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# LIBYAN ARABIC MORPHOLOGY: AL-JABAL DIALECT 

by<br>Abdulgialil Mohamed Harrama<br>Copyright ${ }^{\text {© }}$ Abdulgialil M. Harrama<br>A Dissertation Submitted to the Faculty of the DEPARTMENT OF NEAR EASTERN STUDIES In Partial Fulfillment of the Requirements for the Degree of DOCTOR OF PHILOSOPHY<br>In the Graduate College<br>THE UNIVERSITY OF ARIZONA

1993

## THE UNIVERSITY OF ARIZONA

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SIGNED:


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## ABSTRACT

This study deals with the morphological structure of one of Libyan Arabic varieties called al-Jabal Dialect of Libyan Arabic (JDLA). The main concern of this study is the morphological component of JDLA though a general overview of the phonological system along with major phonological processes have been presented and accounted for. Such a presentation of the phonological processes is justified by the fact that phonology and morphology do interplay greatly in many points in the grammar. This dissertation is the first study of JDLA.

The presentation of this dissertation is conducted in the following way. Chapter $I$ is an introduction. Chapter II deals in brief with the phonological system of the dialect. This includes the consonants and vowels, syllable structure, stress rules and the major phonological processes of JDLA. Phonological processes include syncope, epenthesis, assimilation, metathesis, vowel length, vowel harmony etc. Chapter III introduces the morphology of verbs where the derivation and inflection of triliteral and quadriliteral verbs are presented in detail. This includes the derivational and inflectional processes of sound, doubled, hollow and defective verbs ...etc. JDLA morphology is a root-based morphology where different morphological categories are produced through the interdigitation of roots and vowels which
might be accompanied by affixes. Such a process is a very productive method in word creation as has been pointed out in the main body of this work. Chapter IV is devoted to the morphology of nouns. The derivation and inflection of verbal nouns, instance nouns, unit nouns, feminine nouns, instrumental nouns, locative nouns, etc. are elaborated upon. Chapter $V$ concerns with the morphology of adjectives. The derivational and inflectional processes of verbal adjectives, positive adjectives, elative adjectives and adjectives of color and defect are introduced and accounted for. Chapter VI deals with pronouns where independent and suffixed personal pronouns along with other pronouns have been dealt with. Chapter VII concludes the study by presenting the salient features of JDLA as well as recommendations for future research.

## CHAPTER I

## INTRODUCTION

### 1.1 Preliminary:

The linguistic situation of the Arabic language in the present time, all over the Arab world, is characterized by the existence of more than one variety. Some scholars view this situation as being a diglossic one, namely classical or Standard Arabic and Colloquial or Dialectal Arabic (cf. Ferguson, 1959 and Altoma, 1969). Others, however, have gone far beyond the above dichotomy by suggesting the existence of four varieties of Arabic; that is, classical Arabic (CA), Modern Standard Arabic (MSA), Educated Arabic (EA) and Colloquial Arabic (KA) (cf. Zaghloul, 1980). It is not the object of this study to argue about the validity of these claims. Each variety of Arabic serves its own purpose and function in an Arab society.

Classical Arabic is the language of the Quran and PreIslamic as well as early post-Islamic literature. It is sometimes described as Literary, Written or just Standard Arabic. It is mainly written and used only in some formal situations such as religious ceremonies. As for Modern Standard Arabic, it carries the element of modernity as its name suggests. Although MSA has developed and acquired new vocabulary, it is based on $C A$ and has kept in line with the characteristic properties of the grammatical structure of CA
as Ali (1987) pointed out. It is the vehicle of formal communication and the normal medium of written materials. It is the vehicle of formal speeches, learned debates, news broadcasts over radio and television, etc. It is used in newspapers, magazines, documents and the like. The so-called Educated Arabic refers to a stage between Colloquial or Dialectal Arabic and Standard Arabic and is restricted, in a sense, to educated people when they converse with each other, especially people from different Arab countries. Colloquial or Dialectal Arabic is the variety that is almost entirely spoken by the Arab people throughout the Arab world. It is the informal medium of communication of everyday life among family members, friends, work peers and so on in a designated region.

This study, however, is concerned with the last variety of Arabic, namely Colloquial or Dialectal Arabic as spoken in Libya. It should be pointed out that Dialectal Arabic cannot completely be separated from Classical Arabic (CA) or Standard Arabic (SA). This is due to the fact that many lexical items have been borrowed from the standard language to the dialectal varieties of Arabic. Thus, although the present study is mainly concerned with the dialectal variety of Arabic, some borrowed lexical items from $C A$ or $S A$ are encountered here and there which carry their classical or standard pattern in the colloquial in many cases. These
borrowed items violate some of the phonological processes unique to the dialect such as, for example, syncope.

The question of whether modern Arabic dialects are descended from $C A$ or are reflexions of ancient Arabic dialects that existed side by side with CA lies outside the scope of this study and hence is not of concern here.

### 1.2 Aim, Scope and Methodology:

This study aims at providing a comprehensive linguistic analysis of the Libyan Arabic dialect, spoken in al-Jabal alGarbi (the western mountain) region located about one hundred kilometers southwest of Tripoli, Libya, and hence called JDLA. The region is somehow vast but this study covers mainly my own village and the adjacent areas. This study is based mainly on my own idiolect; it is not a bedouin dialect but rather a dialect of sedentary people who live in small towns and villages.

The scope of this study is the morphological structure of JDLA. The morphological component will be thoroughly investigated in the light of modern linguistic analysis utilizing the most efficient approaches in order to arrive at a satisfactory analysis.

JDLA morphology is essentially a root-based morphological system whereby different forms of morphological categories, through the interdigitation of roots (consonants or glides) with vocalic patterns which might be accompanied
by affixes, are created. The process involved is derivational and/or inflectional. Both operate on stems or derived forms, as will be shown in the subsequent chapters. The manipulation of stems (<root and vowels) and affixation through the application of different morphological rules of derivation as well as inflection is a very productive method in JDLA morphology. It should be kept in mind that in spite of the fact that this study is morphological in nature, some phonological rules or processes are in order. This is mainly due to the fact that morphology and phonology do interplay greatly in many points in the grammar. The utilization of phonological rules is sometimes needed in order to arrive at acceptable utterances as will be illustrated later. In this study, I will not adhere to any specific school of thought. Rather I will utilize the most efficient methods of modern linguistic analysis.

This study is a synchronic analysis of JDLA morphology but some diachronic reference might be made, especially when some issues are best solved by diachronic reference.

### 1.3 Literature Review:

The present study is the first study that investigates the morphological structure of JDLA. To the best of my knowledge, there have been no previous studies on this particular variety of Libyan Arabic. However, it is widely believed that Arabic dialects of each country are sub-divided
into varieties of the same dialect, especially if the region is vast. In the case of Libyan Arabic, one finds eastern and western dialects. Within these regions, there exist the urban and non-urban varieties or dialects. However, some related studies on some Libyan Arabic varieties have been done. These studies include Elfitoury's (1976) dissertation entitled "A Descriptive Grammar of Libyan Arabic." Elfitoury conducted his study utilizing the structural approach. His dissertation describes the grammatical structure of Libyan Arabic as spoken in Tripoli, Libya. Swed's dissertation (1982) deals with three modern Arabic dialects in comparison with Classical Arabic. His study was conducted in the framework of generative phonology. He investigates, from a historical perspective, the developmental processes of the Arabic verb in three modern Arabic dialects: Libyan Arabic (Tripoli dialect), Egyptian Arabic (Cairene dialect) and Iraqi Arabic (Baghdadi dialect). He mainly concentrates on the basic form of triliteral and quadriliteral verbs though he touches upon the derived forms, but not in depth. He also tries to prove that the biconsonantal theory is erroneous. This is also the position of the Classical Arab grammarians. His study gives some insights into the relationship between modern Arabic dialects and $C A$. He indicates that $C A$ was a lingua-franca in pre-Islamic as well as early post-Islamic periods. Elgadi's dissertation (1986) deals with the spoken Arabic of Tripoli, Libya. He investigates the phonology and
morphology of Tripolitanean Arabic in the framework of generative phonology. The dissertation consists of two parts. Part one deals with the sound system of the dialect as well as phonological processes. Part two is devoted to the morphological system of the dialect.

In addition, there are two other studies that deal with Libyan Arabic varieties. Both of these two works are concerned with the phonology of Libyan Arabic. One of them is Aurayieth's dissertation (1982), which investigates the phonology of the verb in eastern Libyan Arabic. The other work is that of Abumdas' dissertation (1985) which investigates the phonology of the zlitan dialect. zlitan is a town located east of Tripoli. Both studies are conducted in the framework of generative phonology.

### 1.4 The Present Study:

The present study as indicated earlier deals with the morphological component of the Libyan Arabic variety as spoken in the above-mentioned region in that part of the world. As is always the case with other modern Arabic dialects, JDLA is rich in vocabulary and has a simplified grammatical structure compared to that of $C A$ where many grammatical features have been lost or modified. It is not, however, the aim of this study to list such features since this study is mainly a general synchronic analysis.

The significance of the present work lies in its being the first detailed analysis of the morphological system of JDLA. It gives a comprehensive analysis of all morphological categories of the dialect: verbs, nouns, adjectives, etc. It will show the major aspects of JDLA morphology that might be shared by some other modern Arabic dialects or peculiar to JDLA. In addition, it will shed some light on the salient features of the dialect. It is intended to fill a gap in the linguistic studies of Libyan Arabic varieties long overdue. The present study may be regarded as a starting point for more research on all grammatical aspects of the investigated dialect. It is hoped that the present work may contribute to the research on Arabic dialectology in general and Libyan Arabic in particular.

### 1.5 Outline of the study:

The remaining chapters of this dissertation are organized in the following way. Chapter II introduces a general overview of the phonological system of JDLA. The consonantal and the vocalic systems, as well as the major phonological processes of the dialect are presented and accounted for. Chapter III is devoted to the morphology of verbs in the dialect. The derivation of triliteral and quadriliteral verbs is introduced and accounted for. This includes the derivation of sound, hollow, doubled and defective verbs. The inflectional processes of perfect,
imperfect and imperative are also presented. Chapter IV deals with the morphology of nouns which includes the derivation and inflection of nouns. Basically, the derivation of verbal nouns, instance nouns, unit nouns, feminine nouns, locative nouns, instrumental nouns, occupational nouns and diminutive nouns is presented and accounted for. The inflection of these nouns is dealt with in some detail. As for Chapter $V$, it is concerned with the morphology of adjectives. The derivation and the inflection of adjectives are presented in some detail. Chapter VI deals with pronouns: personal, demonstrative, interrogative and relative pronouns. It will be shown that personal pronouns are of two types: independent and suffixed pronouns. The attachment of suffixed pronouns to different morphological categories is elaborated upon. Chapter VII concludes this study by presenting the phonological and morphological salient features of JDLA along with limitations of the study and recommendations for future research.

CHAPTER II
THE PHONOLOGICAL BYBTEM OF JDLA

In this chapter, the discussion will focus on some aspects of the phonological system of JDLA. It includes consonants and vowels, syllable structure, stress rules, and major phonological processes of JDLA.

### 2.1 Consonants:

JDLA consonants are classified according to their manner and point of articulation. Their phonetic values are given below:
b Voiced bilabial stop
$t$ Voiceless dental stop
t Voiceless emphatic dental stop
d Voiced dental stop
k Voiceless velar stop
g Voiced velar stop
$q$ Voiceless uvular stop. It occurs mostly in borrowings from CA. In ordinary speech, it is usually replaced by /g/.
? Voiceless glottal stop
f Voiceless labio-dental fricative
$\theta$ Voiceless interdental fricative
ð Voiced interdental fricative
© Voiced emphatic interdental fricative
s Voiceless alveolar fricative
s Voiceless emphatic alveolar fricative
$z$ Voiced alveolar fricative
š Voiceless alveopalatal fricative
ž Voiced alveopalatal fricative
x Voiceless uvular fricative
$\dot{g} \quad$ Voiced uvular fricative
h Voiceless pharyngeal fricative
c Voiced pharyngeal fricative
h Voiceless glottal fricative
m Voiced bilabial nasal
n voiced alveolar nasal
1 Voiced alveolar liquid
r Voiced alveolar liquid
w Voiced bilabial
y Voiced palatal

### 2.1.2 Distribution:

All consonants including the two glides /w/ and /y/ can appear in all positions: initially, medially and finally, except for the glottal stop /?/ which will be elaborated upon below. The two glides may also undergo the process of weakening or deletion altogether in certain positions. With the exception of the glottal stop /?/, all consonants and glides may be geminated. Geminates are regularly transcribed as identical double consonants or glides, e.g., ss, tt, dd, ww, etc.

Table (1)
JDLA Consonants

|  | $\begin{aligned} & \text { B } \\ & \text { I } \\ & \text { L } \\ & \text { A } \\ & \text { B } \\ & \text { I } \\ & \text { A } \\ & \text { L } \end{aligned}$ | $\begin{aligned} & \text { L } \\ & \text { A } \\ & \text { B } \\ & \text { I } \\ & \text { O } \\ & \text { D } \\ & \text { E } \\ & \text { N } \\ & \text { T } \\ & \text { A } \end{aligned}$ | $\begin{aligned} & \mathrm{I} \\ & \mathbf{N} \\ & \mathbf{T} \\ & \mathbf{E} \\ & \mathbf{R} \\ & \mathbf{D} \\ & \mathbf{E} \\ & \mathbf{N} \\ & \mathbf{T} \\ & \mathbf{A} \\ & \mathrm{~L} \end{aligned}$ | $\begin{aligned} & \mathrm{D} \\ & \mathrm{E} \\ & \mathrm{~N} \\ & \mathbf{T} \\ & \mathbf{A} \\ & \mathrm{~L} \end{aligned}$ | A L V E O L A R | $\begin{aligned} & \mathrm{A} \\ & \mathrm{~L} \\ & \mathrm{~V} \\ & \mathbf{E} \\ & \mathbf{O} \\ & \mathbf{P} \\ & \mathbf{A} \\ & \mathrm{~L} \\ & \mathbf{A} \\ & \mathbf{T} \\ & \mathbf{A} \\ & \mathrm{~L} \end{aligned}$ | $\begin{aligned} & \hline \mathbf{p} \\ & \mathbf{A} \\ & \mathbf{L} \\ & \mathbf{A} \\ & \mathbf{T} \\ & \mathbf{A} \\ & \mathbf{L} \end{aligned}$ | $\begin{aligned} & \text { V } \\ & \text { E } \\ & \text { L } \\ & \text { A } \\ & \text { R } \end{aligned}$ | $\begin{aligned} & \mathrm{U} \\ & \mathrm{~V} \\ & \mathrm{U} \\ & \mathrm{~L} \\ & \mathrm{~A} \\ & \mathrm{R} \end{aligned}$ | $\begin{aligned} & \mathbf{P} \\ & \mathbf{H} \\ & \mathbf{A} \\ & \mathbf{R} \\ & \mathbf{Y} \\ & \mathbf{N} \\ & \mathbf{G} \\ & \mathbf{E} \\ & \mathbf{A} \\ & \mathbf{L} \end{aligned}$ | $\begin{aligned} & \mathbf{G} \\ & \mathbf{L} \\ & \mathbf{O} \\ & \mathbf{T} \\ & \mathbf{T} \\ & \mathbf{A} \\ & \mathbf{L} \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| V1. |  |  |  | t t |  |  |  | k | (q) |  | ? |
| vd. | b |  |  | d |  |  |  | g |  |  |  |
| V1. |  | f | $\theta$ |  | s s | s |  |  | x | h | h |
| vd. |  |  | ¢ 0 |  | z | ž |  |  | $\dot{g}$ | c |  |
| Nasal | m |  |  |  | n |  |  |  |  |  |  |
| Liquid |  |  |  |  | 1 r |  |  |  |  |  |  |
| Glide | w |  |  |  |  |  | Y |  |  |  |  |

The glottal stop /?/ does not occur in final position but does occur in initial position in some cases. In other cases, however, it is dropped. Medially, it may occur, especially in the speech of the younger generation. In many cases, the glottal stop is either substituted for by a glide or realized as a vocalic as will be shown later on.

