

Language Change and Stability in Algeria: A Case Study of Mzabi and Kabyle Berber

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Abstract

The current study aims at investigating language change and stability in two Berber speech communities, Kabyle and Mzabi. This study draws upon the following approaches to language change: The sociolinguistic approach (1968), the functional approach (1997), the evolutionary approach (2000), and the Labovian approach (2001). The primary objective of the study is to understand the nature of language change occurring in each dialect with particular reference to French and Arabic as prospective languages of contact. Another objective is to study the linguistic (language competence), extra-linguistic (attitude, nationalism and sense of identity) and social (gender, age, education) factors in play with regard to language change. The data has been collected using three different research tools: the Swadesh List, questionnaire, and interview. The study has found that there is a high level of language change in both dialects, mostly caused by Arabic. Another major finding is that there are different attitudes towards the varieties selected for the study. It is found that the Mzabi community favors MSA, while the Kabyle community favors French. In addition, the study has found that there are significant levels of linguistic variation in the speech of individuals from both communities. Finally, the study has shown that the social variables of “age, gender and education” play a vital role in determining all aspects of the study, i.e. “attitude, use, proficiency and variation”. The only remarkable difference between the speech communities with regard to these social variables is that the Kabyle community has more prominent gender-based differences, particularly among educated individuals.

Keywords: language change, language stability, Algeria, Berber, Kabyle, Mzabi

1. Introduction

The issue of language change and stability is crucial to the study of sociolinguistics in that one of the main contentions of sociolinguistics is that languages undergo change from time to time. Language change and stability are highly related to linguistic variation inasmuch as the variables most subject to variation are more likely to undergo a process of change (Labov 2001; Friðriksson 2008). It has been argued that change is inevitable in all human languages. However, the motives, the pace, and the degree to which languages change can vary from one society, language, dialect and/or linguistic level to another (Friðriksson 2008).

Language change has spilled a lot of ink over the past few decades. Despite the rich literature on the topic, linguists have conflicting views about what language change really is and what motivates it. Some linguists approach change as a language-internal phenomenon (Ohala 1993). They focus on the structural aspects of language that allow and motivate change. The second view approaches change as a language-external phenomenon that is related to language speakers rather than language systems (Milroy 1992; Weinreich, Labov and Herzog 1968). In fact, it can be argued that change is both language-internal and language-external in that change is driven by extra-linguistic factors. However, some linguistic features are more prone to change than others (Yang 2000).

On the other hand, it should be noted that stability is not the exact opposite of change. By all means, no linguistic system is entirely immune to change (Harris 2013). However, the rate at which languages change differs from one context to another; the slowest of these rates can be referred to as a state of stability. In this regard, Nichols (2008) states that “stable does not mean *immutable*, it means more resistant to change, loss or borrowing” (p. 284). Stability is often confused with maintenance. The latter means how a given language is maintained by its speakers in the face of the external factors such as occupation (Friðriksson 2008).

The social and linguistic differences between the Mzabi and Kabyle speech communities in Algeria are worthy of close attention. The sociolinguistic layout of these two communities can profess a keen interest to linguists in general and sociolinguists in particular. Despite that, the two speech communities received little attention from researchers and scholars. Of all aspects of society-language interplay, language change is the least investigated in these two speech communities as all can be found is studies about code-switching (Benhattab 2011), language maintenance and shift (Habbouche 2013) and language contact (Benhattab 2011). This shows that there is a paucity in the literature about language change and language stability in these two Berber speech communities. In light of this, the current study investigates language change and stability in the two social groups, who speak two different dialects, “Mzabi” and “Kabyle”, which pertain to the same language, “Proto-Berber” (Kossmann 2013). This study relates changes at the linguistic level to the social variables, namely gender, age, education and residence, and the extra-linguistic variables, namely attitudes, nationalism and language use.

The primary objective of the current study is to investigate the nature of language change affecting Mzabi and Kabyle. The study also aims at examining the role of social factors related to language change and stability, namely gender, age and education, as well as extra-linguistic factors, namely, attitude, nationalism and language use. In harmony with the objectives of the study, the study seeks to answer the following two questions:

- What is the nature of language change affecting Mzabi and Kabyle?
- What is the role of social and extra-linguistic factors in language change and stability in the Mzabi and Kabyle communities?

2. Background of the study

The following sections discuss the Algerian setting with regard to population, geography, languages and dialects, and the Mzabi and Kabyle communities.

2.1 Population and Geography of Algeria

Algeria is a country located in the middle of the Arab Maghreb. It extends upon 2.381.741 km², which makes it the largest country in Africa. Algeria's population is estimated to be more than 45 million inhabitants (CIA World Factbook 2017). It is a melting pot of ethnic groups including Berbers, Arabs, Turks, Sub-Saharan Africans and Andalusians (Benrabah 2007). Berbers or Amazigh (plural Imazighen), meaning free or noble men, are the indigenous inhabitants of Algeria (Achab 2012). Algeria was populated by many empires and dynasties over time such as ancient Numidians, Phoenicians, Umayyads, Abbasids, Ottomans and the French colonial empire (Lacoste, Nouschi and Prenant 1960). The conquest of Algeria by the French in 1830 lasted more than 130 years and resulted in the decline of the population by more than one third. The consequences of the French conquest were seen at the economic, cultural and social levels of the Algerian community (Chitour 2004). The modern society in Algeria seems to be composed of three main ethnic groups: Arabs, Berber and Francophiles. The division is based on an intellectual rather than ethnic considerations and corresponds to three main languages: Arabic, Tamazight and French.

2.2 Languages of Algeria

Modern Standard Arabic (MSA) is the standard language of today's Arab World. It is used in many domains like religion, government, education, mass media, law, etc. It is also considered as the national and official language of Algeria. In addition, Algerian colloquial Arabic infuses French and even Berber in its vocabulary. It is the language of everyday life, home and street and is the mother tongue of most of the population. Berber and its different varieties that include Chaouia, Kabyle, Mzabi and Touareg are spoken in the Berber community. It is estimated that one quarter of the Algerian population speaks this language (Ethnologue 2012). French, on the other hand, is an important part of the Algerian linguistic repertoire. It was introduced to Algeria during the period of the French occupation and lasted even after the independence. In fact, Algeria is the second largest francophone country in the world. French is used in the media, education, and everyday life by many Algerians. It is estimated that more than two thirds of the Algerian population speak and understand French (Benrabah 2007; Ethnologue 2012).

