



People's Democratic Republic of Algeria
Ministry of Higher Education and Scientific Research
Ibn Khaldoun University of Tiaret
Faculty of Letters, Languages, and Arts
Department of English

**Plural Nouns in Algerian Arabic as Spoken in Tiaret: A Morphological
Analysis**

A Dissertation Submitted in Partial Fulfilment of the Requirements for the Degree of Master
in Linguistics

Submitted by

Khaldia Souidi

Zahira Sediki

Supervised by

Dr. Naima Boukhelif

Board of examiners

Dr. Saraa Nadia Chairman Ibn Khaldoun University -Tiaret

Dr. Naima Boukhelif Supervisor Ibn Khaldoun University -Tiaret

Dr.Amina Abdelhadi Examiner Ibn Khaldoun University -Tiaret

Academic Year:2023/2024

Dedications

This work is dedicated to my parents, El hadj Rabehand El hadja Yakout,

To my ancles, especially 'Mustapha', and my aunts, especially Houria, Malika, and Houaria,

To my second father, Kadi,

To my brother, Hassen, the future public health social worker,

To my two sisters, our teacher, Asma, and our doctor, Nour.

To both Amine and Abdellatif.

To my cousin Amine,

To my nephews Yacine, Mariya, Amira, and Maram

To my friends and classmates especially, Wassila, Zahira, Zohra, Sarah, and Nihed.

Khaldia

This research dedicated to Sediki Family especially:

To my lovely mother, Khadem, and my father, Khaled

To my old brother, Abii AHMED,

To my other brothers, Abdelkader, Madani, Mustapha, and Fethi,

To my sisters in law Karima, Fatiha, Imane, and Rachida,

To my nephews, Ishek, Amir, iline, Ilyes, Khaled, Watine, and Fares.

To 'Souidi family, especially Khalida

To the soul of my grand mother, Aida,

To both 'Nehari' and 'Chohra' family,

To my friends, Houda, Amina, Mokhtaria, and Khadidja,

Zahira

Acknowledgements

Above all, we would like to express our gratitude and thanks to our supervisor, Dr.Naima Boukhelif, for her patience, her vastknowledge, and dedication to working with us throughout the research journey. Her observation and constructive criticism played an important role in shaping this work and reaching the level it is at, her standing with us enhanced our knowledge of the subject and improved our technical skills. All thanks, appreciation and respect to our professor.

We would like to express our thanks and appreciation to the jurymembers, Dr.Saraa Nadia and Dr. Amina Abdelhadifor reviewing our thesis and providing valuable comments. Their experienceand critical review greatly expanded the scope of our research and pushed us to explore new perspectives and strictly ensure the quality of our work.

We thank everyone who contributed to this work, even if just a little.

List of Modern Standard Arabic symbols

1. Consonants

| Consonants | Symbols in IPA |
|------------|----------------|
| ر | /r/ |
| ب | /b/ |
| پ | /p/ |
| ت | /t/ |
| ث | /e/ |
| ج | /dʒ/ |
| ح | /ħ/ |
| خ | /x/ |
| د | /d/ |
| ذ | /ð/ |
| ر | /r/ |
| ز | /z/ |
| س | /s/ |
| ش | /ʃ/ |
| كس | /sˤ/ |
| كدس | /dˤ/ |
| ط | /tˤ/ |
| ظ | /dˤ/ |
| ع | /ʕ/ |
| غ | /ɣ/ |
| ف | /f/ |
| ق | /v/ |
| ق | /q/ |

| | |
|---|-----|
| ق | /g/ |
| ك | /k/ |
| ل | /l/ |
| م | /m/ |
| ن | /n/ |
| ه | /h/ |
| و | /w/ |
| ي | /j/ |

2. Vowels

| Vowels(IPA) | Description |
|--------------|----------------------------------|
| /i/ | Front high unrounded short vowel |
| /i:/ | Front high unrounded long vowel |
| /a/ | Front low unrounded short vowel |
| /a:/ | Front low unrounded long vowel |
| /u/ | Backhigh rounded short vowel |
| /u:/ | Backhigh rounded long vowel |
| /e/ | Front mid unrounded short vowel |
| /ə/ | Mid central vowel |
| /ɔ/ | back mid rounded short vowel |
| /ɔ:/ | back mid rounded long vowel |

List of Acronyms

ADA: Algerian Dialectal Arabic

MSA: Modern Standard Arabic

TAA: Tiaretian Algerian Arabic

TD: Tiaret Dialect

List of Tables

| | |
|--|----|
| Table(01):Morphological Patterns of Plural of Paucityin MSA. | 33 |
| Table(02): Morphological Patterns of Plural of Multitude in MSA..... | 33 |
| Table(03):Morphological Patterns of the Ultimate Plural Form in MSA. | 34 |
| Table(04):Dual Nouns in TAA | 56 |
| Table(05):Masculine Plural Nouns in TAA | 57 |
| Table(06):MasculineNominative, Accusative and Genitive Plural Nouns in TAA..... | 59 |
| Table(07):Feminine Plural Nouns in TAA..... | 63 |
| Table(08):FeminineNominative, Accusative and Genitive Plural Nouns in TAA | 64 |
| Table(09):The Morphological Pattern /ʔafʔila/in TAA | 67 |
| Table(10):The Morphological Pattern /ʔafeʕa:l / in TAA..... | 68 |
| Table(11):The Morphological Pattern /fiʕla:n/ in TAA..... | 69 |
| Table(12):The Morphological Pattern /feʕla:n/ in TAA | 70 |
| Table(13):The Morphological Pattern /fuʕla:n/ in TAA | 71 |
| Table(14):The Morphological Pattern /fʕul/in TAA..... | 71 |
| Table(15):The Morphological Pattern /fʕu:l/in TAA..... | 72 |
| Table(16):The Morphological Pattern /fʕu:la/in TAA | 73 |
| Table(17):The Morphological Pattern /fʕa:li/in TAA..... | 75 |
| Table(18):The Morphological Pattern /fʕa:l/in TAA | 76 |
| Table(19):The Morphological Pattern /fuʕla/in TAA | 77 |
| Table(20):The Morphological Pattern /mfa:ʕel/ in TAA | 78 |
| Table(21):The Morphological Pattern /mfa:ʕi:l/ in TAA..... | 79 |
| Table(22):The Morphological Pattern /fwa:ʕel/ in TAA | 80 |
| Table(23):The Morphological Pattern /fwa:ʕi:l/ in TAA..... | 81 |
| Table(24):The Morphological Pattern /fʕa:jel/in TAA | 82 |

| | |
|---|----|
| Table(25):The Morphological Pattern /fʕa:li:l/ in TAA..... | 83 |
| Table(26):The Morphological Pattern /fʕa:ʕi:l/in TAA..... | 83 |
| Table(27):The Morphological Pattern /fʕa:la:/ in TAA..... | 83 |
| Table(28):Noun Plural Inflectional Morphemes of Arabized words in TAA..... | 86 |
| Table(29):The morphological Pattern/fiʕla:n/ of AA nouns in TAA..... | 90 |
| Table(30):The morphological Pattern/fʕa:l/ of AA nouns in TAA..... | 91 |
| Table(31):The morphological Pattern/fwa:ʕel/ of AA nouns in TAA..... | 91 |
| Table(32):The morphological Pattern/fewa:ʕi:l/ of AA nouns in TAA..... | 92 |
| Table(33):The morphological Pattern/fʕa:jel/ of AA nouns in TAA..... | 93 |
| Table(34):The morphological Pattern/fʕa:li:l/of AA nouns in TAA..... | 94 |
| Table(35):The morphological Pattern/fʕa:la:/ of AA nouns in TAA..... | 95 |

List of Figures

| | |
|--|----|
| Figure(01): <i>English Inflectional Morphemes</i> | 24 |
| Figure(02): <i>Morphemes' Classification</i> | 25 |

Table of Contents

| | |
|--|----|
| Dedication | 2 |
| Acknowledgements | 4 |
| List of symbols | 5 |
| List of Abbreviations and Acronyms | 7 |
| List of Tables..... | 8 |
| List of Figures..... | 10 |
| Table of Contents | 11 |
| Abstract | 14 |
| General Introduction | 15 |

Chapter One: Morphology

| | |
|-------------------------------------|----|
| 1.1.Introduction | 20 |
| 1.2.Definition of Morphology | 20 |
| 1.3.Morpheme | 21 |
| 1.4.Morphemes' Classification | 22 |
| 1.5.Root, Base and Stem | 27 |
| 1.6.Morph Vs Allomorph | 28 |
| 1.7.Word Formation | 28 |
| 1.7.1.Compounding | 28 |
| 1.7.2.Conversion | 28 |
| 1.7.3.Back-formation..... | 28 |
| 1.7.4.Blending | 29 |
| 1.7.5.Acronym Formation | 29 |
| 1.7.6.Clipping..... | 29 |
| 1.7.7.Reduplication | 30 |
| 1.7.8.Borrowing..... | 30 |
| 1.7.9.Coinage..... | 30 |

| | |
|--|----|
| | 12 |
| 1.7.10.Eponym | 30 |
| 1.8.Plural Nouns in Modern Standard Arabic | 31 |
| 1.8.1.Regular Plural..... | 31 |
| 1.8.2.Irregular Plural | 31 |
| 1.9.Literature Review | 36 |
| 1.10.Conclusion..... | 38 |

Chapter Two: Phonology

| | |
|--------------------------------------|----|
| 2.1.Introduction | 40 |
| 2.2.The Origin of Phonology..... | 40 |
| 2.3.The Definition of Phonology..... | 41 |
| 2.4.Phonetics and Phonology | 42 |
| 2.5.Phonemes, Allophones | 42 |
| 2.6.Distinctive Features..... | 43 |
| 2.6.1.Major Class Features | 44 |
| 2.6.2.Place Features..... | 45 |
| 2.6.3.Manner Features | 48 |
| 2.6.4.Laryngeal Features | 48 |
| 2.7.Phonological Processes | 49 |
| 2.7.1.Assimilation | 49 |
| 2.7.2.Dissimilation | 50 |
| 2.7.3.Insertion (Epenthesis) | 50 |
| 2.7.4.Deletion(Elision) | 51 |
| 2.7.5.Metathesis | 51 |
| 2.7.6.Substitution | 51 |
| 2.8.Conclusion..... | 51 |

Chapter Three : Methodology, Results and Discussion

| | |
|------------------------|----|
| 3.1.Introduction | 53 |
|------------------------|----|

| | |
|---|-----|
| 3.2.Research Approach | 53 |
| 3.3.Research Questions | 53 |
| 3.4.Participants | 54 |
| 3.5.Data Collection..... | 54 |
| 3.6.Data Analysis | 56 |
| 3.6.1.Algerian Arabic Noun Plural Inflectional Morphemes in TAA..... | 56 |
| 3.6.2.Algerian Arabic Noun Plural Morphological Patterns in TAA..... | 67 |
| 3.6.3.Algerian Arabized Noun Plural Inflectional Morphemes and Morphological Patterns in TAA | 85 |
| 3.7.Discussion of the Findings | 96 |
| 3.8.Conclusion..... | 100 |
| General Conclusion..... | 101 |
| Bibliography..... | 105 |
| Appendices | 113 |
| المخلص | 119 |
| Résumé..... | 119 |
| Summary | 119 |

Abstract

The primary aim of this research is to provide insights into the morphological structure of plural nouns in Algerian Arabic as Spoken in Tiaret. The present study seeks to determine the inflectional morphemes and the morphological patterns used in this Tiartean dialect to form Algerian Arabic plural nouns, and Algerian Arabized plural nouns. The study also attempts to examine how these plural noun inflectional morphemes and morphological patterns are used in this dialect. To conduct this research, the most commonly inflectional morphemes and the morphological patterns utilized in Tiartean dialect were determined, then three lists were designed, a list of Algerian Arabic singular nouns and their regular plural forms, a list of Algerian Arabic nouns and their irregular forms, and a list of singular Algerian Arabized nouns and their plural forms.. The three lists were provided to fifty native speakers of Tiartean dialect who were asked to : check and correct the plural forms, provide alternative plural forms if they exist, and to read the plural forms. The results of this study revealed that TAA uses the sound inflectional morpheme {i:n} to create the dual form of some Algerian Arabic nouns. It also utilizes the sound inflectional morphemes {i:n} and {a:t} to form the plural of Algerian Arabic nouns. The first inflectional morpheme generates the plural form of masculine nominative, accusative, genitive, human singular nouns, while the second one creates the plural form of both masculine and feminine nominative, accusative, genitive, human and non-human singular nouns. Moreover, the results demonstrated that TAA uses also a set of morphological patterns to create the plural of some Algerian Arabic nouns. These morphemes change the sound structure of these nouns. The findings also showed that, to form the plural of Algerian Arabized nouns, TAA uses only the sound inflectional morphemes {a:t} which is attached to both masculine and feminine nominative, accusative, genitive, human and non-human singular nouns, and some morphological patterns that modify the sound structure of these nouns.

Keywords: Inflectional morphemes, plural nouns, morphological patterns, sound patterns

General Introduction

Algeria is a multilingual speech community country that incorporates the use of so many varieties such as Modern Standard Arabic (MSA), French, Berber, English, and Algerian dialect (AD). Modern Standard Arabic is considered as the official language in Algeria. This language is used only in formal context, such as official magazines, written documents, newspapers, books, official speeches, lectures, television, etc. It is not used in ordinary speech and conversation. In fact, most of the Algerian people uses the Algerian dialect, which is considered as their mother tongue, in their daily life conversation. Though this dialect shares some linguistic features with Modern Standard Arabic, it has its own specific phonological, morphological, lexical and syntactic features.

Algerian dialect is a mix of a number of dialects which are spoken in different parts of Algeria. The Tiaretian dialect is one of these dialects. This dialect which is used in Tiaret speech community is similar somehow to MSA and the Algerian dialects utilized in the North-West of Algeria, yet it has its own linguistic characteristics. One of these characteristics is how to form plural nouns.

To create plural nouns in Tiaretian dialect, a set of bound grammatical morphemes are attached to the end singular nouns. Besides, a number of morphological patterns are utilized. These morphemes and patterns which generate both Algerian Arabic nouns and Algerian Arabized nouns are implemented in a unique way.

Though a number of studies (Djaffar,2013 ; Hemaidia, 2016; Hammodi, 2018; Douлами and Benayache, 2020, Merabet and Lagraa, 2023) have been conducted to examine the use of inflectional and derivational morphemes in Algerian, no study has provided a detailed description of the morphological structure of plural nouns in Algerian Arabic. This motivates us to investigate the inflectional morphemes and the morphological patterns utilized

in Algerian Arabic as spoken in Tiaret to generate both Algerian Arabic and Arabized plural nouns.

To the best of the researchers' knowledge, there has been no study conducted to investigate the morphological structure of plural nouns in Algerian Arabic. Thus, the significance of this research work lies in being the first study that examines how plural nouns are generated in Algerian Arabic as spoken in Tiaret. Moreover, the study at hand makes a substantial contribution to the field of morphology. The results of this research work can be used to enrich literature on plural noun morphology.

The present study aims at analysing the morphological structure of plural nouns in Algerian Arabic as spoken in Tiaret. The research at hand seeks to determine the inflectional morphemes as well as the morphological patterns used in TAA to form the plural form of Algerian Arabic nouns and Algerian Arabized nouns that exist in this dialect. Furthermore, it attempts to examine how these inflectional morphemes and morphological patterns are utilized in this dialect. Interestingly, the primary aim of this study is to provide insights into the morphological structure of plural nouns in Algerian Arabic as spoken in Tiaret.

To achieve the primary aim of this study, the following research questions are raised :

- What are the inflectional morphemes and the morphological patterns used in TAA to form the plural of Algerian Arabic nouns ?
- What are the inflectional morphemes and the morphological patterns used in TAA to form the plural of Algerian Arabized nouns?
- How do these noun plural inflectional morphemes function in TAA?
- How do these noun plural morphological patterns function in TAA?

The following hypotheses are suggested to answers to research questions mentioned above:

- Algerian Arabic as spoken in Tairret may use a number of suffixes and morphological patterns to form the plural nouns of Algerian Arabic nouns.
- TAA may use the same inflectional morphemes and morphological patterns utilized to create Algerian Arabic plural nouns to generate Algerian Arabized plural nouns.
- The inflectional morphemes used in TAA to form plural nouns are attached to the singular nouns without changing the sound structure of these nouns.
- The morphological patterns employed in TAA to create plural nouns may modify the sound structure of these nouns.

To conduct the present study, a qualitative research approach was implemented. Three lists were designed in Algerian Arabic. The first list includes a number of Algerian Arabic singular nouns and their regular plural forms. The second one consists of a set of Algerian Arabic singular nouns and their irregular plural forms. The third list is composed of a group of singular Algerian Arabized nouns and their plural forms. The three lists were given to fifty native speakers of Tiaretian dialect who were asked to check the plural form of each word, correct, in case there is a mistake, the incorrect forms, and give other plural forms. The participants were also asked to read the plural forms. Their readings were recorded in order to determine the structure and the pronunciation of these words.

The research at hand includes three main chapters. The first two chapters are theoretical. Chapter one is dedicated to describe 'morphology'. This chapter defines the concept 'morphology' and the term 'morpheme', and illustrates the differences among 'base', 'root', and 'stem'. It also presents the morphological structure of plural nouns in MSA. Chapter two is devoted to describe 'phonology'. This chapter clarifies the concept 'phonology', and outlines the speech sounds 'phonemes', 'phones', and 'allophones'. The chapter also explains the distinctive feature theory, and some phonological processes. The final chapter is practical. This chapter is used to present and discuss the results to provide insights into the

morphological structure of plural nouns in Algerian Arabic. It is worth noting that the dissertation at hands is written according to the APA style, 7th edition.

Chapter One

Morphology

1.1. Introduction

This chapter highlights the essential concepts of morphology, including the definition of the term ‘morphology’ and ‘morpheme’. It also explains the different classifications of morphemes including lexical, functional, free, and bound morphemes, without forgetting both inflectional and derivational morphemes. Moreover, the chapter presents the distinction among the terms ‘root’, ‘base’, and ‘stem’, as well as the distinction between ‘morph’ and ‘allomorph’. In addition, the chapter at hand highlights the word formation processes, and describes how to form plural nouns in Modern Standard Arabic (MSA). The last section is dedicated to review some previous studies that examine the morphological structure of Algerian Arabic words.

1.2. Definition of Morphology

The term morphology is derived from two Greek words, ‘morph’ which means ‘shape’ and ‘logy’ which signifies ‘the study of something’. This term was introduced by the German Writer Johan Wolfgang Goethe, at the end of the 18th century in the context of biology (Panocovà, 2021). Morphology was defined as “the branch of biology that deals with the form of living organisms and their parts, and the relationships between their structures” (Famala, 2021, p.1).

Morphology, as a sub-discipline of linguistics, was used, for the first time in 1859 by the German linguist, August Schleicher, to refer to the study of the form of words (Handoko, 2019). This sub-discipline was defined by a vast number of linguists. Carstairs-McCarthy (2002, p.16) defines morphology as “the area of grammar concerned with the structure of words and with relationships between words involving the morphemes that compose them”. Both Aronoff & Fudeman (2011, p.1) mention that morphology, in linguistics,

refers to “the mental system involved in word formation or to the branch of linguistics that deals with words, their internal structure, and how they are formed”.

Moreover, Lieber (2009) states that morphology is the investigation of how words are formed, taking into account the methods or the processes by which new words are created in different languages, and how the form of words may change based on their usage in sentences. In addition to the creation of new words, morphology deals with the classification of morphemes and the morphological patterns (Panocovà, 2021). It seems that morphology can simply be defined as the examination of how morphemes and morphological patterns function to create new words (Haspelmath, 2002; Geert, 2012).

1.3. Morpheme

The term ‘morpheme’ has been defined by several linguists. Hockett (1958) defines this term as a minimum meaningful element. Mathesis (1975) states that morpheme is the word’s smallest meaningful part. According to Katamba (2006), and Handoko (2019), the term ‘morpheme’ refers to the smallest semantic or grammatical building blocks that words are composed of. This means that a morpheme which cannot be broken down into smaller elements contributes to the overall meaning of a word (Merina, 2020). Morphemes are usually represented between curly braces { }. Puffer and Huber (2008) emphasize that each morpheme is a combination of form (sound/spelling) and meaning. A word can be composed of one morpheme, such as {boy}, {son}, {eat} and {on}. These words consist of one indivisible element. Other words may contain two or more morphemes, such as ‘desirable’, ‘desirability’, ‘undesirability’. Unlike the previous words, these words can be divided into smaller units or morphemes.

The term ‘morpheme’ was used by the linguist Baudouin de Courtenay (1972) as an umbrella term to cover more specific terms such as root (read, bag), prefixes like (a-, de-, im-)

and suffix like (-ist,-tion) (Panacovà, 2021).It can be defined as the indivisible element that is used in order to form a word (Yule,2017).Additionally , Schmid (2015,p.2) illustrates that “while the word *father* and *teacher* both consist of two syllables , *father* presents only one morpheme (meaning’ male parent’),whereas *teacher* consists of two: the verb teach(‘instruct’) and the nominalising suffix –er (‘someone who does something’)”.In other terms, a morpheme has not characterized by a specific length(short, or long).A long length can refers to only one morpheme and a short length like(-s) is considered as one morpheme.(Famala,2021,p.17).

1.4. Morphemes’ Classification

Morphemes can be classified into a number of categories; the main ones are lexical and grammatical morphemes.According to Yule (2017, p 215), lexical morphemes are described as a “set of ordinary nouns (girl, house), verbs (break, sit), adjectives (long, sad) and adverbs (never, quickly) that we think of as the words that carry the “content” of the messages we convey”. Lexical morphemes are those morphemes which are essential to the semantic content of a spoken or written expression (Handoko, 2019). By contrast grammatical, or functional, morphemes, such as prepositions, articles, suffixes, and conjunctions, refer to the functional words that exist in a given language (Yule,2006). Though these morphemes carry no semantic contents, they are important for creating meaningful and grammatically correct expressions (Handoko, 2019).

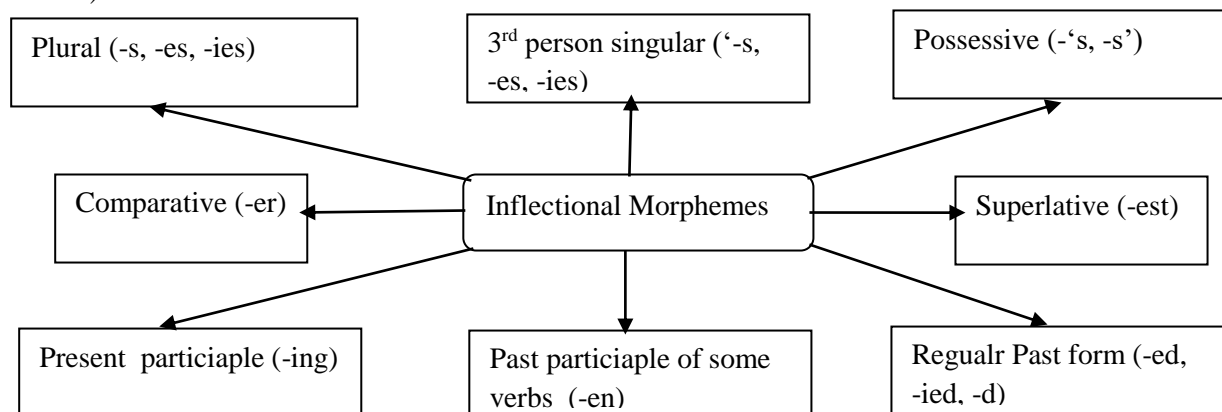
Both lexical and grammatical morphemes can be either free or bound. A free morpheme has the ability to stand alone as an independent word, while a bound morpheme must always be attached to another word to convey meaning (Carstairs-Mc Carthy, 2002; Hamawand, 2011). The morphemes {boy}, {son}, {eat}, {on}, for instance, are free morphemes because they constitute meaningful words by themselves. However, the

morphemes {able}, in 'desirable', and the morpheme {un}, in 'undesirable' are bound because they cannot stand alone as meaningful elements by themselves; instead, they must be attached to other morphemes to convey meaning (Twain,2013).