As for the two glides /w/ and /y/, they occur in all positions with some stipulations regarding medial and final positions. When they are doubled, they occur freely in medial and final positions as radical elements of lexical items. Also, when preceded or followed by long vowels, they are not subject to deletion but rather they are stable in medial or final positions. When preceded by a consonant and followed by a vowel they are also stable as /milwi/ 'twisted'. In addition, when the two glides are not separated by a vowel, i.e., glide cluster, they are stable as in /laawya/ 'twisting (f.)'. In certain positions, glides are deleted or vocalized as will be illustrated in the upcoming sections. As indicated earlier, consonants and glides do geminate. They also form clusters. With regard to the glottal stop /?/, it does not geminate nor does it cluster with other consonants except in borrowings from Standard Arabic. Some of the phonological changes that the glottal stop and the glides undergo will be taken up in the coming section on the phonological processes following syllable structure and stress. It should be pointed out that

JDLA has three emphatic consonants which are indicated by a dot under them except for /h/which is a voiceless pharyngeal fricative. Plain consonants may be affected by neighboring emphatic consonants. This is due to spread of emphasis which affects vowels as well. The domain of emphasis is the syllable or sometimes the whole word. Examples illustrating this point will be given later. Some other varieties of Libyan Arabic include /r/, /l/, /z/ and /m/ as distinctive emphatic consonants (cf. Elfitoury, 1976 and Elqadi, 1986). In the dialect under investigation, however, such phonemes are not considered distinctive emphatic consonants. Rather they are allophones of their counterpart plain consonants mainly in the vicinity of emphatic consonants or sometimes without a particular environment as is the case with the word /?alla/ 'God'. The argument against not considering these consonants as emphatic lies in the fact that minimal pairs are lacking.

### 2.2 Vowels:

The following table illustrates JDLA vowels which vary in length and quality.

Table (2) JDLA Vowels

|  | Front | Central | back |
| :--- | :---: | :---: | :---: |
| high | i ii |  | u uu |
| mid | ee |  | oo |
| low |  | a aa |  |

As seen in the above table, JDLA has a total of eight vowels. Some of these vowels may have allophonic variation in some environments as will be illustrated later on. The basic opposition between /i/, /u/, /a/ and /ii/, /uu/ and /aa/ is one of length. The following general observations are in order:

1. The two long mid vowels /ee/ and /oo/ represent in most cases the Classical Arabic diphthongs /ay/ and /aw/ respectively. These are purely colloquial vowels as in /bayt/ $\longrightarrow$ /beet/ 'house' and /lawn/ $\rightarrow$ /loon/ 'color'. They also occur in loanwords as in /steerso/ 'steering wheel', /freeno/ 'brake' and /talafoon/ 'telephone', etc.
2. All unstressed long vowels become short in final position.
3. /a/ may sometimes be realized as a schwa / / due to vowel reduction after a stressed syllable and before CV as in /callamu/ $\rightarrow$ /call mu/ 'they taught'. Also, when /a/ is in final position, it may be in free variation with /e/ due to the L?imaala/ 'deflection' process.

However, this realization of /a/ as /e/ in final position is not without some stipulations. That is final /a/ may be deflected to /e/ if there is no double consonant or geminate immediately preceding /a/ or if there is no long vowel immediately preceding the consonant or the glide that precedes /a/. In such cases, /a/ cannot be realized as /e/. L?imaala/ is also blocked if /a/ is a feminine, object or possessive marker.
4. Vowels in the environment of emphatic consonants are realized as emphatic and more backed. This is mainly due to emphatic spread as in /taab/ 'he repented', /țaab/ 'it was cooked', /mass/ 'he touched' and /maṣṣ 'he sucked', etc.

### 2.3 Syllable structure:

In this section a brief description of JDLA syllables is given. Syllables in JDLA are characterized by two types: short syllables and long syllables. Some of these syllables are identical with those of $C A$ and some other modern Arabic dialects. Others, however, may be considered unique to the dialect under investigation (cf. Elqadi, 1986 and Qafisheh, 1977). The various types of syllables are introduced below followed by some comments.

1. CV /fi/ 'in'
2. CCV /stafaad/ 'he benefited'

3. Onset and nucleus are necessary in any given syllable but the coda may sometimes be realized as zero as shown above.
4. The onset may be occupied by a consonant or a glide. It may also be occupied by a consonant cluster of geminates which may come to surface as a result of some applications of phonological or morphological rules as in /ktaab/ < /kitaab/ 'book' by syncope rule, /kasar/ 'he broke' which yields /nkasar/ 'it was broken' when prefixed by the Form VII verbs prefix. A consonant cluster initially may consist of a consonant and a glide as, e.g., /twaḍọaf/ 'he was employed' or a glide and a consonant as, e.g., /ysaafir/ 'he travels'.
5. Nucleus is always occupied by a vowel, short or long. It should be noted that two different vowels are not permitted to be in a sequence.
6. The coda may consist of zero, a single consonant, a glide, a consonant cluster or a geminate. The maximum number of consonants in the coda is two.
7. A two consonant cluster or a geminate in medial position is divided between two syllables where the first consonant or glide closes the preceding syllable and the second consonant or glide begins the following syllable. In case of a three-consonant cluster medially, an epenthetic vowel is usually inserted between the first and the second consonant of the cluster.
8. A word may undergo resyllabification as a consequence of some applications of phonological or morphological processes as will be shown in later chapters. Addition, deletion or internal changes may play a crucial part in the process of resyllabification.
9. Due to coalescence, underlying cVCC will be realized as CVVC as in /lawn/ $\rightarrow$ /loon/ 'color' and /sayf/ $\rightarrow$ /seef/ 'sword'.

The discussion of syllable structure will not be pursued further for this study is not phonological in nature.

## 2.4 stress:

Stress in JDLA is predictable. It is assigned in accordance with an opposition between short and long syllables.

In what follows, stress statements and stress assignment rules are presented briefly without further elaboration for the same reasons stated earlier that this study is not a phonological one.
a. In monosyllabic words, stress falls on the only vowel in those words, as for example:

| bint | 'a girl' |
| :--- | :--- |
| ktáab | 'a book' |
| f£ | 'in' |
| frịh | 'he was happy' |
| nḥall | 'it was opened' |


| nḥáaz | 'he sided with' |
| :--- | :--- |
| ráadd | 'returning' |
| báa | 'he sold' |

b. In polysllabic words, stress is assigned according to syllable types that constitute those lexical items. The following illustrates this point. Stress falls on the last syllable (the ultimate) if that syllable is a long one. Examples:

| mafhúum | 'understood' |
| :--- | :--- |
| bildáan | 'countries' |
| gaalúuh | 'they said it' |
| ọarábt | 'I, you (m.s.) hit' |
| kallamúuk | 'they spoke to you (m.s.)' |
| šažaráat | 'trees' |
| callamtuuh | 'you (pl.) taught him' |

If the last syllable is short and the syllable that immediately precedes it (the penultimate) is long, then stress falls on the penultimate. Remember that CVC in final position is considered a short syllable. Examples:

| gáalit | 'she said' |
| :--- | :--- |
| cállam | 'he taught' |
| másnac | 'factory' |
| katábna | 'we wrote' |
| ktáabi | 'my book' |
| yistácmil | 'he uses' |

béetna 'our home'
Cazámin 'he invited me'
If the last two syllables are short, then stress falls on the antepenultima whether it is short or long as the following examples illustrate:
šážara 'a tree'
žtáma ${ }^{c} u \quad$ 'they got together'
nkásaru 'they were broken'
gaddamu 'they presented'
ššáawaru 'they consulted with each other'
ọárabit 'she hit'
Callamit 'she taught'
Stress rules that account for stress assignment in JDLA are stated below (cf. Brame, 1971).

Stress Assignment Rule:
$\mathrm{V} \longrightarrow[+$ stress $] /-\mathrm{C}_{\mathrm{o}}\left((\mathrm{VC}) V C_{0}{ }^{1}\right)$ \#
This schema abbreviates the following disjunctively ordered rules:
a. $\mathrm{V} \rightarrow[+$ stress $] /-\mathrm{C}_{0} \mathrm{VCVC}_{0}{ }^{1} \#$
b. $\mathrm{V} \rightarrow[+$ stress $] /-\mathrm{C}_{0} \mathrm{VC}_{0}{ }^{1} \#$
c. $\mathrm{V} \rightarrow[=$ stress $] /-\mathrm{C}_{0} \#$

JDLA has also the following stress shift rule which is operative in some forms of the perfect verbs as well as in some nouns mostly of the pattern CVCVC.

Stress Shift Rule:

$$
\# C(C) \operatorname{vcv}(C) \rightarrow c(C) \operatorname{VCV}(C)
$$

Consider the following examples:

```
kátab }->\mathrm{ katáb 'he wrote'
nkásar m nkasár 'it was broken'
žtamac }->\mathrm{ žtam{c 'he had a meeting'
balah \longrightarrowbalah 'fresh dates'
šažar \longrightarrow šažarr 'trees'
maša --> maša 'he went'
nkawa --> nkawa 'he was cauterized'
```


### 2.5 Major Phonological Processes:

In this section the major phonological processes that are found in the dialect under investigation will be presented and accounted for. Such processes include: syncope, epenthesis, assimilation, vowel lengthening, vowel shortening, vowel harmony, metathesis, deletion and vocalization of glides, deletion, vocalization of the glottal stop and glide formation from the glottal stop.

### 2.5.1 Syncope:

This process applies to high vowels when they are unstressed in open syllables. Examples:

| kitáab $\rightarrow$ ktáab |  |
| :--- | :--- |
| yiguul $\rightarrow$ yguul | 'book' |
| diyáar $\rightarrow$ dyáar |  |
| nigáddim $\rightarrow$ ngáddim | 'I offer' |
| cuyuun $\rightarrow$ 'rooms' |  |

```
xaayif+a --> xaayfa 'afraid (f.s.)'
faahim+a m faahma 'having understood (f.s.)'
```

The syncope rule can be formulated as follows:
Syncope Rule:


It should be kept in mind that in all other instances where the high unstressed vowel in open syllables is not syncopated, there is a strong belief that such forms or words, which do not undergo syncope, are borrowings from Modern Standard Arabic as e.g. /mucallim/ 'teacher' and /mufattiš/ 'inspector'. This is so because the dialect under investigation is systematically consistent in deleting high unstressed vowels in open syllables.

### 2.5.2 Epenthesis:

Epenthesis is sometimes an optional process, especially when the epenthetic vowel /i/ is inserted between the last two consonant cluster of a word as the following examples indicate:

```
cagl \longrightarrowCagil 'mind'
Oarb Mọarib 'hitting'
ganṣ mganiṣ 'hunting'
kasr \longrightarrow kasir 'breaking'
gult }->\mathrm{ gulit 'I, you (m.s.) said'
ọarabt \longrightarrowooarabit 'I, you (m.s.) hit'
```

Both forms, however, are heard in the speech pattern of the speakers of JDLA. Words with the epenthetic vowel /i/ are used more by the older generation. Younger people may not often use forms with the epenthetic /i/, probably due to educational influence. It should be pointed out that when vowel-initial suffixes are attached to words such as the above, then the epenthetic /i/ is dropped, as e.g.:

$$
\begin{array}{ll}
\text { cagil }+a k \longrightarrow \text { caglak } & \text { 'your mind (m.s.)' } \\
\text { ọarib }+i k \longrightarrow \text { ọarbik } & \text { 'your nitting (f.s.)' } \\
\text { ganiṣ }+i \longrightarrow \text { ganṣi } & \text { 'my hunting' } \\
\text { ọarabit }+ \text { ak } \longrightarrow \text { ọarabtak } & \text { 'I hit you' }
\end{array}
$$

When consonant-initial suffixes are added to the above words, then the epenthetic /i/ remains intact. This is so, because it breaks a three consonant cluster as the following examples show:

| $c_{\text {agil }}+$ kum $\rightarrow$ cagilkum | 'your (pl.) mind' |
| :--- | :--- |
| ganis + ha $\longrightarrow$ ganiṣha | 'her hunting' |

It should be kept in mind that stress should apply before epenthesis in order to avoid the placement of stress on the wrong syllable.

The following epenthetic rule is formulated (cf. Brame, 1971).

$$
\text { Epenthesis: } \phi \rightarrow \mathrm{i} / \mathrm{c}-\mathrm{CC} \#
$$

Another point which should be mentioned here is that the epenthetic vowel does not attract stress.

### 2.5.3 Assimilation:

In this section, the following assimilatory processes are discussed and accounted for:

### 2.5.3.1 Regressive Assimilation:

### 2.5.3.1.1 Voicing assimilation:

This type of assimilation is a regressive one where the /t/ of the imperfect subject prefix /ti-/ assimilates to the first radical of the verb after the vowel /i/ of /ti-/ is syncopated. Examples:

```
td -> dd /ti + diff/ -> /tdiff/ -> /ddiff/ 'you (m.s.) push'
tz }->\mathrm{ dz /ti + ziid/ }->/tziid/ -> /dziid/ 'she adds'
tž -> dž /ti + žurr/ -> /tžurr/ -> /džurr/ 'you (m.s.) pull'
tz -> dz /ti+zaahim/ -> /tzaahim/ -> /dzaahim/ 'you (m.s.)
                                    crowd'
tž -> dž /tii + žuuccu/ ->/tžuuccu/ -> /džuucu/ 'you (pl.)
                                    starve'
tð ->dØ /ti + Øannib/ ->/tðannib/ ->/dðannib/ 'you (m.s.)
                                    punish'
tṭ -> tet /ti + teirr/ -> /tṭiir/ -> /ṭtiir/ 'it flies'
```

The last example represents emphatic assimilation where the /t-/ is realized as /t-/ before the voiceless emphatic consonant /t./.

If the /i/ of the prefix /ti-/ does not syncopate, then there will be no assimilation as the following examples indicate:

```
/ti + dris/ — /tidris/ 'you (m.s.) study'
/ti + gdir/ \longrightarrow /tigdir/ 'you (m.s.) are capable of'
```

```
/ti + zrac/ \longrightarrow/tazrac/ 'you (m.s.) sow'
/ti + žlid/ -> /tižlid/ 'you (m.s.) whip'
/ti + ọrub/ 一 /tuọ̆rub/ 'you (m.s.) hit'
/ti + ṣbaġ/ }\longrightarrow/taṣbaġ/ 'you (m.s.) dye'
/ti + ठbaḥ/ -> /taðbaḥ/ 'you (m.s.) slaughter'
```

The /i/ of the prefix /ti-/ is sometimes realized as /a/ or /u/ in the above examples due to vowel harmony discussed below (see 2.5.6).