2.3 Berber Language in Algeria

Tamazight is the language of the Amazigh in North Africa and some parts of Mali and Niger. The language is referred to as Berber or the Amazigh language (Roberts 2014). It is documented that it is the language of the indigenous people in North Africa (Achab 2012). Berber pertains to the African branch of the Afro-Asiatic language family, which can be referred to as the Hamito-Semitic, as opposed to the Central Semitic language family (Achab 2012; Wolff 2013). The language uses a form of an ancient script that is called Lybico-Berber Script or Tifinagh “/tɪfɪnæʃ/” (ⵜⴰⴳⴷⵓⴷⴰⵢⵜ). However, the use of ancient Tifinagh is not very common among Berber speakers. By the year 2003, a new form of writing system had been adopted in Morocco, and had been known as “Neo-Tifinagh” (Wolff, 2013). However, Berber speakers prefer to use either Arabic or Latin alphabet in writing Berber. It is estimated that Berber is spoken by roughly 14 million people; most of them are in Morocco and Algeria (Wolff 2013).

After the independence of the Great Maghreb countries, a movement of Arabicization was initiated in order to regain the nation sovereignty. Arabic started replacing French in the formal domains such as education and media (Benrabah 2007). However, such measures caused Berber to be suppressed as it was not recognized as a national language (Watanabe, 2014). As a result, a movement of civil activism started in 1980 in the Kabyle state of TiziOuzzou, which demanded the recognition of Berber as an official and national language (Watanabe 2014). After a long turmoil, the Berber identity and language eventually received some recognition. The Berber language was recognized as a national language in Algeria in 2001, but it was not until 2016 that it gained an official language status alongside Arabic.

2.4 The Dialects of Berber

It should be noted that the communities where Berber is spoken do not constitute a continuous geographical setting. Instead, the language is spoken in small detached areas all over North Africa. This perhaps leads to some dialects to grow apart and become somewhat mutually unintelligible (Chaker 1996; Haddaddou 2000). There are five main dialects of Berber in Algeria:

- **Kabyle:** this dialect is used in the central north areas of Algeria, namely in TiziOuzzou, Bouira, Bejaia. It is the most prevalent dialect in Algeria as it is estimated that the number of Kabyle speakers surpasses the number of all other Berber speakers combined (Haddaddou 2000).
- **Mzabi:** this dialect is spoken mainly in Ghardaia, 600km south of Algiers (Chaker 1996). The speakers of this dialect form a minority, yet they make an intact institution within the Berber people, in specific, and the Algerian community, in general.
- **Chaoui:** The Chaoui dialect is spoken in the Aures Mountains in three states, namely, Batna, Khenchla and Souk Ahras. It is the second most prevalent Berber dialect in Algeria (Benhattab 2011).
- **Touareg:** this is a less known dialect because it is spoken by a minority group in the southern borders of Algeria. Chaker (1996) considers it to be the most preserved dialect among all Berber dialects.
- **Chenwi:** the Chenwi dialect is spoken in some northwestern states in Algeria such as Tipaza and Cherchel.

2.5 The Speech Communities Investigated

The current study investigates two Algerian speech communities, which are Mzabi and Kabyle. These two speech communities were selected because they are the most well-known speech communities in Algeria.

2.5.1 The Mzabi Speech Community

There are various Berber-speaking dwellers in Algeria. Some of them come from a smaller population such as Chenoua and Mzabi, whereas others come from a larger population such as Kabyle (Roberts, 2014). The Mzabi, also called Tumzabt, are by far one of the smallest Berber populations of Algeria. The number of Mzabi, according to the 2016 Census, is 155,000 scattered across 5 oases: Ghardaia, BeniIsguen, Melika, BouNoura, and El Ateuf (Ethnologue 2012). The word Mzabi comes from the Arabic name “Mosaab”, their great grandfather (Dabouz 2016). This group is well-known and widely

recognized although it is much smaller and less diverse than its Kabyle counterpart. Interestingly, the Mzabi are congregated in the center of Ghardaia, 600 km south of Algiers, along the Mzabi valley. Unlike other Berber groups, Mzabi are known for their gift for business all over the country. Moreover, Mzabi are so conservative in terms of their religion, traditions and origins, and they tend to value their blood and ethnic ties more than anything else (Benhattab 2011). They mainly speak Mzabi besides Algerian Arabic, MSA and French. Women are said to be virtually monolingual in the Mzabi speech community (Grimes 2003, 222).

2.5.2 The Kabyle Speech Community

Kabyle people represent the largest ethnic community in Algeria, dominating the other Berber groups with a number of 5,675,000 speakers (Ethnologue 2012). Their homeland is originally the highlands and mountains of Kabylie (or Kabylia) in Northeastern Algeria. They live in several regions/wilayas. The region of Kabylie is divided, both geographically and linguistically, into upper/big and lower/small Kabylie on the basis of the mountain elevation and the speakers' dialect. The region of Kabylie enwraps three large mountain chains: Djurdjura in the south, Kabylie coastal chain in the north and Agawa chain where TiziOuzzou is located. TiziOuzzou is considered the cultural hub of upper Kabylie, while Bejaia is the economic center of lower Kabylie. Besides TiziOuzzou and Bejaia, the Kabyle dialect is also spoken in Bouira, Blida, Boumerdes, Bordj BouArreridj, Setif, Jijel and Algiers. Moreover, the Kabyle are known for migration as nearly half of them live in Europe, mainly France. Interestingly, the Kabyle also speak Algerian Arabic and French fluently (Nait-Zerad 2004).

