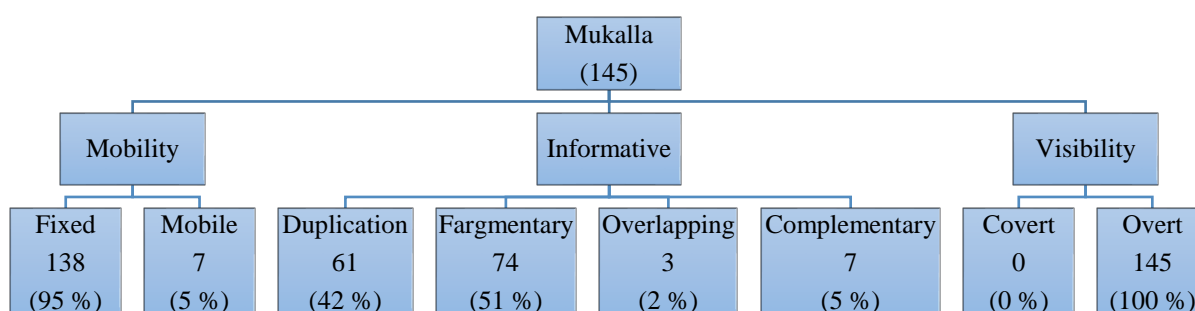
Flow chart 2 Distribution of multilingualism in Mukalla LL

4.3 Sieyun LL
4.3.1 Spatial mobility of the objects inscribed in Sieyun city.
Spatial mobility includes two types of inscribed objects i.e., the stationary and the movable. Table 7 shows the distribution of spatial mobility in multilingual signs in Sieyun city.

Table 7
The distribution of spatial mobility of multilingual signs in Sieyun city

Type	Number	Percentage
Stationary	141	97%
Movable	4	3%
Total	145	100%

4.3.1.1 *Stationary multilingual signs.*

This study gathered 145 of multilingual signs from Sieyun city. 141 signs (97%) out of the total number are stationary (see Table 7). This type of multilingual signs is more widely used, more durable and consequently more expressive in conveying the symbolic message of a given public sphere than the movable ones (Al-Athwary, 2012) (See Figure 13).

4.3.1.2 *Movable multilingual signs.*

The LL in Sieyun city shows that there is diversity of multilingual signs. Among the 145 collected signs, there are only four movable inscribed objects (3%) out of the whole total. These inscribed objects are manifested on movable vehicles which hold multilingual writings. Figure 14 is an example of movable multilingual signs in Sieyun.

Figure 13 Stationary multilingual sign in Sieyun city

Figure 14 Movable multilingual sign in Sieyun city

4.3.2 Visibility of multilingual writing in Sieyun.

In her typology, Reh (2004) differentiated between two types of visible multilingual writings: visible (overt) invisible (covert). The first one is widely disseminated. Therefore, it enables the passers-by to discern the visibility of multilingualism easily while the second one (the covert) needs some efforts to manage the multilingualism because its content is distributed between two segregate signs either at the same place or in two divergence places. The current study displays the visibility of overt multilingual writings in Sieyun city in a high value which reached the peak (100%). However, unfortunately, there is no presence of covert signs in Sieyun LL.

4.3.2.1 *Overt multilingual signs.*

Like Mukalla and Aden, the LL in Sieyun city displayed the entire visibility of multilingual signs. The study registered the total number of signs (145) as visible (100%). This type of signs predominantly outperformed the covert type in many studies like (Al-Athwary, 2017 and Alomoush, 2015).

4.3.2.2 *Covert multilingual signs.*

As Reh (2004) states that if different versions of a text are given on separate carriers, a message is available in more than one language, but its multilingual nature is not visible to the

reader. Based on this, the researchers did not find any of these signs in the city under investigation (See Table 8).

Table 8
The number of visible multilingual objects inscribed in Sieyun city

Type	Number	Percentage
Visible or overt	145	100%
Covert	0	0%
Total	145	100%

4.3.3 Informative multilingual signs in Sieyun city.

This type includes four classifications pertaining to the multilingual writings that the signs reflect. These classifications are: duplication, fragmentary, overlapping and complementary. See Table 9 which illustrates the distribution of the four types in Sieyun city in Yemen.