The prefix /t-/ of Form $V$ and Form VI of the perfect verb assimilates to the first radical of the verb. Examples:
tz $\rightarrow z z / t z a w w a z ̌ / \rightarrow / z z a w w a z ̌ / ~ ' h e ~ g o t ~ m a r r i e d ' ~$
tš $\rightarrow$ šš /tšaawaru/ $\rightarrow$ /ššaawaru/ 'they consulted with each other'
ts —i ss /tsallaf/ — /ssallaf/ 'he borrowed'
tṣ $\longrightarrow$ ss /tṣarraf/ $\rightarrow$ /ṣṣarraf/ 'he behaved'
tọ $\rightarrow$ ọ̣ /tọ̆aarabu/ $\rightarrow$ /đ̣̣̣aarabu/ 'they fought one another'
tt $\rightarrow$ tet /tṭaahanu/ $\rightarrow$ tțtahanu/ 'they were in
tg $\longrightarrow d g / t g a d d a m / \longrightarrow$ /dgaddam/ 'he advanced'
td $\rightarrow$ dd /tdaxxal/ $\rightarrow$ /ddaxxal/ 'he intervened'
tž $\longrightarrow$ žž /tžammad/ $\rightarrow$ /žžammad/ 'it became frozen'

### 2.5.3.1.2 Devoicing Assimilation:

The following examples show devoicing assimilation where the final radical of the verb /d/ is realized as /t/ before the subject suffixes /-t/, /-tu/ or /-ti/:

$$
\begin{aligned}
& d t \rightarrow t t \quad / r a d d a d+t / \rightarrow \text { /raddatt/ } I \text { you (m.s.) } \\
& \text { /raddad }+ \text { tu/ } \rightarrow \text { /raddattu/ 'you (pl.) } \\
& / s a a^{c} a d+t i / \longrightarrow s a a^{c} a t t i / \underset{\text { helped' }}{\text { you }} \underset{\text { hed }}{ } \rightarrow
\end{aligned}
$$

### 2.5.3.1.3 Labial Assimilation:

The nasal consonant $/ \mathrm{n} /$ changes to $/ \mathrm{m} /$ when it is followed by /b/ or /f/, i.e., it changes its point of articulation. Examples:

```
nb }->\textrm{mb}/žanb/ ->/žamb/ 'side
    /nbaac/ \longrightarrow/mbaac/ 'it was sold'
nf }->\textrm{mf}/\mp@subsup{Y}{anfa}{c}/->/\mp@subsup{yamfa}{c}{c}/ 'it is useful'
    /nfatah/ }->\mathrm{ /mfatah/ 'it was opened'
```


### 2.5.3.1.4 Definite Article Assimilation:

The definite article /l-/ assimilates to the following
 $/ z /, / z / /, / n /, / l /$ and $/ r /$ All of these sound segments share the feature $[+$ coronal]. Consider the foilowing examples:

| indefinite | definite |  |
| :---: | :---: | :---: |
| /tiffaah / | /t-tiffaah / | 'the apples' |
| /daar/ | /d-daar/ | 'the room' |
| /țiin/ | /tب-tiin/ | 'the clay' |
| / $\theta$ urama/ | /日-өuuma/ | 'the garlic' |
| /Oiib/ | /o-oiib/ | 'the wolf' |
| /ọill/ | /ọ-ọill/ | 'shade' |


| /suug/ | /s-suug/ | 'the market' |
| :--- | :--- | :--- |
| /ṣabuun/ | /s-ṣabuun/ | 'the soap/ |
| /šarba/ | /š-šarba/ | 'the soup' |
| /žamal/ | /ž-žamal/ | 'the camel' |
| /zaayir/ | /z-zaayir/ | 'the visitor' |
| /naar/ | /n-naar/ | 'the fire' |
| /looz/ | /l-looz/ | 'the nuts' |
| /raaṣ/ | /r-raaṣ/ | 'the head' |

But:

| /baab/ | /l-baab/ | 'the door' |
| :--- | :--- | :--- |
| /cuud/ | /l-cuud/ | 'the stick' |
| /wild/ | /l-wild/ | 'the boy' |
| /hooš/ | /l-ḥooš/ | 'the house' |
| /galb/ | /l-galb/ | 'the heart' |
| /yadd/ | /l-yadd/ | 'the hand' |
| /xuọ̀ra/ | /l-xuọ̀ra/ | 'the vegetable' |

Based on the above examples, the following rule will account for the assimilatory process of the definite article /l-/ where a geminate cluster is being created due to such assimilation.
/l-/ Assimilation Rule:

$$
\underset{[+ \text { def. }]}{l} c_{i} / \#-\underset{[+ \text { Coronal }]}{c_{i}}
$$

This rule has the effect of assimilating the definite article /l-/ to the first radical of a word provided that such radical has the feature [+coronal] as exemplified above.
2.5.3.1.5 Other Assimilation:
nl $-->11$ /nluum/ $-\infty$ /lluum/ 'I blame'
nr $-->$ rr /nraaži/ $-->/ r r a a z ̌ i / ~ ' I ~ w a i t ' ~$

### 2.5.3.2 Progressive Assimilation:

This type of assimilation is not common in JDLA. However, the following examples may serve as representative ones.

$$
\begin{aligned}
& z t \rightarrow z d / z t a a d / \rightarrow / z d a a d / \text { 'it increased' } \\
& t ̣ t \rightarrow t+t / t a l a^{c} / \rightarrow / t t a^{c} / \text { 'he became aware' } \\
& \partial \underline{t} \rightarrow \text { ott /ottarr/ } \rightarrow \text { /ottarr/ 'he was compelled' } \\
& s t \rightarrow s t / s t a d a m / \rightarrow \text { /sṭadam/ 'he clashed with' }
\end{aligned}
$$

It should be borne in mind that the second sound segment /t/ in the above examples is the infix morpheme of Form VIII of the perfect verb.

### 2.5.4 Vowel Lengthening:

Another phonological process in JDLA is vowel lengthening. This process applies to the final vowels of final-vowel verbs as well as to the vowels of subject suffixes. That is to say, when final-vowel verbs are appended by object suffixes, then the final vowel of such verbs gets lengthened. Examples:

```
/bana + ha/ }->\mathrm{ /banaaha/ 'he built it'
/da'ca + kum/ ->/dacaakum/ 'he invited you (pl.)'
/Yirmi + ah/ ->/Yirmiih/ 'he throws it'
/xalla + na/ }->\mathrm{ /xallaana/ 'he left us'
```

$/$ tsammi + hum/ $\rightarrow /$ tsammiihum/ 'she names them'
$/$ Ynaadi $+i k / \rightarrow /$ ynaadiik/ 'he calls you (f.s.)'
When subject suffixes are attached to verbs and they are of the shape $/-(C) V /$, then the vowel of such suffixes is lengthened when object suffixes are added. Consider the following:
$/$ ọarab+u+kum/ $\rightarrow /$ ọarabuukum/ 'they hit you (pl.)'
$/ x a d a m+t u+n a / \rightarrow$ /xadamtuuna/ 'you (pl.) served us'
$/{ }^{c} a l l a m+n a+a h / \rightarrow / c a l l a m n a a h /$ 'we taught him'
/saamaḥ+ti+ah/ $\rightarrow$ /saamaḥtiih/ 'you (f.s.) forgave him'
$/$ xabbar $+u+a k / \rightarrow$ /xabbaruuk/ 'they told you (m.s.)'
It should be pointed out that the vowel of the object suffixes /-ah/ 'him' and /-ak/ 'you (m.s.)' assimilates to the preceding vowel of the verb or subject marker as shown above. Another point that should be mentioned here is that the vowel of the third person feminine singular subject marker of the perfect verb which has the shape /-VC/ or precisely /-it/ 'she' has to be lowered and lengthened only when object suffixes of the shape /-VC/ are appended to the verb. But if the object suffixes are of the shape /-CV(C)/, then the /i/ of the subject suffix /-it/ remains intact as the following examples illustrate:

$$
\begin{aligned}
& / \text { ọarab+it+ah/ } \rightarrow \text { /ọarabaatah/ 'she hit him' } \\
& /{ }^{\text {callam+it+ak/ }} \rightarrow \text { /'allamaatak/ 'she taught you (m.s.)' } \\
& / \text { xadam+it+ik/ } \rightarrow \text { /xadamaatik/ 'she served you (f.s.)' }
\end{aligned}
$$

But:
$/$ ọarab + it + kum/ $\rightarrow$ /ọarabitkum/ 'she hit you (pl.)'
/callam + it + hum/ $\rightarrow$ /callamithum/ 'she taught them' $/ x a d a m+i t+n a / \rightarrow$ /xadamitna/ 'she served us'

### 2.5.5 Vowel shortening:

A long vowel is shortened when it is in final position provided that it is unstressed. $A$ long vowel in final position may be the result of the glottal stop /?/ deletion. After the deletion of $/ ? /$, the long vowel is shortened as in:
$/$ hamraa? $/ \rightarrow /$ hamraa/ $\rightarrow /$ hamra/ 'red (f.)'
$/ s a m a a ? / \rightarrow / s a m a a / \rightarrow / s a m a /$ 'sky'

The rule that accounts for vowel shortening can be formulated as follows:

Vowel Shortening Rule:


### 2.5.6 Vowel Harmony:

Among the phonological processes in JDLA is vowel harmony. It applies to the vowel of subject prefixes of the imperfect verb /ti-/, /yi-/ and /ni-/ where the vowel /i/ of such prefixes is, in most cases, in harmony with the stem vowel of the imperfect verb. The following examples serve as representative ones:

$$
\begin{aligned}
& \text { /yi + ftaḥ/ } \rightarrow \text { /yaftaḥ/ 'he opens' } \\
& / t i+t ̣ l a^{c} / \rightarrow / t^{c}+l^{c} /{ }^{c} / \text { 'she appears' } \\
& / n i+\text { ọrub/ } \rightarrow \text { /nuọ̆rub/ 'I hit' } \\
& \text { /yi + ktib/ } \rightarrow \text { /yiktib/ 'he writes' }
\end{aligned}
$$

Moreover, there is vowel harmony in the dialect that makes the first stem vowel of the perfect verb in harmony with the second stem vowel of such a verb. That is, the standard Arabic pattern of the perfect verb CaCic is realized in the dialect under investigation as CiCic due to the application of vowel harmony as will be elaborated upon in more detail in an upcoming chapter. But for now the following examples will suffice:

$$
\begin{aligned}
& \text { /fariḥ/ } \rightarrow \text { /firih/ } \rightarrow \text { /frih/ 'he was happy' } \\
& \text { /ọaḥik/ } \rightarrow / \text { ọiṇik/ } \rightarrow \text { /ọ̣ik/ 'he laughed' }
\end{aligned}
$$

### 2.5.7 Metathesis:

Metathesis is operative in imperfect verbs when subject suffixes are appended to such verbs. The stem vowel of the imperfect verb is to be metathesized with the second radical of the verb when subject suffixes are attached to the verb. This operation applies to sound verbs only. Consider the following:
$/ Y i+f t a h ̣+u / \rightarrow$ yáftaḥu/ $\rightarrow$ yáfatḥu/ 'they open'
$/ n i+r z ̌ a^{c}+u / \rightarrow /$ nárža $^{c} u / \rightarrow / n a ́ r a z ̌ c u /$ 'we return'
/ti+ftaḥ+i/ --> /taftaḥi/ --> /tafathi/ 'you (f.s.) open' But:

```
/ni + guul + u/ — /ngúulu/ 'we say'
/yi + mši + u/ m /Y{mšu/ 'they walk'
```

Metathesis is also found in the following nouns:
/mádrasa/ $\longrightarrow$ /mádarsa/ 'school'
$/$ mázracha/ $^{\text {c }} \rightarrow$ /mázar ${ }^{\mathbf{c}} \mathrm{a}$ (farm'
máktaba/ $\rightarrow$ /mákatba/ 'library'

Metathesis in such nouns is most likely motivated by having CVCV after stressed syllables. Hence CVCCVCV $\rightarrow$ CVCVCCV. The motivation of metathesis in the above verbs is due to the attachment of subject suffixes. It should be kept in mind that stress should be assigned before the application of metathesis in order to avoid the placement of stress on the wrong syllable of the above words.

### 2.5.8 Deletion of Glides:

The two glides /w/ and /Y/ are deleted in certain environments. When a glide is not a geminate or not preceded by a long vowel or a consonant and such a glide is in final position, then it is deleted. Examples:

$$
\begin{aligned}
& \text { /ramay/ } \rightarrow \text { /rama/ 'he threw' } \\
& \text { /dacaw/ } \rightarrow / \text { da'a/ }^{c} \text { 'he invited' }
\end{aligned}
$$

But:

| /bannaay/ $\rightarrow$ /bannaay/ | 'a builder' |
| :--- | :--- |
| /šayy/ $\rightarrow$ /šayy/ | 'thing' |
| /žaww/ $\rightarrow$ /žaww/ | 'weather' |

In addition, glides are deleted when they are in an intervocalic position between two short vowels provided that they are not geminate nor clustered together as in:

```
/bayac/ -> /baac/ 'he sold'
    /gawal/ — /gaal/ 'he said'
    /xawaf/ \longrightarrow /xaaf/ 'he was afraid'
```

But:

$$
\begin{aligned}
& \text { /xawwaf/ } \rightarrow \text { /xawwaf/ 'he frightened' } \\
& \text { /cayyan/ } \rightarrow \text { /cayyan/ 'he appointed' } \\
& \text { /lawya/ } \rightarrow \text { /lawya/ 'twist' } \\
& \text { /milwi/ } \rightarrow \text { /milwi/ 'twisted' }
\end{aligned}
$$

The rule that accounts for medial and final glide deletion may be formulated as follows:

Medial and Final Glide Deletion Rule:

$$
\text { Glides } \longrightarrow \phi_{[- \text {long }]}^{/ \mathrm{v}} \rightarrow \underset{[- \text { long }]}{\#}
$$

### 2.5.9. Vocalization of Glides:

The two glides can be realized as vowels in specific environments. When the two glides are in final position and preceded by a consonant, they are realized as vowels. That is $/ \mathrm{y} / \rightarrow / i /$ and $/ \mathrm{w} / \rightarrow / \mathrm{l} \rightarrow$ as the following examples show:

$$
\begin{array}{ll}
\text { /žady/ } \longrightarrow \text { /žadi/ } & \text { 'kid of a goat' } \\
\text { /dalw/ } \longrightarrow \text { /dalu/ } & \text { 'bucket' }
\end{array}
$$

However, when suffixes are attached to such words as the above, then the two glides are retained, e.g.:
/žady + een/ $\rightarrow$ /žadyeen/ 'two kids of a goat'
/dalw + een/ $\rightarrow$ /dalween/ 'two buckets'
The rule that accounts for the realization of the two glides as vowels can be stated as follows: Vocalization of the Glides Rule:
2.5.10 Change of /w/ $\rightarrow$ /Y/:

Underlying /w/ is sometimes realized as /y/ in the surface representation in some specific environments. That is, when /w/ is preceded or followed by a long low vowel and followed or preceded by /i/ where /i/ in turn is followed by a consonant, then it changes to /y/. Examples:

```
/zaawir/ — /zaayir/ 'a visitor'
    /xaawif/ \longrightarrow /xaayif/ 'afraid'
    /gaawil/ \longrightarrow /gaayil/ 'having said'
    /ziwaara/ \longrightarrow /ziyaara/ \longrightarrow zyaara/ 'a visit'
```

But if /w/ is followed by /i/ and /y/ respectively, then /w/ will not be realized as /y/. This is so, because if /y/ is in final position, then it is deleted; otherwise the /i/ may be syncopated. Also, /y/ is not a true consonant. Consider the following:

```
/kaawiy/ — /kaawi/ 'having cauterized'
/msaawiy/ — msaawi/ 'equalizing'
```

$/ k a a w i y+a / \longrightarrow / k a a w y a / ~ ' h a v i n g ~ c a u t e r i z e d ~(f) '$.
$/ m s a a w i y+i i n / \rightarrow / m s a a w y i n / ~ ' e q u a l i z i n g ~(m . p l) '$.
Also, /w/ changes into /y/ when it is preceded by /i/ and followed by /y/ as in:
/niwya/ $\longrightarrow$ /niyya/ 'intention'

### 2.5.11 Treatment of the Glottal stop /?/:

In this section, the different realizations of the glottal stop /?/ is briefly discussed. In some cases, the glottal stop is deleted while in other cases it is realized as a glide or a vowel. However, it is retained in some instances. I will not go into detail of all the different functions that the glottal stop displays. Rather, I will introduce some representative examples of the different realizations of the glottal stop.