3. Literature Review

3.1 Empirical Studies

A comparative historical examination of linguistic and social differences between human dialects and societies has been of great interest to many scholars. In the bulk of literature concerning language change and stability, researchers have tracked the factors and conditions underlying them. For instance, Braunmuller et al. (2014) outline the conditions for language change and stability by taking into consideration the mechanisms that are relevant to them both, such as political and economic factors as well as prestige and attitudes, etc. They focus on European, namely Germanic, languages. Similarly, Milroy and Milroy (1985) explore the differences in the development of English and Icelandic in relation to the social networks existing in both societies. Due to the weak tie networks, English has changed quite radically, whereas Icelandic remained unchanged because of the strong ties of kinship and friendship networks. Milroy and Milroy (1985, 380) conclude that "in situations of mobility or social instability, where the proportion of weak links in a community is consequently high, linguistic change is likely to be rapid". In his study of Icelandic and Faroese, Trudgill (2002) refers to geographical isolation and low level of contact as main factors of language stability. The Icelandic and Faroese varieties are considered, to a certain extent, vital examples of language purism (or linguistic stability). Besides the geographical and social factors, language policies set by the councils of these two communities and people's support of

these attempts help a lot in maintaining their stability and keeping them free from foreign influence. What urged Icelandic and Faroese to be more stable was the people's desire to gain independence from Denmark, which, in turn, raised their sense of nationalism, and, thus, caused them to keep their language free from foreign influence (Braunmuller et al. 2014).

In this vein, Friðriksson (2008) makes a link between stability, attitudes and language planning as explanatory factors maintaining stability. Friðriksson (2008) shows how nationalistic sentiments, language ideology, and linguistic pride of Icelandic people contributed to the stability of the Icelandic language, which is similar to what happened in Faroese and Croatian (Petersen 2010; Braunmuller et al. 2014). In addition to national identity, linguistic membership within a group with peculiar linguistic characteristics can be a favorable factor in signaling dialect stability. For example, members of the Flemish dialect tend to have positive attitudes with “a local flavor” to mark their local linguistic affiliation. This led this dialect to have a substantial level of stability.

Interestingly, speakers preserve their dialect not only from foreign effect but also from a neighboring one. They do this to express loyalty and membership to their language and group, i.e. “neighboring opposition” (Larsen 1917, as cited in Trudgill 1988, 554). In certain contexts, speakers want to distinguish themselves from the neighboring speakers by accentuating the salient differences and thus creating a large linguistic distance. The aim is to mark themselves as a unique and different group from surrounding groups or dialects.

At this juncture, it is important to provide examples of high levels of linguistic stability in contact situations where the languages in question are closely related as in the case of Low German and Danish. In normal situations of genetically close varieties, the chance for transfer is high. However, these two varieties show little, if any, interference and have retained their stability despite contact (Bock 1933, cited in Braunmüller et al. 2014). In fact, such situations indicate rather a structure-induced stability where the structural features of the languages in question prevent change due to its complexity. The Balto-Slavic languages against the Uralic languages (Finnish and Estonian) are a perfect illustration of that. The case system of the Uralic languages is quite complex “and thus exercise[s] a conserving influence on the Balto-Slavic languages” (Braunmuller et al. 2014, 27).

In addition, the different grammatical systems of the languages can be a further explanation for this inter-linguistic stability. For instance, the processes of inflectional fusion and reduction occur frequently in the Balto-Slavic languages but rarely in the Uralic languages (Thomason and Kaufman 1988). To illustrate more, Fischer, Gabriel and Kireva (2014) tackle the Sofian Judeo-Spanish language of Bulgaria investigating its syntax and phonology. They come to the realization that the syntax of this variety is more stable than its phonology which is influenced by the local Bulgarian language. The findings are not surprising as it makes sense for syntax to be stable by means of being a relatively deeper linguistic level that speakers are not fully conscious of.

Berg (2014) approaches these intricacies with more specificity. He deals with an internal narrow feature concerning case marking in high and low German varieties. He focuses on definite articles of neuter gender solely. His findings show that the full forms of the definite article in Low German are more

stable than the cliticized forms. The latter forms are converging towards standard German, i.e. “more receptive to standard German influence” (Berg 2014, 71). Thus, the case system for the fully realized definite articles is retained unlike the reduced forms, which have a new dative case emerging under the influence of standard German (Berg 2014; Braunmuller et al. 2014). In certain contact situations, varieties may not be affected as a whole as only certain features change and the others remain stable (Milroy and Milroy, 1985; Thomason and Kaufmann, 1988; Trudgill, 2010; Braunmuller et al. 2014; Berg 2014).

Van (1992) provides a distinct perspective on stability away from society, politics, locality, membership and other languages ideologies. In his study of standard Dutch and Dutch dialects influences, he does not utterly neglect such factors but rather considers them as being "less important than the process of second language learning" (Van 1992, 182). He links stability of language elements including patterns and rules in his framework with the process of second language learning combining almost all elements of language (phonology, morphology, word order, etc.). Sharing the same ideas, Van Coetsem (1988) used the terms *source language agentivity* and *recipient language agentivity* in which the speaker is the agent. He explains the relationship between second language learning and stability. In source language agentivity, the second language learner speaks L2 transferring elements from L1 to L2 such as pronunciation (shibboleths). In recipient language agentivity, the L1 speaker borrows, mainly words, material from L2. Thus, those elements that are easily transferred from L1 to L2 are labeled stable, while those that are easily borrowed are unstable (Van Coetsem 1988, 3). Following Van Coetsem's path, Van (1992) explains this penetration from L1 to L2 by the degree of consciousness speakers have for certain elements as it is a determining factor of stability.

3.2 Theoretical Aspects of Language Change and Stability

Contending that all languages undergo a relative process of change does not imply that all languages change in the same fashion, neither does it dismiss the fact that some linguistic aspects remain relatively stable. For all intents and purposes, some linguistic features must remain stable to warrant comprehension (Rundblad 1998).

Many linguists accept the fact that most linguistic features will acquire a variable at some point in time (Weinreich et al. 1968). These "variant characteristics" beget linguistic variation precipitating language users to select among the variables. This process, often referred to as innovation (Milroy and Milroy 1985; Milroy 1992), is believed to be related to language change in some manner inasmuch as "language change implies variation (though not the reverse)" (Sankoff and Blondeau 2007). The new variable may replace the **core** variable, i.e. **replacive change** (Trudgill 2010), or it may lead to “diversification and creation of new grammatical categories” (Heine and Kuteva 2005, 258), i.e. **additive change** (if we focus on the fact that the set of variants has changed) (Trudgill 2010) or **additive stability** (if we focus on the addition of variants and maintenance of the core variant) (Rundblad 1998). Using additive change/stability is simply a matter of perspective (half-filled= half empty). We can focus on the addition of new variants or the changing of the set of variants (see Figure 1).