According to Yule (2017, p 214) "free morphemes can generally be identified as the set of separate English word forms such as basic nouns, verbs, adjectives and adverbs", whereas bound morphemes must be always bound to other morphemes. For instance, the word 'dogs' consists of two morphemes: {dog} and the suffix {-s}. 'Dog' is a free morpheme because it can stand alone. It has its own content meaning. However, the suffix '-s' is a bound morpheme. It gives some functional information about the word dog. It shows that there is more than one dog. This plural suffix '-s' has no content meaning by itself. It has to be attached to the free morpheme 'dog' to convey meaning (Enna,2020).

Bound morphemes can be further classified into inflectional and derivational morphemes. Inflectional morphemes are those morphemes which are attached to a word without changing the category of this word. In fact, these morphemes are used to communicate words' grammatical properties, such number, person, gender and tense (Handoko,2019). For instance, the plural suffix {-s} in 'tables' is considered as an inflectional morpheme because it does not create a new word; instead, this morpheme is attached to the word 'table' and alter its grammatical feature: The inflectional morpheme {-s} is used just to change the singular noun 'table' into plural, indicating that there is more than one table (Delahunty & Carvey,2010). English language has eight inflectional morphemes. These morphemes are summarized in the figure (01) below.

Figure(01):*English Inflectional Morphemes (Based on Simple Language Advice, June 5th, 2020)*

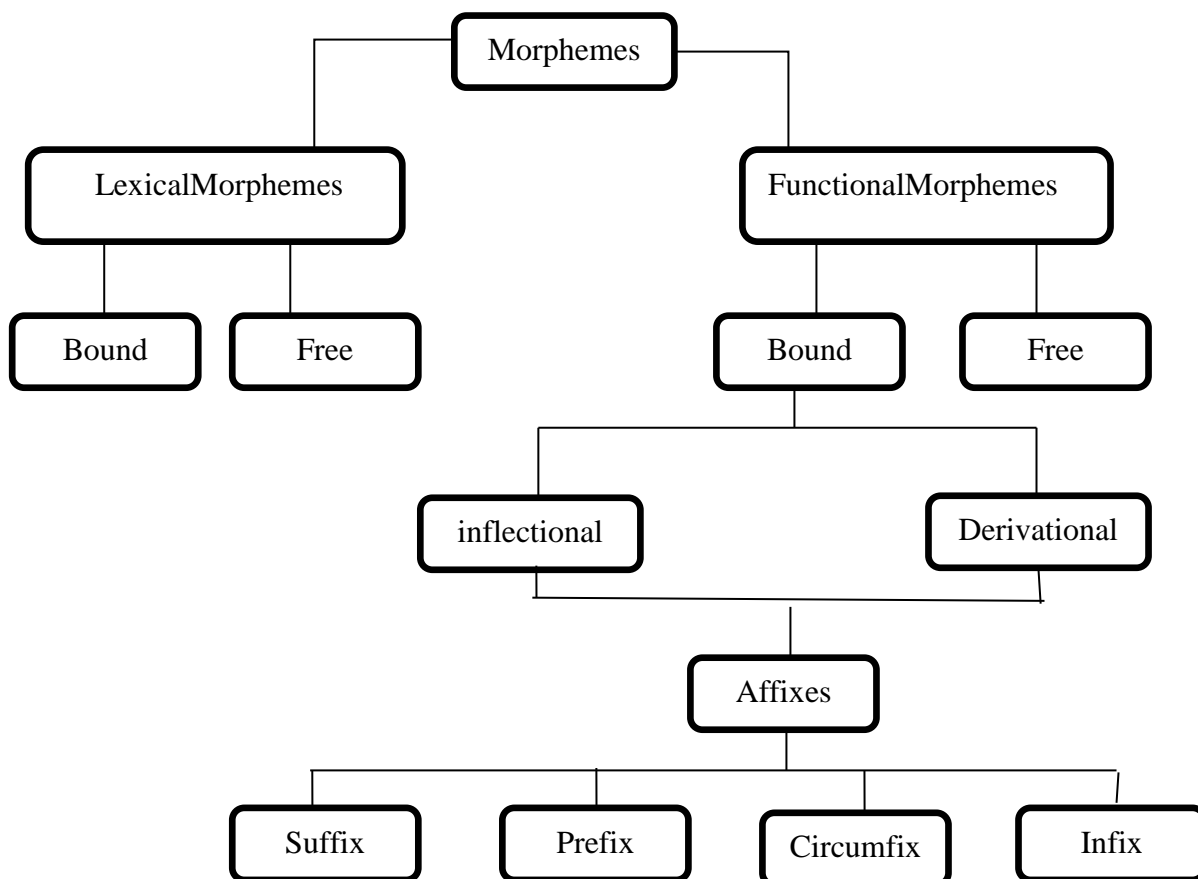


Unlike inflectional morphemes, derivational morphemes do not affect words' grammatical properties. These morphemes are attached to words to create new ones by changing the meaning of words or their grammatical category. For instance, the word 'happy' is an adjective. Adding the derivational morpheme {-ness} to this adjective creates the noun 'happiness'. Similarly, the noun 'hope' turns into the adjective 'hopeless' by adding the derivational morpheme {-less} (Handoko, 2019; Yule, 2006).

Most of the inflectional and derivational morphemes used in many languages are affixes (Hamawand, 2011). Mc Carthy (2002) mentions that an affix is an umbrella term for suffixes and prefixes. A suffix is a bound morpheme which are attached at the end of a particular word, such as the suffixes {-ly} and {-ation} in the words 'additionally' and 'formation', respectively. A prefix is a bound morpheme, or an affix which can be found at the beginning of a word, like the prefix {re-}, in 'reformulate', and {in-}, in 'independent' (Famala, 2021; Handoko, 2019). Some words are created by adding circumfixes. A circumfix is considered as an affix which is composed of two parts. The first part is attached to the beginning of a word, and the second one is placed at the end (Famala, 2021; Handoko, 2019). For instance, in Algerian Arabic, verbs are negated by adding the circumfix 'ma-ʃ'. The first part 'ma-' is added at the beginning; while the second part 'ʃ' is attached at the end, as in 'ma:klateʃ' (she did not eat). Another type of affixes can be inserted in the middle

of a word. This type of affixes which is called ‘infix’ is not famous in English language, but it can be found in other languages which are usually known as infixing languages such as Hebrew and Arabic(Yule,2006; Katamba ,2006). The classification of Morphemes can be summarized in the figure (2) below:

Figure(02):*Morphemes’ Classification*



1.5. Root, Base and Stem

To analyse the morphological structure of words, one has to differentiate among three crucial concepts which are root, base and stem. Handoko (2019, p.11) defines the concept root “as a core part of a word, the word which must be lexical in nature. A root must exist independent of affixes. A root cannot be segmented further into smaller meaningful units”. This definition suggests that a root is the basic form that, even after removing all the possible

affixes that can be attached to it, still carries a semantic reading (Haspelmath ,2002; Famala,2021). For instance, the word ‘happy’ is a root because it is considered as the smallest meaningful form that contains no extra affixes.

A base refers to “any morphological element to which other morphological elements are added during the construction of words” (Famala, 2021,p 24). Also, Haspelmath (2002,p.19) mentions that “the of the word that an affix is attached to it is called the base” . This means that, a base, can be attached to other morphological elements. These elements are called affixes. “The affixes attached to a base may be inflectional affixes selected for syntactic reasons or derivational affixes which alter the meaning or grammatical category of the base”(Handoko,2019,p.33). For instance , the word ‘act’ which is considered as a base ,can be attached to the inflectional morpheme ‘-s’ to form the plural in ‘ speech acts’ .Also, it can be attached to the derivational morpheme ‘-ive’ to change the noun ‘act’ to the adjective ‘active’.

According to Geert (2007,p.28) “the stem of a word is the word form minus its inflectional affixes”. In other terms, a stem can be a result of the combination of two parts which are a root and an affix. Additionally, a stem can be attached to one or more morphemes. Also, it is a word that has lexical meaning such as, the word ‘productive’ represents a stem because it consists of the word form ‘product’ which is attached to the morpheme ‘-ive’, and it has a lexical meaning. Simultaneously, the same stem ‘productive’ can be attached to the morpheme ‘-ity’ and become the word ‘productivity’. The stem ‘productive’ represents a simplex stem and ‘ productivity ‘ represents complex stem (Handoko,2019;Twain ,2013).

From Handoko’ viewpoints, (2019,p.33), “all roots are bases .Bases are called steams only in the context of inflectional morphology”. For instance, present(root) plus the prefix(re-)

becomes the base 'represent' and by the addition of the inflectional suffix '-ed' to this base ,it becomes the stem 'represented'.

1.6. Morph Vs Allomorph

The term 'morph' refers to the specific forms which are used in order to realize morphemes at the level of speech. For instance, the word places has two morphs. The first one is the lexical morpheme {place} and the second one is the inflectional morpheme {s} (Panacovà ,2021; Yule,2006). An allomorph is a linguistics term for a variant form of a morpheme. The concept occurs when a unit of meaning can vary in sound (phonologically) without changing meaning (Handoko, 201). In other terms, one single morpheme can have several distinct pronunciations. These different shapes take into account the context. It means that the appropriate specific realization is used in the appropriate context (Carstairs-McCarthy ,2002; Haspelmath, 2002). For instance, the inflectional morpheme {-s}, which is used to indicate the plural form, has three main distinct realizations at the level of speech. It can be pronounced as [s] in 'students', [z] in 'phones', or [ɪz] in 'duties'. These three allomorphs are used in different contexts taking into account the phonological properties of neighbouring sounds (Yule ,2017; Famala,2021).

Moreover, Haspelmath (2002, p.26-27) illustrates that "English verbs such as sleep ,keep ,deal , feel ,mean , whose root has the long vowel [i:] in the present tense forms ,show a root allomorph with short [e] in the past tense forms (slept, kept ,dealt ,felt , meant)". Similarly, Melinda Vernanda (2016) gives another clear example of an allomorph, which is the past form morpheme {-ed}. This morpheme can be pronounced as [d] in classified, [t] in talked, or [ɪd] in divided.

1.7. Word Formation

Hamawand(2011) expresses that word formation focuses on creating new words. It deals with the basis used while forming new words. There are several types of word formation processes which are used to create new words. The main ones are: compounding, conversion, back formation, blending, acronym formation, clipping, reduplication, borrowing, coinage, and eponym.

1.7.1. Compounding

According to Booij(2007,p.75) “compounding (also called composition) is the most frequently used way of making new lexemes. Its defining property is that it consists of the combination of lexemes into larger words”. In English, compounding is regarded as the highly creative word formation process which is defined as a composition of two or more already existed linguistic elements or a new one. To put it in other words, compounding refers associating two or more separate constituents to create one single structure, for instance, the word ‘pickpocket’(Panacovà,2021; Yule,2017).

1.7.2. Conversion

Conversion is another word formation process which transfers a word from one word class to another one without adding any morphemes. That is, keeping the same form of a word and changing only its word-class, is called conversion (Schmid,2015;Bauer,1983). Panacovà(2021, p 62) clearly stated that“we speak of conversion in cases when a word which belongs to one word class (parts of speech)shifts to another word class without adding an affix”.For instance, the word ‘email’ is a noun, but it is also used to describe and action ‘to email’.

1.7.3. Back-formation

Yule (2017,p. 176) states that “a very specialized type of reduction process is known as backformation. Typically, a word of one type (usually a noun) is reduced to form a word of

another type(usually a verb)”. This word formation process is based on deleting a smallest unit of a word which is ‘morpheme’. As a result of this deletion, a new word class appears. For instance, the verb ‘televise’ is derived from the noun ‘television’ by deleting the morpheme {-ion}(Schmid, 2015).

1.7.4. Blending

Finegan (2004) explains that the process of blending occurs when numerous morphemes are mixed together to form one word. Panacovà (2021,p.64) argues that “blends result from the combining of parts of two words into a single one. The parts of two words are not necessarily morphemes, e.g. vlog from video and blog, brunch from breakfast and lunch”.

1.7.5. Acronym Formation

Acronym is considered as a kind of blending because they share the same technique which is the reduction of sounds. The process of acronym is based on taking the first letters of words , associating them together , and pronouncing them as one word such as the French Acronym *SAMU* (Service d’Aide Medicale Urgente)(McCarthy,2002;Hamawand ,2011) .

1.7.6. Clipping

Clipping is based on the reduction of the existing words by deleting a part of the original form of a word without changing both meaning and word class of this word(Delahunty & Carvey ,2010; Dalton-Puffer and Dieter Huber ,2008). According to Schmid (2015, p.29)

The process of clipping is responsible for a number of entirely common everyday words, whose sources are hardly known today. For example, car is a front clipping of motor car and bus a front clipping of omnibus; pub is a back clipping of public house and zoo a back clipping of zoological garden.

1.7.7. Reduplication

Reduplication is a word formation process which is based on the repetition of a smallest minimal unit of a word or part of this unit with the purpose of creating new term which has both different word class and meaning such as ‘Tik-Tok’ (Finegan ,2004).

1.7.8. Borrowing

Borrowing is considered as the most widely used means to create new words in English language(Yule,2017). According to Delahunty & Carvey (2010,p. 137)

Borrowing involves coping a word that originally belonged in one language into another language. For instance, many terms from Maxicancuisince,like taco and burrito, have become current in American English and are spreading to other English dialects. Borrowing requires that the borrowing language and the source language come in contact with each other.

1.7.9. Coinage

The process of coinage means developing new words and concepts. It refers to “the invention and general use of totally new terms”(Yule,2017,p.179).Coinage is considered as the rarely used process in English language(Dalton-Puffer and Dieter Huber,2008). This process is usually in commercial business and technology such as the words used ‘vaseline’ and ‘google’.

1.7.10. Eponym

Eponym is a process used to create new terms based on the name of a person or a place. A common example of eponymy is the word ‘sandwich. This word was created after the name of Earl of Sandwich who refused to leave the gambling table to have meal. So, he insisted to put slices of meat between two pieces of bread while gambling (Yule, 2017).

1.8. Plural Nouns in Modern Standard Arabic

The plural form in Modern Standard Arabic (MSA) refers to more than three things. This form is created by the adding a set of plural markers at the end, as in 'مناقش' /muna:qif/ (examiner), 'مناقشون' /muna:qifu:n/ (male examiners), and 'مناقشات' /muna:qif a:t/ (females examiners), or by changing the whole structure of words like in 'اقلام' /ʔaqela:m/ (pens), 'مدارس' /mada:ris/ (schools), and 'علماء' /ʔulama:ʔ/ (scientists). The plural in MSA can be categorized into two main categories: regular plural and irregular, or broken, plural. To form regular plural, specific suffixes are attached to the words without changing the internal structure of words. Concerning the irregular or broken plural, several distinct morphological patterns are employed. These patterns change the internal structure of words (Abdul-Halim, Shamsan, and Attayib, 2015: Bousedr, 2017).

1.8.1. Regular Plural

To form the regular plural in MSA, two main types of suffixes are employed: The sound masculine suffixes {-u:n} and {-i:n}, and the sound feminine suffix {-a:t}.

1.8.1.1. Sound Masculine Plural Suffixes

Abdul-Halim, Shamsan and Attayib (2015, p.143) state that "the sound plural form of the masculine noun is made by adding the suffix-un to the singular form to indicate the nominative case and the suffix -in to indicate the accusative or genitive cases". For instance, adding the inflectional morpheme {-u:n} to the masculine singular nominative noun 'مشرف' /muʃrif/ (a supervisor) forms the plural noun 'مشرفون' /muʃrifu:n/ (supervisors). However, if the word 'مشرف' is in the accusative or genitive case, the inflectional morpheme {-i:n} is attached at the end of the word. This means, the plural form becomes 'مشرفين' /muʃrifi:n/ (supervisors), instead of 'مشرفون' /muʃerifu:n/ (supervisors).

1.8.1.2. *Sound Feminine Plural Suffix*

To form the regular plural of feminine nouns, the inflectional morpheme {-a:t} is attached at the end of these nouns. However, in some words, this morpheme can substitute the last letters instead of attaching directly to them. For instance, to form the plural of the singular word 'معلمة' /muʕalima/ (a female teacher), one should substitute the last letter 'ة' (taa' marbuta) by the feminine inflectional morpheme {-a:t}. This changes the word from the singular form 'معلمة' /muʕalima/ (a female teacher) to the plural form 'معلمات' /muʕalima:t/ (female teachers). The feminine inflectional morpheme {-a:t} is used to indicate the nominative, accusative, and the genitive case. To communicate the right case, specific diacritics are used. The feminine inflectional morpheme {-a:t} is used with 'damma' if the plural noun is nominative, or it is used with 'kasra', if the plural noun is accusative or genitive (Abdul-Halim , Shamsan , and Attayib, 2015).

1.8.2. *Irregular Plural*

The broken plural refers to a plural which indicates three or more and changes the internal structure of the singular form of the noun. It can be defined as any plural that does not have sound plural endings {-u:n, -i:n, -a:t} (Sliman,2020; Ali, 2023). The broken plural can be divided into three main categories which are: plural of paucity /dzameʕ ʔalqillah/, plural of multitude /dzameʕ ʔalkaθrah/, and the ultimate plural form /siat muntaha ʔal dzumu:ʕ/.

1.8.2.1. *Plural of Paucity /dzameʕ ʔalqillah/*

It can be defined as the plural which indicates three things to maximum ten things. It includes four main morphological patterns (Essamiri,2013). These patterns can be summarized in the following table:

Table(01): Morphological Patterns of Plural of Paucity in MSA (based on Bousedr, 2017, p.9).

| Morphological Pattern | Example from MSA | |
|-----------------------|-----------------------------|-------------------------------|
| | Singular | Plural |
| أفعله /ʔafʕilah/ | طعام /tʕaʕa:m/ A food | أطعمة /ʔatʕʕimah/ Foods |
| أفعل /ʔafʕul / | شهر /ʃaher/ A month | أشهر /ʔaʃhur/ Months |
| فعله /fiʕlah/ | صبي /sʕabijj/ A child | صبية /sʕibjah/ children |
| أفعال /ʔafʕa:l / | وقت /waqet / Time | أوقات /ʔawqa:t/ Times |

1.8.2.2. Plural of Multitude /dzameʕ ʔalkaʕrah/

According to Essamiri(2013), this type of irregular plural can be defined as a plural which indicates at least more than ten things. It includes sixteen morphological patterns which are summarized in the following table:

Table(02): Morphological Patterns of Plural of Multitude in MSA (based on Bousedr ,2017, p.9).

| Morphological Pattern | Example from MSA | |
|-----------------------|------------------------------|-----------------------------|
| | Singular | Plural |
| فعل /fuʕl / | احمر /ʔħmar/ Red | حمر /ħumr/ Red |
| فعل /fuʕul / | كتاب /kitab/ a book | كتب /kutub/ Books |
| فعل /fuʕal / | علبة /ʕulbah/ a box | علب /ʕulab/ Boxes |
| فعل /fiʕal / | عبرة /ʕibrah/ a lesson | عبر /ʕibar / Lessons |
| فعله /fuʕala/ | قاضي /qa:dʕi:/ A judge | قضاة /qudʕa:t/ Judges |
| فعله /faʕala/ | كاتب /ka:tib/ A writer | كتبة /kataba/ Writers |
| فعله | قرد | قردة |

| | | |
|----------------------|-----------------------------------|----------------------------------|
| /fiʕala/ | /qird/ A monkey | /qirada/ monkeys |
| فعلى /faʕla/ | احمق /ʔaħmaq/ Foolish | حمقى /ħamqa/ Fools |
| فعول /fuʕu:l/ | درس /dars/ A course | دروس /duru:s/ Courses |
| فعل /fuʕʕal/ | راكع /ra:kiʕ/ Kneeling | ركع /rukkaʕ/ Kneelings |
| فعال /fiʕa:l/ | كلب /kalb/ A dog | كلاب /kila:b/ Dogs |
| فعال /fuʕʕa:l/ | قارئ /qa:riʔ/ A reader | قراء /qurra:ʔ/ Readers |
| فعلان /fiʕla:n/ | غراب /yura:b / a Crow | غربان /yirba:n/ Crows |
| فعلان /fuʕla:n/ | ركب /rakb / | ركبان /rukba:n/ |
| أفعلاء /ʔfʕila:ʔ/ | ولي /walijj / Father/mother | أولياء /ʔawlija:ʔ/ Parents |
| ففعلاء /fuʕala:ʔ/ | بخيل /baxi:l / | بفعلاء /buxala:ʔ/ Stignies |

1.8.2.3. The Ultimate Plural Form /siat muntaha ʔal dzumu:ʕ/

It can be defined as every plural that has two or three letters followed by an ‘alif’, with a ‘suku:n’ in the middle (Elghalayini ,2005,p.194) .It includes eighteen morphological patterns. These patterns can be summarized in the following table:

Table(03):Morphological patterns of the ultimate plural form in MSA (based on Bousedr ,2017,p.9).

| Morphological Pattern | Examples from MSA | |
|-----------------------|-------------------------------|---------------------|
| | Singular | Plural |
| فواعل /fawa:ʕil/ | زوبعة /zawbaʕa/ A storm | زوابع /zawa:biʕ/ |

| | | Storms |
|------------------------|-----------------------------------|-----------------------------------|
| مفاعيل /mafa:ʕi:l / | مفتاح /mifta:h/ A key | مفاتيح /mafa:ti:h/ Keys |
| فعائل /faʕa:ʔil/ | رسالة /risa:la/ A letter | رسائل /rasa:ʔil/ Letters |
| فعاعيل /faʕa:ʕi:l/ | خفاش /xufa:f / A bat | خفافيش /xafa:fi:f / Bats |
| فعالي /faʕa:la/ | دعوى /daʕwa: / Lawsuit | دعاوى / daʕa:wa:/ Lawsuits |
| فعالي /faʕa:lili:/ | كرسي /kurssi:/ A chair | كراسي /kara:ssi:/ Chairs |
| فعالل /faʕa:lil/ | سفرجل /safardʒal/ quince | سفارج /saf a:ridʒ/ quinces |
| فعاليل /faʕa:li:l/ | دينار /dina:r/ Dinar | دنانير /dana :ni :r/ Dinars |
| فواعيل /fawa:ʕi:l/ | تاريخ /ta:ri:x/ A date | تواريخ /tawa:ri:x/ Dates |
| مفاعل /mafa:ʕil/ | مسجد /masdʒid/ A mosque | مساجد /masa:dʒid/ Mosques |
| افاعل /ʔafa:ʕil/ | ارنب /ʔarnab/ A rabbit | ارانب /ʔara:nib/ Rabbits |
| افاعيل /ʔafa:ʕi:l/ | اسطورة /ʔus u:rah/ A legend | اساطير / ʔasa: i:r/ Legends |
| تفاعل /tafa:ʕil/ | تجربة /tadʒubah/ | تجارب /tadʒa:rib/ |

| | An experiment | Experiments |
|------------------------|-----------------------------------|------------------------------------|
| تفاعيل /tafa:ʕi:l/ | تسبيحة /tasbi: ah/ A praise | تسابيح / tasa:bi:/ Praises |
| يفاعيل / jafa:ʕi:l/ | ينبوع /junbu:ʕ/ A fountain | ينابيع /jana:bi:ʕ/ Fountains |
| فياعل /faja:ʕil/ | فيلق /fajelaq/ A corps | فيالق /faja:liq/ Corps |
| فياعيل / faja:ʕi:l/ | شيطان / aje a:n/ A devil | شياطين / aja: i:n/ Devils |
| فعالى /fuʕa:la:/ | سكران /sakera:n/ A drunk | سكارى /suka:ra:/ Drunks |

1.9. Literature Review

Several studies have been proposed to examine the inflectional and derivational morphemes in Algerian Arabic. Djaffar(2013) studied the inflectional and derivational formations in Algerian Arabic Dialect. The study emphasized on Algiers Arabic Urban Dialect(AAUD) which is the variety spoken in the capital city. She analysed different parts of speech of AAUD especially plural nouns. The results of the study revealed that there are four noun plural inflectional morphemes in AAUD are: /-a:t/ , /-i:n/ , /-jja/ , /-a/ and eleven morphological patterns which are used to form the broken plural including /fʕa:l/ , /fʕa:lel/ , /fʕa:li/ , /fʕu:l/ , /fʕu:la/ , /fʕa:la/ , /fila:n/ , /feʕla:n/ , /fʕel/ , /feʕla/ , and /fʕi:l/. However, Djaffar(2013) did not explain how these morphemes and morphological patterns are used in AAUD.