### 2.5.11.1 Deletion of the Glottal stop:

The glottal stop in final position is always deleted when preceded by a vowel. Its deletion occurs in verbs, nouns and adjectives. The following examples illustrate this point:

| /bada? $/ \rightarrow$ /bada/ | 'he began' |
| :--- | :--- |
| /qara? $/ \rightarrow$ /gara/ | 'he read' |
| /dawaa? $/ \rightarrow$ /dawa/ | 'medicine' |
| /samaa? $\rightarrow$ /sama/ | 'sky' |
| /hamraa?/ $\rightarrow$ /hamra/ | 'red (f.)' |

```
/ṣafraa?/ \longrightarrow /ṣafra/ 'Yellow (f.)'
/camyaa?/ }->\mathrm{ /camya/ 'blind (f.s.)'
/ṣaḥraa?/ — /ṣaḥra/ 'desert'
```

The rule that accounts for final /?/ deletion is stated below:

Final /?/ Deletion Rule:

$$
/ ? / \longrightarrow \phi / \mathrm{V} \longrightarrow \#
$$

On the other hand, if the glottal stop is in an initial position, its deletion is not systematic. It is deleted in some instances while retained in others. This is probably due to the influence of $C A$ on the dialect. Words that retain the glottal stop initially are most likely borrowings from CA. As far as $I$ know, it is deleted initially in two verbs of Form I. They are /?akal/ $\rightarrow$ /kala ~kale/ 'he ate' and /?axað/ $\rightarrow$ /xaða ~ xaðe/ 'he took'. As you can see, the deietion of /?/ in the above two verbs is compensated by /a/ in final position where it alternates with /e/ due to the ?imala 'deflection' process discussed earlier. These two verbs are considered irregular.

In addition, the glottal stop is deleted from Form IV of CA perfect verbs. This is so, because CA Form IV verbs are realized in the dialect as Form I or II as the following examples illustrate:

```
/?alaḥḥ/ \longrightarrow /laḥh/ 'he insisted'
/?akram/ — /karam/ 'he honored, welcomed'
```

/?acṭa/ $\rightarrow$ /'aṭa/ 'he gave'
/?akmal/ $\rightarrow$ /kammal/ 'he finished'
/?axbar/ $\rightarrow$ /xabbar/ 'he told'
The glottal stop is, however, retained initially in some verbs, such as:

| /?amar/ | 'he ordered' |
| :--- | :--- |
| /?ammam/ | 'he nationalized' |
| /?adoan/ | 'he called for prayer' |
| /?a00ar/ | 'he influenced' |

In nouns and adjectives, initial /?/ is retained in most cases. Examples:

| /?aṣ(i)l/ | 'origin' |
| :--- | :--- |
| /?ar(i)ḍ/ | 'earth, land' |
| /?až(i)r/ | 'reward' |
| /?užra/ | 'wage' |
| /?amaana/ | 'honesty' |
| /?umm/ | 'mother' |
| /?aḥmar/ | 'red (m.s.)' |
| /?aṣfar/ | 'yellow (m.s.)' |
| /?acma/ | 'blind (m.s.)' |
| /?akbar/ | 'older' |

However, when the definite article /l/ is prefixed to such words, the glottal stop drops:

| $/ 1+$ ?užra/ $\rightarrow$ lužra/ | 'the wage' |
| :--- | :--- |
| $/ 1+$ ?aḥmar $/ \rightarrow$ llaḥmar $/ \longrightarrow$ | 'the red one (m.s.)' |

In some proper names that begin with the glottal stop, speakers of this dialect most often omit the glottal stop as in:
/?aḥmad/ $\rightarrow$ /hamad/ 'Ahmed'
/?ibrahiim/ $\rightarrow$ /brahiim/ 'Ibrahim'
In medial position, the glottal stop is most likely realized as vocalic or a glide. It might be retained in some lexical items that are considered classicism. However, it is deleted when preceded by a vowel and followed by subject suffix morphemes of the shape $/-V(C) /$ in verbs. After the deletion of the glottal stop, the stem vowel of the verb assimilates to the vowel of the suffix. Examples:
$/$ mala? $+i t / \rightarrow / m a l a i t / \rightarrow / m a l i t /$ 'she filled'
$/$ mala? $+u / \rightarrow / m a l a u / \rightarrow / m a l u /$ 'they filled'
$/$ bada? + it/ $\rightarrow / b a d a i t / \rightarrow / b a d i t /$ 'she started'
The following rule accounts for the realization of the glottal stop as zero in medial position.

Medial /?/ Deletion Rule:

$$
/ ? / \longrightarrow \phi / V \underset{[-10 n g]}{ }+\mathrm{V}(\mathrm{C})
$$

### 2.5.11.2 Vocalization of the Glottal stop:

Medially, the glottal stop is sometimes realized as a vowel. That is, when it is preceded by a short vowel and followed by a consonant, it is realized as a vowel of the same quality as the vowel which immediately precedes it. Consider the following examples:

| $\begin{aligned} & / \mathrm{ra} ? \mathrm{~s} / \rightarrow / \text { raas/ } \\ & / \theta a ? r / \rightarrow / \text { aar/ } \end{aligned}$ | 'head' <br> 'revenge' |
| :---: | :---: |
| /fa?l/ $\rightarrow$ /faal/ | 'good omen' |
| /sta?hal/ $\rightarrow$ /stahal/ | 'he deserved' |
| /ya?mur/ $\rightarrow$ /yaamur/ | 'he orders' |
| /su? $\mathrm{m} / \mathrm{\longrightarrow} /$ šuum/ | 'calamity, bad luck' |
| $/ \mathrm{bu}$ ?s/ $\rightarrow$ /buus/ | 'misery' |
| /bi?r/ $\longrightarrow$ /biir/ | 'well' |
| $/ z i ? r / \rightarrow / z i i r /$ | 'large jar' |
| /ठi?b/ $\rightarrow$ /ठiib/ | 'wolf' |

The following formulated rule has the effect of the above realization of /?/ as vowel.

Vocalization of /?/ Rule:

$$
/ ? / \longrightarrow v_{i} / v_{i} \longrightarrow c
$$

When the glottal stop is in final position and preceded by a consonant, it changes into a high vowel as in:
$/$ mal?/ $\rightarrow$ /mali/ 'filling'
$/{ }^{c} i b ? / \rightarrow /{ }^{c}$ ibi $\sim^{c}$ ibu/ 'burden, load'

### 2.5.11.3 Glide Formation from a Glottal stop:

The process of the glide formation from the glottal stop, which might be termed the glidization of the glottal stop, occurs in the following environments:
(a) When it is in medial position preceded by a short vowel and followed by a long vowel or preceded by a long
vowel and followed by a short vowel. The following examples clarify this point:

| /ri?aasa/ $\rightarrow$ /ryaasa/ | 'leadership' |
| :---: | :---: |
| /ọi?aab/ $\rightarrow$ /סyaab/ | 'wolves' |
| /malaa?ika/ $\rightarrow$ /malaayka/ | 'angels' |
| /baa?is/ $\rightarrow$ /baayis/ | 'miserable' |
| /mulaa?im/ $\rightarrow$ /mlaayim/ | 'suitable' |
| /qiraa?a/ $\rightarrow$ /graaya/ | 'reading' |
| /muruu?a/ $\rightarrow$ /mruuwa/ | 'sense of honor' |
| /su?aal/ $\rightarrow$ /swaal ~ su?aal/ | 'question' |

As can be seen from the last two examples, the glottal stop is either realized as /w/ and the high back vowel /u/ is deleted by syncope or retained is the two alternants /swaal ~ su?aal/ exhibit. Retention of the glottal stop in such an example is due to classicism. If the glottal stop is preceded by the high back vowel /u/, it is to be changed into /w/. Otherwise it changes into /y/ as seen above.
(b) When the glottal stop is preceded by a consonant and followed by a vowel, it changes into /y/. It should be noted that the consonant that precedes the glottal stop has to be part of the stem of the word. This will exclude the definite article /l/ discussed earlier. Examples:

| $/$ /mal?aan/ $\rightarrow$ /malyaan/ | 'full' |
| :--- | :--- |
| $/$ mas?uul/ $\rightarrow$ /masyuul/ | 'official, responsible' |
| $/$ stad?ab/ $\rightarrow$ /stadyab/ | 'he was wolflike' |

As for the lexical item /sa?al/ 'he asked', speakers of this dialect substitute the verb /našad/ 'he asked'. However, when the verb /sa?al/ is used, the glottal stop is sometimes retained and in this case the verb is considered a borrowing from CA. At other times, the glottal stop is either elided or substituted for by the voiceless glottal fricative /h/ without any apparent reason. The substitution of the glottal stop by $/ \mathrm{h} / \mathrm{is}$ also heard in another verb, i.e. /za?ar/ $\rightarrow$ /zahar/ 'he bellowed'. The realization of /?/ as /h/ in such verbs might be due to the presence of /s/ and $/ 2 /$ in these two verbs and to the fact that /?/ is located between two short vowels of the same quality, namely /a-a/. Recall that /?/ in /mas?uul/ 'official, responsible' above is not realized as $/ \mathrm{h} /$ but rather as $/ \mathrm{y} / \mathrm{probably}$ because it is not in an intervocalic position and because of the presence of the long vowel in such a word.
(c) When the glottal stop is preceded by the short vowel /a/ and followed by subject markers of the shape /-c(V)/, then it changes into /y/. Consider the following:

```
/qara?+tu/ — /garaytu/ -> /gareetu/ 'you (pl.) read'
/qara?+ti/ -> /garayti/ — /gareeti/ 'you (f.s.) read'
/gara?+t/ --> /garayt/ --> /gareet/ 'I, you (m.s.) read'
```

The glottal stop in the above examples is being separated from the consonant that follows it by a morpheme boundary. Recall that if the consonant that follows the glottal stop is part of the stem, then it is realized as a
vowel as has been indicated above and repeated here for convenience:

$$
\begin{array}{ll}
\text { /ra?s/ } \rightarrow \text { /raas/ } & \text { 'head' } \\
\text { /bi?r/ } \rightarrow \text { /biir/ } & \text { 'well' }
\end{array}
$$

It should also be remembered that after the glottal stop changes into /y/ in the above examples in (c), then /ay/ is realized as /ee/ due to the coalescence process explained earlier (see 2.3).

In addition, when the glottal stop is in final position and preceded immediately by a glide, it changes into a glide identical with the preceding glide. Examples:
/šay?/ $\rightarrow$ /šayy/ 'thing'
/ọ̀aw?/ 一 /ọ̀aww/ 'light'
Moreover, one has to indicate that individual differences among the speakers of the dialect in retaining, deleting or glidizing the glottal stop in various morphological categories do exist. This is, of course, due mainly to the educational background of each individual.

Finally, it should be pointed out that the above phonological processes are the major and the most common ones. They are by no means exhaustive.

## CHAPTER III

## MORPHOLOGY OF VERBS

### 3.1 Preliminary:

Arabic morphology in general is built on roots or, in other words, it is a root-based morphology as has been indicated earlier in the introduction. That is, the roots which consist of radicals, whether consonants alone or consonants and glide(s), interdigitate with vowels. The interdigitation of roots and vocalic patterns constitute what is known as stems. In turn, stems accompanied by affixes comprise the majority of the lexical items of Arabic morphology. Altoma (1969: 31) states:

The root system of Arabic represents a basic morphological structure of nouns, verbs and some particles. The vast majority of morphemes ... have a stem which consists of interlocking parts, a root consisting typically of three consonants and a pattern of vowels fitting around the consonants of the root. The root generally has a fairly constant lexical meaning like "writing" related to /ktb/ or "killing" expressed by /qtl/. The vowel pattern has generally the function of specifying the grammatical role of the stem, past tense of verb, singular or plural of noun, active or passive participle, verbal noun and the like. This root and pattern structure of the stem is found in all verbs, most nouns and some particles.

To see how the root, most of the time, carries the general meaning of the lexical item while the vocalic patterns, with or without affixes, single out the grammatical meanings as indicated by Altoma, consider the related meanings expressed by the root /ktb/:

| /katab/ | 'he wrote' |
| :--- | :--- |
| /yiktib/ | 'he writes' |
| /kaatib/ | 'writer' |
| /ktaaba/ | 'writing' |
| /kattab/ | 'he caused s.o. to write' |
| /kaatab/ | 'it was written' |
| /nkatab/ | 'written' |
| /ktaab/ | 'library' |
| /maktuab/ | 'office' |

The manipulation of stems and affixes is a very productive method in Arabic morphology. Such manipulation is accomplished through the application of two morphological rules or processes as well as some phonological rules. The two morphological processes are derivation and inflection. The dialect under investigation employs extensively these two morphological processes along with some phonological processes. Regarding the significance of the derivational processes, Ali (1987: 19) points out
it goes without saying that /ištigaad/ "derivation" in Arabic has been and still is the most important principle of word creation. It represents the most natural method by which the language has been able to generate the overwhelming majority of its native vocabulary.

### 3.2 Derivation:

Verbs in Arabic are divided into simple and derived verb forms or classes. In JDLA, there are eight verb forms out of ten $C A$ verb forms of the triliteral consonants. Actually CA has fifteen triliteral verb forms but the last five forms of the fifteen are not commonly used anymore. Usually form I is the simple or the base-form from which most of the other forms or classes are derived. As will be shown below, some of the derived verb forms may not always be derived from Form I verbs. In other words, they may be derived from nouns, adjectives or other derived forms. It should also be kept in mind that theoretically one may derive any form from Form I verbs, but in reality such derived forms may not be in actual use. In contrast, not all the derived forms have existing Form I verbs in actual use. These points will be illustrated later on.

Whereas verbs are divided or classified into simple and derived verbs, they are also classified in accordance with the number and type of roots or radicals they have. According to the number of roots, verbs are either triliteral or quadriliteral. However, some triliteral verbs underlyingly may be realized as biliteral in the surface representation as will be shown below. There are also two verbs in the dialect whose underlying representation consists of three radicals but they surface as uniliteral verbs. Such realizations are mainly due to some applications of
phonological processes discussed earlier. These verbs will be presented and accounted for below.

With regard to the type of roots, they may consist of consonants alone or consonants and glides. It has been demonstrated above that the two glides and the glottal stop may undergo some phonological processes in specific environments as to deletion or vocalization. Consequently, roots that do not have among them any glides or the glottal stop are called strong roots and their verbs are also called strong verbs. In turn, strong verbs are divided into sound and doubled verbs. Other verbs which have among their roots glide(s) or the glottal stop are considered non-strong verbs. This is so, because of the changes that the glides and the glottal stop undergo in some environments. Further illustration regarding the position of the glide in the stem of the verb, i.e., initially, medially or finally are given here. Traditionally, if the glide is the last radical of the root of the verb, i.e., in final position, then such a verb is called a defective verb.

If the glide is in medial position of the verb stem or root, then such a verb is called a hollow verb when the glide undergoes the process of deletion. Otherwise, it is called a medial glide verb, as will be shown later on. In contrast, when the glide is verb-initial, such a verb is called an assimilated verb. But the term "assimilated" is misleading because of the fact that the initial glide does not always
assimilate to the sound segment that follows it. It assimilates only to the infix /t/ of Form VIII as will be illustrated below. At any rate, verbs with an initial glide may be called initial glide verbs.

Furthermore, verbs that have the glottal stop as part of their roots, whether initially, medially or finally, are called hamzated or glottalized verbs even though the glottal stop may undergo some phonological processes such as deletion or vocalization similar to the processes that the glides may undergo. This is done to avoid the ambiguity that may arise if we call, for instance, the verb that has within its root the glottal stop medially or finally, and the glottal stop undergoes the process of deletion, a hollow or defective verb. That is, in surface representation both the glides and the glottal stop are realized as zero when they undergo deletion. However, it is safe to say that verbs which have among their roots the glottal stop or a glide are weak verbs because of the different realizations that the glottal stop and the two glides exhibit in surface representation. Examples will be provided later.

Before discussing the derived verb forms, let's begin with the simple or the basic form from which other forms are derived. The starting point is triliteral verbs.