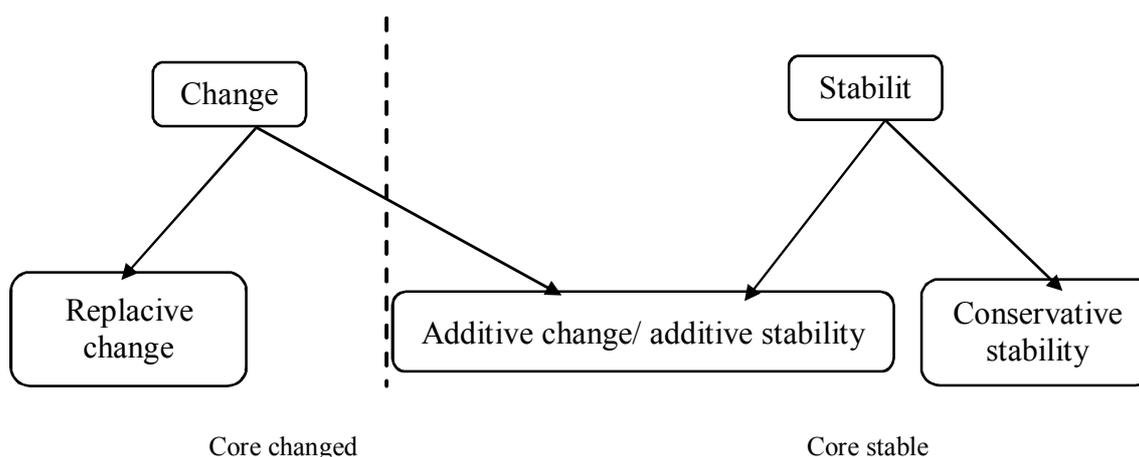


Figure 1: The interrelation between change and stability (retrieved from Rundblad, 1998, 2).

The discussion of language change and stability amounts to referring to the nature of language change and stability and the causes and mechanisms thereof. On that account, several models have been proposed to attend to this phenomenon, perhaps the most paramount of which is McMahon's (1994). She foregrounds conditions and causes for language change where the conditions for the change of a given linguistic feature are polysemy, discontinual transmission, and the arbitrariness of the sign. To an extent, the linguistic features that do not meet these conditions are relatively more stable. Firstly, Rundblad (1998) argues that non-polysemous words, and analogously the linguistic variants with "uniplex" features, are relatively more stable. Secondly, non-arbitrary words, i.e. onomatopoeic words, are comparably more stable. These two conditions are highly applicable in that the multiplicity of sense leads language users to reduce it to a unitary form-function mapping. Clearly, onomatopoeic words have a very clear non-arbitrary form-meaning mapping, and thus, are more stable. The final condition, which is discontinual transmission means that variants that are not found in all the speech community are likely to undergo change. Although different in terminology, the final condition embraces the contention that linguistic variation breeds language change.

Rundblad (1998) also raises an interesting point about the psychological factor interfacing with language change. He remarks that taboo words are viewed to be less prone to change. These words, he argues, have a high level of expressivity which is associated with a certain psychological effect. This psychological effect of expressiveness contributes to these words enjoying a high level of stability compared to other words.

At this point, it is crucial to refer to the main factors and mechanisms triggering language change and stability. In connection with the factors influencing language change, Kuhl and Braunmuller (2014) highlight the main conditions and factors underlying language change and stability in a language contact situation. The basic assumption upon which this framework is built considers "multilingual speakers as the source of all outcomes of contact between languages" (Kuhl and Braunmuller 2014, 2). They also distinguish three different factors: language internal factors (linguistic characteristics), language external factors (contact) and extra-linguistic factors (language planning and standardization). Kuhl and

Braunmuller (2014) focus on the possible linguistic systems that remain stable or/and those which change or diverge in language contact situations. To this end, language stability may occur either due to or despite language contact. Kuhl and Braunmuller (2014, 14) define stability as the stage when “change no longer happens or when it never occurred”. They point out that certain languages or varieties may remain stable or change as a whole or in some of their features or “in bundles of features and to different degrees” (Kuhl and Braunmuller 2014, 14).

4. Methods

The current study adopts a qualitative and quantitative research method. A pilot study was carried out prior to the main research. The following sections present the methods adopted in this study.

4.1 Participants

The participants in this study were chosen from the population using the Stratified Random Sampling. This sampling technique ensures the maximum diversity of population, and that the sample is representative of the entire population in order to increase the efficiency of research. One hundred and twenty four native speakers of Mzabi and Kabyle stratified on the basis of their mother tongue and regional background (62 Mzabi; 62 Kabyle), gender (66 male; 58 female), age ((young) 18-29 years old, 38; (mid-aged) 30-49 years old, 44; (old) 50 years old and above, 42), education (educated 69; uneducated 55) participated in this study. The following table shows the distribution of the participants.

Table 1: Distribution of Participants

Region		Gender				Age			Education			
Mzabi	Kabyle	TL	M	F	TL	Young 18-29	Mid-aged 30-49	Old 50+	TL	Edu- cated	Unedu- cated	TL
62	62	124	66	58	124	38	44	42	124	69	55	124

4.2 Data Collection Techniques

In harmony with the research goals, the researcher opted for the use of several research tools, each designed in a specific way to answer the research questions.

4.2.1 The Glossary Translation

In order to study the level at which the two dialects have changed, the present study makes use of a technique referred to as “the Swadesh List” (Swadesh 1952). In this technique, a list of the most common words is compiled based on the premise that such words exist in all human languages. Hence, Proto-Berber once had a Proto-representation for all the items in the list. Accordingly, any similarities that are found between Kabyle/Mzabi and Arabic/French is attributed to language change inasmuch as Proto-Berber has a lexical inventory that is unique and different from that of Arabic and French (Kossmann and Stroomer 1997). Comparing the frequency of lexical influence of other languages on each dialect was achieved by translating a glossary for each of these dialects and exploring the degree of similarity

between each dialect and the prospective languages of influence, i.e., Standard Arabic, Algerian Arabic and French. The glossary adopted in this study is an extended version of the original Swadesh List (Swadesh, 1952), which contains 250 words. The list in this study includes 260 words translated into Standard Arabic, Algerian Arabic, French, Mzabi and Kabyle accompanied with their phonological gloss.