Furthermore, Hemaidia (2016) conducted a contrastive error analysis study in his final doctoral thesis. In the second chapter of his thesis, he focused on the inflectional and derivational morphemes in Algerian Arabic as spoken in Tiaret. His study is about a contrastive (comparative) study between two different languages 'English' and 'Arabic' in order to identify both similarities and differences between them. He analysed all the different parts of speech in details. Moreover, he emphasized on a contrastive description of the inflectional morphemes of Arabic and English including number, gender, person, case, tense, voice, mood, and aspect. His comparison was based on a corpus analysis. After analysing and interpreting the results, he found that they are different rather than similar. For instance, in Arabic, there are three forms: singular, dual, and plural. Unlike English which includes only two forms: singular and plural.

Besides, Hammodi's article (2018) highlighted the Algerianisation of French Nouns by using the Algerian Arabic determiners, demonstratives, and possessives with French Nouns. The purpose of her study is to describe and explain the application of Algerian Arabic determiners, demonstratives, and possessives with French Nouns. It emphasized on switching and borrowing from French to Algerian Arabic and vice versa. The findings demonstrated that borrowing French nouns to Algerian Arabic touches several branches of linguistics such as syntax, phonology, and morphology.

Similarly, Doulami and Benayache (2020) studied the adaptation of French language nouns, verbs, and adjectives to the linguistic system of Algerian Arabic dialect. Their investigation focused on the reasons behind this issue, attitudes towards it, and how French parts of speech were adapted into the linguistic patterns of Algerian Arabic. They chose 100 students at the university of Ibn Khaldoun in Tiaret as a sample. In addition, both a questionnaire and word list were used as tools of investigating. The study came up with two main results. It seems that Algerian people borrow French words in order to fill the lexical

gaps. Moreover, it appears that they have both positive and negative attitudes towards this phenomenon.

Moreover, Merabet and Lagraa (2023) studied the morphophonemic Analysis of verbal inflectional morphemes in Algerian Arabic as spoken in Tiaret. Their analysis was based on recording, observation, and interpretations, they found that verbal inflectional morphemes in Tiaret dialect can be classified into two groups. The first group refers to past tense inflectional morphemes. This group includes only suffixes. The second group refers to present tense inflectional morphemes. This group contains both suffixes and prefixes. Additionally, they found that, when using these types of morphemes, a number of phonological processes take place such as assimilation, substitution, deletion, insertion, and metathesis.

1.10. Conclusion

The chapter is devoted to describe morphology, the branch of linguistics that examines the word structure. It highlights the main concept in morphology, which is morpheme by taking into consideration the different classifications of this concept. The chapter also explains other important concepts including root, base, stem, morph and allomorph. Moreover, it describes the common word formation processes used to create new words. At the end, the chapter presents how MSA forms plural nouns, and reviews some relevant studies.

Chapter Two

Phonology

2.1.Introduction

This chapter highlights the fundamental concepts of phonology. It clarifies the concept 'phonology', and outlines the speech sounds 'phonemes', 'phones', and 'allophones'. Moreover, the chapter illustrates the similarities and the differences between phonetics and phonology, and explains the distinctive feature theory. The chapter also describes the main phonological processes, such as assimilation, dissimilation, epenthesis, deletion, substitution and metathesis.

2.2.The Origin of Phonology

Phonology is a Greek word. It is divided into two parts; the first one is 'phono' which refers to sound and the second part 'logy' which means speech. In general phonology is the study of speech sound. However, it is distinct from phonetics which includes physical production, perception of sounds or signs of language (Roger,1998;Carr,2003). The early stages of phonological studies were in the nineteenth century by the scholar Jan Baudouin de Courtenay (Anderson and Stephen, 2021),who launched a new term, phoneme, in many of his lectures in 1876-1877.This was the starting point of modern phonology.

Nikolia Trubetzkoywho is one of leaders and founders of the Prague school is considered a pivotal scholar in phonology in the interwar period (Baltaxe, 1969). In the early twentieth century, he published his most important works on phonology. He was greatly influenced by Jan Baudouin (Anderson, 2021).Hence, scholars began to focus on phonology, such as Chomsky and Halle who published 'The SoundPattern of English' in 1968, and Davide Stampe (1969)and John Goldsmith (1976)who have significantly contributed to the study phonology (Hale, et al. 2008).

2.3. Definition of Phonology

Phonology is the study of the sounds used in a given a language, their structure and constitution intowords,phrases,and syllables (Bird 2002). Yule (2017)defines phonology as the description of the speaker's sound system in a language, and is generally based on the theory of what every adult speaker of a language knows without awareness of the phonetic system of the language. Phonology is the systematic and scientific study of the sound structure in a language which differs from morphology (Odden, 2005).Jordan and Brentari (2018) consider phonology as one of the main important branches of linguistics;as it studies how language is organized systematically.

Phonology is the study of the sound pattern that arises in a language. Some linguists consider phonetics and the speech sound production, to be part of phonology (Suarz, J, 2012).Phonology is concerned with the way sounds change over time and how these changes are explained in terms of the phonetic system and other linguistics factors. Phonology seeks to understand how language works as a complex system and how the sounds of language are used to communicate meaningful speech (Goldsmith, 2011).

Phonology is fundamental to our understanding of how sounds work. It studies the sound systems of language and deals with the mental processes that underlie speech. Itis used, for instance, to treat sound acquisition and speech disorders. Phonology can be used to examine how individuals develop their sound system and investigate people who have problems in creating correct speech sounds (Gussenhoven&Jacobs, 2017).Many scholars, like Johnson (1999),Iggy Roca (1972) and Goldsmith(2011) define phonology as the typical study of phonemes in language, including their systematic organization ,stock,distributionand pattering.

2.4. Phonetics and Phonology

Phonetics and phonology are related, yet different branches of linguistics. According to Aziaku (2023) phonetics is the scientific study of sound discovering how it is produced and used in spoken language, how to formulate symbols, and recognize different sounds; while phonology is the phonemic analysis aimed at determining the nature of phonemes and accessing the phonetic inventory of the language (Roach 1992). Phonetics is the scientific study of human speech sounds and how they are produced, transmitted and received, whereas, phonology is the study of the main speech sounds and their systematic development in a particular language (Koukab2019).

Both of phonetics and phonology study the speech sound. The main difference between them is that phonetics is the study of concrete speech sound, while phonology is the study of abstract sound, especially the different sound patterns in different languages (Hasa, 2016). Despite the differences, phonology and phonetics are so closely related, Huffman (2014) emphasized that phonetics is the application of phonological studies. Phonology is defined as the cognitive aspect of sound structure, while phonetics is understood as the application of this cognitive aspect.

2.5. Phones, Phonemes and Allophones

Though the three terms ‘phonemes’, ‘phones’, and ‘allophones’ refer to speech sounds, there are differences among these terms. Evstifeeva(2023,p.19)defines the term ‘phoneme’ as “a minimal abstract linguistic unit realized in speech in the form of speech sounds opposable to other phonemes of the same language in order to distinguish the meaning of morphemes and words”. The term ‘phoneme’ is considered the only meaningful sound of a language, because by changing the phoneme in one word; another word is obtained that is completely different in meaning (Coxhead,2006).

Phonemes are those distinct set of sounds used in a particular language(Chomsky,1968). Similarly, Sapir (1925) explained that phonemes are the basic components of words in a given language. He emphasized that the phonemes used to create a particular word are what determine its meaning. For instance, the word ‘red’ (color) contains three phonemes which are /r/ /ɛ/ and /d/. If the phoneme/r/ is replaced by /b/, the word obtained, ‘bed’ (home furnishings), is semantically different from ‘red’.

Phonemes are abstractions, the speech sounds that human beings produce are called phones(Ladefoged, 2006). Setyaningsih(2017) considered a phoneme to be an abstract sound in our memory that is distinct and varies from one language to another. By contrast, phones are tangible, non-contradictory sound segments.

To produce one phoneme, language users may use one phone. They may also use a number of phones. That is, users can realize one phoneme using a set of speech sounds. The speech sounds used to verbalize one particular phoneme are called allophones (Bloomfield, 1933).Ladefoged, (1975) defined the term ‘allophone’ as the many spoken sounds that are used to pronounce one phoneme in specific a language. For example, [p^h]and [p] are allophones for the phoneme /p/ in English language. They are two different ways of pronouncing the same phoneme /p/. To distinguish between abstract sound units and concrete sound units, linguists and phonologists usually describe the phonemes of a particular language using slashes, as in /t/, /k/, and /g/, while phones and allophones are presented using brackets, as in [t], [k], and [g](Wise, 2013).

2.6. Distinctive Features

Distinctive feature is considered as the basic idea in phonology ,as it expresses the way in which phonemes contrast (Jakaza,2018).According to Chomsky and Halle (1968, p.64) “distinctive features are the minimal elements of which phonetic, lexical,and phonological

transcription are composed by combination and concatenation”. Deepark and Mohit (2012) maintain that distinctive features identify the variations that exist among sounds and the ways in which these sounds may change.

The distinctive features were introduced by Jakobson and Morris in 1950’s. These two scholars proposed a number of binary features that can be used to differentiate each phoneme from other phonemes (Ethelbert,2008). Distinctive features are a global set of characteristics associated with sound (Jacobson, 1961).The set of features and their role has expanded over the years. The distinctive features serve to define phonological dimensions that are important for lexical variation and phonological patterning in human language (Mielke, J, 2011). Distinctive features are classified into major class features, place features, manner features and laryngeal features.

2.6.1. Major Class Features

According to Chomsky and Halle (1968, p.301-302) major class features “segregate segments into the large groups of consonants and vowels, sonorants and obstruents, glides and liquids, and syllabic and non-syllabic sounds”. There are four major class features: consonant al syllabic, sonorant, and approximant

[+/-consonantal]: Sounds which are produced by creating a partial or a complete air obstruction in the vocal tract are considered as consonantal sounds, such as obstruent, nasals, and liquids. By contrast, other sounds are produced without complete obstruction, such as vowels, and semivowels (Halle and Clements, 1983).

[+/- syllabic]: Darragh(2018) confirm that syllabic sounds are the sounds that represent the nucleus of a syllable. This suggests that vowels and syllabic consonants are [+syllabic],

whereas, the sounds that can not function as the nucleus of a syllable are [-syllabic] (Halle and Clements, 1983).

[+/-sonorant]: Sonorant sounds refer to those sounds which are produced with a continuous flow of air, such as vowels and glides (Bakovic, 2015). By contrast, [-sonorant] sounds are the exact opposite of [+sonorant] sounds. Their production severely limits the air flow, such as fricatives, stops, and affricates (Halle and Clements, 1983).

[+/-approximant]: Approximant sounds are produced with narrowing the articulators without creating a total block. That is, the production of these sound allows the air to escape freely, as in vowels, glides, and liquids (Bakovic, 2015).

2.6.2. Place Features

Blevins (2009) considered place features as the characteristics that describe exactly the different places in the vocal tract which are used to produce speech sounds. There are two types of place features: consonantal place features and vowel place features.

2.6.2.1. Consonant Place Features

To describe the places involved in the production of consonants, a set of unary and binary features are used.

[labial]: Labial sounds are produced by creating obstruction at the level of the lips, as in /p/, /b/, /m/, /v/, and /f/ (Halle and Clements, 1983).

[coronal]: “Coronal sounds are produced with the blade of the tongue raised from its neutral position” (Chomsky; Halle, 1968, p. 304). Using the blade of the tongue to create constriction at the level of the alveolar ridge produce coronal sounds, such as /t/, /n/ and /s/.

[dorsal]: dorsal sound can be produced creating constriction using the back half of the tongue, or the dorsum (Drragh, 2018), as in /k/ and /g/ in English.

[guttural]: Ladefoged (1996) explain that the term guttural is used to refer to the sounds which are produced at the back of the mouth, such as the pharyngeal sounds in Arabic.

[+/-anterior]: When a blockage occurs in the front part in the mouth from the alveolar ridge forward, anterior sounds are produced (Chomsky and Halle, 1968). Halle and Clements (1983) explain that anterior sounds are produced by a constriction that occurs in the front part of the oral cavity, such as /m/, /p/, /v/, /f/.

[+/-strident]: These sounds are produced with loud turbulent noise. This noise results from a constriction at particular point in the vocal tract, as the noise resulted from the production of fricatives and affricates (Ridouane, and Harry, 2015).

[+/-distributed]: According to Katamba (1989, p. 44) “distributed sounds are made with an obstruction and extending over a considerable area along the middle-line of the oral tract”. That is, distributed sounds are produced along the airflow path due to the obstruction created by the labial blades.

[+/-high]: Shriberg and Kent (2012) said that “high sounds are produced by raising the body of the tongue above the level that it occupies in the neutral position”. That is, by raising the tongue above the sound level, high sounds are produced as in /k/ sound.

[+/-low]: When the tongue is lowered and lies at lower level than the level it occupies, it often produces low sounds, as in /h/ (Katamba, 1989).

[+/-back]: Backsounds are produced when the tongue is retracted relatively from its original level, as in velars and velarized consonants (Halle and Clements 1983).

[+/-round]: Narrowing the lip opening produces rounded sounds (Shriberg and Kent, 2012). Goldsmith (2011) explained that forming a ring requires contracting the rings surrounding the lips, which is how round sounds are produced.

2.6.2.2. Vowel place features

Unlike consonants which are described in relation to the different places where an obstruction may occur, vowels are distinguished by five main features that describe the size and the shape of the oral cavity. These features are [+/-high],[+/-low],[+/-back], [+/-round] and [+/-tense](Colin, et al.,2011).

[+/-high]: The high vowel sounds are produced by the tongue's body rising from its basic position (El Husaiyn, 2016).[+high]includes all the high vowels and [-high] includes the other vowels (Ladefoged,2001).

[+/-low]: When the mouth is slightly open and the tongue is relatively flat or lower than its normal level, low vowels are produced (Gaur,2023).[+low] includes all the low vowels and [-low] includes all the other vowels (Ladfoged and Johnson, 2014).

[+/-back]: Back vowels are distinguished by being the highest point on the tongue, located relatively back in the mouth (Tsur and Reuven,1992).These sounds are produced by pulling the body of the tongue from the neutral position, as in example /u/ in rule [ru:l](Ladefoged,2006).

[+/-round]:Rounded vowels are produced by changing the shape of the lips and forming a circular opening (Deilbre,1992).Ladefoged (2006) mentioned that, in English, [+round] includes all back vowels except /ɑ/, /ʌ/,/ə/ which are [-round], other vowels are [-round] too.

[+/-tense]:Halle(1997,p.611)explained that “tenseness is the pronunciation of a vowel with less centralization... longer duration, and narrower mouth width (with the tongue being perhaps more raised) compared with another vowel”, like /i:/ in ‘be’.

2.6.3. Manner Features

Manner features are concerned with the degree of structure in the vocal tract and how the articulators are used when producing the sounds (Bullbul,2014). Manner features are: [+/-continuant], [+/-delayed], [+/-nasal]and [+/-lateral].

[+/-continuant]:Continuant sounds are produced with partial obstruction that does not completely block the airflow. This means that the articulation of continuant sounds does not block the air flow, like /w/ in wall (Chomsky and Halle1968).

[+/-delayed released]:The closure that occurs in the oral cavity followed by release at a certain point produces [+ delayed released] sounds, As such as /dʒ/ and /tʃ/ (ALAsmari, 2015).

[+/-nasal]:When the sound produced from the lungs moves through the nasal cavity instead of the oral cavity,[+nasal] sounds are produced, for instance /n/ and /m/are [+nasal] (Sridhar, 2019).

[+/-lateral]:Allowing the air stream to move from one or two sides of the tongue produce lateral sounds like /l/ (Shriberg and Kent, 2012).

2.6.4. Laryngeal Features

Laryngeal features are those characteristics that describe the condition of the larynx or the vocal folds (Blevins, 2004). There are three laryngeal features: [+/-spread glottis], [+/-constricted glottis], [+/-voice].

[+/-spread glottis]:Spread glottis sounds are produced by the spread of the vocal cords, which creates a period of silence before the sound is produced. This feature is used to distinguish between aspirated and non-aspirated stops (Riduane,2006), while [-spread glottis] sounds are produced without spreading the glottis (Goldsmith,1990).

[+/-constricted glottis]: Constricted glottis sound result from a severe blockage in the glottis, which is used by the vocal cords, and this prevents their free vibration . this process occurs only with constricted glottis sounds,while the non-constricte glottis sounds produced without this process (without a blockage in the glottis) (Katamba,F,1989)

[+/-voice]: “Voiced sound are associated with vibration of the vocal folds” (Shriberg and Kent, 2012,p. 369). That is, when vocal folds vibrate, voiced sound are produced, as in /b/ and /g/. Voiceless sounds are those produced without vocal fold vibration, such as /t/, and /k/ sound (Goldsmith,1990).

2.7.Phonological Processes

Phonological processesare a set of processes that explains how mainly stored abstract representations are produced as concrete real sounds (Erlinda, 2010). Several phonological processes have been proposed to treat how language users articulate abstract speech sounds. The main phonological processes are assimilation, dissimilation, insertion, deletion, substitution, and metathesis.

2.7.1. Assimilation

Assimilation is defined as the modification of a sound to make it more similar to another sound in its vicinity. Its advantage is that it leads to easier and more economical transitions from one sound to another (Katamba,1989).There are three types of assimilation:

a. Regressive Assimilation

Regressive or proactive assimilation is the change that occurs in characteristics of a phoneme due to the effect of another phoneme that occurs later in the word (Garn& Lynn,2004). Regressive assimilation is a right to left process that transmits the characteristic (s) of a given phoneme to another phoneme that comes before it, like /d/ and /b/ in the word

handbag[ˈhænd.bæg] the native speaker pronounced it clearly but it difficult to pronounce in fast speech. So the speaker pronounced like this [hæmbæg](Forel& Puska, 2005).

a. Progressive Assimilation

Progressive assimilation is a left to right assimilation that occurs when a given phoneme assigns some of its feature (s) to another phoneme that comes after it (Forel& Puska, 2005). Lorenz (2013) explained that progressive assimilation makes a given phoneme appears more similar to the one that comes earlier, for instance washed /wɒʃt/ (d to t).

b. ReciprocalAssimilation

Reciprocal assimilation is a process that merges the features of two neighbouring phonemes to produce a new sound. For example, In English, when the phoneme /s/ meets /j/, a new sound is produced[ʃ] (Roach, 1983).

2.7.2. Dissimilation

Dissimilation is the opposite of assimilation. When a soundchanges one of its features and becomes less similar to another sound in order to distinguish between the two sounds this process is called dissimilation. Dissimilation is more common among those who do not speak their mother tongue. It is the process by the means of which two similar sounds in a word becom less similar(Gimson,2014).

2.7.3. Insertion (Epenthesis)

Epenthesis is the process of introducing different linguistic contexts or an entire syllable into a single word (Paul.A,2022).That is , insertion is a phonological process in which a sound or syllable as added to a word to break up the sequence of consonants in it or to create a phonetically acceptable form (Goldsmith,1995).

2.7.4. Deletion(Elision)

Deletion, or elision, is the opposite of insertion. It is phonological process by the means of which one or more sound segments are removed (Chomsky and Halle, 1968).

2.7.5. Metathesis

When sounds or syllables change their positions in a word or words of the same sentence, this process is called metathesis. It refers to the mutual change between two separate or adjacent sounds or syllables (Strazny, 2005). comfortable > comfterble /'kʌmfətərbəl/.

2.5.6. Substitution

The substitution is “the replacement of one phoneme by another in a given phonetic context” (Stevens and Halle, 1971, p. 34). Substitution occurs when a sound segment that does not exist before articulation is used to produce another sound segment (Sa’aid, 2020).

2.6. Conclusion

Chapter two has been devoted to describe phonology. It defines this term and clarifies the distinction among phonemes, phones, and allophones, and the differences between phonetics and phonology. The chapter also illustrated the features used to define and distinguish each phoneme from other phonemes, and explains the phonological processes that change words’ sound patterns.

Chapter Three
Methodology, Results, and Discussion

3.1.Introduction

The chapter at hands presents the practical side of the research. It describes the data gathering procedures, and analyses the results obtained objectively to provide insights into the morphological structure of plural nouns in TAA. First, the chapter details the process of data collection. It presents the research approach, the research questions, the participants, the settings and the process of data collection . Then, it displays the results, and discusses them in a scientific way to determine the inflectional morphemes and the morphological patterns used in TAA to form plural nouns, and to explain how these inflectional morphemes and morphological patterns function in TAA.

3.2.Research Approach

To conduct this study a qualitative research approach is used. A collection of TAA plural nouns are analyzed to identify the inflectional morphemes and the morphological patterns used in TAA to create plural nouns of both Algerian Arabic words and Arabized words, and explore how these morphemes and patterns are used in TAA.

3.3.Research Questions

As it is mentioned in the general introduction, the present research attempts to answer the following questions:

- What are the inflectional morphemes and the morphological patterns used in TAA to form the plural of Algerian Arabic nouns?
- What are the inflectional morphemes and the morphological patterns used in TAA to form plural of Algerian Arabized nouns?
- How do these noun plural inflectional morphemes function in TAA?
- How do these noun plural morphological patterns function in TAA?

3.4.Participants

A group of fifty (50) native speakers of Tiaretian dialect (TD) were chosen to represent the population of the present study. The sample of the study, which consists of both male and female speakers, was randomly selected without taking into consideration social factors such as the participant's age, educational level, social class...etc.