### 3.2.1 Triliteral Verbs:

### 3.2.1.1 Eimple Verbs:

The simplest or the basic verb form in JDLA is the third person masculine singular form of the perfect aspect in its underlying representation. This choice is justified by the fact that this form has zero derivation as well as zero inflection.

The vast majority of JDLA Form I verbs in their underlying representation are of the pattern /CaCac/. However, due to some phonological processes such a pattern may sometimes be realized differently as can be seen later. The underlying representation notion adopted here may be justified by the fact that, in many cases, it accounts correctly for the realization of different well-derived morphological categories of the same root, i.e., roots that have among them one or two glides. For instance, some of the derived verb forms are best accounted for by having underlying representation for the simple verbs from which those verbs are derived, as, e.g., middle glide verbs of Form II.

### 3.2.1.1.1 Form I Verbs:

(a) Sound Verbs:

The majority of these verbs have the pattern /CaCaC/:
/katab/ 'he wrote'
/ọarab/ 'he hit'
/fatah/ 'he opened'
/našad/ 'he asked'
/sakan/ 'he dwelled'
/masak/ 'he caught'
/nažaḥ/ 'he succeeded'
/žabad/ 'he pulled'
/gatal/ 'he killed'
/xadam/ 'he worked'
However, there are a small number of verbs in JDLA which have /CiCic/ as their underlying representation pattern. Such a pattern may, in one way or another, be considered as a reflection of the CA pattern /CaCiC/ but has undergone a phonological process, i.e., vowel harmony. It has been stated earlier that there is vowel harmony in the dialect that makes the first stem vowel of the perfect verb in harmony with the second stem vowel. This vowel harmony process, however, applies only to Form I verbs. So, CA pattern /CaCiC/ --> JDLA pattern /CiCiC/ via vowel harmony.

The underlying pattern /CiCiC/ shows up in surface representation as /CCic/ for the third person masculine singular which is taken here as the base form. Hence $C A$ verb /samic/ appears in the dialect as /simic/, then it becomes /smic/ 'he heard' due to the processes of stress shift and syncope discussed earlier (see 2.4 and 2.5.1). That is $/$ sámic $^{\mathrm{c}} / \rightarrow / \mathrm{simi}^{\mathrm{c}} / \rightarrow / \mathrm{simi}^{\mathrm{c}} / \rightarrow / \mathrm{smi}^{\mathrm{c}} /$ 'he heard'. More examples:

| /tcib/ | 'he became tired' |
| :--- | :--- |
| /rbiḥ/ | 'he gained' |
| /šbic/ | 'he became full (of food)' |
| /girig/ | 'he drowned' |
| /ọhik/ | 'he laughed' |
| /frih/ | 'he became happy' |

The surface pattern /CCiC/ is also found when some subject suffixes of the shape /-C(V)/ are attached to such verbs as the above. The justification for having /CiCic/ as an underlying pattern is due to the fact that the first stem vowel may be retained while the second vowel is syncopated because the environment for its syncopation is met as in: /firiḥ + it/ $\rightarrow$ /firihit/ $\rightarrow$ /firḥit/ 'she became happy' $/$ ọiṇik $+u / \rightarrow$ /ọiṇiku/ $\rightarrow /$ ịhku/ 'they laughed'

As these examples indicate, the surface pattern is /CiCC/. The adaptation of /CiCiC/ as an underlying pattern for the above verbs goes well with the general pattern of perfect verbs, which is /CVCVC/. Thus, the realization of /CCiC/ or /CiCC/ from the underlying /CiCiC/ is achieved through the application of some phonological rules, namely, stress shift and/or syncope, as has been illustrated above.
(b) Doubled Verbs:

Verbs that have identical second and third radicals are called doubled verbs. These verbs have / $\mathrm{CaC}_{\mathrm{i}} \mathrm{C}_{\mathrm{i}} /$ as their
pattern. However, such a pattern may be questionable as it will be argued against below. Examples:

| /radd/ 'he returned s.th.' | /hall/ 'he opened' |
| :--- | :--- |
| /mass/ 'he touched' | /maṣs/ 'he sucked' |
| /šamm/ 'he smelled' | /cadd/ 'he counted' |
| /cạ̣ḍ/ 'he bit', | /gašš/ 'he cheated' |
| /lamm/ 'he gathered' | /ṭagg/ 'he knocked' |
| /kaḥh/ 'he coughed' | /ṣabb/ 'he poured' |

(c) Defective Verbs:

These verbs have a glide as their final radical in the underlying representation. They are called defective verbs because they lose their last radical in surface representation. Underlyingly, they have the pattern /CaCaC/, but such a pattern surfaces as /Caca/. Examples:

| /ramay/ $\rightarrow$ /rama/ | 'he threw' |
| :--- | :--- |
| /dacaw/ $\rightarrow$ /daca/ | 'he called; he invited' |
| /mašay/ $\rightarrow$ /maša/ | 'he walked' |
| /šaray/ $\rightarrow$ /šara/ | 'he bought' |
| /žaray/ $\rightarrow$ žara/ | 'he ran' |
| /rašaw/ $\rightarrow$ /raša/ | 'he bribed' |

These verbs also include certain verbal roots which consist of one consonant plus two glides occupying the second and the third position of the stem of the verbs. The last glide is elided in surface representation. Examples:
/naway/ $\rightarrow$ /nawa/ 'he intended'

| /laway/ $\rightarrow$ /lawa/ | 'he twisted' |
| :--- | :--- |
| /šaway/ $\rightarrow$ /šawa/ | 'he grilled' |
| /cayay/ $\rightarrow$ caya/ | 'he became tired' |

As can be seen from these examples, the last radical is always /y/ while the second radical is, in most cases, /w/. It seems that when there are two glides in the root of the verb, one of them has to stay and be part of the stem of the verb. Omission of the second glide is accounted for by the final glide deletion rule (see 2.5.8). It may also be due to the fact that an intervocalic glide is to be deleted when it is followed by a short vowel and a consonant rather than a short vowel and another glide in the underlying representation as the above examples illustrate. The retention of the middle glide in the above verbs may suggest that the dialect does not tolerate the deletion of two radicals from the same root except in two verbs which are considered irregular. These two verbs will be introduced and accounted for below. Moreover, the stability of the middle glide in the above verbs is also found in some other morphological categories as in, e.g., /milwi/ 'twisted', /laawi/ 'twisting', etc.
(d) Hollow Verbs:

Hollow verbs are those verbs whose second root is a glide, provided that such a glide is not geminate or preceded by a long vowel (see 2.5.8). The glide being in intervocalic
position and not followed by another glide is elided leaving the middle position of the stem of the verb hollow and hence the name hollow verbs. Thus, underlying triliteral verbs surface as biliteral verbs. Their underlying pattern /CaCaC/ surfaces as /CaaC/. Examples:

| /gawal/ $\rightarrow$ /gaal/ | 'he said' |
| :--- | :--- |
| /bayac/ $\rightarrow$ /baac/ | 'he sold' |
| /xawaf/ $\rightarrow$ /xaaf/ | 'he was afraid' |
| /ṭayar/ $\rightarrow$ /ṭaar/ | 'it flew' |
| /nawam/ $\rightarrow$ /naam/ | 'he slept' |
| /cawam/ $\rightarrow$ /caam/ | 'he swam' |
| /sayad/ $\rightarrow$ /saad/ | 'he hunted' |
| /lawam/ $\rightarrow$ /laam/ | 'he blamed' |
| /mayal/ $\rightarrow$ /maal/ | 'he leaned' |

(e) Initial Glide Verbs:

These verbs are more like sound verbs, i.e., they do not lose the initial glide. Examples:
/wagaf/ 'he stood up; he stopped'
/wa'ad/ 'he promised'
/waṣaf/ 'he described'
/wažad/ 'he found'
/waṣal/ 'he arrived'
/ybis/ 'it dried up'

## (f) Hamzated or Glottalized Verbs:

Hamzated verbs refer to these verbs that have among their radicals the glottal stop (Arabic hamza). Most verbs that retain the glottal stop are considered borrowings from $C A$. The different functions of the glottal stop have been treated in the previous chapter. Hamzated verbs have the pattern /CaCaC/. Examples:

| /?amar/ | 'he ordered' |
| :--- | :--- |
| /?adan/ | 'he allowed' |
| /sa?al/ | 'he asked' |

It has been mentioned earlier that there are two verbs which surface as uniliteral verbs. They are /ža/ 'he came' and /ra/ 'he saw'. The underlying representations of these two verbs are /jaya?/ and /ra?ay/. The glottal stop /?/ and the glide /y/ are both deleted from these two verbs leaving such verbs with only one radical, which is irregular.

### 3.2.1.2 Derived Verbs:

3.2.1.2.1. Form II:

The main characteristic of Form II verbs is the doubling of the second radical of the root. Generally, they are transitive and in most cases they are derived from form I verbs. They express causative, intensive or frequentative meanings.
(a) Sound Verbs:

They have the pattern / $\mathrm{CaC}_{\mathrm{i}} \mathrm{C}_{\mathrm{i}} \mathrm{aC} /:$

Form I
/katab/ 'he wrote'
/kasar/ 'he broke'
/gatal/ 'he killed'
/xabaṭ/ 'he hit'
$/$ raža ${ }^{c} /$ 'he returned'
/gaṭa ${ }^{c} /$ 'he cut'
/xadam/ 'he worked'
/smin/ 'he became fat' /samman/ 'he made s.o. or s.th. fat' /friḥ/ 'he became happy' /farrah/ 'he made s.o. happy'
/ợik/ 'he laughed' /ọaḥhak/ 'he made s.o. laugh'
(b) Doubled Verbs:

They have the pattern $/ \mathrm{CaC}_{\mathrm{i}} \mathrm{C}_{\mathrm{i}} \mathrm{ac} \mathrm{C}_{\mathrm{i}} /$
Form I Form II
/radd/ 'he returned; he replied'
/raddad/ 'he repeated s.th frequently'
/hall 'he opened; he solved' /hallal/ 'he analyzed'
/gall/ 'it became little' /gallal/ 'he made s.th. little'
/Caḍọ/ 'he, it bit' /'aọ̣̀ặ̣/ 'he bit frequently'
/habb/ 'he liked, loved' /habbab/ 'he made loveable'
/žaff/ 'it dried' /žaffaf/ 'he made s.th. dry'
A remark on the derivational process of the above verbs
will be introduced below.
(c) Defective Verbs:

These verbs have the pattern / $\mathrm{CaC}_{\mathrm{i}} \mathrm{c}_{\mathrm{i}} \mathrm{a} /\left(\left\langle\mathrm{CaC}_{i} \mathrm{C}_{\mathrm{i}} \mathrm{aC}\right)\right.$ :

| /maša/ 'he went' | /mašša/ 'he made s.o. go' |
| :--- | :--- |
| /baka/ 'he cried' | /bakka/ 'he made s.o. cry' |
| /ğala/ 'it became expensive' | /galla/ 'he raised the price' |
| /žara/ 'he ran' | /žarra/ 'he caused s.o. to run' |
| /raọa/ 'he was content' | /raḍọa/ 'he satisfied s.o.' |
| /ṣafa/ 'it became clear' | /ṣaffa/ 'he made s.th. clear' |
| /šaha/ 'he desired' | /šahha/ 'he made s.o. covetous' |
| /žala/ 'he went away' | /žalla/ 'he caused s.o. or |
|  |  |

(d) Middle Glide Verbs:

These verbs refer to those verbs whose middle radicals are glides. Because such glides in Form II are doubled or a geminate, they do not undergo the process of deletion. It has been indicated in Form I above that verbs with middle glides, underlyingly, are called hollow verbs because glides in Form I undergo deletion. Hence, to call verbs of Form II middle glide verbs hollow verbs is misleading since the glides are part of the stem underlyingly and surfacely. So, they are called middle glide verbs instead of hollow verbs for the reasons stated here. They have the pattern / $\mathrm{CaC}_{\mathrm{i}} \mathrm{C}_{\mathrm{j}} \mathrm{aC} /:$

Form I
/xaaf/ 'he was afraid'
/baan/ 'he, it became clear'
/ṭaar/ 'it flew'
/žaa ${ }^{c} /$ 'he was hungry'

Form II
/xawwaf/ 'he frightened s.o.' /bayyan/'he made s.th. visible'
/țayyar/ 'he made s.th. fly'
/žawwac / 'he caused s.o. to starve'

```
/țaah! 'he fell down' /tayyaḥ/ 'he caused s.o. or
    s.th. to fall down'
```

(e) Initial Glide Verbs:

These verbs have the following pattern / $\mathrm{CaC}_{\mathrm{i}}^{\mathrm{i}} \mathrm{C}_{\mathrm{ac}}$ /:

Form I
/warae/ 'he inherited'
/wagaf/ 'he stood up;
/waөag/ 'he trusted'
/waṣal/ 'he arrived'
/ybis/ 'it dried up'

Form II
/warrae/ 'he appointed s.o. as heir'
/waggaf/ 'he stopped s.o. or s.th.'
/waboag/ 'he documented'
/waṣsal/ 'he conducted s.o. or s.th. (to a place)'
/yabbas/ 'he made s.th. dry'
(f) Hamzated or Glottalized Verbs:

It should be remembered that the glottal stop does not occur as a geminate cluster in any position. The only Form II verbs that have the glottal stop are those whose first radical is /?/. Their pattern is / $\mathrm{CaC}_{i} \mathrm{C}_{\mathrm{i}} \mathrm{aC} /:$
/?akkad/ 'he assured'
/?a00ar/ 'he influenced'
/?ayyad/ 'he supported'
/?awwal/ 'he interpreted'
/?amman/ 'he insured'
Based on the above data, a rule that accounts for the derivation of Form II verbs from Form $I$ verbs can be formulated. Such a rule is, in a sense, a gemination rule:

Form II Derivational Rule:

$$
\mathrm{C}_{\mathrm{i}} \longrightarrow \mathrm{C}_{\mathrm{i}} \mathrm{C}_{\mathrm{i}} / \# \mathrm{CV} \longrightarrow \mathrm{~V}(\mathrm{C})
$$

This rule has the effect of deriving correctly Form II verbs from Form I verbs from the pattern /CaCaC/ as well as the underlying pattern /Cicic/. However, another phonological rule is needed to account for the correct derivation of Form II from Form I pattern /Cicic/. This rule is a vowel lowering rule, i.e., lowering of /i-i/ into /a-a/ after the derivational process takes place. The formulization of such a rule is as follows:

Vowel Lowering Rule:


It has been mentioned earlier (see 3.2) that some of the derived verb forms may not always be derived from verbs. Some may be derived from other morphological categories, i.e., nouns or adjectives. Since this is the case, the following form II verbs are derived from nouns:

| Base Form |  | Form II |  |
| :---: | :---: | :---: | :---: |
| /?ism ~ ?isim/ | 'name' | /samma/ | 'he named' |
| /haṭab/ 'wood' |  | /hatttab/ | 'he gathered wood' |
| /zwaag/ 'paint' |  | / zawwag/ | 'he painted' |
| /šarg ~ šarig/ | 'east' | /šarrag/ | 'he went east' |
| /garb ~ ġarib/ | 'west' | /garrab/ | 'he went west' |
| /'iid/ 'feast' |  | /cayyad/ | 'he celebrated a feast' |
| /caša/ 'dinner' |  | /cašša / | 'he gave s.o. dinner' |

Form II verbs that are derived from adjectives express the general meaning of "to cause s.th. or s.o. to acquire the quality expressed by the adjective" (cf. Qafisheh, 1977: 42).