4.2.2 The Questionnaire

The questionnaire in this study was adopted from previous studies (Friðriksson 2008), and adapted for the purpose of the current research. It consists of 38 items divided into four sections. The first section, **Personal Background**, consists of five items that aim to gather demographic information about the speakers such as age, gender, education and region. The second section, **Linguistic Proficiency**, consists of six items that aim to gather information about the speaker's mother tongue(s) and their competence in other languages. The third section, **Language Use**, consists of nine items that scale down the extent to which the speaker uses certain varieties in certain contexts, giving insight into the social networks in each community. The final section, **Language Attitude**, consists of 18 items that aim to elicit scaled responses about the speaker's attitude towards different varieties as well as their sense of nationalism and identity that certain varieties express.

4.2.3. The Interview

The current study makes use of a structured interview in order to complement the previous research tools. Each interview consists of a series of informal questions that were prepared beforehand. The aim of this interview is to explore the degree to which language change is reflected on the speech of different social groups. Whether or not speakers refrain from using the borrowed words is both evaluative and predictive of language change.

4.3 Data Analysis

The first step of the analysis was translating the glossaries and identifying the lexical variables to be investigated. The glossaries were analyzed manually in order to identify any instances of resemblance between the lexical items of Mzabi and Kabyle with either of MSA, Algerian Arabic or French. The instances of resemblance were coded **AlgA** (if there is a resemblance with the lexical items of Algerian Arabic), **MSA** (if there is a resemblance with the lexical items of Modern Standard Arabic), and **Fr** (if there is a resemblance with the lexical items of French). The unchanged lexical items were labelled **Br** (Berber). The results were entered in SPSS software in order to be given numerical values for this analysis to compare the means of changed lexical items in the two dialects and get the statistical significance of the differences or the lack thereof. The analysis of the questionnaire was carried out using the SPSS software providing the following statistical operations: **Means, frequencies and standard deviations** in order to give statistical descriptions of the variables; **Cronbach's Alpha** in order to test the reliability of the research tool; **One-Way ANOVA and Independent-Samples T-test** in order to compare the means and results of the two speech communities and test the significance of the differences;

and **Pearson and Spearman Correlation Coefficients** in order to measure the level of correlation between variables.

As far as the analysis of the interviews was concerned, each informant was asked ten questions that elicit the production of the target variables. The informant either used the Proto-Berber variable or the changed one. The results were scored on a grid where “**Changed**” was used to note that the speaker used the changed variable, and “**Unchanged**” was used to note that the speaker used the Proto-Berber variable in answering the question. The scores were also entered in SPSS software to be described statistically and tested for significance. Moreover, the results of the two groups were contrasted and compared to the results of the Glossary Translation to check whether the changes in the linguistic systems were represented in the linguistic practices of these communities.

5. Results and Discussion

5.1. The Glossary Translation (Swadesh List)

The analysis of the translated glossary is primarily comparative both intra- and inter-dialectally. It compares the change of different lexical items and the overall change occurring in the two dialects qualitatively and quantitatively. Given that the two dialects are likely to have generated within the same temporal context, different extents of change mean that change occurred at different rates.

The analysis of the translated glossary reveals that there are several categories of lexical items on the Swadesh List. The categorization of these lexical items is based on whether these lexical items have changed and on the language affecting them. To illustrate, the category “Br” includes words that have not changed while the category “MSA” includes Berber words that have been affected by Modern Standard Arabic. The lexical items in each category are not necessarily related, neither in word class nor in the lexical field. Table 2 illustrates the results of the analysis of the glossaries based on the origin of each word.

Table 2: Distribution of lexical categories in Mzabi and Kabyle

Categories	Number		Percentage	
	Mzabi	Kabyle	Mzabi	Kabyle
Br	166	172	63.8	66.2
MSA	68	60	26.2	23.1
Fr	12	13	4.6	5.0
AlgA	2	2	0.8	0.8
MSA-Fr-Br	00	1	00	0.4
MSA-Fr	00	3	00	1.2
MSA-Br	7	4	2.7	1.5
Fr-Br	4	4	1.5	1.5
Total	260	260	100.0	100.0

The first category “**Br**” includes the words that are purely Berber. Such words seem to have remained unaffected by the other languages such as “/damkurra:z/” (Λ◦□Ƶ◦○◦✱) in Mzabi, which means “narrow”, and “/ʔarga:z/” (◦○✱◦✱) in Kabyle, which means “man”. This category constitutes words that

are relatively unchanged. Table 2 shows that there are 166 unchanged Berber words in Mzabi and 172 in Kabyle, constituting 63.8% and 66.2%, respectively. The values are very close to each other, which imply that the two dialects are affected by language change to the same degree with a slight margin of 6 words for the Kabyle dialect.

The unchanged words include the grammatical words such as particles, determiners and pronouns like “/di:nni/” (ΛΞΙΞ) in Mzabi and “/ðihi:n/” (VΞΦΞΙ) in Kabyle, which mean “there”, “/nəfni:n/” (IḡḡIΞI) in Mzabi and “/Nukni/” (IḡḡIΞ) in Kabyle, which mean “we”. Another type of words that resisted change in both dialects is the common colours like “black, white, green, yellow, etc.”, as well as cardinal numbers. However, uncommon colours such “beige” are borrowed from French. For some reason, the numbers “three, four and five” have two equivalents in Kabyle “/əla:əa/ (XII.Xo), /revfa/ (OḡḡΔḡo) and /Xumsa/” (XḡḡOo), which are clearly loanwords from Arabic, alongside their Proto-Berber representations “/Kra:d/ (KOOΛ), /ku:z/ (Kḡḡ) and /səmmu:s/” (ḡḡḡḡḡ) respectively. Moreover, words that refer to body parts seem to have remained unaffected by other languages in the two dialects equally, for example, “/ʔi:ls/” (ΞIIḡ), which means “tongue” in the two dialects.

An interesting result is that there is a pattern in the way the two dialects undergo lexical change. This motivates the correlation analysis of language change in the two dialects. To do so, lexical items in the “Br” category are labeled “Unchanged”; the rest is labeled “Changed”. Even though some words still have a Berber representation alongside the changed one, such words are labeled “Changed” as they underwent a process of **Additive Change**. Pearson Correlation Coefficient is calculated at the 0.01 level of significance.