3.5.Data Collection

In order to determine the inflectional morphemes and the morphological patterns used in TAA to form plural of both Algerian Arabic nouns and Arabized nouns, a collection of TAA plural nouns was analysed. To collect these plural nouns, three lists were designed in Algerian Arabic (see appendix A, B and C). The first list includes a number of Algerian Arabic singular nouns and their regular plural forms. The second one consists of a set of Algerian Arabic singular nouns and their irregular plural forms. The third list is composed of a group of singular Algerian Arabized nouns and their plural forms. The three lists were given to the participants who were asked to check the plural form of each word and correct, in case there is a mistake, the incorrect forms, and give other plural forms, if they exist. The participants were also asked to read the plural forms. Their readings were recorded in order to determine the structure and the pronunciation of these words.To create the three lists, two steps were required:

- **Step01:Finding out the inflectional morphemes and the morphological patternsused in TAA**

To find out the inflectional morphemes and the morphological patterns thatexist in TAA, all the inflectionalmorphemes and the morphological patterns thatexist in Modern StandardArabicweredetermined. Modern Standard Arabicwasusedbecauseit has been noticedthatmany plural nouns in Algerian Arabic as spoken in Tiaret are createdusing the

same inflectional morphemes and the morphological patterns that exist in Modern Standard Arabic. Then a group of randomly selected speakers from Tiaret Speech community was observed for two months. The observation method was used to identify the inflectional morphemes and morphological patterns that may exist only in TAA, and determine the inflectional morphemes and the morphological patterns utilized to generate the plural forms of Algerian Arabized words.

➤ **Step02: Plural Nouns Tasks**

After identifying the inflectional morphemes and the morphological patterns used in TAA, the next step is to determine how these inflectional morphemes and morphological patterns function in TAA to form plural nouns. To do this, the three lists were designed. The first list (Appendix A) is used to explore how the inflectional morphemes are employed to form Tiaretian plural nouns. The list contains three sections (03) each of which is devoted to one inflectional morpheme. The second list (Appendix B) is used to determine how the morphological patterns are used to create Tiaretian plural nouns. The list consists of sections (19) each of which is dedicated to one morphological pattern. The third list (Appendix C) is designed to examine how the inflectional morphemes and the morphological patterns are used to create the plural forms of Algerian Arabized nouns. The list is composed of eight sections. The first section is devoted to examine how the inflectional morphemes are used to create the plural forms of Algerian Arabized nouns, while the other seven sections are dedicated to explore how the morphological patterns are utilized to create Algerian Arabized nouns.

To determine the function of each inflectional morpheme and each morphological pattern in the three lists, a set of plural nouns from TAA were used. The participants were given the lists in order to check if the plural nouns are correct or not. The participants were also asked

to correct the errors, and mention other plural forms, if they exist. Moreover, they were asked to read the plural forms to determine the right structure and pronunciation of these forms.

3.6.Data Analysis

To analyse the data, three section are used. The first section presents and analyses TAA's plural noun inflectional morphemes. The second section describes and discusses the morphological patterns that exist in TAA to form the plural of Algerian Arabic nouns. The third section is devoted to demonstrate and examine the inflectional morphemes and the morphological patterns used to form the plural of Algerian Arabized nouns as spoken in Tiaret. To explain the function of TAA's inflectional morphemes and the morphological patterns, some of the examples used in this study are presented alongside some examples from MSA.

3.6.1. Algerian Arabic Noun Plural Inflectional Morphemes

The inflectional morphemes used in TAA to describe plural form of Algerian Arabic nouns can be grouped into two main categories: Dual noun inflectional morpheme and plural noun inflectional morphemes.

3.6.1.1.Dual Inflectional Morpheme

To describe duality, TAA uses the dual sound inflectional morpheme {i:n}. this morpheme is used with nouns that describe numerals and time. This can be seen in Table (04) below.

Table(04):*Dual Nouns in TAA*

| Singular form | Dual form |
|--------------------------------|-------------------------------------|
| /ʕaʕra/ 'عشرة' (ten) | /ʕaʕri:n/ 'عشرين' (twenty) |
| /ʔalf/ 'الف' (one thousand) | /ʔalfi:n/ 'الفين' (two thousand) |
| /ʕa:m/ 'عام' (one year) | /ʕa:mi:n/ 'عامين' (two years) |
| /deqi:qa/ 'دقيقة' (one minute) | /deqi:qi:n/ 'دقيقتين' (two minutes) |
| /sa: ʕa/ 'ساعة' (one hour) | /sa: ʕti:n/ 'ساعتين' (two hours) |
| /li:la/ 'ليلة' (two hours) | /li:ltin/ 'ليلتين' (two nights) |

The results in table (04) displays that the dual sound inflectional morpheme {i:n} is attached to the end of some Algerian Arabic singular nouns without deleting the final letter ‘ة’(taa’ marbutha), as in /sa: ʕti:n/ ‘ساعتين’ (two hours), and /li:ltin/ ‘ليلتين’ (two nights). However, in the first word /ʕaʕfra/ ‘عشرة’(ten), the dual sound inflectional morpheme {i:n} substitute the final letter ‘ة’(taa’ marbutha).

The results in table (04) also reveal that the dual sound inflectional morpheme {i:n} is attached to both masculine singular nouns, such as /ʔalf/ ‘الف’ (one thousand), and /ʕa:m/ ‘عام’ (one year), and feminine singular nouns like /deqi:qa/ ‘دقيقة’ (one minute), and /sa: ʕa/ ‘ساعة’ (one hour).

3.6.1.2.Plural Inflectional Morphemes

TAA uses two inflectional morphemes to form plural nouns: The masculine sound inflectional morpheme {i:n}, and the feminine sound inflectional morpheme {a:t}. The first morpheme is attached to the end of singular nouns to create masculine plural nouns, while the second is placed at the end of singular nouns to form feminine plural nouns.

➤ The Masculine Sound Inflectional Morpheme {i:n}

The results of the study reveal that TAA uses the masculine sound inflectional morpheme {i:n} to create the plural form of masculine singular human nouns, this can be seen in table (05) below

Table(05):*Masculine Plural Nouns in TAA*

| Singular form | Plural form |
|---|---|
| /muʕallim/ ‘معلم’ (a male teacher) | /muʕallimi:n/ ‘ معلمين ’ (male teachers) |
| /mufattif/ ‘مفتش’ (a male inspector) ’ | /mufattifɪ:n/ ‘مفتشين’ (male inspectors) |
| /muʔatʕir/ ‘مؤطر’ (a male supervisor) | /muʔatʕiri:n/ ‘مؤطرين’ (male supervisors) |

| | |
|--|--|
| /muwa:t ^ʕ in/ مواطن (a citizen) | muwa:t ^ʕ ni:n// مواطنين (citizens) |
| /mudʒa:hed/ 'مجاهد' (a male fighter) | /mudʒa:heda:t/ 'مجاهدين' (male fighters) |
| /muqa:wil/مقاول(a contractor) | /muqa:wili:n/مقاولين(contractors) |
| /mumawwil/ ممول(a financier) | /mumawwili:n/ ممولين(financiers) |
| /mureʃid/ 'مرشد' (a male guide) | /mureʃidi:n/ 'مرشدين' (male guides) |
| /muna:fiq /'منافق' (hypocrite) | /muna:fiqa:t / 'منافقين' (hypocrites) |
| /muna:qij/ 'مناقش' (a male examiner) | 'مناقشين' /muna:qijī:n/ (male examiners) |
| /munaʃʃit ^ʕ / 'منشط' (a male TVpresenter) | /munaʃʃit ^ʕ i :n/ 'منشطين' (male TV presenters) |
| /muy anni: / 'مغني' (a male singer) | /muy anniji:n / 'مغنيين' (male singers) |
| /maktab/ 'مكتب' (a desk) | * /maktabi:n/ 'مكاتبين' (desks) |
| '/keta:b/كتاب' (a book) | * /keta:bi:n/ 'كتابين' (books) |
| /ħait ^ʕ / 'حيط' (a wall) | * /ħait ^ʕ i :n/ 'حيطين' (walls) |
| /mefta:ħ/ مفتاح (a key) | * /mefta:ħi:n/ 'مفتاحين' (keys) |
| /mesma:r/ 'مسمار' (a nail) | * /mesma:ri:n/ 'مسمارين' (nails) |
| /yurra:f/ 'غراف' (a cup) | * /yurrafi:n/ 'غرافين' (cups) |
| /s ^ʕ ubba:t ^ʕ / 'صباط' (a shoe) | * /s ^ʕ ubba:t ^ʕ i :n/ 'صباطين' (shoes) |
| '/muyruf/ مغرف (a spoon) | * /muyrufi :n/ 'مغرفين' (spoons) |
| /mat ^ʕ raħ/ 'مطرح' (a bed) | * /mat ^ʕ raħi:n/ 'مطرحين' (beds) |
| /mat ^ʕ erag/ 'مطرق' (a stick) | * /mat ^ʕ eragi :n/ 'مطارقين' (sticks) |
| /ba:b/ 'باب' (a door) | * /ba:bi:n/ 'بيابين' (doors) |

Table (05) demonstrates that the masculin sound inflectional morpheme {i:n} is used in TAA to create the plural form of human nouns only. It shows that the masculin inflectional morpheme {i:n}, for instance, is attached to the end of the masculin singular human nouns /muʃallim/ 'معلم' (a male teacher), /mufattif/ 'مفتش' (a male inspector), and /muʔat^ʕir / 'مؤطر' (a male supervisor), to create the masculin plural human nouns /muʃallimi:n/ 'معلمين' (male

teachers), /mufattijī:n/ ‘مفتشين’ (male inspectors), and /muʔatʕiri:n/ ‘مؤطرين’ (male supervisors), respectively.

The table also reveals that the masculine sound inflectional morpheme {i:n} is not used in TAA to form the plural form of non-human nouns. All the participants agree that the masculine non-human plural forms which are created using the masculine sound inflectional morpheme {i:n} are incorrect.

The results of the study reveal that TAA uses the masculine sound inflectional morpheme {i:n} to create masculine nominative, accusative, and genitive plural human nouns, this can be seen in table (06) below

Table(06): *Masculine Nominative, Accusative and Genitive Plural Nouns in TAA*

| Cases | Masculine Sound Plural in MSA | | Masculine Sound Plural in TAA | |
|-----------------|--------------------------------------|--|--|---|
| | Singular | Plural | Singular | Plural |
| Nominative case | /muʕallim/ معلم A male teacher | /muʕallimu:n/ معلمون Male Teachers | /muʕallim/ معلم A male teacher | /muʕallimi:n/ معلمين Male teachers |
| | | | /mufattij/ مفتش A male inspector | /muffattijī:n/ مفتشين Male inspectors |
| | | | /muʔatʕir / مؤطر A male supervisor | /muʔatʕiri:n/ مؤطرين Male Supervisors |
| Accusative case | /muʕallim/ معلم A male teacher | /muʕallimi:n/ معلمين Male teachers | /muʕallim/ معلم A male teacher | /muʕallimi:n/ معلمين Male teachers |
| | | | /mufattij/ مفتش A male inspector | /muffattijī:n/ مفتشين Male Inspectors |
| | | | /muʔatʕir/ مؤطر A male supervisor | /muʔatʕiri:n/ مؤطرين Male supervisors |
| Genitive case | /muʕallim/ معلم A male teacher | /muʕallimi:n/ معلمين Male teachers | /muʕallim/ معلم A male teacher | /muʕallimi:n/ معلمين Male teachers |
| | | | /mufattij/ مفتش A male inspector | /muffattijī:n/ مفتشين Male inspectors |
| | | | /muʔatʕir / مؤطر A male supervisor | /muʔatʕiri:n/ مؤطرين Male supervisors |

Table (06) shows that masculin nominative plural nouns in TAA are formed by attaching the masculine sound inflectional morpheme {i:n} to the end of masculine nominative singular nouns. For instance, To form the plural of the masculin singular noun /muʃallim/ 'معلم' (a male teacher), speakers of Tiaret usually use /muʃallimi:n/ 'معلمين' (male teachers) instead of /muʃallim:un/ 'معلمون' (male teachers). Consider examples (1) and (2) below :

1.a. /dʒa:ʔa ʔalmuʃallim/ /dʒa:ʔa ʔalmuʃallimu:n/(MSA)

جاء المعلم ————— جاء المعلمون

The teacher came The teachers came

1.b. /dʒa:ʔa ʔalmuʃallim / * /dʒa:ʔa ʔalmuʃallimi:n/(MSA)

جاء المعلم جاء المعلمين —————>

The teacher came The teachers came

2.a. /dʒa: lmuʃallim / * /dʒa:w lmuʃallimu:n/ (TAA)

جا المعلم ————— لمعلمون جا

The teacher came The teachers came

2.b. /dʒa: lmuʃallim / /dʒa:w lmuʃallimi:n/ (TAA)

جا المعلم جا المعلمين —————>

The teacher came The teachers came

In MSA, the sentence (1.a) /dʒa:ʔa ʔalmuʃallimu:n / 'جاء المعلمون' (the teachers came) is grammatical, whereas, the sentence (1.b) /dʒa:ʔa ʔalmuʃallimi:na / 'جاء المعلمين' (the teachers came) is ungrammatical because the masculin singular noun /ʔalmuʃallim/ المعلم (a male teacher) in the sentence /dʒa:ʔa ʔalmuʃallim / 'جاء المعلم' (the teacher came) is in the nominative case. Thus, to form the plural of this nominative noun, the masculin sound inflectional morpheme {u:n} is used instead of {i:n}.

In TAA, the sentence (2.a) /dʒa:w lmuʕallimu:n/ ‘لمعلمونجاو’ (the teachers came) is ungrammatical although the word /lmuʕallimu:n/ ‘لمعلمون’ (the teachers) is the nominative subject of the sentence. However, the sentence (2.b.) /dʒa:w lmuʕallimi:n/ ‘جاوالمعلمين’ (the teachers came) is considered as the correct form because masculine plural nominative nouns in TAA are created by using the masculine sound plural inflection morpheme {i:n} instead of {u:n}.

Table (06) also demonstrates that the masculine sound plural inflectional morpheme {i:n} is used in TAA at the end of masculine singular accusative and genitive nouns to create their plural forms. This can be seen in example (3) below:

3.1. /ra:ni: ʃeft lmuʕattif/ → /ra:ni: ʃeft lmuʕattifi:n/ (TAA)

راني شفت المفتش راني شفت المفتشين →

I saw the inspector

I saw the inspectors

(Accusative case)

3.b. /hedart mʕa lmuʕattif/ → /hedart mʕa lmuʕattifi:n/ (TAA)

هدرت مع المفتش

→

هدرت مع المفتشين

I talked to the inspector

I talked to the inspectors

(Genitive case)

In (3.1), the masculine sound plural inflectional morpheme {i:n} is attached to the end of the masculine accusative singular noun /lmuʕattif/ ‘المفتش’ (the male inspector) to form the masculine accusative plural noun /lmuʕattifi:n/ ‘المفتشين’ (the male inspectors). It is also attached, in (3.b), to the end of the masculine genitive singular noun /lmuʕattif/ ‘المفتش’ (the male inspector) to form the masculine genitive plural noun /lmuʕattifi:n/ ‘المفتشين’ (the male inspectors).

The masculine sound plural inflectional morpheme {i:n} is utilized in TAA to create the masculine plural human nouns that indicate more than one entity. This can be seen in example (04) below:

4.a. /dʒaw: zu:dʒ muʔatʕiri:n/ (TAA)

جاو زوج مؤطرين

Two supervisors came

4.b. /ʃeft zu:dʒ muʔatʕiri:n/ (TAA)

شفت زوج مؤطرين

I saw two supervisors

4.c. /hedart m3a zu:dʒ muʔatʕiri:n/ (TAA)

هدرت مع زوج مؤطرين

I talked to two supervisors

The masculine plural noun /muʔatʕiri:n/ ‘مؤطرين’ (male supervisors) in (4.a), (4.b), and (4.c) is used with the word ‘zu:dʒ’ (زوج) (two) to indicate the number of the supervisors. This suggests that TAA has no dual form for masculine singular human nouns. If this form exist in this dialect, speakers of Tiaretian dialect would not use the word ‘zu:dʒ’ with masculine plural human nouns. It means that, TAA employs the masculine sound plural inflectional morpheme {i:n} to change a masculine singular human noun into a masculine plural human noun that refers to two or more entities.

➤ The Feminine Sound Plural Inflectional Morpheme {a:t}

To form the plural of feminine nouns, TAA uses the feminine sound plural inflectional morpheme {a:t}. This inflectional morpheme is used to create the plural of both human and non-human nouns. This can be seen in Table (07) below.

Table(07):Feminine Plural Nouns in TAA

| Singular form | Plural form |
|--|--|
| /muʃallima/ 'معلمة' (a female teacher) | /muʃallima:t/ 'معلمات' (female teachers) |
| /mufattiḡa/ 'مفتشة' (a female inspector) | /mufattiḡa:t/ 'مفتشات' (female inspectors) |
| /muʔatʃ ira/ 'مؤطرة' (a female supervisor) | /muʔatʃ ira:t/ 'مؤطرات' (female supervisors) |
| /xajja:tʃ a/ 'خياطة' (a seamstress) | /xajja:tʃ a:t/ 'خياطات' (seamstresses) |
| /muḡ a:heda/ 'مجاهدة' (a female fighter) | /muḡ a:heda:t/ 'مجاهدات' (female fighters) |
| /muma ila/ 'ممثلة' (a female actor) | /muma ila:t/ 'ممثلات' (a female actors) |
| /tʃ ajja:ba/ 'طباخة' (a female cook) | /tʃ ajja:ba:t/ 'طباخات' (female cooks) |
| /mureḡda/ 'مرشدة' (a female guide) | /mureḡda:t/ 'مرشدات' (female guides) |
| /muna:fiqa/ 'منافقة' (hypocrite female) | /muna:fiqa:t/ 'منافقات' (hypocrite females) |
| /muna:qiḡa/ 'مناقشة' (a female examiner) | /muna:qiḡa:t/ 'مناقشات' (female examiners) |
| /munaḡḡitʃa/ 'منشقة' (a female TV presenter) | /munaḡḡitʃa:t/ 'منشقات' (female TV presenters) |
| /muyannija/ 'مغنية' (a female singer) | /muyannija:t/ 'مغنيات' (female singers) |
| /maḡazma/ 'محزمة' (a belt) | /maḡazma:t/ 'محزمات' (a belts) |
| /kalema/ 'كلمة' (a word) | /kalema:t/ 'كلمات' (words) |
| /ʃeba:ja/ 'عباية' (a dress) | /ʃeba:ja:t/ 'عبايات' (dresses) |
| /bedeḡija/ 'بدعية' (a dress) | /bedeḡija:t/ 'بدعيات' (dresses) |
| /zarebija/ 'زربية' (a carpet) | /zarebija:t/ 'زربيات' (carpets) |
| /maʃeza/ 'معزة' (a goat) | /maʃeza:t/ 'معزات' (goats) |
| /masʃ aleḡa/ 'مصلحة' (a broom) | /masʃ aleḡa:t/ 'مصلحات' (brooms) |
| /sʃalla:ja/ 'صلاة' (A prayer rug) | /sʃalla:ja:t/ 'صلايات' (prayer rugs) |
| /seḡ a:da/ 'سجادة' (a prayer rug) | /seḡ a:da:t/ 'سجادات' (prayer rugs) |
| /mera:ja/ 'مرآية' (a mirror) | /mera:ja:t/ 'مرايات' (a mirrors) |
| /dʒameḡija/ 'جمعية' (an association) | /dʒameḡija:t/ 'جمعيات' (associations) |

| | |
|--------------------------|--------------------------------|
| /xi :ma :r/ 'خمار'(veil) | /xi:ma:ra:t/ 'خمارات' (veils) |
|--------------------------|--------------------------------|

Table (07) shows that the feminine sound plural inflectional morpheme {a:t} is utilized in TAA to create the plural form of feminine singular human nouns. This morpheme, for instance, is used to substitute the last letter 'ة'(taa' marbuta) of the feminine singular human nouns /muʃallima/ 'معلمة' (a female teacher), /mufattifa/ 'مفتشة,' (a female inspector), and /muʔatʕira / 'مؤطرة' (a female supervisor), to create the feminine plural human nouns /muʃallima:t/ 'معلمات' (female teacher), /mufattifa:t/ 'مفتشات' (female inspectors), and /muʔatʕira:t/ 'مؤطرات' (female supervisors), respectively.

The results in table (07) also reveal that the feminine sound plural inflectional morpheme {a:t} can be attached to the end of the feminine singular non-human nouns too. For example, this morpheme is used to substitute the last letter 'ة'(taa' marbuta) of the feminine singular non-human nouns /maħazma/ 'محزمة' (a belt), /kalema/ 'كلمة' (a word), and /ʕeba:ja/ 'عباية' (a dress), to create the feminine plural non-human nouns /maħazma:t/ 'محزمات' (belts), /kalema:t/ 'كلمات' (words), and /ʕeba:ja:t/ 'عبايات' (dresses), respectively.

Moreover, the table demonstrates that the feminine sound plural inflectional morpheme {a:t} is used in TAA to create the plural of some masculine singular nouns, as in /xi:ma:ra:t/ 'خمارات'(veils). The singular form of the noun /xi:ma:ra:t/ 'خمارات'(veils) is /xi :ma :r/ 'خمار'(veil). This singular form is masculin, but the plural is feminine.

The feminine sound plural inflectional morpheme {a:t}, in TAA, is attached to a feminine singular noun regardless of its case. This can be seen in table (08) below

Table(08):*Feminine Nominative, Accusative and Genitive Plural Nouns in TAA*

| Cases | Feminine Sound Plural in MSA | | Feminine Sound Plural in TAA | |
|-----------------|------------------------------|--|--|--|
| | Singular | Plural | Singular | Plural |
| Nominative case | /muʃallima/ معلمة A | /muʃallima:tun/ معلمات female Teachers | /muʃallima/ معلمة A female teacher | /muʃallima:t/ معلمات Female teachers |

| | | | | |
|-----------------|--|--|---|---|
| | femaleteacher | | /mufattija/ مفتشة A female inspector | /muffattija:t/ مفتشات Female inspectors |
| | | | /xaja:t ^ʕ a / خياطة Seamstress | /xaja:t ^ʕ a:t/ خياطات Seamstresses |
| Accusative case | /muʕallima/ معلمة A female teacher | /muʕallima:tin/ معلمات Female teachers | /muʕallima/ معلمة A female teacher | /muʕallima:t/ معلمات Female teachers |
| | | | /mufattija/ مفتشة A female inspector | /muffattija:t/ مفتشات Female inspectors |
| | | | /xaja:t ^ʕ a / خياطة Seamstress | /xaja:t ^ʕ a:t/ خياطات Seamstresses |
| Genitive case | /muʕallima/ معلمة A female teacher | /muʕallima:tin/ معلمات Female teachers | /muʕallima/ معلمة A female teacher | /muʕallima:t/ معلمات Female teachers |
| | | | /mufattija/ مفتشة A female inspector | /muffattija:t/ مفتشات Female inspectors |
| | | | /xaja:t ^ʕ a / خياطة Seamstress | /xaja:t ^ʕ a:t/ خياطات Seamstresses |

Table (08) shows that the feminine sound plural inflectional morpheme {a:t} is used in TAA to create the plural of feminine nominative, accusative and genitive singular nouns. For instance, speakers of Tiaretian Dialect use the following examples:

5.1. /dʒa:t lmuʕallima / → /dʒa:w lmuʕallima:t/

لمعلمة جاءت → جاو لمعلمات

The teacher came

The teachers came

(Nominative case)

5.2. /ra:ni: ʃeft lmuʕattija/ → /ra:ni: ʃeft lmuʕattija:t/

راني شفت المفتشة → راني شفت المفتشات

I saw the inspector

I saw the inspectors

(Accusative case)

3.b. /hedart mʕa lxaja:t^ʕa //hedart mʕa lxaja:t^ʕa:t/

هدرت مع الخياطة

هدرت مع الخياطات

I talked to the seamstress

I talked to the seamstresses

In the examples above, the feminine singular nouns /lmuʃallima/ 'المعلمة' (the teacher), /lmufattifa/ 'المفتشة' (the inspector), and /lxaja:tʰa / 'الخياطة' (the seamstress) are assigned different cases. The first noun is assigned a nominative case. The second noun is assigned an accusative case. The Third noun is assigned a genitive case. However, the three feminine singular nouns are pluralized in TAA using the feminine sound plural inflectional morpheme {a:t}. To form the plural of the nominative noun /lmuʃallima/ 'المعلمة' (the teacher), and the accusative noun //lmufattifa/ 'المفتشة' (the inspector), and the genitive noun /lxaja:tʰa/ 'الخياطة' (the seamstress), the feminine plural nouns /lmuʃallima:t/ 'المعلمات' (the teachers), /lmufattifa:t/ 'المفتشات' (the inspectores), and /lxaja:tʰa:t/ 'الخياطات' (the seamstresses)are utilized respectively.