Base Form /žadiid/ 'new' /žaddad/ 'he renewed s.th.' /?abyaọ/ 'white' /bayyaọ/ 'he whitened s.th.' /naọ̀iif/ 'clean'

Form II
/naḍọaf/ 'he cleaned'

It should be pointed out that some Form $I$ verbs cannot derive Form II verbs. In other words, some Form I verbs are used in JDLA but their corresponding derived forms are not actually used. Examples:

| Form I |  | Form II |
| :---: | :---: | :---: |
| /xanag / | 'he strangled' $\longrightarrow$ | */xannag/ |
| /sažad/ | 'he prostrated' $-/ \longrightarrow$ | */sažžad/ |
| /wacad/ | 'he promised' $-1 \rightarrow$ | */wa ${ }^{\text {ccad }}$ / |
| /rama/ | 'he threw' - - | */ramma/ |
| /gaal/ | 'he said' $\rightarrow$ - | */gawwal/ |

In contrast, some Form II verbs may not always have corresponding Form $I$ verbs in use. Examples:

Form I

| */sažal/ | - $-1-$ | /sažžal/ | 'he registered' |
| :---: | :---: | :---: | :---: |
| */žarab/ | - $-1-$ | /žarrab/ | 'he tried' |
| */kalam/ | - - | /kallam/ | 'he spoke to' |
| */?ayad/ | 4-1- | /?ayyad/ | 'he supported' |

One final point has to be cleared up before closing the discussion on Form II verbs. It has been indicated earlier
(see 3.2.1.1.1 (b)) that the pattern of Form I doubled verbs, which is / $\mathrm{CaC}_{\mathrm{i}} \mathrm{C}_{\mathrm{i}} /$, is questionable. That is, considering such a pattern as an underlying one cannot correctly derive Form II pattern / $\mathrm{CaC}_{\mathrm{i}} \mathrm{c}_{\mathrm{i}} \mathrm{aC}$ / of doubled verbs. Therefore, a suggested underlying pattern for Form I doubled verbs is proposed as $/ \mathrm{CaC}_{\mathrm{i}} \mathrm{ac} \mathrm{C}_{\mathrm{i}} /$. This pattern will account for the correct derivation of Form II doubled verbs from Form I doubled verbs. That is, Form II doubled verbs are derived by doubling the second radical of Form I doubled verbs. If doubling the second radical takes place without having the second vowel, this will result in having three consecutive identical consonants without an intervening vowel and that is not permitted in Arabic. Thus having the underlying pattern $/ \mathrm{CaC}_{\mathrm{i}} \mathrm{ac}_{\mathrm{i}} /$, e.g., /radad/ for the surface pattern / $\mathrm{CaC}_{\mathrm{i}} \mathrm{C}_{\mathrm{i}} /$, e.g., /radd/ 'he returned s.th.' is justified in order to correctly derive Form II and also Form $V$ Doubled verbs from Form I doubled verbs. However, one may ask what will happen to the second vowel of the underlying /radad/ when there is no derivation or how can one account for /radad/ $\rightarrow$ /radd/?

The answer, it seems, lies in the fact that the second vowel /a/ of the underlying /radad/ is either metathesized with the second or the third radical of the stem. Metathesis may be justified by the following hypotheses.
(a) Two identical consonants tend to geminate. Hence, the second vowel /a/ metathesizes with the second radical and
assimilates to the first vowel /a/. The process goes as follows: /radad/ $\longrightarrow$ /raadd/ $\longrightarrow$ /radd/ 'he returned s.th.'.
(b) The second vowel /a/ metathesizes with the third radical when subject suffixes of the shape /-C(V)/ are appended to the verb. Then the vowel /a/ is raised to /e/ and lengthened, e.g., /radad $+t / \longrightarrow$ /raddeet/ 'I, you (m.s.) returned s.th.' and /radad + tu/ $\longrightarrow / r a d d a t u / \rightarrow$ raddeetu/ 'you (pl.) returned s.th.'.

However, if subject suffixes are of the shape $/-V(C) /$, then the vowel /a/ metathesizes with the second radical and follows the same process as in (a) above. For example, /radad + it/ $\longrightarrow$ /raaddit/ $\longrightarrow$ /raddit/ 'she returned s.th.' and /radad $+u / \rightarrow$ /raaddu/ $\rightarrow$ /raddu/ 'they returned s.th'.

### 3.2.1.2.2 Form III:

Form III verbs are characterized by having the low long vowel /aa/ after the first radical of the root. Most of Form III verbs are transitive and some of them have an associative meaning. They are generally derived from Form $I$ verbs whether Form I verbs are in actual use or not as will be illustrated below.
(a) Sound Verbs:

They have the pattern /Caacac/:
/gaatal/ 'he fought with'
/kaatab/ 'he corresponded with'

| /țaalab/ | 'he demanded' |
| :--- | :--- |
| /caatab/ | 'he blamed' |
| /saanad/ | 'he supported' |
| /raažac/ | 'he revised s.th.' |
| /šaarak/ | 'he participated with s.o.' |
| /gaabal/ | 'he met with s.o.' |

All of the above verbs are derived from Form I verbs that are in actual use. However, some Form III verbs may not have form I verbs as will be shown below.
(b) Defective Verbs:

These verbs have the pattern /CaaCa/:
/haama/ 'he defended'
/maašal 'he walked with s.o.'
/laaga/ 'he met with s.o.'
/Caada/ 'he antagonized'
/naada/ 'he called s.o.'
/saawa/ 'he established equality'
(c) Middle Glide Verbs:

These verbs do not lose their glides due to the fact that such glides are preceded by a long vowel which blocks the deletion process of glides.

| /naawal/ | 'he handed over' |
| :--- | :--- |
| /gaawam/ | 'he stood up against' |
| /caawan/ | 'he helped' |
| /caayan/ | 'he examined' |

/caayaš/ 'he lived with'
(d) Initial Glide Verbs:
/waazan/ 'he compared'
/waaṣal/ 'he continued; he maintained close relation with'
/waafag/ 'he agreed'
/waažah/ 'he confronted'
The derivational rule that accounts for the derivation of Form III from Form $I$ is formulated as follows:

$$
\underset{[- \text { long }]}{\mathrm{V}} \underset{\substack{[+ \text { long } \\[+ \text { low }]}}{\mathrm{V}} / \mathrm{\# C} \longrightarrow \mathrm{Ca}(\mathrm{C})
$$

The following examples do not have corresponding form I verbs:

## Form III

/caarak/ 'he fought'
/saa'ad/ 'he helped'
/saafar/ 'he travelled'
/waažah/ 'he confronted'
/waafag/ 'he agreed'
In addition, not all Form $I$ verbs can have Form III verbs as their derived forms. Examples:

Form I
/xazan/ 'he stored' —/ $\longrightarrow$ */xaazan/
/gasal/ 'he washed' $-/ \longrightarrow \quad$ */giaasal/
/rašaf/ 'he sipped' —/ $\longrightarrow$ */raašaf/
/ragad/ 'he slept' $\longrightarrow / \longrightarrow \quad$ */raagad/

| /salax/ | 'he skinned' | */saalax/ |
| :---: | :---: | :---: |
| /frih/ | 'he became happy' -_/ | */faarah/ |
| /šawa/ | 'he grilled' $\quad / \longrightarrow$ | */šaawa/ |
| /xaaf/ | 'he was afraid' $\longrightarrow$ | */xaawaf/ |
| /waṣaf/ | 'he described' $\longrightarrow 1 \longrightarrow$ | */waaṣaf/ |
| /našad/ | 'he asked' $\rightarrow$ - $\quad$ - | */naašad/ |

Form IV verbs are not used in JDLA, but rather Form 1 or Form II verbs are used instead, as has been indicated earlier (see 2.5.11.1).

### 3.2.1.2.3 Form V:

Form $V$ verbs are characterized by doubling the second radical of the root as well as the prefixation of the derivational morpheme /t-/. The above process of doubling and prefixation applies to Form $I$ verbs to derive Form $V$ from them. The doubling of the second radical of the root is the derivational process for Form II verbs. Hence, most Form V verbs are derived from Form II by prefixing /t-/ to such verbs. Form $V$ verbs are usually reflexive of Form II and they may also denote passivity.
(a) Sound Verbs:

They have the pattern /tcaciciac/:
/t'allam/ 'he learned'
/thassan/ 'he improved (himself); it improved'
/tkassar/
'it was broken'
/tkallam/
'he spoke'

```
/ssẹarraf/ < /tṣarraf/ 'he behaved'
/dgaddam/ < /tgaddam/ 'he progressed'
/00amman/ < /teamman/ 'it was priced'
/tmazzag/ 'it was torn'
/ssallaf/ < /tsallaf/ 'he borrowed'
```

(b) Doubled verbs:

They have the pattern /tcac $\mathrm{C}_{\mathrm{i}} \mathrm{ac}_{\mathrm{i}} /$.
/traddad/ 'he hesitated'
/ššaddad/ < /tšaddad/ 'he was harsh'
/tfakkak/ 'it was dismantled'
/tmaddad/ 'he stretched himself out'
/ssammam/ < /tsammam/ 'he was poisoned'
(c) Defective Verbs:

As it is the case with the previous forms, defective verbs lose their final radical. They have the pattern $/$ tcac $_{\mathrm{i}} \mathrm{C}_{\mathrm{i}} \mathrm{a}$ /.
Root Form V
/ġdy/ /tgadda/ 'he had lunch'
/rgy/ /tragga/ 'he advanced, was promoted'
/mny/ /tmanna/ 'he wished'
/xlw/ /txalla/ 'he abandoned'
/wfy/ /twaffa/ 'he died'
/wly/ /twalla/ 'he assumed responsibility'
Form V verbs whose first radical is the glottal stop are very few. The glottal stop may be retained and in this case
such verbs are borrowings from $C A$ or in some cases the glottal stop is substituted for by /Y/ as the following examples illustrate:

| /t?akkad ~ tyakkad/ | 'he was certain' |
| :--- | :--- |
| /t?assaf ~ tyassaf/ | 'he was sorry' |
| /t?a@日ar/ | 'he was influenced' |
| /t?addab ~ tyaddab/ | 'he behaved himself' |

As the foregoing examples indicate, some Form V verbs are reflexive or passive of Form II verbs. To make this point clearer, consider the following examples:


Form 1 , then two processes apply: first, doubling the second radical of the root; second, the addition of the prefix/t$/$.

### 3.2.1.2.4 Form VI:

Form VI verbs are characterized by having a long vowel /aa/ after the first radical of the root and by the prefixation of $/ t-/$. The presence of the long vowel after the first radical of the root denotes form III verbs. Accordingly, Form VI verbs are mostly derived from Form III by prefixing /t-/. Form VI verbs have the following pattern /tcaaca(c)/. They may denote reciprocity. Examples:

Form III Form VI
/kaatab/ 'he wrote to' $\rightarrow$ /tkaatabu/ 'they wrote each other'
/gaaṭa ${ }^{c} /$ 'he broke up $\rightarrow / d g a a t a^{c} u /$ 'they got separated
(with s.o.)
/saamaḥ/ 'he forgave' $\rightarrow$ /ssaamaḥu/ 'they forgave each other'
/caarak/ 'he fought' $\rightarrow / t^{\text {caaraku/ 'they fought each }}$ other'
/šaawar/ 'he consulted' $\rightarrow$ /ššaawaru/'they consulted each other'

Form VI verbs may also denote pretense:
/ọọaahar/ 'he pretended'
/tmaaraọ̃/ 'he pretended to be sick'
/tnaasa/ 'he pretended to have forgotten'
They may also have a passive meaning:
/ttaakal/ 'it was eaten'
/ttaaxad/ 'it (he) was taken'
The last two verbs represent unusual assimilation. That is, the assimilation of the glottal stop to the prefix /t-/ of Form VI. Their underlying representation is /t?aakal/ and $/ t$ ?aaxad/, respectively. The glottal stop in Form I of these two verbs is deleted and the two verbs are compensated for by the vowel /a $\sim e / i n f i n a l$ position (see 2.5.11.1). However, the glottal stop does not assimilate in /t?aamar/</ta?aamar/ 'he plotted' because such a verb is a borrowing from CA.

Some Form VI verbs are defective. Examples:
Form III Form VI
/laaga/ 'he met (s.o.)' $\rightarrow$ /tlaagu/ 'they met together'
 each other'
/saawa/ 'he made equal' $\rightarrow$ /ssaawa/ 'they were made equal' /daawa/ 'he treated medically' $\rightarrow / d d a a w a / ~ ' h e ~ w a s ~ c u r e d ' ~$

It should be emphasized that not all Form III verbs are capable of deriving Form VI verbs. Consider the following examples:

| Form III |  |
| :--- | :--- |
| /haawal/ 'he tried' | $\longrightarrow / \longrightarrow$ Form VI |
| /haažam/ 'he attacked' | $\longrightarrow /$ thaawal/ |
| /raaca/ 'he waited' | $\longrightarrow / \longrightarrow$ */haažam/ |

In contrast, Form VI verbs are not always derived from Form III verbs as the following examples indicate:

Form III
*/gaacad/ 4-/——/dgaacad/ 'he retired' */faaham/ 4-/- /tfaaham/ 'he came to an understanding' */ọaarab/ 4-/- /ọ̣aarabu/ 'they hit each other' */raaxa/ 4-/- /traaxa/ 'he showed little energy' */ọaahar/ «-/- /ọ̣aahar/ 'he pretended'

If Form VI is derived from Form III, then the following rule accounts for such derivation:

$$
\phi \rightarrow t / \# \longrightarrow \operatorname{Caaca}(C)
$$

If a Form VI verb does not have a corresponding Form III verb as the above examples indicate, then the above rule applies with a vowel lengthening rule, i.e., the lengthening of the first stem vowel of Form $I$ verbs.

### 3.2.1.2.5 Form VII:

Form VII verbs are derived from Form $I$ verbs by the addition of the prefix /n-/. Form VII verbs are intransitive and have a passive meaning.

Sound verbs have the following pattern: /ncacac/:

Form I
/kasar/ 'he broke'
/Ọarab/ 'he hit'
/harag/ 'he burned' /smic / 'he heard'
/žabad/ 'he pulled'
/katab/ 'he wrote'

Form VII
$\rightarrow$ /nkasar/ 'it was broken'
$\rightarrow$ /nọ̀arab/ 'he was hit'
$\rightarrow$ /nḥarag/ 'it was burned'
$\rightarrow / n s a m a c /$ 'it was heard'
$\rightarrow$ /nžabad/ 'it was pulled'
$\rightarrow$ /nkatab/ 'it was written'

Form VII verbs are also found as doubled verbs and their pattern is /nCaCici/:


As the last example indicates, passive meaning is not always obtained or realized.

The derivational rule of Form VII from Form I can be formulized as follows:

$$
\phi \longrightarrow \mathrm{n} / \# \longrightarrow \text { [Form I verbs] }
$$

### 3.2.1.2.6 FOrm VIII:

The main feature of Form VIII verbs is the presence of the infix /-t-/ immediately after the first radical of the root. They are mostly derived from Form $I$ verbs.

Sound verbs have the following pattern: /CtaCaC/.

Form I
/naṣar/ 'he rendered $\rightarrow$ /ntaṣar/ 'he triumphed'
s.o. victorious'
/nafax/ 'he inflated' $\rightarrow$ /ntafax/ 'it was inflated' /laḥam/ 'he welded' $\rightarrow$ /ltaḥam/ 'it was welded'
$/ m a n a c /$ 'he prevented' $\rightarrow / \operatorname{mtana}^{c} /$ 'he abstained'
Most Form VIII verbs denote reflexivity, i.e., they are reflexive of Form $I$ verbs as the following examples illustrate:
/žama'/ 'he gathered' $\rightarrow$ /žtama ${ }^{\text {c } / \text { 'he met (with s.o.)' }}$
/nagal/ 'he moved' $\rightarrow$ /ntagal/ 'he moved (himself)' $/ s m i^{c} /$ 'he heard' $\quad \rightarrow \quad /$ stama $^{c} /$ 'he listened to s.th.'