Table 3: Pearson Correlation Coefficient

		Mzabi	Kabyle
Mzabi	Pearson Correlation	1	.402**
	Sig. (2-tailed)	0.000	0.000
	N	260	260
Kabyle	Pearson Correlation	0.402**	1
	Sig. (2-tailed)	0.000	0.000
	N	260	260

** . Correlation is significant at the 0.01 level (2-tailed).

Table 3 shows that there is a significant correlation between change in Mzabi and change in Kabyle. In other words, if a lexical item in either dialect has changed, its equivalent in the other dialect is likely to have changed. Theoretically, such a strong match in change can be accounted for in one of the three following possibilities:

- Since the two dialects originate from the same language “Proto-Berber”, the so called “changed words” were inherently existent in Proto-Berber, and they were passed on to these two dialects as the

language branched out. Thus, the similarities occur simply because they were already existent in Proto-Berber.

- If we assume that in a given period of time the two dialects branched out of Proto-Berber, we can explain the similarities in change pattern by assuming that change to these lexical items occurred before the branching of these two dialects, and it is carried out by these dialects as they have split apart.
- That some lexical items rather than others changed in both dialects is attributed to the fact that these lexical items, in abstraction, are more prone to change.

The first possibility means that the changed terms are originally within the lexical repertoire of Proto-Berber, and that considering them as changed variables is incorrect. However, the list shows that some of the changed words are close to their French counterparts, and it has already been shown that Berber and French are lexically distant being from two separate language families. On equal footing, the second possibility implies that language change occurred before the branching of the two dialects, and that this change was transmitted to the two dialects after the split. However, such a postulation is theoretically and empirically loose. On the one hand, the lexical reconstruction done by Louali and Philippon (2003, 24) suggests that Proto-Berber stage existed 7000 years ago long before any encounter between Berber and French and Arabic. Moreover, the empirical evidence refutes such analysis on the basis that even though the lexical items in the two dialects change in parallel, the result of change is not the same. Some words are changed into Arabic and others into French. However, if change occurred before the branching of these dialects, the resulting changed lexical items would be similar. The third possibility, and perhaps the most likely, implies that certain lexical items are changed because they are more prone to change than others. In this respect, Hudson (1981, 339) argues that “some aspects of language are more susceptible to external influence than others” and that “certain areas of vocabulary are the most susceptible”. This statement amounts to saying that certain lexical groups are more stable than others. Such a hypothesis is supported by the fact that grammatical words, numbers, common colours and body parts are more resistant to change than the other lexical groups. In fact, this claim does not contradict the linguistic theory of language change in that it leaves the door open for the assumption that the propagation of linguistic change is partially motivated by the linguistic properties of the variable (Ohala 1993).

A major finding this stage of analysis reveals is that the degree to which certain linguistic variables are prone to change is partially predetermined by the linguistic properties of this variable. However, the result of this change is determined by extra-linguistic factors such as exposure and speakers’ choice. This view subsumes the two views of language change as being language-internal (Ohala 1993) and language-external (Milroy 1992; Weinreich et al. 1968).

The second category “Ar” includes words that are derived from Arabic and lost their Proto-Berber representation such as “/lhu:t/” in Mzabi and “/Ahu:oi:w/” in Kabyle, which mean “fish”. The primary assumption is that these words once had a Proto-Berber representation, and that language change resulted in the loss of the old representation “**Replacive Change**”. Table 2 shows that there are 68 words which

are exclusively “Ar” in Mzabi and 60 in Kabyle. The total number of all changed lexical items in Mzabi is 94 words, which means that 72.3% of all changed words in the Mzabi list are Arabic. Kabyle, on the other hand, contains 88 changed words, 60 of which are exclusively Arabic (67%). It can be, thus, argued that contact-induced language change is largely with Arabic. In addition, the table shows that Mzabi is slightly more affected by Arabic-driven lexical change.

The category “Fr” includes words that have lost their Berber representation and, instead, acquired new forms that are influenced exclusively by French, for instance, “/ddissɜ:r/” (ΛξΘ⊖) in Mzabi, which means “fruits”, and “/jetkɔnzla/” (ʃ⊖+κ--II⊖) in Kabyle which means “to freeze”. Again, it is revealed that the linguistic link between the forms of the changed language and the language of influence is not necessarily direct. The French word “dessert” is not the literal translation of the Mzabi word “/ddissɜ:r/” (ΛξΘ⊖). The French word “dessert” refers to post-meal sweets while the Mzabi word “/ddissɜ:r/” (ΛξΘ⊖) means fruits. Notwithstanding the semantic relationship between the two, these examples show that lexical change is not always a process whereby literally translated words are adapted to the linguistic system of a given language.

Moreover, Table 2 shows that the two dialects are affected by French almost equally. However, the findings do not suggest that the same lexical items are changed in the two dialects, neither does it imply that change induced by French affects the same words in the two dialects the same way. A word such as “fruit” is affected by French in Mzabi “/ddissɜ:r/” (ΛξΘ⊖) and by Arabic in Kabyle “/fa:kja/” (κ⊖κ⊖). Another example is the word “turn off”, which is affected by Arabic in Mzabi “/jtʰafi/” (ʃ⊖⊖⊖) and unchanged in Kabyle “/Saxsi:/” (⊖⊖⊖⊖).

Another aspect of change that the list reveals is that one lexical item can be affected by the same language differently in the two dialects. For example, the word “freeze” is affected by French in the two dialects. However, the outcome of this change is different in each dialect. The word in Kabyle is “/jetkɔnzla/” (ʃ⊖+κ--II⊖), which comes from the French verb “congeler”, and the Mzabi word is “/jetəgla:sʰa/” (ʃ⊖+⊖⊖⊖⊖⊖), which comes from the French word “glacer” /gla:sɛ/.

The Category “Alga” contains words that are common in Algerian Spoken Arabic and in either Mzabi or Kabyle. There are two words in each dialect, “/gæ:ʎ/” (κ⊖⊖) and “/lbabo:r/” (II⊖⊖--⊖) in Mzabi, which mean “all” and “ship”, respectively, and “/asʰebba:ðʰ/” (⊖⊖⊖⊖⊖) and “/lvavo:r/” (II⊖⊖--⊖) in Kabyle, which mean “shoes” and “ship” respectively. The lexical items in this category can be problematic as Algerian Arabic itself is influenced by Berber, so it is not clear whether a word such as “/gæ:ʎ/” (κ⊖⊖) is an Algerian Arabic word that is borrowed from Berber or the opposite. Moreover, the word “/asʰebba:ðʰ/” (⊖⊖⊖⊖⊖), “/sabba:tʰ/” in Algerian Arabic, is likely to be the equivalent of the Spanish word “zapato”, which means “shoes”. Furthermore, the word “/babor/” in Algerian Arabic, meaning “ship”, is likely to be borrowed from the Spanish word “babor”, which means “ship”. According to Mefrouh, Bouchemal and Smaili (2012), there are many lexical items in Algerian Arabic that are influenced by Spanish.