Table 9
The distribution of the four informative multilingual types in Sieyun city

Type	Number	Percentage
Duplicating multilingualism	52	36 %
Fragmentary multilingualism	82	56 %
Overlapping multilingualism	7	5 %
Complementary multilingualism	4	3 %
Total	145	100%

Table 9 exhibits the total number of the four informative multilingual types in Sieyun city. There are 145 items. These signs are all included under the bottom-up approach. Moreover, the difference in numbers and percentages is due to the fact that the transcripts of the collected signs appear differently. Furthermore, this study revealed that LL in Sieyun approximately resembles those appeared in Aden and Mukalla especially in the sequence of the tow top types fragmentary and duplication.

4.3.3.1 *Duplicating multilingual signs.*

In this type of multilingual signs, the sign holds a complete translation of its texts. The current study revealed that the duplication multilingual writings in Sieyun city compose (36 %) of the total number of 145 signs (See Table 9).

Figure 15 is an exact example of duplicating multilingual writings in which there are two equal texts in Arabic and English languages. This sign showed the name of "THE SPECIALIZED MEDICAL CENTER". The purpose of selecting equal items in the two languages is to serve monolingual and multilingual people. The accuracy in translating each single segment from SL to TL appears in the whole sign.

Figure 15 Duplicating multilingual sign in Sieyun city

4.3.3.2 *Fragmentary multilingual signs.*

Sieyun LL revealed that 82 items (56 %) out of 145 are of the second type of informative multilingual signs (fragmentary) which proved to be the most dominant in Yemeni LL in the three cities under investigation. Figure 16 shows a sign as an example of fragmentary multilingual signs in Sieyun city.

Figure 16 Fragmentary multilingual sign in Sieyun city

This sign is an example of fragmentary multilingual signs in the sense that only one part of the inscription is transliterated into English transcripts (ENSJAM) while the remaining two parts are still in Arabic language *deayah wa e'laan* 'advertisement'. Reh (2004) confirmed that local customers with a limited knowledge of English will understand and interpret the information on such sign. However, the foreigner passers-by may face difficulty to understand and interpret what is presented by this shop because the word *ensjam* is written in Romanized Arabic and the two Arabic words are not translated. Alomoush (2015) praised the use of Romanized Arabic or Arabicized English on signs claiming that it is helpful because it advocates linguistic tolerance and glocal identity, it encourages local names and cultural references, and it creates new functions like lexical needs and euphemisms.

4.3.3.3 *Overlapping multilingual signs.*

In this type, only a part of the sign information is repeated in at least one more language while other parts of the text are in one language only (See Figure 17).

Sieyun has revealed seven overlapping signs (5%) out of 145. Overlapping multilingual signs seldom appear in this city like Aden and Mukalla. In the signboard (in Figure 17), the shop's name "Qamar Mobile" was transliterated exactly while the rest items are left in Arabic language. The notional exaggeration appears in this sign when displaying "China in Sieyun", "everything related to your mobile is available, only costs you 500 riyals".

4.3.3.4 *Complimentary multilingual signs.*

In this type of multilingual signs, the written languages used to complete each other. In other words, only some content of the sign is written in one language and the other is written in another language in a way that each part completes the other to give the overall message of the sign. Figure 18 is an example of complementary multilingual writings in Sieyun city.

The multifunctional sign in Figure 18 is the best example of complementary multilingualism. It utilized English and Arabic to complete the purpose. The sign involves two portions; one for each language. They are equal in size and located on the sign top. The English portion is *king* while the Arabic is *boodah* which means 'ice-cream'. The local customer will face difficulty to interpret this sign from the first sight for the fuzzy relation between the two words (*king* and *boodah*). Such signs require complete knowledge of the two languages in order to understand and interpret the reflected message.