The feminine sound plural inflectional morpheme {a:t}.is utilized in TAA to create the feminine plural nouns that describe more than one entity. This can be seen in example (06) below:

6.a. /dzaw: zu:dʒ muʃallima:t / (TAA)

جاو زوج معلمات

Two teachers came

6.b. /ʃeft zu:dʒ muʃallima:t/ (TAA)

شفت زوج معلمات

I saw two teachers

6.c. / hedart m3a zu:dʒ muʃallima:t / (TAA)

هدرت مع زوج معلمات

I talked to two teachers

The feminine plural human noun /muʃallima:t / ‘معلمات’ (male supervisors) in (6.a), (6.b), and (6.c) is used with the word ‘zu:dʒ’ (زوج) (two) to indicate the number of the teachers. This word is used in TAA because this dialect has no dual form for feminine singular human nouns. It means that, TAA employs the feminine sound plural inflectional morpheme {a:t} to change a feminine singular human noun into a feminine plural human noun that refers to two or more entities.

3.6.2. Algerian Arabic Noun Plural Morphological Patterns in TAA

In addition to the plural noun inflectional morphemes {i:n} and {a:t} , TAA uses a set of morphological patterns to create broken plural nouns. These patterns can be classified into three main categories: plural of paucity, plural of multitude, and the ultimate plural.

3.6.2.1. Plural of Paucity

To create plural of paucity, TAA uses two morphological patterns which are /ʔafʔila/ ‘افعله’, and /ʔafʔa:l/ ‘افعال’

➤ Pattern 01: /ʔafʔila/ ‘افعله’

Table(09):The Morphological Pattern /ʔafʔila/in TAA

| Morphological pattern | Singular Form | | Plural Form | |
|-----------------------|---------------|--------------------------------|---------------|---------------------------------|
| | Sound Pattern | Noun | Sound Pattern | Noun |
| /ʔafʔila/ | /CVʔa:C/ | /suʔa:l/ سؤال A question | /ʔaCʔiCa/ | /ʔasʔila/ اسئلة Questions |

One of the morphological patterns used in TAA to describe the plural of paucity is /ʔafʔila/. This morphological pattern is used to change singular nouns with the sound pattern /CVʔa:C/ into plural nouns with the sound pattern /ʔaCʔiCa/. Table (9) shows that the singular /CVʔa:C/ noun /suʔa:l/ ‘سؤال’ (a question) is changed into the plural noun /ʔasʔilah / ‘اسئلة’ (questions).

Table (09) demonstrates that the pattern /ʔafʔila/ is used to form the plural of singular /CVʔa:C/ nouns by changing the internal structure of these nouns. The main changes observed are inserting the speech sounds /ʔa/ at the beginning of these singular nouns, deleting the vowel of the first syllable, and substituting the long vowel /a:/ of the second syllable by the short vowel /i/, and inserting the short vowel /a/ at the end of these singular nouns.

➤ **Pattern 02: /ʔafʔa:l/ ‘افعال’**

Table(10):*The Morphological Pattern /ʔafeʔa:l / in TAA*

| Morphological pattern | Singular Form | | Plural Form | |
|-----------------------|---------------|--------------------------|---------------|-------------------------------|
| | Sound Pattern | Noun | Sound Pattern | Noun |
| /ʔafʔa:l / | /CVCVC/ | /sabeb/ سبب Reason | /ʔaCCa:C/ | /ʔasba:b/ أسباب Reasons |
| | | /ħulem/ حلم dream | | /ʔaħla:m/ احلام dreams |

Table (10) reveals that the pattern /ʔafeʔa:l/ is also used in TAA to describe the plural of paucity. The morphological pattern /ʔafeʔa:l / is utilized in TAA to change singular nouns with the sound pattern /CVCVC/. For instance, the singular /CVCVC/ nouns /sabeb/, and /ħulem/ are transformed into the plural /ʔaCCa:C/ nouns /ʔasba:b/, and /ʔaħla:m/, respectively.

To form these plural nouns, the pattern /ʔafʔa:l/ changes the internal structure of singular /CVCVC/nouns. The main changes occurred are inserting the speech sound /ʔa/ at the beginning of these singular nouns, deleting the vowel of the first syllable, and substituting the short vowel of the last syllable in these singular nouns by the long vowel /a:/.

3.6.2.2. Plural of Multitude

To create plural of multitude, TAA uses nine morphological patterns which are:

/fiʕla:n/ ‘فعلان’, feʕla:n/ ‘فعلان’, /fuʕla:n/ ‘فعلان’, /fʕul/ ‘فعل’ , /fʕu:l/ ‘فعل’, /fʕu:la/ ‘فعل’, /fʕa:li/ ‘فعال’, /fʕa:l/ ‘فعال’ , /fuʕla/ ‘فعل’.

➤ **Pattern 01: /fiʕla:n/ ‘فعلان’**

Table(11):The Morphological Pattern /fiʕla:n/ in TAA

| Morphological pattern | Singular Form | | Plural Form | |
|-----------------------|---------------|------------------------------|---------------|-----------------------------------|
| | Sound Pattern | Noun | Sound Pattern | Noun |
| /fiʕla:n/ | /CVVC/ | /dʒa:r/ جار Neighbor | /Ci:Ca:n/ | /dʒi:ra:n/ جيران Neighbors |
| | | /ba:b/ باب A door | | /bi:ba:n/ بيبان Doors |
| | | /ħaitʕ/ حيط A wall | | /ħi:tʕa:n/ حيطان Walls |
| | | /ʕu:d/ عود Amatchstick | | /ʕi:da:n/ عيدان Matchsticks |

To indicate the plural of multitude, TAA use the morphological pattern /fiʕla:n/. This pattern as shown in table (11) is used to form the plural of the singular nouns with the sound pattern /CVVC/. The table, shows that the singular nouns /dʒa:r/, /ba:b/, /ħaitʕ/, /ʕu:d/ have the same sound pattern /CVVC/. These nouns are used in the plural form as /dʒi:ra:n/, /bi:ba:n/, /ħi:tʕ a:n/, and /ʕi:da:n/, respectively.

Table (11) demonstrates that the morphological pattern /fiʕla:n/ modifies the internal structure of the singular nouns with the sound pattern /CVVC/. The main modifications are substituting the nucleus of the syllable by the long vowel /i:/ and inserting the speech sounds /a:n/ at the end of these singular nouns.

➤ **Pattern 02: /feʕla:n/ ‘فعلان’**

Table(12):*The Morphological Pattern /feʕla:n/ in TAA*

| Morphological pattern | Singular Form | | Plural Form | |
|-----------------------|---------------|-----------------------------|---------------|------------------------------|
| | Sound Pattern | Noun | Sound Pattern | Noun |
| /feʕla:n/ | /CVCVVC/ | /xeru:f/ خروف A sheep | /CeCCa:n/ | /xerfa:n/ خرفان Sheeps |
| | /CVVCVV/ | /ħa:si:/ حاسي A well | | /ħesja:n/ حسيان Wells |

Another morphological pattern used in TAA to form plural of paucity is /feʕla:n/. This pattern is used with two different singular noun structures. The morphological pattern /feʕla:n/ is used with singular /CVCVVC/ nouns and singular /CVVCVV/ nouns. Table (12) shows that the singular noun /xeru:f/ with the sound pattern /CVCVVC/ and the singular noun /ħa:si:/ with the sound pattern /CVVCVV/ are changed into the plural nouns /xerfa:n/ and /ħesja:n/, respectively. These plural nouns have the same plural sound pattern which is /CeCCa:n/.

To form the plural nouns, the morphological pattern /feʕla:n/ changes the internal structure of the singular nouns. The main changes are substituting the nucleus of the first syllable by the vowel /e/, deleting the nucleus of the second syllable, and inserting the speech sounds /a:n/ at the end of these singular nouns.

➤ **Pattern 03: /fuʕla:n/** ،‘فعلان’

Table(13):The Morphological Pattern /fuʕla:n/ in TAA

| Morphological pattern | Singular Form | | Plural Form | |
|-----------------------|---------------|------------------------------|---------------|---------------------------------|
| | Sound Pattern | Noun | Sound Pattern | Noun |
| /fuʕla:n/ | /CVVC/ | /wa:d/ واد A river | /CuCCa:n/ | /wudja:n/ وديان Rivers |
| | /CCVVC/ | /bla:d/ بلاد A country | | /bulda:n/ بلدان countries |

In addition, TAA utilized the morphological pattern /fuʕla:n/ to form the plural of some nouns. This pattern is utilized to create the plural form of two different singular noun structures. This pattern is used in TAA to produce the plural form of singular /CVVC/ nouns and singular /CCVVC/. Table (13) reveals that the singular noun /wa:d/ with the sound pattern /CVVC/ and the singular noun /bla:d/ with the sound pattern /CCVVC/ are changed into the plural nouns /wudeja:n/ and //bulda:n /, respectively. These plural nouns have the same plural sound pattern which is /CuCCa:n/.

To form the plural nouns, the morphological pattern /fuʕla:n/ change the internal structure of the singular nouns. The main changes are using the the vowel /u/ as the nucleus of the first syllable, and inserting the speech sounds /a:n/ at the end of these singular nouns.

➤ **Pattern 04 : /fʕul/** فعل

Table(14):*The Morphological Pattern /fʕul/ in TAA*

| Morphological pattern | Singular Form | | Plural Form | |
|-----------------------|---------------|------------------------------|---------------|----------------------------|
| | Sound Pattern | Noun | Sound Pattern | Noun |
| /fʕul/ | /CVCCV/ | /qarʕa/ قراعا A bottle | CCuC | /qruʕ/ قراعا Bottles |
| | | /zunqa/ زنقا A street | | /znuq/ زنق Streets |
| | /CVVCVV/ | /ta:qa/ تاقا A window | | /tjuq/ تبق windows |

Another morphological pattern used in TAA is /fʕul/. This pattern is used to change singular /CVCCV/ and singular /CVVCVV/ nouns into plural /CCuC/ nouns. Table (14) shows that the singular nouns /qarʕa/ and /zunqa/ which have the sound pattern /CVCCV/ are used in the plural form as /qruʕ/ and /znuq/, respectively. Moreover, the singular /CVVCVV/ noun /ta:qa/ is used in the plural form as /tjuq/.

To form the plural of /CVCCV/ nouns, the pattern /fʕul/ changes the structure of the syllables of these nouns by reducing the number of the syllables into one, and using the vowel /u/ as the nucleus of this syllable after two consonant cluster. The same modifications take place to create the plural of /CVVCVV/ nouns. Besides, the sound /j/ is inserted before the nucleus to form consonant cluster.

➤ **Pattern 05: /fʕu:l/ ‘فعل’**

Table(15):*The Morphological Pattern /fʕu:l/ in TAA*

| Morphological pattern | Singular Form | | Plural Form | |
|-----------------------|---------------|-------------------------------|---------------|------------------------------|
| | Sound Pattern | Noun | Sound Pattern | Noun |
| /fʕu:l/ | /CVCVC/ | /galeb/ قلب A heart | CCu:C | /glu:b / قلوب Hearts |
| | /CVCCV/ | /dʕarsa/ ضرسا A tooth | | /dʕru:s/ ضروس teeth |
| | /CVVCVC/ | /ʃa:hed/ شاهد A witness | | /ʃhu:d/ شهود witnesses |

Moreover, the morphological pattern /fʕu:l/ is used in TAA to form the plural of some nouns. This pattern is utilized to create the plural form of three different singular noun structures. This pattern is used in TAA to produce the plural form of singular /CVCVC/ nouns, singular /CVCCV/ nouns, and singular /CVVCVC/ nouns. Table (15) displays that the singular noun /galeb/ with the sound pattern /CVCVC/, the singular noun /dʕarsa/ with the sound pattern /CVCCV/ and the singular noun /ʃa:hed/ with the sound pattern /CVVCVC/ are changed into the plural nouns /glu:b/ and /dʕru:s/, and //ʃhu:d/, respectively. These plural nouns have the same plural sound pattern which is /CCu:C/.

To form the plural of these singular nouns, the morphological pattern /fʕu:l/ changes the internal structure of the singular nouns. The main changes are reducing the number of the syllables in these sounds into one, and using the long vowel /u:/ as the nucleus of this syllable.

➤ **Pattern 06: /fʕu:la/ ‘فَعُول’**

Table(16):*The Morphological Pattern /fʕu:la/ in TAA*

| Morphological pattern | Singular Form | | Plural Form | |
|-----------------------|---------------|---------------------------|---------------|----------------------------|
| | Sound Pattern | Noun | Sound Pattern | Noun |
| /fʕu:la/ | /CCVVC/ | /kta:b/ كتاب A book | /CCu:Ca/ | /ktu:ba/ كتوبا Books |
| | /CVVC/ | /ði: b/ ذيب A wolf | | /ðju:ba/ ذيوب Wolves |

Furthermore, TAA employs the morphological pattern /fʕu:la/ to create the plural form of some nouns. This pattern is used with two different singular noun structures. The pattern /fʕu:la/ is used to transform singular nouns with the sound pattern /CCVVC/ and the singular nouns with the sound pattern /CVVC/. The table above shows that the singular nouns /kta:b/ and /ði: b/ have the same plural sound pattern which is /CCu:Ca/. The plural of these two nouns are /ktu:ba/ and /ðju:ba/ respectively.

To form the plural of /CCVVC/ singular nouns, the morphological pattern /fʕu:la/ change the internal structure of the singular nouns. The main changes are substituting the long vowel of the syllable by the long vowel /u:/, and inserting the vowel /a/ at the end of these singular nouns. The same modifications take place to create the plural of /CVVC/ nouns. Beside, the sound /j/ is inserted before the nucleus to form consonant cluster.

➤ **Pattern 07: /fʕa:li/ ‘فعال’**

Table(17):*The Morphological Pattern /fʕa:li/ in TAA*

| Morphological pattern | Singular Form | | Plural Form | |
|-----------------------|---------------|------|---------------|------|
| | Sound Pattern | Noun | Sound Pattern | Noun |
| | | | | |

| | | | | |
|----------|----------|-------------------------------|-----------|-------------------------------|
| /fʕa:li/ | /CuCCa/ | /rukba/ ركبا A knee | /CCa:Ci:/ | /rka:bi:/ ركابي Knees |
| | | /sukna/ سكنا A house | | /ska:ni:/ سكاني houses |
| | /CVVCVV/ | /ta:qa/ تاقا A window | | /twa:qi:/ تواقي windows |
| | | /li:la:/ ليلا One night | | /lja:li:/ ليالي nights |

Besides, TAA employs the morphological pattern /fʕa:li/ to create some plural forms. This pattern is used with two different noun structures. Table (17) demonstrates that the pattern /fʕa:li/ can be used to form the plural of the singular /CuCCa/ nouns and the singular /CVVCVV/. For instance, the singular nouns /rukba/ and /ta:qa/ have different sound patterns, but they have the same plural sound pattern, /CCa:Ci:/. The two nouns are used in the plural form as /rka:bi:/, and /twa:qi:./.

To form the plural of the singular nouns, the morphological pattern /fʕa:li/ changes the internal structures of /CuCCa/ nouns by modifying the structure of the first syllable, using the long vowel /a:/ as the nucleus of this syllable, and substituting the last vowel /a/ by the long vowel /i:/. This pattern also changes the internal structure of /CVVCVV/ nouns by inserting /w/ or /j/ before the nucleus of the first syllable and substituting the last long vowel /a:/ by the long vowel /i:./.

➤ **Pattern 08:/fʕa:l/**

Table(18):The Morphological Pattern /fʕa:l/in TAA

| Morphological pattern | Singular Form | | Plural Form | |
|-----------------------|---------------|------------------------------|---------------|-------------------------------|
| | Sound Pattern | Noun | Sound Pattern | Noun |
| /fʕa:l/ | /CVCVC/ | /dʕajef/ ضياف A guest | /CCa:C/ | /dʕja:f/ ضياف Guests |
| | /CVVC/ | /da:r/ دار A house | | /dja:r/ ديار Houses |
| | /CCVC/ | /dʒbel/ جبل A mountain | | /dʒba:l/ جبال Mountains |

TAA form also the plural of some nouns using the morphological pattern /fʕa:l/. This pattern is used with three different singular noun structures. The pattern /fʕa:l/ is used to transform singular nouns with the sound pattern /CVCVC/, /CVVC/, and /CCVC/. Table (18) shows that the singular nouns /dʕajef/, /da:r/, and /dʒbel/ have different sound patterns, but they have the same plural sound pattern /CCa:C/. The plural forms of these sounds are /dʕja:f/, /dja:r/, and /dʒba:l/ respectively.

To create the plural form of these nouns, the morphological pattern /fʕa:l/ changes the internal structure of singular/CVCVC/ nouns by modifying the the structure of the first syllable and substituting the last vowel /e/ by the long vowel /a:/. This pattern also changes the internal structure of /CVVC/ nouns by inserting /j/ before the nucleus of the syllabus. Besides, the to form the plural of the singular/CCVC/ nouns, the morphological pattern /fʕa:l/modifies its structure. The long vowel /a:/ is used to substitute the short vowel on these singular nouns.

➤ **Pattern 09: /fuʕla/ ‘فعل’**

Table(19):*The Morphological Pattern /fuʕla/in TAA*

| Morphological pattern | Singular Form | | Plural Form | |
|-----------------------|---------------|---|---------------|--|
| | Sound Pattern | Noun | Sound Pattern | Noun |
| | /CVCVVC/ | /meri:d ^s / مريض A patient | /CuCCa/ | /mur ^s a/ مرضى Patients |
| | /CVCVC/ | /mijet/ ميت A dead person | | /muwta/ موتى Deaths |

Additionally, TAA employs the morphological pattern /fuʕla/ to create the plural form some nouns. This pattern is used with two different singular nouns structures. The pattern /fuʕla/ is used to transform singular nouns with the sound pattern /CVCVVC/ and the singular sound nouns with the sound pattern /CVCVC/. Table (19) reveals that the two singular nouns /mri:d^s/ and /mejet/ have different singular sound patterns, but the two have the same plural sound pattern /CuCCa/. The plural of these two nouns is /mur^sa/ and /muwta/, respectively.

To create the plural from of singular /CVCVVC/ nouns, the pattern /fuʕla/ changes the internal structure of these nouns. The structure of the two syllables is modified in these words, the vowel /u/ is used to substitute the short vowel of the first syllable, the nucleus of the second syllable is deleted, and the short vowel /a/ is inserted at the end of these nouns. Similarly, to form the plural of singular /CVCVC/ nouns, the same modifications take place. Besides, the sound /w/ is used to substitute the sound /j/.

3.6.2.3. The Ultimate Plural

In addition to plural of paucity, eight morphological patterns are used in TAA to indicate the ultimate plural. These patterns are: /mfa:ʕel/ مفاعل , /mfa:ʕi:l/ مفاعيل , /fwa:ʕel/ فواعل , /fwa:ʕi:l/ فواعيل , /fʕa:ʕel/ فعايل , /fʕa:li:l/ فعائل , /fʕa:ʕi:l/ فعايل and /fʕa:la/ فعالا.

➤ **Pattern 01: /mfa:ʕel/ مفاعل**

Table(20):The Morphological Pattern /mfa:ʕel/ in TAA

| Morphological pattern | Singular Form | | Plural Form | |
|-----------------------|---------------|------------------------------|---------------|-------------------------------|
| | Sound Pattern | Noun | Sound Pattern | Noun |
| /mfa:ʕel/ | /CVCCVC/ | /metʕrah/ مطرح A bed | /CCa:CeC/ | /mtʕa:reħ/ مطارح Beds |
| | | /muyruf/ مغرف A spoon | | /mya:ref/ مغارف Spoons |
| | | /metʕreg/ مطرق A stick | | /mtʕa:reg/ مطارق Sticks |

One of the morphological pattern used in TAA to describe the ultimate plural is /mfa:ʕel/. This pattern is used to change singular nouns with the sound pattern /CVCCVC/ into plural nouns with the sound pattern /CCa:CeC/. The morphological pattern /mfa:ʕel/ is used to create plural form of singular /CVCCVC/ nouns that begin with the consonant /m/. Table (20) displays that the singular /CVCCVC/ nouns /metʕrah/, /muyruf/, and /metʕreg/, which have the consonant /m/ in initial position, are changed into the plural/ CCa:CVC/ nouns /mtʕa:reħ/, /mya:ref/, and /mtʕa:reg/.

To create the plural of singular /CVCCVC/ nouns, the morphological pattern /mfa:ʕel/ changes the internal structure of the first syllable in these nouns, substitutes the short vowel of the first syllable by the long vowel /a:/, and substitutes the short vowel of the second syllable by the short vowel /e/.

➤ **Pattern 02: /mfa:ʕi:l/ ‘مفاعيل’**

Table(21):The Morphological Pattern /mfa:ʕi:l/ in TAA

| Morphological pattern | Singular Form | | Plural Form | |
|-----------------------|---------------|------------------------------------|---------------|--------------------------------------|
| | Sound Pattern | Noun | Sound Pattern | Noun |
| /mfa:ʕi:l/ | /CVCCa:C/ | /mefta:h/ مفتاح A key | /CCa:ʕi:C/ | /mfa:ti:h/ مفتاح A key |
| | | /mesma:r/ مسمار A nail | | /msa:mi:r/ مسامير Nails |
| | | /musra:n/ مصران An intestine | | /msa :ri :n/ مصارين intestines |
| | | /mektu:b/ مكتوب A fate | | /mka :ti :b/ مكاتيب Fates |

Another morphological pattern used in TAA to describe the ultimate plural is /mfa:ʕi:l/. This pattern is similar to the pattern /mfa:ʕel/. The two patterns are used to create plural form of singular /CVCCVC/ nouns that begin with the consonant /m/. However, /mfa:ʕi:l/ is used with singular nouns that have the long vowel /a:/ as the nucleus of the second syllable. That is, /mfa:ʕi:l/ is utilized with singular /CVCCa :C/ nouns to create plural /CCa:ʕi:C/ nouns

Table (21) shows that the singular / CVCCa :C/ nouns /mefta:h/ and /mesma:r/, are transformed into the plural /CCa :Ci :C/ nouns /mfa:ti:h/ and /msa:mi:r/ by modifying the internal structure of the first syllable, substituting the short vowel of the first syllable by the long vowel /a:/, and substituting the short vowel of the second syllable by the long vowel /i:/.