Some Form VIII verbs may have a passive meaning:

## Form I

/nafax/ 'he inflated' $\rightarrow$ /ntafax/ 'it was inflated' /rabat!/ 'he tied s.th.' $\rightarrow$ /rtabaṭ/ 'it was tied'

The above meanings that Form VIII verbs denote may also be found in other Form VIII sub-forms, i.e., doubled, defective and hollow verbs.

It should be pointed out that in a few cases Form $I$ and Form VIII verbs have similar meanings as, e.g.: /sara/ 'he bought' /štara/ 'he bought'

Form VIII doubled verbs have the following pattern: $/$ Ctac $_{i} C_{i}$.

Form I
/lamm/ 'he gathered'
/hall/ 'he opened, solved'
/ball/ 'he wetted'
/madd/ 'he extended'
/ọarr/ 'he damaged'

## Form VIII

/ltamm/ 'he rallied (with)' /htall/ 'he occupied'
/btall/ 'he was wetted'
/mtadd/ 'it was extended'
/Oṭarr/ 'he was forced'

Form VIII defective verbs have the following pattern: /CtaCa/.

Form I
/rama/ 'he threw s.th.' $\rightarrow$ /rtama/ 'it was thrown'
/maha/ 'he erased' $\rightarrow$ /mtaha/ 'it was erased'
/mala/ 'he filled up' $\rightarrow$ /mtala/ 'it was filled up'
/daca/ 'he called' $\rightarrow$ /ddaca/ 'he claimed'
/nasa/ 'he forgot' $\rightarrow$ /ntasa/ 'it was forgotten'

Form IX verbs do not exist in the investigated dialect. 3.2.1.2.7 Form X :

Form $X$ verbs are characterized by having the prefix /sta-/. They may have a causative-reflexive meaning because of the presence of /s/ and /t/ of the prefix, respectively. Other Form $X$ verbs have an estimative meaning. They are derived from Form I verbs or from adjectives and a few are derived from nouns. In some cases, they may be derived directly from the root without having existing verb, djective or noun forms.

Sound verbs have the pattern /staccac/:
Base Form
/naṣar/ 'he helped' $\rightarrow$ /stanṣar/ 'he sought support (of)'

| /gafar/ 'he forgave' | $\rightarrow$ | /stağfar/ 'he sought (God's) |
| :--- | :--- | :--- |
| forgiveness' |  |  |

Form $X$ doubled verbs have the pattern /StaCacicich

In the above examples, the infix /-t-/ in the verb /ddaca/ is realized as /d/ through voicing assimilation.

Form VIII hollow verbs have the pattern/Ctaac/:
Form I
Form VIII


As the last four examples indicate, some Form VIII verbs do not always have corresponding Form $I$ verbs.

Assimilated Form VIII verbs have the following pattern: /ttacac/ < /wtacac/.

Root Form VIII
/wṣl/ /ttaṣal/ < wtaṣal/ 'he got in touch'
/wfg/ /ttafag/ < wtafag/ 'he agreed'
/wkl/ /ttakal/ < wtakal/ 'he relied'
/wọ̀ḥ/ /ttaọ̀ah/ < wtaọ̀aḥ/ 'it became clear'
/whm/ /ttaham/ < wtaham/ 'he accused'
/wžh/ /ttažah/ < wtažah/ 'he went toward'
Since most of Form VIII verbs are derived from Form I verbs, the following rule will account for such derivation:

$$
\phi \longrightarrow t / \# C \longrightarrow V_{1}^{2} C_{1}^{2} V_{o}^{1}(C)
$$



Such verbs are considered initial weak verbs because of the glide /w/.

Since most Form X verbs are derived from form I verbs, the following rule accounts for such a derivation:

$$
\phi \longrightarrow \text { sta- / \# - [Form I verbs] }
$$

### 3.2.2 Quadriliteral Verbs:

As its name implies, a quadriliteral verb consists of four radicals. Such radicals may be strong radicals or undergo a weakening process. A quadriliteral verb may be composed of four different radicals or some radicals may result from duplication of other radicals in the root, as will be illustrated below. Quadriliteral verbs, sometimes referred to as quadriradical verbs are of two forms: (basic) quadriliterals and derived quadriliterals.

### 3.2.2.1 Basic Quadriliterals

Basic quadriliteral verbs are of the following types:
(a) This type has the pattern /Caccac/:
/taržam/ 'he translated'
/daržaḥ/ 'he swung'
/šalbaṭ/ 'he splashed water'
/xarbaš/ 'he scribbled'
/xalbaṭ/ 'he mixed things up'
/darhab/ 'he rolled s.th.'
/gaṭran/ 'he coated with tar'
/'askar/ 'he camped'
/bahoal/ 'he treated (s.o.) meanly'
/balhag/ 'he stared at s.o.'
(b) This type has duplicated radicals, i.e , the third and the fourth radicals are duplications of the first and the second radicals, respectively. This type has the pattern $/ \mathrm{C}_{\mathrm{i}} \mathrm{ac}_{\mathrm{j}} \mathrm{c}_{\mathrm{i}} \mathrm{ac}_{\mathrm{j}} /$ :
/ṭagṭag/ 'he knocked'
/tamtam/ 'he stammered'
/zalzal/ 'he shook'
/wašwaš/ 'he whispered'
/xašxaš/ 'he clanked'
/fatfat/ 'he cut into pieces'
/na ${ }^{\text {na }}{ }^{\mathrm{c}}$ / 'he added mint (to tea)'
/šamšam/ 'he sniffed'
/daġdaġ/ 'he tickled'
(c) This type has the pattern /Caccac/:
/barbas/ 'he dug out'
/masmar/ 'he nailed'
/samsar/ 'he acted as broker'
(d) This type has the pattern /CooCac/ < /CaCCaC/. It undergoes a coalescence process:
/toorax/ < /tawrax/ 'he dated historically'
/ṣoogar/ < /ṣawgar/ 'he insured s.th.'
/xooxam/ < /xawxam/ 'it (he) made s.o. crazy'
(e) This type is concerned with defective verbs where the last radical is deleted. Its pattern is /CaCCa/:
/maska/ < /maskay/ 'he shuffled (cards)'
/marka/ < /markay/ 'he marked s.th. as a debt'

### 2.2.2.2 Derived quadriliterals

Derived quadriliterals are characterized by having the prefix /t-/. They are mainly derived from basic quadriliteral verbs in the same way as form $V$ verbs are derived from Form II of triliteral verbs. They have passive meanings. Examples:

| /tlaxbat// | 'he was confused' |
| :--- | :--- |
| /tkarkab/ | 'it was rolled' |
| /txalbat/ | 'it was mixed up' |
| /ddaǵdaǵ/ < /tdaġdaǵ/ | 'he was tickled' |
| /dgaṭran/ < /tgaṭran/ | 'it was coated with tar' |
| /zzalban/ < /tzalbah// | 'he was cheated' |
| /tfatfat/ | 'it was cut into pieces' |
| /ttoorax/ < /tawrax/ | 'it was dated historically' |
| /thazhaz/ |  |

It should be noted that the pattern of basic quadriliteral verbs is similar to that of Form II triliteral verbs. The difference lies in the fact that the second and the third radicals of Form II triliteral verbs are always identical, i.e., doubled while in basic quadriliteral verbs they are not. Likewise, the pattern of derived quadriliteral verbs is similar to that of Form $V$ triliteral verbs where both of them have the pattern /tCaCCa(C)/ underlyingly.

However, in Form $V$ the second and the third radicals are identical, but in derived quadriliteral verbs they are not. The rule that accounts for the derivational process of derived quadriliteral verbs from their corresponding basic quadriliteral verbs may be stated as follows:

$$
\boldsymbol{o} \text { _ t- } / \# \text { [basic quadriliteral verbs] }
$$

### 3.3 INFLECTION:

Verbs in JDLA are inflected for the following:
Aspect: perfect and imperfect
Person: first (1), second (2) and third (3)
Gender: masculine (m.) and feminine (f.)
Number: singular (s.) and plural (pl.)
Mood: indicative and imperative
It should be noted that verbs in the perfect aspect are not inflected for mood. That is, such verbs do not have mood, (Cf. Qafisheh, 1977). Also, verbs in JDLA are not inflected for voice. Passive voice in JDLA is usually expressed by Form VII verbs as will be shown below.

Verb forms in JDLA consist of verb stems plus inflectional affixes. These affixes may be suffixes, prefixes or a combination of both as will be illustrated later on.

### 3.3.1 Inflection of the Perfect:

The inflectional affixes of the perfect are all suffixes. Verb forms in the perfect aspect are inflected through the process of attaching suffixes to verb stems. This process of suffixation is achieved through the application of a morphological rule of inflection whereby verb stems are transformed into full-fledged verb forms. The inflectional suffixes of the perfect are illustrated in the following chart:

Chart 1
Inflectional Suffixes of the Perfect

| Person: | Gender: | Number: | Suffix: |
| :---: | :---: | :---: | :---: |
| 1 | - | S | /-t/ |
| 1 | - | P1. | /-na/ |
| 2 | M | S | /-t/ |
| 2 | F | S | /-ti/ |
| 2 | - | P1. | /-tu/ |
| 3 | M | S | 1-Ø1 |
| 3 | F | S | /-it/ |
| 3 | - | P1. | /-u/ |

Some notes on the above inflectional suffixes are in order:

1. There is no gender distiction in the first person suffixes whether singular or plural.
2. There is no gender distintion in the second person plural as well as the third person plural.
3. The first person singular suffix and the second person masculine singular suffix are identical.
4. There are no dual suffixes in verbs.
5. The first and the second person suffixes have the shape /-C(V)/.
6. The third person suffixes are either of the shape $/-\mathrm{V}(\mathrm{C}) /$ or $/-\varnothing /$.

It should be pointed out that the third person masculine singular form of the perfect verb is considered the stem form for all perfect verbs because it has zero suffix as shown above. Thus, the inflectional rule for the perfect is formulated as follows:

$$
\begin{aligned}
& \varnothing \longrightarrow \text { Infl. } /[\text { verb stem } \longrightarrow] \\
& \text { Inflectional Suff. }= /-c(V) / \\
& \\
& /-\varnothing(C) / \\
&-\varnothing
\end{aligned}
$$

### 3.3.1.1 Sound Verbs:

In this section, the conjugation of triliteral as well as quadriliteral sound verbs will be presented and accounted for. Form I sound verbs are conjugated as follows:

| S | /katab+t/ | /ḍarab+t/ |
| :---: | :---: | :---: |
| Pl. | /katab+na/ | /ọarab+na/ |
| M. S. | /katab+t/ | /ọarab+t/ |
| F. S. | /katab+ti/ | /ọarab+ti/ |
| Pl. | /katab+tu/ | /ọarab+tu/ |
| M. S. | /katab+Ø/ | /ọarab+Ø/ |
| 3 F. S. | /katab+it/ ~/kitab+it/ | /ọarab+it/ ~/ọurab+it/ |
| 3 Pl . | /katab+u/ ~/kitab+u/ | /Ọarab+u/ ~ /ọurab+u/ |

As can be seen from the above conjugation, there are two alternate forms for the third person feminine singular and the third person plural. Such an alternation is motivated by the addition of vowel-initial suffixes. That is, some speakers of the dialect, mostly the older generation, may occasionally
raise the first vowel of the stem when suffixes of the shape /-V(C)/ are appended to verb stems. However, the raised vowel alternates between a high front vowel and a high back vwoel, i.e. /i/ and /u/ respectively as shown above. Alternation of the raised vowel between /i/ and /u/ is, in most cases, determined by the environment as will be illustrated below, but exceptions do exist.

Let us examine more data from the dialect:

1 S.
1 Pl.
2 M. S.
2 F. S.
2 Pl.
3 M. S.
3 F. S.
3 Pl.

1 s.
1 Pl.
/masaḥna/
/masaṇt/
/masaḥti/
/masaḥtu/
/masaḥ/
/masaḥit/~/misaḥit/
/ṭalag/ to let go'
/ṭalagt/
/ṭalagna/
/ṭalagt/
/ṭalagti/
/ṭalagtu/
/ṭalag/
/ṭalagit/ ~/ṭulagit/
/ṭalagu/ ~ /ṭulagu/
/ṣadag/ 'to be truthfull'
/ṣadagt/
/ṣadagna/
/ṣadagt/
/ṣadagti/
/ṣadagtu/
/ṣadag/
/ṣadagit/ ~/ṣudagit/

3 Pl. /masaḥu/ ~/misaḥu/ /ṣadagu/ ~/ṣudagu/
The above conjugation of Form $I$ sound verbs shows that there is no alternation or change in the stem of the verb with suffixes of the first and the second persons. This holds true for all Form $I$ sound verbs. As for verbs with 3 F.S. and 3 pl. suffixes, alternation does exist. Hence, the following examples will focus on verbs with these two suffixes in order to arrive at a determining conclusion for the quality of the raised vowel.

| 3 F.S | /našadit/ -/nišadit/ | /ọafarit/ -/ọufarit/ |
| :---: | :---: | :---: |
| 3 Pl . | /našadu/ - /nišadu/ | /ọafaru/ ~/ọufaru/ |
|  | /raža' / 'to return' | /gața/ 'to cut' |
| 3 F. S. | /raža ${ }^{\text {c }}$ (// ~/riža ${ }^{\text {c }}$ it/ | /gaṭa ${ }^{\text {c }}$ it/ -/guṭa ${ }^{\text {cit/ }}$ |
| 3 Pl . | /raža ${ }^{\text {c }} u$ / - /riža ${ }^{\text {c }}$ u/ | /gaṭa ${ }^{\text {c }}$ / ~/guṭacu/ |
|  | /Oabah/ 'to slaughter' | /xaṭaf/ 'to snatch' |
| 3 F. S. | /סabaḥit/ ~/סibahit/ | /xaṭafit/ -/xuṭafit |
| 3 Pl . | / Oabaḥu/ ~/סibaḥu/ | /xaṭafu/ ~ /xuṭafu/ |

Based on the above data and on other data in the dialect not mentioned here for the sole purpose of unavailability of space, one can determine the quality of the raised vowel, i.e., whether it is a high front or a high back vowel when vowel-initial suffixes are attached to verb stems. The paradigms above indicate that the raised vowel is a/u/ when the first radical of the stem is an emphatic, namely, /s/, /t/
and $/ \mathrm{O} /$, or if the first radical is $/ \mathrm{r} /$, $/ \mathrm{g} /$ or $/ \mathrm{x} /$ and the second radical is an emphatic, or when the first radical is a /w/ as, e.g.,
/wagaf/ 'to stop; stand up'
3 F. S. /wagafit/ ~ /wugafit/
3 Pl. /wagafu/ ~/wugafu/
A rule that will account for the vowel raising and its quality may be formulated as follows:


In Forms II and III, there is no alternation in the vocalic pattern of the stem when suffixes are attached to such forms. Examples:

| Form II | Form III |
| :--- | :--- |
| /gaddam/ 'to offer' /raasal/'to correspond' |  |

1 s /gaddamt/ /raasalt/
1 Pl. /gaddamna/ /raasalna/
2 M. S.
/gaddamt/
/raasalt/
2 F. S.
/gaddamti/
/raasalti/
2 Pl.
/gaddamtu/
/raasaltu/
3 M. S.
/gaddam/
/raasal/
3 F. S.
/gaddamit/
/raasalit/

When suffixes are attached to Forms $V$ and VI, a schwa / / may sometimes be inserted after the prefix /t/ provided that the prefix /t/ does not undergo assimilation. Consider the following examples from Form V:
/t'allam/ 'to learn' /ssallaf/'toborrow'

1 s. /tcallamt/ ~ /t callamt/ /ssallaft/
1 Pl. /tªllamna/ ~ /t Callamna/ /ssallafna/
2 M. S. /tcallamt/ - /t Callamt/ /ssallaft/
2 F. S. /tªllamti/ ~ /t Callamti/ /ssallfti/
2 Pl. /tcallamtu/ ~ /t Callamtu/ /ssallaftu/
3 M. S. /t ${ }^{C} a l l a m /$
/ssallaf/
3 F. S. /t'allamit/ ~ /t Callamit/ /ssallafit/
3 Pl. /tªllamu/ ~/t Callamu/ /ssallafu/
It should be pointed out that the prefix /t-/ of Form $V$ in /ssallaf/ has undergone complete assimilation. The original form of /ssallaf/ is /tsallaf/ (see 3.2.1.2.3). Form VI verbs are conjugated in the same manner as Form $V$ verbs.