Figure 17 Overlapping multilingual sign in Sieyun city

Figure 18 Complementary multilingual sign in Sieyun city

To sum up, the LL in Sieyun city showed that Reh's (2004) classification of multilingualism characteristics can be applied to sort LL signs. With regard to spatial mobility, Sieyun signs are mostly *fixed* 141 (97 %) while only (3 %) are *movable*. For the second section, the visibility of multilingualism on the signs, the subsection *overt* reached the peak 145 (100%) while there was zero share for *covert* signs. For the third type of classification, the informational multilingual signs, the distribution is: duplication 52 (36%), fragmentary 82 (56 %), overlapping 7 (5%) and complementary 4 (3 %). Flow chart 3 illustrates the whole related information.
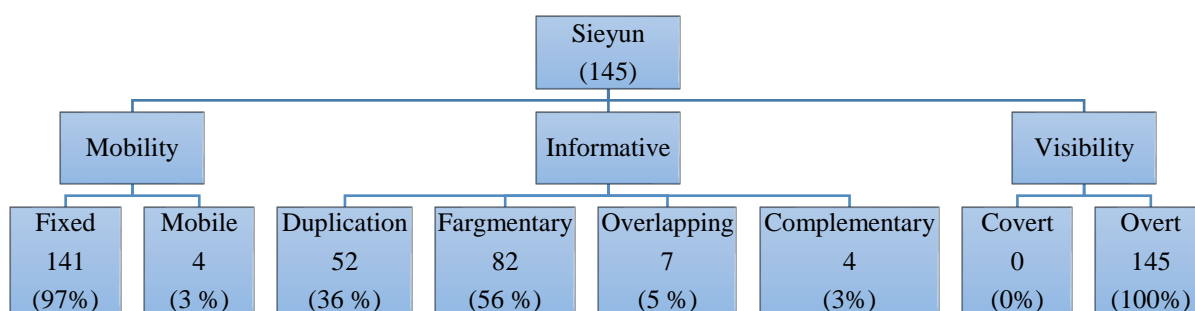
Flow chart 3 Distribution of multilingualism in Sieyun LL

To conclude, the current study of the Yemeni LL in the three cities under investigation showed all the types adopted by (Reh 2004) for the division of linguistic diversity. Different

numbers and percentages were exhibited for all sub-sections of multilingualism, except for the *covert* subsection in the visibility branch which did not record any appearance at all. This is in spite of its importance in Reh's (2004) study which illustrated that the presence of covert multilingualism signs in any linguistic sphere reflects the significance of increasing number of inscribed items in one linguistic community, and which also asserted the fact that the majority of readers worldwide prefer reading texts in their first language even if they have knowledge of a second. A total number of 435 signs were collected from the three cities equally (Aden - Mukalla - Sieyun) i.e., 145 sign from each city. The researchers divided these signs, according to Reh's (2004) classification for characteristics of multilingualism, into: 1) visible multilingual signs which included 435 with (100%) in the *overt* section while *covert* type was not present, 2) mobile multilingual signs which included 423 with a rate of (97%) in the *fixed* section and only 12 signs (3%) in the *movable* section, and 3) *informative multilingual signs* which were distributed among the 435 signs with a different proportions between the four sections. Fragmentary was mostly dominant by 226 signs (52%), duplication comes second with 173 signs (40%), whereas both overlapping and complementary reach 18 signs (4%) each.

The findings of this study are in agreement with similar studies such as Al-Athwary's (2017) which investigated the multilingual writings in LL of Sana'a city and showed that the Yemeni LL is free of the *covert* multilingual type. In addition, it also revealed a deficiency in the two types of multilingualism (complementary and overlapping). These two Yemeni studies are not in line with Reh's study in relation to complementary and overlapping types. For instance, complementary and overlapping multilingualism were much more frequent than those of duplicating or fragmentary multilingualism in Lira municipality in Uganda. This is simply because the speech community in Uganda is multilingual while it is monolingual in Yemen. Therefore, readers in that country face no difficulty in reading and interpreting complementary and overlapping multilingual signs because most of them are bilingual in more than one language, but the overwhelming majority of people in Yemen cannot do so. (See Table 10).