➤ **Patter 03 : /fwa:ʕel/ ‘فواعل’**

Table(22):*The Morphological Pattern /fwa:ʕel/ in TAA*

| Morphological pattern | Singular Form | | Plural Form | |
|-----------------------|---------------|-------------------------------|---------------|--------------------------------|
| | Sound Pattern | Noun | Sound Pattern | Noun |
| /fwa:ʕel/ | /Ca:CVC/ | /dʒa:meʕ/ جامع A mosque | /Cwa:CVC/ | /dʒwa:meʕ/ جوامع Mosques |
| | | /tʕa:beʕ/ طابع A stamp | | /tʕwa:beʕ/ طوابع A stamp |
| | /CVVCV/ | /sa:ʕa/ ساعة A watch | | /swa:jeʕ/ سوايع A watch |
| | | /ri:ħa/ ريحة A parfum | | /rwa:jeħ/ روايح parfums |

In addition, TAA utilized the morphological pattern /fwa:ʕel/ to form the plural of some nouns. This pattern is utilized to create the plural form of two different singular noun structures. This pattern is used in TAA to produce the plural form of singular /Ca:CVC/ and singular /CVVCV/ nouns. Table (22) reveals that the singular nouns /dʒa:meʕ/ with the sound pattern /Ca:CVC/ and the singular noun /ri:ħa/ with the sound pattern /CVVCV/ are changed into the plural nouns /dʒwa:meʕ/, and /rwa:jeħ/, respectively. These plural nouns have the same plural sound pattern which is /Cwa:CVC/.

To form the plural of the singular nouns, the morphological pattern /fwa:ʕel/changes the internal structures of /Ca:CVC/nouns by inserting the sound /w/ before the nucleus of the first syllable .This pattern also changes the internal structure of /CVVCV/ by substituting the long vowel in the first syllable by the long vowel /a:/, inserting /w/ before this long vowel, substituting the long vowel of the vowel /a:/ by the long vowel /i:/, inserting /j/ as the onset of the second syllable and deleting the vowel /a/ that occurs in final position.

➤ **Pattern 04 : /fewa:ʕi:l/، فواعيل،**

Table(23):The Morphological Pattern /fwa:ʕi:l/ in TAA

| Morphological pattern | Singular Form | | Plural Form | |
|-----------------------|---------------|--|---------------|---|
| | Sound Pattern | Noun | Sound Pattern | Noun |
| /fewa:ʕi:l/ | /Ca :CVVC/ | /ħa:nu:t/ حانوت A market | /Cwa :Ci:C/ | /ħwa:ni:t/ حوانيت markets |
| | | /tʰa:dʒi:n/ طاجين A cooking bowl | | /tʰwa:dʒi:n/ طواجين Cooking bowls |
| | | /sʰa:ru:x/ صاروخ A rocket | | /sʰwa:ri:x/ صواريخ Rockets |

Moreover, the morphological pattern /fewa:ʕi:l/ is used in TAA to form the plural of some nouns. This pattern is utilized to create the plural form of singular /Ca:CVVC/ nouns . Table (23) displays that singular nouns /ħa:nu:t/, /tʰa:dʒi:n/, and /sʰa:ru:x/ which have the sound pattern /Ca:CVVC/ are changed into the plural nouns /ħwa:ni:t/, /tʰwa:dʒi:n/, and /sʰwa:ri:x/, respectively. These plural nouns have the same plural sound pattern which is /Cwa :Ci:C/.

To form the plural of these singular nouns, the morphological pattern /fɛa:jeɫ/ changes the internal structure of the singular nouns. The main changes are inserting /w/ before the nucleus of the first syllable and substituting the long vowel in the second syllable by the long vowel /i:/.

➤ **Pattern 05 : /fɛa:jeɫ/ 'فاعيل'**

Table(24):The Morphological Pattern /fɛa:jeɫ/in TAA

| Morphological pattern | Singular Form | | Plural Form | |
|-----------------------|---------------|----------------------------------|---------------|-----------------------------------|
| | Sound Pattern | Noun | Sound Pattern | Noun |
| /fɛa:jeɫ/ | /CCVVCV/ | /dqi:qa/ دقيقة A minute | /CCa:jeC/ | /dqa:jeq/ دقائق Minutes |
| | | /ʕedʒu:za/ عجوزة Old woman | | /ʕedʒa:jez/ عجائز Old women |
| | | /dʒema:ʕa/ جماعة A group | | /dʒma:jeʕ/ جماع groups |

Furthermore, TAA employs the morphological pattern /fɛa:jeɫ/ to create the plural form some nouns. This pattern is used to transform singular nouns with the sound pattern /CCVVCV/. The table above shows that singular nouns /dqi:qa/, /ʕedʒu:za/, and /dʒema:ʕa/ have the same plural sound pattern which is /CCa:jeC/. The plural of these three nouns are /dqa:jeq/, /ʕedʒa:jez/, and /dʒma:jeʕ/ respectively.

To form the plural of these singular nouns, the morphological pattern /fɛa:jeɫ/ changes the internal structure of the singular nouns. The main changes are substituting the long vowel of the first syllable by the long vowel /a:/, inserting the /j/ before the nucleus of the second syllable and deleting the vowel /a/ that occurs in final position in the second syllable.

➤ **Pattern 06 : /fʕa:li:l/** ’فعاليل

Table(25):The Morphological Pattern /fʕa:li:l/ in TAA

| Morphological pattern | Singular Form | | Plural Form | |
|-----------------------|---------------|----------------------------------|---------------|-----------------------------------|
| | Sound Pattern | Noun | Sound Pattern | Noun |
| /fʕa:li:l/ | /CVCCVVC/ | /fendʒa:l/ فنجال A cup | /CCa:ʕi:C/ | /fna:ɗʒi:l/ فناجيل Cups |
| | | /sʕandu:g/ صندوق A box | | /sʕna:di:g/ صناديق Boxes |
| | | /sultʕa:n / سلطان A Sultan | | /sla:tʕ i:n/ سلاطين Sultans |

TAA also uses the morphological pattern /fʕa:li:l/ to describe the ultimate plural. This pattern is employed with singular nouns that have the sound pattern /CVCCVVC/. As indicated in table (25). The singular nouns /fendʒa:l/ and /sʕandu:g/ have the sound pattern /CVCCVVC/. These nouns are used in the plural form with the sound pattern /CCa:ʕi:C/. The plural of these nouns are /fna:ɗʒi:l/ and /sʕna:di:g/, respectively.

To form the plural of these singular nouns, the morphological pattern /fʕa:li:l /changes the internal structure of the singular nouns. The main changes are modifying the internal structure of the first syllable, substituting the short vowel of the first syllable by the long vowel /a:/, and substituting the long vowel in the second syllable by the long vowel /i:/

➤ **Pattern 07 :/fʕa:ʕi:l/**

Table(26):The Morphological Pattern /fʕa:ʕi:l/in TAA

| Morphological pattern | Singular Form | | Plural Form | |
|-----------------------|---------------|------|---------------|------|
| | Sound Pattern | Noun | Sound Pattern | Noun |
| | | | | |

| | | | | |
|------------|-----------|----------------|------------|----------------|
| /fʕa:ʕi:l/ | /CVCCVVC/ | /yurra:f/ | /CCa:ʕi:C/ | /yra:ri:f/ |
| | | غراف A cup | | غراريف Cups |
| | | /sʕubba:tʕ / | | /sʕba:bi:tʕ / |
| | | صباط A shoe | | صبايط Shoes |

Besides, TAA utilizes the morphological pattern /fʕa:ʕ i: l/. This morphological pattern is similar to /fʕa:li:l/. It is used with singular nouns that have the sound pattern /CVCCVVC/ and form nouns with the sound pattern /CCa:ʕi:C/. The only difference is that /fʕa:ʕi:l/ is employed when consonant gemination takes place, as in /yurra:f/. In this singular noun, the consonant /r/ is doubled. To form the plural of this singular noun, the pattern /fʕa:ʕ i: l/ is utilized. This pattern changes the internal structure of the singular nouns. The main changes are modifying the internal structure of the first syllable, using the long vowel /a:/ to break the gemination and substituting the long vowel in the second syllable by the long vowel /i:/

➤ **Pattern 08 : /fʕa:la:/** ’فعالا’

Table(27):The Morphological Pattern /fʕa:la:/ in TAA

| Morphological pattern | Singular Form | | Plural Form | |
|-----------------------|---------------|-----------------------------|---------------|--------------------------------|
| | Sound Pattern | Noun | Sound Pattern | Noun |
| /fʕa:la:/ | /CVCCVV/ | /kursi:/ كرسي A chair | /CCa:Ca:/ | /kra: sa:/ كراسا Chairs |
| | /CVVC/ | /ð i : b/ ذئب A wolf | | /ðja: ba:/ ذئبابا Wolves |

| | | | | |
|--|----------|---------------------------|--|----------------------------|
| | /CVVCVV/ | /bi:du:/ بيدو A can | | /bwa:da:/ بوادا cans |
|--|----------|---------------------------|--|----------------------------|

TAA forms also the plural of some nouns using the morphological pattern /fʕa:la:/. This pattern is used with three different singular noun structures. The pattern /fʕa:la:/ is used to transform singular nouns with the sound pattern /CVCCVV/, /CVVC/, and /CVVCVV/. Table (27) shows that the singular nouns /kursi:/, /ði:b/, and /bi:du:/ have different sound patterns, but they have the same plural sound pattern /CCa:Ca:/. The plural forms of these sounds are /kra:sa:/, /ðja:ba:/, and /bwa:da:/, respectively.

To create the plural form of these nouns, the morphological pattern /fʕa:la:/ changes the internal structure of singular /CVCCVV/ nouns by modifying the structure of the first syllable, using the long vowel /a:/ as the nucleus of this syllable, substituting the nucleus of the second syllable by the long vowel /a:/. This pattern also changes the internal structure of /CVVC/ nouns by inserting /j/ before the nucleus of the syllabus, and inserting the long vowel /a:/ in final position. Besides, to form the plural of the singular /CVVCVV/ nouns, the morphological pattern /fʕa:la:/ modifies its structure. The nucleus of the first syllable is substituted by the long vowel /a:/ and the sound /w/ is inserted before this vowel. The long vowel /a:/ is also used to substitute the nucleus of the second syllable.

3.6.3. Algerian Arabized Noun Plural Inflectional Morphemes and

Morphological Patterns in TAA

To form the plural of Algerian Arabized nouns, TAA uses sound plural inflectional morpheme, and a set of morphological patterns.

3.6.3.1. Algerian Arabized Noun Plural Inflectional Morphemes

The findings of the study demonstrates that TAA uses only the feminine sound plural inflectional morpheme {a:t} to accounts for the plural form of Algerian Arabized nouns. This can be seen in the table below

Table(28):Noun Plural Inflectional Morphemes of Arabized words in TAA

| Singular form | Plural form |
|---|--|
| /pela:ka:r/ 'بلاكار' (a closet) | /pela:ka:ra:t/ 'بلاكارات' (closets) |
| /vi:seta/ 'فيستا' (a jacket) | /vi:seta:t/ 'فيستات' (jackets) |
| /su:zi:/ 'سوجي' (a subjet) | /su:zija :t/ 'سوجيات' (subjects) |
| /t ^ʰ a:ppi:/ 'تابي' (a carpet) | /t ^ʰ a:ppi:ja:t/ 'تابيات' (carpets) |
| /seti:lu:/ ستيلو (a pen) | /seti:luwa:t/ 'ستيلوات' (Pens) |
| /feri : zida:r/ 'فريجيدار' (a fridge) | /feri : zida:ra :t/ 'فريجيدارات' (fridges) |
| kufi :re t ^ʰ a/ 'كوفيرطا' (a bed blanket) | kufi :re t ^ʰ a :t/ 'كوفيرطات' (a bed blankets) |
| /peru : zi :/ 'بروجي' (a project) | peru : zija :t / 'بروجيات' (projects) |
| (a desk)بيرو/bi :ru:/ | /bi :ruwa :t/ 'بيروات' (desks) |
| /ka :zji :/ 'كايي' (a copybook) | /ka :zja :t/ 'كايات' (copybooks) |
| /pela:ka:r/ 'بلاكار' (a closet) | */pe la:ka:ri:n/ 'بلاكارين' (closets) |
| /vi:seta/ 'فيستا' (a jacket) | */vi:seti:n/ 'فيستين' (jackets) |
| /su:zi:/ 'سوجي' (a subjet) | */su:ziji :n/ 'سوجيين' (subjects) |
| /t ^ʰ a:ppi:/ 'تابي' (a carpet) | */t ^ʰ a:ppi:ji:n/ 'تابيين' (carpets) |
| /seti:lu:/ ستيلو (a pen) | */seti:luwi:n/ 'ستيلوين' Pens |
| /feri : zida:r/ 'فريجيدار' (a fridge) | */feri : zida:ri :n/ 'فريجيدارين' (fridges) |
| /kufi :re t ^ʰ a/ 'كوفيرطا' (a bed blanket) | */kufi :re t ^ʰ i :n/ 'كوفيرطين' (a bed blankets) |
| /peru : zi :/ 'بروجي' (a project) | */peru : zi ji :n/ 'بروجيين' (projects) |
| /bi :ru:/ 'بيرو' (a desk) | */bi :ruwi :n/ 'بيروين' (desks) |
| /ka :zji :/ 'كايي' (a copybook) | */ka :zji :n/ 'كاين' (copybooks) |
| /ka :du:/ 'كادو' (a gift) | */ka:duwi:n/ 'كادوين' (gifts) |

| | |
|-------------------------------|-------------------------------------|
| /ʃa:pu:/ 'شابلو' (a hat) | */ ʃa:puwi:n/ 'شابلوين' (hats) |
| /karetʕi:/ 'كرطي' (a city) | */karetʕiji :n/ 'كرطيين' (cities) |
| /tʕa :kesi:/ 'طاكسي' (a taxi) | */tʕa :kesiji :n/ 'طاكسيين' (taxi) |

Table (28) shows that the feminine sound plural inflectional morpheme {a:t}, for instance, is attached to the end of the Algerian Arabized nouns /pela:ka:r/, /suʒi:/ and /tʕa:ppi/ to create the plural nouns /pela:ka:ra:t/, /suʒi:ja:t/ and /tʕa:ppi:ja:t/. The table reveals that the masculine sound inflectional morpheme {i:n} is not used in TAA to form the plural of Algerian Arabized nouns. All the participants agree that the plural Algerian Arabized nouns which are created using the masculine sound inflectional morpheme {i:n} are incorrect.

Most of the Algerian Arabized nouns used in TAA are non-human nouns, this explains why this dialect uses only the feminine sound plural inflectional morpheme {a:t} to account for the plural form of Algerian Arabized nouns. The feminine sound plural inflectional morpheme {a:t} is used to form the plural of both human and non-human nouns, unlike the masculine sound plural inflectional morpheme {i:n} which is employed to create masculine plural human nouns.

The results also reveal that when the feminine sound plural inflectional morpheme {a:t} is used to create the plural of singular Algerian Arabized nouns that end with vowel /a/, as in /vi:seta/, this morpheme substitutes this vowel. The plural form of this word becomes /vi:seta:t/. Moreover, when the feminine sound plural inflectional morpheme {a:t} is used to create the plural of singular Algerian Arabized nouns that end with long vowel /i:/, the sound /j/ is inserted before this feminine sound plural inflectional morpheme. For instance, the singular Algerian Arabized nouns /suʒi:/ and /tʕa:ppi:/ end with the long vowel /i:/. The plural of these nouns are /sudʒi: ja :t/ and /tʕa: ppija:t/, respectively. To form the plural of these

nouns the feminine sound plural inflectional morpheme {a:t} is attached at the end of these nouns, and the sound /j/ is inserted before this inflectional morpheme.

Likewise, when the feminine sound plural inflectional morpheme {a:t} is attached to nouns that end with long vowel /u:/, the sound /w/ is inserted before this feminine sound plural inflectional morpheme. This can be seen in the noun /sti:luwa:t/ which is used as a plural form of the singular noun /sti:lu:/.

Furthermore, the findings in table (28) display that the feminine sound plural inflectional morpheme {a:t} is attached to both masculine and feminine singular nouns. For instance, the Algerian Arabized singular noun /pela:ka:r/ is masculine, while the Algerian Arabized noun /vi:seta/ is feminine. But the two nouns are transformed into the plural form by attaching the inflectional feminine sound plural inflectional morpheme at the end of these words.

The feminine sound plural inflectional morpheme {a:t} is used to create the plural nominative, accusative and genitive Algerian Arabized nouns. This can be seen in the example (7) below:

| | | |
|--------------------------|---|-----------------------------|
| 7.a. /su:zi: ra:h bajen/ | → | /su:zi:ja:t rahum bajeni:n/ |
| سوجي راه باين | | سوجيات راهم باينين |
| The subject is clear | | The subjects are clear |
| (Nominative Case) | | |

| | | |
|-----------------------|---|------------------------|
| 7.b. /tʃebaʃetsu:zi:/ | → | /tʃebaʃet su:zi:ja:t/ |
| طبعتسوجي | | طبعت سوجيات |
| I printed subject | | I printed the subjects |
| (Accusative Case) | | |

| | | |
|-------------------------------|---|------------------------------|
| 7.c. /ka:jen ɣalta fe su:zi:/ | → | /ka:jen ɣalta fe su:zi:ja:t/ |
| كاين غلطة في سوجي | | كاين غلطة في سوجيات |

| | |
|-----------------------------------|------------------------------------|
| I printed subject | I printed the subjects |
| There is a mistake in the subject | there is a mistake in the subjects |

(Genitive Case)

The singular Algerian Arabized noun /su:zi:/ has different cases in the examples above. It has a nominative case in (7.a), an accusative case in (7.b) and a genitive case in (7.c). However, the plural of this singular Algerian Arabized noun in the three examples is created by using the feminine sound plural inflectional morpheme {a:t}.

The feminine sound plural inflectional morpheme {a:t} is attached to the Algerian Arabized nouns to create the plural form that indicates more than one entity. This can be seen in the example (8) below

8.a. /tʰebaʃet zu:dʒ su:zi:ja:t/

طبعت زوج سوجيات

I printed two subejcts

8.b. /ka:jen ɣalta fi zu:dʒ su:zi:ja:t/

كاين غلطة في زوج سوجيات

There is a mistake in two subejcts

The Algerian Arabized plural noun /su:zi:ja:t/ in (8.a) and (8.b) is utilized with the word 'zu:dʒ' (زوج) (two) to indicate the number of the subjects. This word is used in TAA because this dialect has no dual form for The Algerian Arabized nouns. It means that, TAA employs the feminine sound plural inflectional morpheme {a:t} to change an Algerian Arabized singular noun into an Algerian Arabized plural noun that refers to two or more entities.

3.6.3.2. Algerian Arabized Noun Plural Inflectional Morphological Patterns

In addition to the plural noun inflectional morphemes {a:t}, TAA uses a set of morphological patterns which are utilized to form the plural of some Algerian Arabic nouns to account for

the plural some of Algerian Arabized Nouns. The patterns used in TAA to create plural Algerian Arabized nouns belong to the category plural of multitude and the ultimate plural.

1. Plural of Multitude

To account for the plural of some Algerian Arabized nouns, two morphological patterns the indicate plural of multitude are used. These pattern are: /fiʕla:n/ and /ʕa:l/

➤ **Pattern 01:/ fiʕla:n/**

Table(29):The morphological Pattern/fiʕla:n/ of AA nouns in TAA

| Morphological pattern | Singular Form | | Plural Form | |
|-----------------------|---------------|--------------------------|---------------|-------------------------------|
| | Sound Pattern | Noun | Sound Pattern | Noun |
| /fiʕla:n/ | /CVVC/ | /sʕa:k/ صاك A bag | /Ci:Ca:n/ | /sʕi:ka:n/ صيكان Bags |
| | | /ʕa:l/ شال A scraf | | /ʕi:la:n/ شيلان Scraves |

One of the morphological pattern utilized in TAA to form the plural of multitude of Algerian Arabized nouns is the pattern /fiʕla:n/. This pattern is used to form the plural Algerian Arabized nouns in the same way it is used to create the plural of Algerian Arabic nouns. Table (29) shows that the Algerian Arabic nouns /sʕa:k/which has the sound pattern /CVVC/ is used in the plural form as /sʕi:ka:n/. This plural form which has the sound pattern /Ci:Ca:n/is created by substituting the nucleus of the syllable by the long vowel /i:/ and inserting the speech sounds /a:n/ at the end of the singular noun.

➤ **Pattern 02:/fʕa:l/**

Table(30):The morphological Pattern/fʕa:l/ of AA nouns in TAA

| Morphological pattern | Singular Form | | Plural Form | |
|-----------------------|---------------|---------------------------|---------------|----------------------------|
| | Sound Pattern | Noun | Sound Pattern | Noun |
| /fʕa:l/ | /CVCVC/ | /banek/ بنك A bench | /CCa:C/ | /bna:k/ بناك Benches |

Another morphological pattern employed in TAA to account for the plural of Algerian Arabized nouns is /fʕa:l/. Just like in Algerian Arabic nouns, this pattern is used with Algerian Arabized singular/CVCVC/ nouns. Table (30) demonstrates that the singular Algerian Arabized noun /banek/ which has the sound pattern /CVCVC/ is used in the plural form as /bna:k/. This plural noun which has the sound pattern /CCa:C/ is created by modifying the structure of the first syllable and substituting the last vowel /e/ by the long vowel /a:/

2. The Ultimate Plural

TAA also uses five patterns that describe the ultimate plural of Algerian Arabic nouns to account for the plural of Algerian Arabized nouns. These patterns are: /fwa:ʕel/, /fwa:ʕi:l/, /fʕa:jel/, /fʕa:li:l/, and /fʕa:la:/

➤ **Pattern 01: /fwa:ʕel/**

Table(31):The morphological Pattern/fwa:ʕel/ of AA nouns in TAA

| Morphological pattern | Singular Form | | Plural Form | |
|-----------------------|---------------|-------------------------------|---------------|---------------------|
| | Sound Pattern | Noun | Sound Pattern | Noun |
| /fwa:ʕel | /Ca:CVCV/ | /tʕa:bel/ طابلا A table | /Cwa:CVC/ | /tʕwa:bel/ طوابل |

| | | | | |
|--|--|--|--|--------|
| | | | | tables |
|--|--|--|--|--------|

The morphological pattern /fwa:ʕel/ which is utilized in TAA to form the plural of some Algerian Arabic nouns is also employed to create the plural some Algerian Arabized nouns. Table (31) reveals that the pattern /fwa:ʕel/ is utilized to form the plural of the singular Algerian Arabized /Ca:CVCV/ noun /tʕa:bela/ and the singular Algerian Arabized /CVCVVCV/ noun /nimi:ru/. This pattern changes these singular nouns into the plural /Cwa:CVC/noun.

Just like in Algerian Arabic nouns, the pattern /fwa:ʕel/ modifies the internal structures of singular Algerian Arabized /Ca:CVCV/nouns by inserting the sound /w/ before the nucleus of the first syllable. This pattern also deletes the final vowel /a/ in these singular nouns.