Examining language change in this category shows how language change is not always unilateral as two contact-languages can trigger changes in each other's systems. Indeed, language change is not merely a process of one language exerting influence on the other and changing its structure. Two languages can mutually influence each other. In this view, Matras (2009) argues that contact-induced change can affect both contact languages.

The categories "Br", "Ar", "Fr" and "AlgeA" include items that are either exclusively Berber or exclusively non-Berber. Words in these categories have one lexical representation, either changed or unchanged. From a linguistic standpoint, the exclusively Berber words represent instances of complete stability, and the exclusively non-Berber words represent instances of complete change. The categories "Ar-Br", "Fr-Br" and "Ar-Fr-Br" include lexical items that have more than one representation, one is Berber, and the other(s) non-Berber. Items in these categories formulate cases of sociolinguistic variation, which, according to the sociolinguistic approach, is highly related to language change (Milroy 1992). It is generally believed that language change is actuated by the linguistic variables that have more than one variation (Labov 2001; Chambers and Trudgill 1998). Such a view means that language change in-process is represented in the linguistic variables that have more than one variation. This category includes words that have two variations: "Ar-Br" or "Fr-Br", and words that have three variations "Ar-Fr-Br".

It is noteworthy that not all variation is indicative of change in-process. For one, some words in Kabyle have two variations of the same word that are both non-Berber, e.g., the word "correct" in Kabyle has an Arabic-based variation /ʔisʔaha/ (ⵉⵙⵃⵃⵏⵏ) and a French-based one "/zy:st/" (ⵉⵣⵣⵉⵙⵜ) but no Proto-Berber one. The basic tenet of the Swadesh List tool is that this word once had a Proto-Berber variation, yet the results show that this variation has undergone two processes of change: replacive and additive.

The following figure illustrates the process of language change based on the results obtained from the glossary.

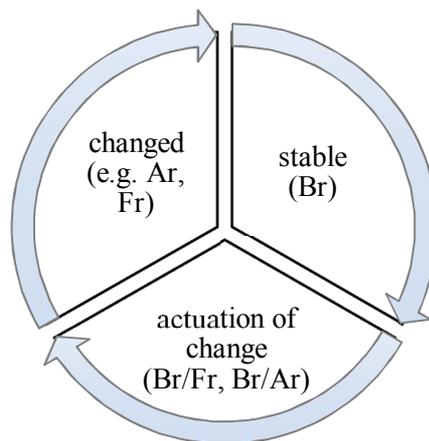


Figure 2: The process of language change

Figure 2 illustrates the process of language change. The first stage is a relative state of stability, where items have a representation that is shared by all members of the community. Language change is

actuated as some groups feel the non-conformity with the norms that were common (Labov 2001). The non-conformity gives rise to other variables alongside the old one. Some of these variables dominate the others and spread across the whole speech community in line with the Constructive Nonconformity Principle (Labov 2001). As the term is accepted by the vast majority of the speech community, it becomes in a relative state of stability. However, the new stable terms can enter in a new process of change in the same cyclic fashion.

The lexical items in the Swadesh List of Mzabi and Kabyle fall within one of the three stages of language change. The first stage is where the linguistic variables are seemingly stable in that there is no innovation/variation that subsumes these variables. This view is in line with the opinion that language change is *primarily* the result of linguistic innovation (Weinreich et al. 1968; Milroy and Milroy 1985). The second stage includes elements that are likely to change in that there is linguistic innovation. It should be noted that not all cases of linguistic innovation lead to change inasmuch as some innovated variables die out soon after they are actuated (Milroy and Milroy 1985). Moreover, the word “*primarily*” above suggests that not all linguistic change results from variation. Language change can occur because language users see the need for certain linguistic functions that their language lacks; for example, the word “bark of tree” has no equivalent in Mzabi and Kabyle, and speakers fill this lexical gap by borrowing from French. The final stage of language change is where the old variables are completely lost and replaced by the new ones. The figure above shows that the replacement is not necessarily unitary in the sense that some variables are replaced by more than one variable. The new variables can feed into new processes of change.

The variables in the second stage are different in terms of their stability and change. Evaluating their prospective change is usage-based; i.e., researchers examine what variables are more used in the speech community and what social groups are using them in order to hypothesize about what variables are more stable/changing (Chambers and Trudgill 1998). Therefore, the elements in this category have a predictive force as they help the researcher hypothesize where change is heading based on which variables are more spread in each community.

5.1.1 *The Questionnaire*

5.1.2 *Language Proficiency*

Concerning language proficiency, the questionnaire shows that speakers from both communities, albeit not natives, have good proficiency in Algerian Arabic. The contrast lies in the mastery of French and MSA. The results have shown that the Mzabi community has better proficiency in MSA, while the Kabyle community has better proficiency in French. The significant source of variation in the proficiency of French and MSA is education, whereas age is a significant determinant of Algerian Arabic proficiency.

5.1.3 *Language Use*

The findings show that both communities have affiliated with Berber as their main language of communication with both in-group and out-group members of their community. It is also noticed that MSA, although mastered by many informants, is restricted to certain formal contexts such as school. In

fact, both communities never use MSA outside of school. On equal footing, French use is highly dispersed in the two communities. It is observed that the Mzabi speakers almost never use French, and, if ever, they use it in certain contexts such as university or government settings. Contrarily, the Kabyle community uses French in the in-group as well as in the out-group settings. Unsurprisingly, the Mzabi speakers use Algerian Arabic more often and in more diverse contexts than the Kabyle speakers. Their use of Algerian Arabic is expected given that the analysis of language proficiency shows that the Mzabi speakers have more proficiency in this dialect. The results show that the Mzabi and Kabyle speakers have equally refrained from using Algerian Arabic with in-group members of their social networks such as family, friends and neighbours. The difference in language use shows that French and Berber are the two languages of communication in most of the Kabyle community.