Table 10
The distribution of LL multiannual signs in Aden, Mukalla and Sieyun

CITY	MOBILITY		INFORMATIVE				VISIBILITY	
	FX	MO	DUP	FRA	OVL	COM	COV	OVE
ADEN	144	1	60	70	8	7	0	145
MUKALLA	138	7	61	74	3	7	0	145
SIEYUN	141	4	52	82	7	4	0	145
TOTAL	423	12	173	226	18	18	0	435
PERCENTAGE	97%	3%	40%	52%	4%	4%	0%	100%

Note: FX= fixed, MO=movable, DUP=duplication, FRA=fragmentary, OVL=overlapping, COM=complementary, COV=covert, OVE=overt.

5. Conclusion

5.1 Main findings

The current study gathered 435 photos of signs from the three Yemeni cities of Aden, Mukalla and Sieyun; with 145 signs form each. Based on Reh's (2004) classification of multilingualism characteristics, the overall results have shown that multilingualism is overt in all the obtained signs (100%). It has also shown that the vast majority (97%) of LL multilingual signs are fixed or stationary. Furthermore, and regarding the informative multilingual signs, it is found that more than half (52%) of the signs have fragmentary information. (40%) of these

signs were classified as duplication while the remaining (8%) was divided evenly between overlapping and complementary multilingualism.

In addition, it is found that Reh's classification is almost the same in the three cities under investigation. They were identical in the number of overt multilingual sings. They were almost similar in the fact that multilingual LL signs are mostly stationary. For the third criterion, the three cities have the majority of their signs being fragmentary and duplication signs, and only a minor portion was found to be either overlapping or complementary.

5.2 Scope and limitation of the study

This study is carried out in three Yemeni southern cities Aden, Mukalla and Sieyun to learn more about the phenomenon of multilingualism in the Yemeni LL. It traces Reh's (2004) types and distributions of multilingualism in LL in those cities. Needless to say, LL contains two major types top-down and bottom-up. The researchers only focus on bottom-up ones.

5.3 Recommendation and suggestions for further studies

After conducting this study, the researchers recommend that concerned authorities should activate their role in supervising the state of LL in Yemen. They should have some regulations that control the use of signs. They should also emphasise the importance of showing their mother tongue in signs. Linguistic supervision by specialists and translation centres should also be considered.

The researchers can also list some suggestions for further research projects. For example, this study tackled bottom-up multilingualism; therefore, top-down approach could be the basis for other studies. Another way of conducting a similar study could be the focus on a particular neighbourhood per se in order to discover the state of its LL. The language displayed in signage could also be discussed form linguistic perspectives like morphology, syntax, meaning-making and stylistic aspect.

References

Abas, S. (2019). *Commemoration, contestations and collective memory – a linguistic landscape study of Buenos Aires, Argentina* (Unpublished Doctoral Dissertation). Indian University. Argentina.

Al-Athwary, A. (2012). Exploring the Structure and Functions of Sana'a's Linguistic Landscape. *Journal of Social Studies*, (34), 9-45.

Al-Athwary, A. (2017). English and Arabic Inscriptions in the Linguistic Landscape of Yemen: A Multilingual Writing Approach. *International Journal of Applied Linguistics & English Literature*, *6*(4), 1-8.

Al-Athwary, A. (2022). Linguistic Landscape in Najran: A Sociolinguistic Approach. *Theory and Practice in Language Studies, 12*(12), 2559-2567.

Al-Na'imat, G. (2015). *Brand names in the linguistic landscape of Aqaba, Jordan*. (Doctoral Dissertation). Liverpool: University of Liverpool.

Alomoush, O. (2015). *Multilingualism in the linguistic landscape of urban Jordan*. (Doctoral Dissertation). University of Liverpool, Liverpool, UK.

Alomoush, O. (2018). English in the linguistic landscape of a northern Jordanian city. *English Today,*1-8.

Backhaus, P. (2007). *Linguistic landscapes: A comparative study of urban multilingualism in Tokyo*. Clevedon, UK: Multilingual Matters Ltd.

Ben-Rafael, E. Shohamy, E. Amara, M. and Hecht, N. (2006). The symbolic construction of the public space: The case of Israel. *International Journal of Multilingualism 3*(1), 7–30.

Bousquet, A. (2018). *A history of language and being in the Bible: An interpretation based on Heidegger and Dürckheim*. Koadig Press.