➤ **Pattern 02: /fwa:ʕi:l/**

Table(32):The morphological Pattern/fewa:ʕi:l/ of AA nouns in TAA

| Morphological pattern | Singular Form | | Plural Form | |
|-----------------------|---------------|--------------------------------|--------------------------------|------------------------------|
| | Sound Pattern | Noun | Sound Pattern | Noun |
| /fewa:ʕi:l/ | /Ca:CVVCV/ | /va:li:za/ فاليزا A bag | /Cwa:ʕi:C/ | /vwa:li:z/ فواليز bags |
| | | /ba:si:na/ باسينة | | /bwa:si:n/ بواسين |
| | /CVVCVVC/ | /bu:f:u :n/ بوشون A plug | /bwa: ʕi:n/ بواشين plugs | |

The morphological pattern /fwa:ʕi:l/ which is used in TAA to form the plural of some Algerian Arabic nouns, is also utilized to account for the plural of some Algerian Arabized nouns. The results in table (32) reveals that this pattern is utilized to create the plural form of singular /Ca:CVVCV/ nouns and singular /CVVCVVC/. Table (31) displays that the singular Algerina Arabized nouns /va:li:za/ and /ba:si:na/ which have the sound pattern /Ca:CVVCV/ are changed into the plural nouns /vewa:li:z/ and /bwa:si:n/, respectively. Moreover, the table shows that the singular Algerian Arabized noun /bu:f:u :n/ which has the sound pattern /CVVCVVC/ is used in the plural form as /bwa:f:i:n/

To form the plural of the Algerian Arabized singular /Ca:CVVCV/ nouns, the morphological pattern /fwa:ʕi:l/ changes the internal structure of these nouns. The main changes are inserting /w/ before the nucleus of the first syllable, substituting the long vowel in the second syllable by the long vowel /i:/, and deleting the final vowel /a/. Besides, to create the plural form of the Algerian Arabized singular /CVVCVVC/ nouns, the long vowel of the first syllable is substituted by the long vowel /a:/, the sound /w/ is inserted before this long vowel, and the long vowel in the second syllable is substituted by the long vowel /i:/

➤ **Pattern 03: /fʕa:je/**

Table(33):The morphological Pattern/fʕa:je/ of AA nouns in TAA

| Morphological pattern | Singular Form | | Plural Form | |
|-----------------------|---------------|-----------------------------------|---------------|-----------------------------------|
| | Sound Pattern | Noun | Sound Pattern | Noun |
| /fʕa:je/ | /CCVVCV/ | /kla:sʕa/ كلاصا A classroom | /CCa:jeC/ | كلاصا /kla:jesʕ/ Classrooms |

| | | | | |
|--|--|------------------------------|--|------------------------------|
| | | /blu:tʰa/ بلوطا A ball | | /bla:jetʰ/ بلوطا Balls |
|--|--|------------------------------|--|------------------------------|

Furthermore, the morphological pattern /fʁa:jel/ is used in TAA to form , in addition to the plural of some Algerian Arabic nouns, the plural of some Algerian Arabized nouns. This pattern is used to transform Algerian Arabized singular nouns with the sound pattern /CCVVCV/. The table above shows that the singular nouns /kla:sʰa/ and /blu:tʰa/ have the same plural sound pattern which is /CCa:jeC/. The plural of these nouns are /kla:jesʰ/ and /bla:jetʰ/, respectively.

Just like Algerian Arabic nouns, the morphological pattern /fʁa:jel/ changes the internal structure of the Algerian Arabized singular nouns. The main changes are substituting the long vowel of the first syllable by the long vowel /a:/, inserting the /j/ before the nucleus of the second syllable and deleting the vowel /a/ that occurs in final position in these nouns.

➤ **Pattern 04: /fʁa:li:l/**

Table(34):The morphological Pattern/fʁa:li:l/of AA nouns in TAA

| Morphological pattern | Singular Form | | Plural Form | |
|-----------------------|---------------|-----------------------------------|---------------|-------------------------------------|
| | Sound Pattern | Noun | Sound Pattern | Noun |
| /fʁa:li:l/ | /CVCCVVC/ | /kɛrʰa:b/ كرطاب A schoolbag | /CCa:Ci:C/ | /kra:tʰi:b/ كراطيب schoolbags |
| | | /kartʰu:n/ كرطون A box | | /kra:tʰi:n/ كراطين Boxes |

The morphological pattern /fʕa:li:l/ is also employed with Algerian Arabized singular nouns that have the sound pattern /CVCCVVC/. As indicated in table (34). The Algerian Arabized singular nouns /kertʕa:b/ and /kartʕu:n/ have the sound pattern /CVCCVVC/. These nouns are used in the plural form with the sound pattern /CCa:Ca:C/. The plural of these nouns are /kra:tʕi:b/ and /kra:tʕi:n/, respectively.

To form the plural of these Algerian Arabized singular nouns, the morphological pattern /fʕa:li:l/ changes the internal structure of these nouns. The main changes are modifying the internal structure of the first syllable, substituting the short vowel of the first syllable by the long vowel /a:/, and substituting the long vowel in the second syllable by the long vowel /i:/.

➤ **Pattern 05: /fʕa:la:/**

Table(35):The morphological Pattern/fʕa:la:/ of AA nouns in TAA

| Morphological pattern | Singular Form | | Plural Form | |
|-----------------------|---------------|------------------------------|---------------|---------------------------------|
| | Sound Pattern | Noun | Sound Pattern | Noun |
| /fʕa:la:/ | /CVVCVV/ | /du:sʕ i:/ دوصي A file | /CCa:Ca:/ | /dwa:sʕ:a / دواصا Files |
| | | /ki :lu :/ كيلو A kilo | | /kwa :la/ كوالا Kilos |
| | | /lu:tʕ u:/ لوطو A car | | /lwa : tʕ a :/ لواطا Cars |

TAA forms also the plural of some Algerian Arabized nouns using the morphological pattern /fʕa:la:/ which is utilized to create the plural of some Algerian Arabic nouns. This pattern is used to transform the Algerian Arabized singular nouns with the sound pattern /CVVCVV/.

Table (35) shows that the singular nouns /du:s^hi:/, /ki:lu:/, and /lu:t^hu:/ which have the sound pattern /CVVCVV/ have the plural sound pattern /CCa:Ca:/. The plural forms of these sounds are /dwa:s^ha:/, /kwa:la:/, and /lwa:t^ha:/, respectively.

To create the plural form of these nouns, the morphological pattern /fʕa:la:/ changes the internal structure of these nouns. The nucleus of the first syllable is substituted by the long vowel /a:/ and the sound /w/ is inserted before this vowel. The long vowel /a:/ is also used to substitute the long vowel in the second syllable.

3.7. Discussion of the Findings

To form the plural of both Algerian Arabic and Algerian Arabized nouns in TAA, a set of inflectional morphemes and morphological patterns are utilized. The inflectional morphemes used in TAA to describe plural form of Algerian Arabic nouns can be grouped into two main categories: Dual noun inflectional morpheme and plural noun inflectional morphemes. To indicate duality, TAA employs the dual sound inflectional morpheme {i:n}. This morpheme is used to form the dual of both masculine singular and feminine singular nouns. What is interesting about this inflectional morpheme {i:n}, is that it is used to indicate the dual form of some singular nouns that describe numeral and time. To create the dual form of these nouns, the dual sound inflectional morpheme {i:n} is attached to the end of some nouns without deleting the letter ‘س’, while it substitutes this letter to form the dual of other nouns.

Though the dual sound inflectional morpheme {i:n} is used to generate the dual of some Algerian Arabic masculine and feminine singular nouns in TAA, it is not used in this dialect to create the dual form of Algerian Arabized singular nouns.

In addition to the dual form, TAA uses the masculine sound inflectional morpheme {i:n} and the feminine sound inflectional morpheme {a:t} to create the plural form of Algerian Arabic nouns. The first morpheme is attached to the end of Algerian Arabic

masculine singular nominative, accusative, genitive nouns to create Algerian Arabic masculine plural nominative, accusative, and genitive nouns. The masculine sound inflectional morpheme {i:n} is utilized in TAA to generate the plural form of only human nouns to indicate more than one entity. That is, the masculine sound inflectional morpheme {i:n} is used with Algerian Arabic masculine singular nominative, accusative, genitive human nouns to indicate both dual and plural forms. Although this masculine sound inflectional morpheme {i:n} is employed in this dialect to form the plural of Algerian Arabic masculine nouns, it is not used to create the plural form of Algerian Arabized nouns, because most the Algerian Arabized nouns used in TAA are words that are non-human nouns.

Regarding the second plural inflectional morpheme, the findings demonstrate that the feminine sound inflectional morpheme {a:t} used at the end of Algerian Arabic masculine and feminine singular nominative, accusative, genitive nouns to create Algerian Arabic feminine plural nominative, accusative, and genitive nouns, unlike the masculine sound inflectional morpheme {i:n} which is utilized in TAA to generate the plural form of only human nouns, the feminine sound inflectional morpheme {a:t} is employed in this dialect to create the plural form of both human and non-human nouns to indicate more than one entity. That is, the feminine sound inflectional morpheme {a:t} is used with Algerian Arabic masculine and feminine singular nominative, accusative, genitive human and nonhuman nouns in TAA to indicate both dual and plural forms. This feminine inflectional morpheme is used in TAA to create the plural form of Algerian Arabized nouns. This morpheme is utilized to create the plural form of both feminine and masculine Algerian Arabized nominative, accusative, genitive singular non-human nouns. TAA utilized this morpheme to generate the plural of Algerian Arabized nouns, because most of these Algerian Arabized nouns are non-human, and the feminine sound inflectional morpheme

{a:t} can be attached to both human and non-human nouns, unlike, the masculine sound inflectional morpheme {i:n} which is attached at the end of only human nouns.

To create the plural form of Algerian Arabized nouns, the the feminine sound inflectional morpheme {a:t} substitutes the last vowel /a/ in nouns ending with this vowel. However, the sounds /j/ and /w/ are inserted before this morpheme when it is attached to singular nouns that end with the vowel /i:/ or /u:/, respectively.

In addition to inflectional morphemes mentioned above which are used to create regular dual and plural form, TAA uses a set of morphological patterns to create broken plural nouns of Algerian Arabic nouns. These patterns can be classified into three main categories: Plural of paucity, plural of multitude, and the ultimate plural. To create plural of paucity, TAA uses two morphological patterns which are /ʔafʔila/ 'افعله', and /ʔafʔa:l/ 'افعال' . To create plural of multitude, TAA uses nine morphological patterns which are: /fiʔla:n/ 'فعلان', /feʔla:n/ 'فعلان', /fuʔla:n/ 'فعلان', /fʔul/ 'فعل' , /fʔu:l/ 'فعول', /fʔu:la/ 'فعول', /fʔa:li/ 'فعال', /fʔa:l/ 'فعال' , /fuʔla/ 'فعل'. Moreover, eight morphological patterns are used in TAA to indicate the ultimate plural. These patterns are: /mfa:ʔel/ مفاعل , /mfa:ʔi:l/ مفاعيل , /fwa:ʔel/ فواعل , /fewa:ʔi:l/ فواعيل , /fʔa:ʔel/ فعايل , /fʔa:li:l/ فعائل , /fʔa:ʔ i: l/ فعايل , and /fʔa:la:/ فعالا.

To create Algerian Arabic plural nouns, these morphological patterns change the sound structure of the singular form of these nouns. What is interesting about these morphological patterns is that nine of them are used with only one singular sound structure. These patterns are /ʔafʔila/ 'افعله', and /ʔafʔa:l/ 'افعال' /fiʔla:n/ 'فعلان', /mfa:ʔel/ مفاعل , /mfa:ʔi:l/ مفاعيل /fewa:ʔi:l/ فواعيل , /fʔa:ʔel/ فعايل , /fʔa:li:l/ فعائل , /fʔa:ʔ i: l/ فعايل. However, seven patterns are utilized with two singular sound structures. These patterns are /feʔla:n/ 'فعلان', /fuʔla:n/ 'فعلان', /fʔul/ 'فعل' /fʔu:la/ 'فعول', /fʔa:li/ 'فعال', , /fuʔla/ 'فعل',

and /fwa:ʕel/ فواعل, while three patterns are used with three singular sound structures. These patterns are: /fʕu:l/ 'فَعُول', /fʕa:l/ 'فَعَال', and /fʕa:la:/ فعالا.

Another interesting point about these patterns is that to create the plural form of one Algerian Arabic singular noun, more than one morphological patterns can be utilized. For instance, the singular nouns /ta :qa/ can be changed into the plural form using two different morphological patterns. To create the plural form of these nouns both the morphological patterns /fʕul/ 'فَعْل' and /fʕa:li/ 'فَعَال' can be employed. TAA uses both the plural nouns /tjuq/ and /twa:qi:/.

TAA uses a set of morphological patterns which are utilized to form the plural of some Algerian Arabic nouns to account for the plural some of Algerian Arabized Nouns. The patterns used in TAA to create plural Algerian Arabized nouns belong to the category of plural of multitude and the ultimate plural. The morphological patterns used in TAA to describe plural of paucity are not used to generate the plural of Algerian Arabized nouns. The morphological patterns that indicate plural of multitude which are used to create Algerian Arabized plural nouns are / fiʕla:n/ and /fʕa:l/. Additionally, the patterns that describe the ultimate plural of Algerian Arabic nouns used to account for the plural of Algerian Arabized nouns include /fwa:ʕel/ فواعل, /fwa:ʕi:l/ فواعيل, /fʕa:je:l/ فعائل, /fʕa:li:l/ فعائليل, and /fʕa:la:/ فعالا.

3.8. Conclusion

The chapter described and examined the data obtained from the selected population. First, it described in details the noun plural inflectional morphemes used in Algerian Arabic Dialect as spoken in Tiaret. Also, it described the noun plural morphological patterns that exist in Tiaret Dialect. Moreover, it analysed the inflectional morphemes and the morphological patterns used in Tiaretian Algerian Arabic of Arabized nouns. Then, the chapter discussed the use of these inflectional morphemes and morphological patterns in TAA.

General Conclusion

The study at hand aims to provide insights on the morphological structure of plural nouns in Algerian Arabic as spoken in Tairat. It seeks to determine how inflectional and morphological patterns are utilized in TAA to create the plural form of Algerian Arabic and Arabized nouns, and to examine how these morphemes and patterns are used in TAA. The study is composed of three main chapters. The first two chapters are theoretical, while the last one is practical.

To conduct the present research, a qualitative approach was implemented. A number of Algerian plural nouns are administered to fifty Tairatian dialect's native speakers who were asked to determine whether the plural of each noun is correct or not, to correct the mistakes, and to provide other plural forms. The results of the study confirm the hypotheses proposed to answer the research questions. The findings demonstrate that plural nouns in TAA can be grouped into two main categories: dual form and plural form. The dual form is created by attaching the masculine sound inflectional morpheme {i:n} to the end of some Algerian Arabic masculine and feminine singular nouns that describe numeral and time. This morpheme is used without altering the sound structure of the singular nouns to which it is attached. Though TAA utilized this morpheme to create the dual form of some Algerian Arabic nouns, it does not employ it to generate the dual form of Algerian Arabized singular nouns.

Regarding the plural form, it seems that TAA utilizes both regular plural nouns and irregular plural nouns. The first type is created by using the masculine sound inflectional morpheme {i:n}, and the feminine sound inflectional morpheme {a:t} to the end of some Algerian Arabic nouns without changing the sound structure of these nouns. The masculine sound inflectional morpheme {i:n} can be attached to the end of Algerian Arabic masculine singular nominative, accusative, genitive human nouns to form Algerian Arabic

masculine plural nominative, accusative, genitive human nouns that indicate more than one entity. However, it is not employed in this dialect to form the plural of Algerian Arabized masculine nouns. By contrast the feminine sound inflectional morpheme {a:t} can be attached to the end of Algerian Arabic masculine and feminine singular nominative, accusative, genitive human and non human nouns to create Algerian Arabic feminine plural nominative, accusative, and genitive human and non human nouns to indicate more than one entity. This morpheme is also utilized to create the plural form of both feminine and masculine Algerian Arabized nominative, accusative, genitive singular non- human nouns.

The irregular plural form is created in TAA by using a set of morphological patterns that modifies the sound structure of Algerian Arabic singular nouns. These patterns can be classified into three main categories: Plural of paucity, plural of multitude, and the ultimate plural. To create plural of paucity, TAA uses two morphological patterns which are /ʔafʔila/ 'افعله', and /ʔafʕa:l/ 'افعال'. To create plural of multitude, TAA employs nine morphological patterns which are: /fiʕla:n/ 'فعلان', /feʕla:n/ 'فعلان', /fuʕla:n/ 'فعلان', /fʕul/ 'فعل', /fʕu:l/ 'فعول', /fʕu:la/ 'فعول', /fʕa:li/ 'فعال', /fʕa:l/ 'فعال', /fuʕla/ 'فعل'. Moreover, eight morphological patterns are utilized in TAA to indicate the ultimate plural. These patterns are: /mfa:ʕel/ مفاعل, /mfa:ʕi:l/ مفاعيل, /fwa:ʕel/ فواعل, /fewa:ʕi:l/ فواعيل, /fʕa:ʕel/ فعايل, /fʕa:ʕi:l/ فعايل, /fʕa:ʕi:l/ فعايل, /fʕa:ʕi:l/ فعايل, and /fʕa:ʕi:l/ فعايل.

Regarding the use of these patterns, it appears that nine of them are used with only one singular sound structure. These patterns are /ʔafʔila/ 'افعله', and /ʔafʕa:l/ 'افعال', /fiʕla:n/ 'فعلان', /mfa:ʕel/ مفاعل, /mfa:ʕi:l/ مفاعيل, /fewa:ʕi:l/ فواعيل, /fʕa:ʕel/ فعايل, /fʕa:ʕi:l/ فعايل, /fʕa:ʕi:l/ فعايل, and /fʕa:ʕi:l/ فعايل. Seven patterns are utilized with two singular sound structures. These patterns are /feʕla:n/ 'فعلان', /fuʕla:n/ 'فعلان', /fʕul/ 'فعل', /fʕu:la/ 'فعول', /fʕa:li/ 'فعال', /fuʕla/ 'فعل', and /fwa:ʕel/ فواعل, while three patterns are used with three singular sound structure. These patterns are: /fʕu:l/ 'فعول', /fʕa:l/ 'فعال', and /fʕa:ʕel/ فواعل, while three patterns are used

with three singular sound structures. These patterns are: /fʕu:l/ ‘فَعول’, /fʕa:l/ ‘فَعال’, and /fʕa:la:/ فَعالا. To create the irregular plural of some Algerian Arabic singular nouns, it seems that more than one morphological patterns can be utilized.

To form the irregular plural form of Algerian Arabized nouns, the two morphological patterns / fiʕla:n/, /fʕa:l/ which describe plural of multitude, and the five morphological patterns /fwa:ʕel/ فواعل, /fwa:ʕi:l/ فواعيل, /fʕa:jel/ فعائل, /fʕa:li:l/ فعاليل, and /fʕa:la:/ فعالا that indicate the ultimate plurals utilized. Just like the Algerian Arabic nouns, these patterns alter the sound structure of Algerian Arabized singular nouns.

➤ **Limitations of the Study**

The study at hand is not without limitations:

1. The present research work is the first attempt to examine the morphological structure of plural nouns in Algerian Arabic. It was challenging due to the lack of previous studies on plural noun morphology in Algerian Arabic.
2. The process of data collection and data analysis was time consuming.
3. This study examined the morphological structure of plural nouns in TAA without taking into consideration how these nouns can be utilized in relation to the plural of other parts of speech like adjectives and verbs.

➤ **Recommendations**

1. Researchers are highly recommended to investigate the morphological structure of words in Algerian Arabic, especially the Tiaretian dialect.
2. Researchers are highly recommended to examine the plural form used in different Algerian dialects to determine how the morphological structure of plural nouns may change from one dialect to another.

3. Researchers are highly recommended to examine the morphological structure of plural nouns in Algerian Arabic by taking into consideration the plural form of other parts of speech like adjectives and verbs.

List of Reffrences

1. Abderrahman,F., Youssef,H.,& Benafra,Y.(2022).*Lectures on Morphology* .Published by Dar Al-Raya.
2. Abdullah Al_ asmari .(2015). *Phonology chapter 07*. Shlideshare site. <https://fr.slideshare.net/>.
3. Abigail,c. Mariek,M. (2014).*Interface between phonology and phonetics*. Oxford Bibliographies in Linguistics.
4. Aloof, M., & Fudeman ,K.(2011).*What is Morphology?(2nded)*.Published by UK- Wiley Blackwell in the united Kingdom.
5. Anderson,S.(2021).*Phonology in the Twentieth Century*.Published under the Creative Commons Attribution 4.0 Licence .Frier University,Berlin.
6. Setyaningsih,A.(2017). *Phonemes,Phones,Allophones*.University of yogyakarta, Depok,Inonesia.
7. Bakovi,E.(2015).DistinctiveFeatures.AnnaMai.https://annamai.net/LIGN111/Features_handout_Bakovic_Rose.pdf.
8. Bauer, L . (1983).*English Word-Formation*.Cambridge University Press.
9. Baltaxe,C. (1969).*Principles of Phonology* .University of California.
10. Birde,S. (2002).*Phonology*. University of Pennsylvania.
11. Blevins,J. (2004). *Evolutionary Phonology the Emergence of sound patterns* .Cambridge University Press.
12. Bloomfield, L. (1933). *Language*. Henry Holt and Company.Linguistics society of America.
13. Booij, G.(2007). *The Grammar of Words:An Introduction to Morphology(2nd ed)*. Oxford University Press.

14. Booij, G.(2012). *The Grammar of Words :An Introduction to Morphology(3rd ed)*. Oxford University Press.
15. Boutahar,B.(2017). *The Plural :Types,and Exmaples*. BYJU'S. <https://byjus.com/>.
16. Brentic .Diane Fenlon. Gordan &Comien.(2018).sign Language Phonolog.ResearchGate.<https://www.researchgate.net/>.
17. Bulbul,G (2014) . *Consonants of Articulation*.Department of English.Maltani Mal Modi College.
18. Carstairs-McCarthy,A. (2002) .*An Introduction to English Morphology :Words and Their Structure*. In H.Giegerich Ed Linguistics. Edinburgh University Press.
19. Carr,P.(2003).*English Phonetics and Phonology an Introduction*.Welly.Blackwell.
20. Chomsky, N., & Halle, M. (1968). *The Sound Pattern of English*. Harper & Row.
21. Crystal, D. (2008). *Dictionary of Linguistics and phonetics (6th ed.)*.Wiley-Blackwell.
22. Colin,J .Ewen . Hume, E & Rice,K. (2011).The Blackwell Companion to Phonology. Blackwell Pub; 1st edition .
23. Coxhead,P.(2006). *Natural Language Processing and Application ,Phones,Phonemes*. University of Brimingham.
24. Darragh,P.(2018). *Introduction to Phonology ,Part 03:Phonetics Features*.[\[GitHub.com\]](https://github.com/). <https://github.com/>.
25. Deepar,J;Mohit,J.(2014).*Distinctive Features*.SildeShare. <https://fr.slideshare.net/>.
26. Deibler,E .(1992). Organized Phonology Data. Papua New Guinea.Draft.
27. Delahunty & Carvey.(2010).The English Language :From Word to Sence.Parlor PressLLc.
28. Dini Handoko, M. Pd. (2019).*English Morphology* .Published .by CV .IQRO.
29. Djaffar,F .(2013).*Morphological Derivations and Inflections in An Algerian Arabic Dialect.M .A .Dissertation*. Department of English ,University of Malaya.