5.1.4 Attitude, Nationalism and Sense of Identity

Being the main language of communication, Berber is viewed by both communities as a highly ethnic and patriotic language that expresses the Berber identity. The results show that the speakers have equally expressed their high view of Berber. The attitudes towards MSA match the results of proficiency. The Mzabi speakers have more positive attitudes towards MSA. Despite the dissimilar attitudes, both communities share, to an extent, the view that MSA is not a language that expresses their identity as they do not affiliate with it as an ethnic language. French, being a language of communication in the Kabyle community, is viewed more positively by the Kabyle speakers. Conversely, the Mzabi speakers have a highly negative attitude towards it, particularly as being “intrusive”. Again, such results show the strong interrelatedness between language attitude, language proficiency and language use. The results also show that the Mzabi speakers have more positive attitudes towards Algerian Arabic. This positive attitude is expected, knowing that the Mzabi speakers have more proficiency in Algerian Arabic and use it more often. Part of the positive attitude of Mzabi speakers towards Algerian Arabic comes from the evaluation thereof as being “important” and “useful”. On the other hand, there is a negative attitude towards Algerian Arabic among the Kabyle speakers as it is evaluated as “intrusive”. The negative views show that attitude is highly intertwined with language proficiency and language use.

5.1.5 The Interview

The aim of the interview is to examine language change as a social behavior. The results show that linguistic variation is an integral element of the linguistic practices in both communities. The analysis shows that the three social variables chosen for the study are central to variation in both communities. Age and education are represented as factors determining linguistic variation in both communities. It has been observed that the younger the individuals are, the more subject to variation their speech is. This goes in line with previous findings that younger generations are often the leaders of change as they easily adopt innovated variables (Chambers and Trudgill 1998). Education is also seen as a determining factor of linguistic variation in the two communities. Educated individuals have more positive attitudes towards all of the varieties in the study and exhibit more variation in their speech.

The interviews of the Mzabi speakers show that gender is not a significant source of variation. Such results concord with the results of previous findings (Chambers and Trudgill 1998), as gender is not a prime determinant of attitude, language use and linguistic proficiency. The Kabyle speakers, however, have a high level of gender-based variation. Nonetheless, such variation is restricted to the educated individuals. It has been shown that female individuals almost have a unitary speech that is likely to be governed by the notion of social acceptability. The uneducated female Kabyle speakers do not have high awareness of the notions of prestige and acceptability, and that is likely the reason that their speech is not much different from the speech of their male counterparts.

6. Conclusion

The current study is an attempt to investigate language change in two speech communities in Algeria; one is small and highly conservative, and the other is considerably larger and less conservative. In general, it is concluded that the two dialects of Berber (Mzabi and Kabyle) are highly influenced by French and Arabic. This influence shows the dynamic nature of human language. Moreover, the study concludes that change has affected both dialects almost equally inasmuch as the percentage of the changed words is almost identical in the two dialects. The study plumbs the depth of language change as a social and linguistic phenomenon. That is, language change is both language-internal and language-external. The study shows that some aspects of change are purely linguistic, some are purely social, and others show the interrelatedness of the social and the linguistic factors. Moreover, it should be noted that not all language change is contact-induced. In other words, some aspects of language change are bound to change regardless of contact. Language is a living entity that adapts to the external conditions where it is spoken. Despite the fact that the Mzabi speech community is a highly conservative and closely-knit speech community, it has shown high levels of change and variation among male and female individuals. In this vein, Milroy and Milroy (1985; 1992) and Milroy (1992) note that closely-knit social groups resist language change. This observation can be explained within the Labovian framework of language change. Therefore, the study concludes that closely-knit speech communities generally resist language change and prevent the Non-Conformity stage from happening. However, once Non-Conformity - actuation of change - takes place, the Constructive Non-Conformity stage - transmission of change – soon follows because of the shared values among individuals. In sum, the current research is an attempt to approach the issue of language change from the perspectives of language-in-use, language-in-abstraction, and language in the eye of the beholder.

التغير والثبات اللغوي في الجزائر: دراسة حالة اللهجتين المزابية والقبائلية البربريتين

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الملخص

تهدف الدراسة الحالية إلى البحث في التغير والثبات اللغويين في المجتمعين البربريين القبائلي والمزابي. وتعتمد هذه الدراسة في دراسة تغير اللغة وثباتها على: النهج اللغوي الاجتماعي (1968)، والنهج الوظيفي (1997)، والنهج التطوري (2000)، ونهج لابوف (2001). وتهدف الدراسة بشكل رئيسي إلى فهم طبيعة التغير اللغوي في كل لهجة، مع الإشارة إلى كل من اللغة الفرنسية واللغة العربية بوصفها لغات اتصال محتملة. أما الهدف الآخر لهذه الدراسة فهو الحصول على فكرة واضحة عن العوامل اللغوية مثل "الكفاءة اللغوية"، وغير اللغوية مثل "الموقف، والقومية والشعور بالهوية" والاجتماعية " كالجنس والعمر والتعليم" و علاقتها بالتغير اللغوي.

استخدمت هذه الدراسة ثلاث أدوات بحثية مختلفة لجمع البيانات وهي: الاستبيان، والمقابلة وقائمة "سواديش". وتوصلت الدراسة إلى وجود مستوى عال من التغير اللغوي في كل من اللهجتين الذي غالبا ما يكون متأثراً بالعربية. أما بالنسبة للمواقف، فقد أبرزت الدراسة وجود تباين في المواقف تجاه اللغة الفرنسية واللغة العربية الفصحى، فقد أظهرت الدراسة أن المجتمع المزابي يفضل اللغة العربية في حين يفضل المجتمع القبائلي اللغة الفرنسية. وزيادة على ذلك، وجدت الدراسة تنوعاً لغوياً أعلى نسبياً في اللهجة المزابية. وأظهرت الدراسة أن المتغيرات الاجتماعية "العمر والجنس والتعليم" تلعب دوراً هاماً في تحديد "الموقف، والاستخدام، والكفاءة والتنوع اللغوي". لكن الفرق الوحيد الملحوظ بين المجتمعين فيما يتعلق بهذه المتغيرات الاجتماعية هو أن المجتمع القبائلي لديه اختلافات أكثر بروزاً بين الجنسين، وبخاصة بين الأفراد المتعلمين.

الكلمات المفتاحية: التغير اللغوي، الثبات اللغوي، الجزائر، الأمازيغية، القبائلية، المزابية.

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