Brito, A. (2016). *Multilingualism and Mobility: A Linguistic Landscape Analysis of Three Neighbourhoods in Malmö, Sweden*. (Master's Thesis). Lund University in Sweden.

Creswell, J. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (4th ed). Upper Saddle River, NJ: Merrill/Prentice Hall.

Gorter, D. (2006). *Linguistic landscape: a new approach to multilingualism*. Clevedon: Multilingual Matters.

Griffee, D. T. (2012). *An introduction to second language research methods design and data*. Berkeley, California, USA TESL-EJ Publications.

Hult, F. (2009). Language ecology and linguistic landscape analysis. In: D. Gorter & E. Shohamy eds. *Linguistic landscape: expanding the scenery* (pp. 88-104). New York: Routlege.

Insyirah, A. and Sudarwati, E. (2021). Are you Covidient or Covidiot? A Linguistic Landscape Study on COVID-19 flyer in Pasuruan District. *Journal of English Language Teaching and Linguistics 6*(2), 319-341.

Landry, R. & Bourhis R. (1997). Linguistic landscape and ethnolinguistic vitality: an empirical study. *Journal of Language and Social Psychology*, *16*(1), 23–49.

Nash, J. (2016). Is linguistic landscape necessary? *Landscape Research*, *41*(3), 1-6.

Reh, M. (2004). Multilingual writing: A reader-oriented typology – With examples from Lira Municipality (Uganda). *International Journal of the Sociology of Language, 170*, 1–41.

Sayer, P. (2009). Using the linguistic landscape as a pedagogical resource. *ELT Journal Volume 64*(2), 143-155.

تعددية اللغة في المشهد اللغوي في المدن اليمنية: منهج تصاعدي

أ.د. حسين علي حبتور
أستاذ اللغويات التطبيقية، بقسم اللغة الإنجليزية، كلية التربية عتق، جامعة شبوة، اليمن
haahabtoor@gmail.com
ORCID http://orcid.org/000-0002-5146-0774

محمد حسن عبدالصمد
مدرس، جامعة شبوة، اليمن
باحث دكتوراة، جامعة حضرموت، اليمن
mohammadghareeb2017@gmail.com

الملخص

يتحدث المجتمع اليمني اللغة العربية في ظل وجود ضئيل للأقليات. وبرغم هذا، فان اللغة الإنجليزية تظهر الى جانب اللغة العربية في المشهد اللغوي اليمني نظراً لأهميتها في التجارة والتسويق والسياحة. تستقصي هذه الدراسة ظاهرة تعدد اللغات في المشهد اللغوي اليمني في ثلاث مدن هي: عدن والمكلا وسيئون؛ وذلك كون هذه المدن أكبر المدن الجنوبية ذات المشهد اللغوي الواسع، وكذا لعدم تطرق الدراسات السابقة للمشهد اللغوي بشكل عام والتعدد اللغوي بشكل خاص في هذه المدن الثلاث. تبنت هذه الدراسة التصاعدية تصنيف *Reh's* (2004) للوحات والذي يرتكز على ثلاثة معايير: الحركية، إمكانية الرؤية، والجانب المعلوماتي للمحتوى. وجاوبت هذه الدراسة على السؤالين التاليين: 1) ماهي خصائص اللوحات متعددة اللغة في عدن والمكلا وسيئون؟ 2) كيف تتوزع هذه الخصائص في المدن الثلاث المستهدفة؟ وقد احتوت هذه الدراسة الكمـنـوعية على 435 صورة للوحات اختيرت عشوائياً من المدن الثلاث. وقد أظهرت النتائج أن كل اللوحات التي شملتها الدراسة احتوت على تعددية لغوية ظاهرة (100%). وفيما يخص معيار الرؤية فقد أظهرت النتائج أن اللوحات الثابتة تمثل أغلبية بنسبة 97%. وبالنسبة للمعيار الثالث، فقد كانت تعددية اللغة في اللوحات جزئية (52%) مكررة (40%) بينما وُجِدَ جزء يسير يحوي تعددية لغوية متداخلة (4%) أو متكاملة (4%).

189