30. Douлами, M. & Benayache, N. (2020). *Manifestation of French Language Parts of Speech Adapted to the Linguistic System of Algerian Arabic Variety: Case Study of Student Population at the University of Ibn Khaldoun in Tiaret*. M.A. Dissertation. Department of English, Ibn Khaldoun University, Tiaret
31. Easy Arabic. (2020, June 6). Beginners Arabic-Lesson 14 Arabic Plural [video]. Youtube. <https://www.youtube.com/watch?v=VuhM8r1xcRU&t=618s>.
32. EL_Husaiyn, A. (2016). *Phonology Phonological Features of English Vowels*. SildShare. <https://fr.slideshare.net/>.
33. Elghalayini, M. (2005). *Arabic Lectures*. (1st ed). Published by Dar Ibn Alhaytham.
34. Enna. (2020, May 14). Morphology Episode 2 Free vs Bound Morphemes. [video]. Youtube. <https://www.youtube.com/watch?v=NSqwojB7T0E&t=56s>
35. Erlinda, R. (2010). *Introduction to Linguistic for ELT*. English Teaching Department. IAIN batusangkar.
36. Essamiri, M. (2013). *Arabic Morphology : Rules and Meaning*. Published by Dar Ibn Kathir.
37. Evsitifeeva, M.; Teorltchesaya, F. (2023). *Main aspects of Functional Phonetics*. [Fayllar.Org].
38. Famala, E. (2021). *Introduction to English Morphology*. Cambridge University Press.
39. Finegan, E. (2004). *Language : Its Structure and Use* (4th ed). Wadsworth.
40. Forel, C.A.; Puskas, G. (2005). *Phonetics and Phonology*. University of Geneva.
41. Garn-Nunn, P., & Lynn, J. (2004). *Calvert's Descriptive Phonetics*. New York: Thieme Medical Publisher.
42. Gay, L.R., Geoffrey E. Mills, Peter W. Airasian. (2012). *Educational Research_ competencies for Analysis and Applications* (10th ed). Pearson Education.
43. Gimson, A. C. (2014). *Pronunciation of English*. Routledge. Routledge; 8th edition

44. Goldsmith, J. (1990). *Autosegmental and metrical phonology*. Wiley-Blackwell. Northwestern University. Department of Linguistics (2016) Sheridan Road USA.
45. Goldsmith, J. (1995). *The Handbook of Phonological Theory*. Cambridge, Mass, Oxford Blackwell.
46. Goldsmith, J. (2011). *The Handbook of Phonological Theory*. Published in 2014 by John Wiley & Sons.
47. Gunna R, M. (1961). *Preliminaries to speech Analysis the Distinctive Features and their Correlate*. Oxford Clarendon.
48. Gussenhoven, C., & Jacobs, H. (2017). *Understanding Phonology*. Routledge.
49. Hale, Mark, & Rias, Charles (2008). *The Phonological Enterprise*. Oxford University.
50. Halle, M., & Clements, G. N. (1983). *Problem Book in Phonology*. The Massachusetts Institute of Technology.
51. Halle, M., & Stevens, K. N. (1971). *Phonology: An Introduction to Basic Concepts*. Mouton.
52. Halle, M. (1997). *Tenseness, Vowel Shift and The Phonology of The Back Vowels in Modern English*. *Linguistic Inquiry*, Vol 8, PP 611-625.
53. Halim Hammad, S. (2020). *Lectures on Morphology*. Published by Dar SAFFA.
54. Hammaw and, Z. (2011). *Morphology in English word formation in Cognitive Grammar*. Published by Continuum International Publishing Group.
55. Hammodi, Kh. (2018). *Algerianization of French Nouns : The use of Algerian Arabic Determiners, Demonstratives, and Possessives with French Nouns: A Descriptive Morphological Account*. *International Journal of Linguistics, Literature and Translation*. <https://doi.org/10.32996/ijllt.2018.1.4.12>.
56. Hasa. (2016). *Difference between phonetics and phonology*. Pediaa.com.
57. Harman, W., Holiman, C. (1999). *A Handbook to Literature (8th edition)*. Publisher by

prentice hall.university of California.

58. Hemaidia,M.(2016).*Algerian Arabic Varieties Speakers'Errors in English Writings "A contrastive Error Analysis Study*.Doctoral .Thesis. Department of English ,Oran 2Ahmed Ben Ahmed University ,Oran.
59. Haspelmath ,M.(2002).*Understanding Morphology* .Oxford University Press.
60. Jakaza .(2018).*Evaluating the Importance of of Distinctive Features in Linguistic Analysis*. Departement of English and Communication.Midalands State University.
61. Jakobson, R. (1941). Why 'Mama' and 'Papa'? The Journal of American Folklore, 54(213), 97-106.
62. Jakobson, R., Fant, G., & Halle, M. (1952). *Preliminaries to Speech Analysis: The Distinctive Features and their Correlates*.MIT Press.
63. Jakobson ,R C. Gunnar M& Font Halle,M.(1961). *Preliminaries to Speech Analysis The Distinctive Features and their Correlates*. Oxford: Clarendon.
64. John,T.,Jensen& Margaret.(2005).*Foot, Word,and Laryngeal Features in English and Iclemandic*.University of Ottawa.
65. Kari, Ethelbert E. (2008). *Degema–English dictionary with English index*. Tokyo: Research 433 institute for languages and cultures of Asia and Africa (ILCAA).
66. Katamba,F.(1989).*An Introduction to Phonology* .Longman group UK limited.
67. Katamba ,F.(2006). *Morphology : Modern Linguistics Series*. Virginia :Macmillan Education Australia.
68. Koukab,A.(2019).*Lecture in English*.University of Agriculture.
69. Ladefoged,P.(2001).*A Course in Phonetics(4th Edition)*.University of California.
70. Ladefoged,P(2005).) *Vowels and consonants in Introduction to The Sound of Language*. Cengage learning,Canada.
71. Ladegoged,P.,Keith,J(2006).*A Course in Phonetics (6th Edition)*.publisher by Michael

Roesenberg.Cengage learning,Canada.

72. Ladefoged,P.(1975).*A Course in Phonetics(1th Edition)*.university of Michigan.
73. Ladefoged,P.(1996) . *The Sound of The World's Language*.Oxford Black Well.
74. Lass,R.(1998).*Phonology an Introduction to Basic Concepts*.Cambridge University.
75. Lieber,R.(2009).*Introducing Morphology*. Cambridge University Press.
76. Lorenz,F(2013).*Basics of Phonetics and English Phonology*.Logos Verlag ,Berlin
77. Merabet,F & Lagraa,I.(2023).*Morphophonemic Analysis of Verbal inflectional Morphemes in Algerian Arabic As Spoken in Tiaret*. M.A. Dissertation. Department of English ,Ibn Khaldoun University ,Tiaret.
78. Merina.(2020,October 19).Meeting 4 Morphology :Morpheme ,allomorph ,Word Formation || Mata kuliah: General Linguistics. [video].Youtube <https://www.youtube.com/watch?v=GWPAKI5qMZQ&t=612s>
79. Muayad Abdul-Halim.,Ahmed Shamsan&Abdul-Majeed Attayib.(2015).*Inflectional Morphology in Arabic and English. AContrastive Study*.International Journal of English Linguistics.<https://dx.doi.org/10.5539/ijel.v5n2p139>.
80. Muhammad Arjan Ali.(2023).*The Language of Quaran*.Amazon Digital Service. <https://www.amazon.fr/digital/s?k=digital>.
81. Odden,D(2005).*Introducing Phonology*.Combridge University.
82. Riailand,A.,Ridouane,R&Harry(2015).*Features in Phonology and Phonetics*. University of Connecticut, Storrs, USA.
83. Ridouane,R;Clements (2006).*Quantal Phonetics and Distinctive Features* .ReaserchGate. <https://www.researchgate.net/>.
84. Roach,P. (1983).*English Phonetics and Phonology a Practical Course (2th edition)*.Cambridge University Press.

85. Roach,P.(1992).*English Phonetics and Phonology a Practical Course*(4th edition).Cambridge University Press.
86. Panacovà ,R .(2021).*Basic Concepts of Morphology*. Vydatel'stvo safarik Press.
87. Paul,A. (2022).*Everythings about the origins and Oddities of Language You Never Thought to Ask*.Elliott&Thompson.
88. Puffer,D & Huber,D.(2008).*Introduction to The Study of Language 'Morphology'*.Jimcontent.com.<https://se5fd416c4cdc1a50.jimcontent.com/download/version/0/module/1730600417/name/Morphology.pdf>.
89. Quinn Patton,M.(2002).*Qualitative Research and Evaluation Methods*.Sage publications L.td.
90. Sa'aid,Z.(2020).*Phonological Substitution in Motivated by Adjacent Phonological Features Evidence from Classical Arabic*. Department of English. Tafila Technical University, Tafila , Jordan.
91. Sapir,E.(1925).*Sound Patterns in Language*.Linguistics Society in America.
92. Seggy,E. (1996). *The representation of Features and Relations in Nonlinear Phonology*. Doctoral dissertation ,Combridge university.
93. Shmid Hans- Jörg. (2015). "*Morphology*".In: Natalie Braber ,Louise Cummings and Lise Morrish ,eds., *Exploring Language and Linguistics* Cambridge. Cambridge University Press,77-110.
94. Shrinberg, L; Kent, R. (2012). *Clinical Phonetics* .Pearson education.
95. Sridhar Kumar,M (2019). *Nasalization in Phonetic*.*Research Journal of English Language and Literature*.Dravidian university Kuppan chittoor.
96. Strazry,P.(2005).*Encyclopaedia of linguistics*.Chicago.
97. Suarz,J.(18 May2012).*Definition of Phonology*. SilderShare.
98. Tsur.Reuven.(1992). *The Phonetic Mode of Speech perception* . University Press.

99. Twain, M. (2013). *Morphology. The words of Language*. Cengage Learning
100. Wise, L. (10 november 2013). *Evaluations in Language*. BloG On Linguistics.
101. Yule, G. (2006). *The study of Language (3rd ed)*. Published in the United States of America (2006) by Cambridge University Press.
102. Yule, G. (2017). *The study of Language (6th ed)*. Published in the United Kingdom by Cambridge University Press.

Appendices

Appendix A : List of inflectional morphemes

Section 01: Dual inflectional morpheme {i:n}

| Singular | Plural | Yes | No | Correct |
|----------|--------|-----|----|---------|
| عشرة | عشرين | | | |
| الف | الفين | | | |
| عام | عامين | | | |
| دقيقة | دقيقة | | | |
| ساعة | ساعتين | | | |
| ليلة | ليلتين | | | |

Section 02: Plural inflectional morpheme {i:n}

| Singular | Plural | Yes | No | Correct |
|----------|---------|-----|----|---------|
| معلم | معلمين | | | |
| مناقش | مناقشين | | | |
| مواطن | مواطنين | | | |
| مجاهد | مجاهدين | | | |
| عشرة | عشرين | | | |
| الف | الفين | | | |
| عام | عامين | | | |
| مناقش | مناقشين | | | |
| حيط | حيطين | | | |
| مفتاح | مفتاحين | | | |
| مسمار | مسمارين | | | |

| Singular | Plural | Yes | No | Correct |
|----------|---------|-----|----|---------|
| معلم | معلمون | | | |
| مناقش | مناقشون | | | |
| مواطن | مواطنون | | | |
| مجاهد | مجاهدون | | | |
| مفتاح | مفتاحون | | | |

| | | | | |
|-------|---------|--|--|--|
| ممول | ممولون | | | |
| مرشد | مرشدون | | | |
| مسمار | مسمارون | | | |
| مفتش | مفتشون | | | |
| مطرح | مطرحون | | | |
| مغني | مغنيون | | | |

Section 03: plural inflectional morpheme {a:t}

| Singular | Plural | Yes | No | Correct |
|----------|----------|-----|----|---------|
| صلايا | صلايات | | | |
| سجادا | سجادات | | | |
| عبايا | عبايات | | | |
| تعار | تعارات | | | |
| خيمار | خيمارات | | | |
| سبيطار | سبيطارات | | | |
| طبيبا | طبيبات | | | |
| خياطا | خياطات | | | |
| مهيبا | مهيبات | | | |
| بدعيا | بدعيات | | | |
| معلمة | معلمات | | | |

Appendix B: Morphological patterns (Algerian Arabic Nouns)

Section 1: morphological pattern مفاعيل

| Singular | Plural | Yes | No | Correct |
|----------|---------|-----|----|---------|
| مفتاح | مفاتيح | | | |
| مصران | مصارين | | | |
| مشوار | مشاوير | | | |
| مسمار | مسمامير | | | |
| مكتوب | مكتايب | | | |
| مهبول | مهايبيل | | | |
| مسكين | مساكين | | | |
| مسؤول | مسانيل | | | |
| مجنون | مجاتين | | | |

Section 2: morphological pattern فعائل

| Singular | Plural | Yes | No | Correct |
|----------|--------|-----|----|---------|
| جماعا | جماميع | | | |
| طبيعا | طبايع | | | |
| شكارا | شكاير | | | |
| خلعا | خلايع | | | |
| بلغا | بلايغ | | | |
| زلافا | زلايف | | | |
| عجوزا | عجايز | | | |
| مخدا | مخايد | | | |
| عفسا | عفايس | | | |
| بلوزا | بلايز | | | |

Section 3: morphological pattern فعائليل

| Singular | Plural | Yes | No | Correct |
|----------|--------|-----|----|---------|
| كسكاس | كسكايس | | | |

| | | | | |
|-------|--------|--|--|--|
| سروال | سراويل | | | |
| فنجال | فناجيل | | | |
| صندوق | صناديق | | | |
| منقوش | مناقيش | | | |
| سلطان | سلاطين | | | |

Section 4: morphological pattern فواعل

| Singular | Plural | Yes | No | Correct |
|----------|--------|-----|----|---------|
| طابع | طوايع | | | |
| جامع | جوامع | | | |
| خاتم | خواتم | | | |
| قابسا | قوابس | | | |
| ساعا | سوايع | | | |
| عادا | عوايد | | | |
| حاجا | حوايح | | | |
| ريحا | روايح | | | |
| شارب | شوارب | | | |
| حاجب | حواجب | | | |

Section 5: morphological pattern فواعيل

| Singular | Plural | Yes | No | Correct |
|----------|--------|-----|----|---------|
| طاجين | طواجين | | | |
| حانوت | حوانيت | | | |
| قيطون | قواطين | | | |
| بابور | بوابير | | | |
| كابوس | كوابيس | | | |
| كاتون | كوانين | | | |
| جار | جوارين | | | |
| شيطان | شواطين | | | |

Section 6: morphological pattern فعلا

| Singular | Plural | Yes | No | Correct |
|----------|--------|-----|----|---------|
| باب | بيبان | | | |
| كاس | كيسان | | | |
| خيظ | خيطان | | | |
| حيظ | حيطان | | | |
| فار | فيران | | | |
| راس | ريسان | | | |

Section 7: morphological pattern فعولا

| Singular | Plural | Yes | No | Correct |
|----------|--------|-----|----|---------|
| كرسي | كراسا | | | |
| خدمي | خداما | | | |
| طيسي | طباسا | | | |
| ذيب | ذيابا | | | |
| بيدو | بوادا | | | |
| غرفيا | غرافا | | | |
| يتيم | يتاما | | | |
| كوري | كوارا | | | |
| شادي | شوادا | | | |
| قوطني | قواطا | | | |

Section 8: morphological pattern فعول

| Singular | Plural | Yes | No | Correct |
|----------|--------|-----|----|---------|
| ذنب | ذنوب | | | |
| قلب | قلوب | | | |
| كتاب | كتوبا | | | |
| شاهد | شهود | | | |
| لحاف | لحوف | | | |
| قدرا | قدور | | | |

Section 9: morphological pattern فعالي

| Singular | Plural | Yes | No | Correct |
|----------|--------|-----|----|---------|
| سكنا | سكاني | | | |
| ورقا | ورقي | | | |
| تاقا | تواقي | | | |
| قهوا | قهوي | | | |
| قفلا | قفالي | | | |
| مغطا | مغاطي | | | |
| دعوا | دعاوي | | | |
| مرقا | مراقي | | | |

Section 10: morphological pattern فعال

| Singular | Plural | Yes | No | Correct |
|----------|--------|-----|----|---------|
| ضياف | ضياف | | | |
| دار | ديار | | | |
| طرف | طراف | | | |
| وعل | وعال | | | |
| كلب | كلاب | | | |
| جمل | جمال | | | |
| جبل | جبال | | | |
| عبد | عباد | | | |
| برج | براج | | | |

Section 11: morphological pattern مفاعل

| Singular | Plural | Yes | No | Correct |
|----------|--------|-----|----|---------|
| مطرح | مطارح | | | |
| مطرق | مطارق | | | |
| مغرف | مغارف | | | |
| مسند | مساند | | | |
| مرفع | مرافع | | | |
| محرم | محارم | | | |
| مضرب | مضارب | | | |

Section12: morphological pattern فعل

| Singular | Plural | Yes | No | Correct |
|----------|--------|-----|----|---------|
| قرعا | قرع | | | |
| قصعا | قصع | | | |
| تاقا | تيق | | | |
| شجرا | شجر | | | |
| سعفا | سعف | | | |
| بقرا | بقر | | | |
| سلا | سلل | | | |

Section 13: morphological pattern فعولا

| Singular | Plural | Yes | No | Correct |
|----------|--------|-----|----|---------|
| ذئب | ذئوبا | | | |
| قط | قطوطا | | | |
| عظم | عظوما | | | |
| حنش | حنوشا | | | |
| كتاب | كتوبا | | | |
| لحاف | لحوفا | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

Section 14: morphological pattern أفعله

| Singular | Plural | Yes | No | Correct |
|----------|--------|-----|----|---------|
| سؤال | اسئله | | | |
| جواب | اجوبة | | | |

Section 15: morphological pattern أفعال

| Singular | Plural | Yes | No | Correct |
|----------|--------|-----|----|---------|
| سبب | اسباب | | | |
| حال | احوال | | | |
| حلم | احلام | | | |

Section 16: morphological pattern فاعلى

| Singular | Plural | Yes | No | Correct |
|----------|--------|-----|----|---------|
| مريض | مرضى | | | |
| ميت | موتى | | | |
| طبيب | طبي | | | |
| شريك | شركى | | | |
| شريف | شرفى | | | |

Section 17: morphological pattern فعايل

| Singular | Plural | Yes | No | Correct |
|----------|--------|-----|----|---------|
| غراف | غراريف | | | |
| كلاب | كلاليب | | | |
| صباط | صبابيپ | | | |
| سلاك | سالليك | | | |
| فلوس | فلاليس | | | |

Section 18: morphological pattern /fe

| Singular | Plural | Yes | No | Correct |
|----------|--------|-----|----|---------|
| خروف | خرفان | | | |
| حاسي | حسيان | | | |

Section 19: morphological pattern فعلان

| Singular | Plural | Yes | No | Correct |
|----------|--------|-----|----|---------|
| بلاد | بلدان | | | |
| طريق | طرقان | | | |

Section 1: inflectional morpheme {a:t}

| Singular | Plural | Yes | No | Correct |
|----------|----------|-----|----|---------|
| فيستا | فيستات | | | |
| طابليا | طابليات | | | |
| تابي | تابيات | | | |
| سوجي | سوجيات | | | |
| ستيلو | ستيلوات | | | |
| طاكسي | طاكسيات | | | |
| كرطي | كرطيات | | | |
| سبيطار | سبيطارات | | | |
| بلاكار | بلاكارات | | | |
| باطيما | باطيمات | | | |
| كوفيرطا | كوفيرطات | | | |

Section 2: morphological pattern فواعيل

| Singular | Plural | Yes | No | Correct |
|----------|--------|-----|----|---------|
| فاليزا | فواليز | | | |
| باسينا | بواسين | | | |
| بوشون | بواشين | | | |
| چريكا | چواريك | | | |
| قأطو | قوأطيظ | | | |

Section 3: morphological pattern فعايل

| Singular | Plural | Yes | No | Correct |
|----------|--------|-----|----|---------|
| كلاصا | كلايص | | | |
| بلاصا | بلايص | | | |
| بلاكا | بلايك | | | |
| بلوطا | بلايظ | | | |

Section 4: morphological pattern فعايل

| Singular | Plural | Yes | No | Correct |
|----------|--------|-----|----|---------|
| صنديلا | صناديل | | | |
| فرشيطا | فراشيط | | | |
| كرطاب | كراطيب | | | |
| كرطونا | كراطين | | | |
| سربيتا | سرابيت | | | |

Section 5: morphological pattern فواعل

| Singular | Plural | Yes | No | Correct |
|----------|--------|-----|----|---------|
| طابلا | طوابل | | | |
| نميرو | نوامر | | | |

Section 6: morphological pattern فعلان

| Singular | Plural | Yes | No | Correct |
|----------|--------|-----|----|---------|
| صاك | صيكان | | | |
| قاز | قيران | | | |
| طاس | طيسان | | | |

Section 7: morphological pattern فاعلا

| Singular | Plural | Yes | No | Correct |
|----------|--------|-----|----|---------|
| كيلو | كوالا | | | |
| دوصي | دواصا | | | |

| | | | | |
|------|-------|--|--|--|
| بيرو | بوارا | | | |
| شنوي | شناوا | | | |

Section 8: morphological pattern فعلان

| Singular | Plural | Yes | No | Correct |
|----------|--------|-----|----|---------|
| بنك | بناك | | | |
| دوصي | دواصا | | | |
| بيرو | بوارا | | | |
| شنوي | شناوا | | | |

الملخص

تهدف الدراسة الى تحديد المورفيمات والاوزان الصرفية المستعملة في اللهجة الجزائرية كما يتحدث بها سكان تيارت لتشكيل صيغة الجمع للاسماء العربية والمعربة المستخدمة في هاته اللهجة. تم دراسة وتحليل مجموعة من الاسماء المستخدمة في اللهجة التيارتية. اشارت نتائج البحث ان اللهجة التيارتية تستخدم المورفيمات الصرفية "ين" و "ات" لتشكيل صيغة الجمع دون تغيير التركيبة الفونولوجية للأسماء ، كما أنها تستخدم مجموعة من الأوزان الصرفية التي تؤثر على التركيبة الفونولوجية للأسماء

Résumé

L'étude vise à identifier les morphèmes flexionnelles et modelés morphologiques utilisés dans le dialecte algérien tel que parlé par les habitants de Tiaret pour former la forme plurielle des noms arabes et arabisés utilisés dans ce dialecte. Un groupe de noms utilisés dans le dialecte Tiaret a été étudié et analysé. Les résultats de la recherche ont indiqué que le dialecte Tiaret utilise les morphèmes «i:n» et «a:t» pour former le pluriel sans changer la structure phonologique des noms. Il utilise également un ensemble de modelés morphologiques qui affectent la structure phonologique des noms.

Summary

The study aims to identify the inflectional morphemes and morphological patterns used in the Algerian dialect as spoken in Tiaret to form the plural form of Arabic and Arabized nouns. To conduct the research, a group of nouns used in the Tiaretian dialect was examined and analyzed. The results indicated that the Tiaretian dialect uses the morphemes “i:n” and “a:t” to form the plural form without changing the phonological structure of the nouns. It also uses a set of morphological patterns that affect the phonological structure of the nouns.