In Forms VII and VIII, the raising of the first vowel of the stem is noticed in the speech pattern of some speakers of the dialect. Let us examine the following examples from form VII:
/nkasar/ 'to be broken' /nọarab/ 'to be hit'
1 S /nkasart/ /nọ̀arabt/
1 Pl. /nkasarna/ /nọ̀arabna/
2 M. S. /nkasart/ /nọ̀arabt/

2 F. S. /nkasarti/ /nọarabti/
2 Pl. /nkasartu/ /nọarabtu/
3 M. S. /nkasar/ /nọarab/
3 F. S. /nkasarit/ ~ /nkisarit/ /nọarabit/ ~ /nọ̀urabit/
3 Pl. /nkasaru/ ~ /nkisaru/ /nọarabu/ ~/nọ̀urabu/
As the above and some other data in the dialect suggest, the raised vowel is a high back vowel if the first radical is an emphatic or /w/. Otherwise, the raised vowel is an /i/. The following rule will account for vowel raising and its quality:


Form VIII verbs also have alternate forms when appended by vowel-initial suffixes.

In Form X verbs, there is a metathesis between the stem vowel and the second radical of the stem whenever vowelinitial suffixes are added to these verbs. This suggests that metathesis is motivated by the attachment of such suffixes. Examples:
/staxdam/ 'to use'

1 S. /staxdamt/
1 Pl. /staxdamna/
2 M. S. /staxdamt/

2 F. S. /staxdamti/
2 Pl. /staxdamtu/
3 M. S. /staxdam/
3 F. S. /staxdamit/ $\longrightarrow$ /staxadmit/
3 Pl. /staxdamu/ $\longrightarrow$ /staxadmu/
All sound verbs mentioned in the derivation section above are conjugated in the same manner as those verbs presented here.

### 3.3.1.2 Doubled Verbs:

In Forms I, VII, VIII and $X$ doubled verbs there is no noticeable change in the vocalic pattern of the stem if the suffix is of the shape $/-V(C) /$ or $/-0 /$, i.e. third person suffixes. On the other hand, if the suffix is a consonantinitial suffix, a long mid front vowel between the last radical of the stem and the suffix is inserted. For an arguement regarding this vowel and how it came about see (3.2.1.2.1) above.

Consider the following examples:

Form I
/radd/ 'to return' /nọ̀amm/ 'to join'
Form VII

1 S.

1 Pl.

2 M. S.

2 F. S. 2 Pl.
/raddeet/
/raddeena/
/raddeet/
/raddeeti/
/raddeetu/
/nọ̀ammeet/
/nờammeena/
/nọ̀ammeet/
/nọ̀ammeeti/
/ nọ̀ammeetu/

| 3 M. S. | /radd/ | /nọamm/ |
| :--- | :--- | :--- |
| 3 F. S. | /raddit/ | /nọammit/ |
| 3 Pl. | /raddu/ | /nọammu/ |

## Form VIII

/htamm/ 'to be concerned' /stacadd/ 'to be ready'
1 S.
1 Pl.
2 M. S.
2 F. S. /htammeeti/
2 Pl. /htammeetu/
3 M. S. /htamm/
3 F. S. /htammit/
3 Pl.

### 3.3.1.3 Hollow Verbs:

Hollow verbs occur in Forms I, VII, VIII and X. Form $I$ hollow verbs are conjugated as follows:


As can be seen from the above conjugation, there is an alternation in the stem vowel where we find a short high fornt vowel with first and second person suffixes and a long low vowel with the third person suffixes. Before postulating a rule which accounts for this alternation, let us examine more data.

1 S.
1 Pl .
/gulna/
/xufna/
2 M. S.
/gult/
/xuft/
2 F. S.
/gulti/
/xufti/
2 Pl. /gultu/
/xuftu/
3 M. S.
/gaal/
/xaaf/
3 F. S.
/gaalit/
/xaafit/
3 Pl. /gaalu/ /xaafu/
These examples also exhibit stem vowel alternation. Therefore, one can conclude that the stem vowel of Form I hollow verbs has to be raised and shortened before consonant-initial suffixes but it remains intact with vowel-initial suffixes or zero suffix. The raised vowel also alternates between a front vowel and a back vowel. To account for the quality of the raised vowel, i.e. /i/ and /u/, we have to take into consideration the underlying representation of the above verb stems which are as follows:
/baya ${ }^{\text {c/ }} \rightarrow$ /baac/, /Cayaš/ $\rightarrow$ /Caaš/, /gawal/ $\rightarrow$ /gaal/ and /xawaf/ $\rightarrow$ /xaaf/. The /y/ and /w/ have been deleted because
of their intervocalic position (see deletion of glides, above). Hence, the raised vowels /i/ and /u/ indicate that the deleted glides are /y/ and /w/, respectively.

The following rule will account for the vowel raising and its quality:


In Forms VII and VIII, The stem vowel remains intact with the third person suffixes, but it is raised to /i/ and shortened when consonant-initial suffixes are appended to those verbs. The following examples illustrate this point:
/nhaaz/ 'to take sides' /xtaar/ 'to choose'

1 S. /nḥizt/ /xtirt/
1 Pl. /nḥizna/ /xtirna/
2 M. S. /nḥizt/ /xtirt/
2 F. S. /nḥizti/ /xtirti/
2 Pl. /nḥiztu/ /xtirtu/
3 M. S. /nḥaaz/ /xtaar/
3 F. S. /nḥaazit/ /xtaarit/
3 Pl. /nḥaazu/ /xtaaru/
It should be pointed out that the raised vowel is always /i/ in Forms VII and VIII even if the original deleted glide is a /w/ as for example /ḥtižti/ 'you (f.s.) needed'. This is probably due to the presence of an initial consonant cluster
in these two forms. The following rule will account for the raising of /a/ to /i/:
$a \longrightarrow i / \# \begin{array}{ll}n & C \\ C & t\end{array}$ $\qquad$ $\mathrm{C}+\mathrm{C}(\mathrm{V})$
$\mathrm{C}+\mathrm{C}(\mathrm{V})$

As for Form $X$, consider the following examples:

1 S. /stafaad/ 'to benefit' /stacaan/ 'to seek help' /stafatt/ </stafadt/ /stacant/

1 Pl. /stafadna/ /stacanna/

2 M. S. /stafatt/ </stafadt/ /stacant/
2 F. S. /stafatti/ </stafadti/ /stacanti/
2 Pl. /stafattu/ </stafadtu/ /stacantu/

3 M. S.
/stafaad/
/stacaan/
3 F.S.
/stafaadit/
/stacaanit/
3 Pl. /stafaadu/ /stacaanu/
The above conjugation shows that the stem vowel is shortened when consonant-initial suffixes are attached, but remains intact with vowel-initial suffixes or a zero suffix. The following rule will account for vowel shortening of form $X$ hollow verbs:

$$
\text { aa } \longrightarrow a \quad / \operatorname{stac} \ldots c+c(V)
$$

### 3.3.1.4 Defective Verbs:

Defective verbs are found in all forms. They are all conjugated in the same way. That is, if the suffix is a vowelinitial suffix, the last vowel of the stem assimilates to the vowel of the suffix. On the other hand, if the suffix is a

```
consonant-initial suffix, the last vowel of the stem is
realized as /ee/. Examples:
```

    Form I Form II
    /maša/ ~/maše/ 'to walk' /ġanna/ 'to sing'
    | 1 | S. | /mašeet/ | /ganneet/ |
| :---: | :---: | :---: | :---: |
| 1 | Pl. | /mašeena/ | /ganneena/ |
| 2 | M. S. | /mašeet/ | /ganneet/ |
| 2 | F. S. | /mašeeti/ | /ganneeti/ |
| 2 | Pl. | /mašeetu/ | /ganneetu/ |
| 3 | M. S. | /maša/ ~ /maše/ | /ganna/ |
| 3 | F. S. | /mašit/ | /gannit/ |
| 3 | Pl. | /mašu/ | /ġannu/ |

To account for the presence of the mid front vowel /ee/ in the above examples, one has to resort to the underlying representation of the above verb stems which are /mašay/ and /gannay/. When consonant-initial suffixes are appended to /mašay/ and /gannay/, the /ay/ undergoes coalescence /ay/—/ee/. The application of coalescence will account for the presence of /ee/ in the above examples as well as in the upcoming conjugations of all forms of defective verbs. On the other hand, when vowel-initial suffixes are attached to the underlying representaion of all defective verbs, the glides /y/ or /w/ have to be deleted because of their intervocalic position, i.e., between two short vowels. It should also be pointed out that the final /a/ of some defective verbs may optionally undergo the process of deflection ,i.e. /a/ $\rightarrow / e /$.

That is, when final /a/ is not immediately preceded by a consonant cluster or a single consonant and a long vowel, it may optionally be deflected to /e/. Examples:

Form III Form I
/laaga/ 'to meet' /daca/ ~ /dace/ 'to call'

| 1 S . | /laageet/ | /da ${ }^{\text {ceet/ }}$ |
| :---: | :---: | :---: |
| 1 Pl . | /laageena/ | /daceena/ |
| $2 \mathrm{M} . \mathrm{S}$. | /laageet/ | /daceet/ |
| 2 F . S. | /laageeti/ | /daceeti/ |
| 2 Pl . | /laaggeetu/ | /daceetu/ |
| $3 \mathrm{M} . \mathrm{S}$. | /laaga/ | $/ d a^{c} a / \sim / d a^{c} e /$ |
| 3 F. S. | /laagit/ | /dacit/ |
| 3 Pl . | /laagu/ | $/ d a b^{c} u /$ |

Since all defective verbs are inflected in the same way, it seems that there is no need to give a conjugation for each form. The reader is referred to the derivation section in this chapter for more defective verbs which are conjugated as the ones persented here.

As for quadriliteral verbs, they are inflected as follows:

Basic Quadriliterals: Derived Quadriliterals:
/karkab/ 'to roll s.th.' /ddagdag/ 'to be tickled'
1 S. /karkabt/ /ddagdagt/
1 Pl. /karkabna/ /ddagdagna/
2 M. S. /karkabt/ /ddagdagt/
2. F. S. /karkabti/ /ddagdagti/

2 Pl. /karkabtu/ /ddagdagtu/
3 M. S. /karkab/ /ddagdag/
3 F. S. /karkabit/ $\rightarrow /$ karakbit/ /ddagdagit/ $\rightarrow /$ ddagadgit/
3 Pl. /karkabu/ $\rightarrow / k a r a k b u / / d d a g d a g u / \rightarrow / d d a g a d g u /$
The preceding quadriliteral sound verbs are conjugated without any apparent changes when suffixes are of the shape /-C(V)/. However, with vowel-initial suffixes, there is metathesis between the stem vowel and the third radical of the stem.

Defective quadriliteral verbs are conjugated as defective triliteral verbs. Metathesis, however, is not operative with defective quadriliteral verbs. Examples:
/maška/ ' to shuffle cards'
1 S
/maškeet/
1 Pl. /maškeena/
2 M. S. /maškeet/
2 F. S. /maškeeti/
2 Pl. /maškeetu/
3 M. S. /maška/
3 F. S. /maškit/
3 Pl. /mašku/

### 3.3.2 Inflection of the Imperfect:

The inflectional affixes of the imperfect are either prefixes alone or prefixes and suffixes together as the following chart shows:
Chart 2
Inflectional Affixes of the Imperfect
Person: Gender: Number: Prefix: Suffix:

| 1 | - | S | /ni--/ | /--Ø\| |
| :---: | :---: | :---: | :---: | :---: |
| 1 | - | Pl. | /ni--/ | /--u/ |
| 2 | M | S | /ti--/ | /--Ø/ |
| 2 | F | S | /ti--/ | /--i/ |
| 2 | - | P1. | /ti--/ | /--u/ |
| 3 | M | S | /yi--/ | /--Ø/ |
| 3 | F | S | /ti--/ | /--Ø/ |
| 3 | - | P1. | /Yi--/ | /--Ø/ |

The following comments about the above chart are in order:

1. Suffixes of the second person masculine singular and the third person feminine singular are identical.
2. What has been said about gender distinction in the perfect suffixes holds true here.
3. Plural affixes as well as the second feminine singular affixes are prefixes and suffixes, but all the others are only prefixes.
4. All imperfect suffixes are high vowels, i.e. /i/ and /u/.
5. The vowel /i/ of the prefixes /ni/, ti/ and /yi/ may sometimes be syncopated or realized as an /a/ or a /u/ in specific environments as will be illustrated below.

### 3.3.2.1 Sound Verbs:

Form I sound verbs have the following general pattern /CCVC/. This pattern is realized as /-CCic/, /-CCac/ or /-CCuC/ as will be illustrated below. Examples:

1 S .
1 Pl
2 M. S.

2 F. S.
2 Pl

3 M. S.

3 F. S.

3 Pl .
/-ktib/ 'to write' /-ftah/ 'to open'

```
/niktib/
```

                    /niktibu/ \(\rightarrow / n i k i t b u /\) /naftaḥu/ \(\rightarrow / n a f a t h ̣ /\)
                    /tiktib/ /taftah/
                    /tiktibi/ \(\rightarrow / t i k i t b i / / t a f t a h ̣ i / ~ \rightarrow / t a f a t h ̣ i /\)
                    /tiktibu/ \(\rightarrow / t i k i t b u / /\) /taftaḥu/ \(\rightarrow / t a f a t h ̣ /\)
                    /Yiktib/ /yaftah/
                    /tiktib/ /taftaḥ/
                    /Yiktibu/ \(\rightarrow /\) Yikitbu/ /yaftaḥu/ \(\rightarrow / y a f a t h ̣ u /\)
    It should be pointed out that the stem verb of tine imperfect is preceded by a hyphen and translated as an Enlgish infinitve. Thus, /-ktib/ 'to write' and /-nšid/ 'to ask'. More Examples:
/-xdim/ 'to work; to serve' /-ọrub/ 'to hit'

1 S. /nixdim/
1 Pl. /nixdimu/ $\rightarrow / n i x i d m u /$
/nuọ̀rub/
/nuọ̀rubu/ $\rightarrow$ /nuọ̃urbu/

| M. S. | /tixdim/ | /tuọ̆rub/ |
| :---: | :---: | :---: |
| $2 \mathrm{~F} . \mathrm{S}$. | /tixdimi/ $\rightarrow$ /tixidmi/ | /tuọ̀rubi/ $\rightarrow$ /tuọ̆urbi/ |
| 2 Pl. | /tixdimu/ $\rightarrow$ /tixidmu/ | /tuọ̀rubu/ $\rightarrow$ /tuọ̀urbu/ |
| $3 \mathrm{M} . \mathrm{S}$. | /tixdim/ | /tuọ̆rub/ |
| 3 F. S. | /tixdim/ | /tuọ̀rub/ |
| 3 Pl . | /tixdimu/ $\rightarrow$ /tixidmu/ | /tuọ̀rubu/ $\rightarrow$ /tuộurbu/ | The foregoing conjugation shows the morphological process involved in forming imperfect verbs. Such a process can be put diagrammatically as follows:




Diagram (1) represents imperfect verb forms with the first person singular prefix, the second person masculine singular prefix and the third person masculine or feminine singular prefixes. Diagram (2) represents prefixes and suffixes.

In addition, the above conjugation indicates that there is an alternation in the stem vowel. That is, the stem vowel appears as /i/, /a/ or /u/. Such alternation may be accounted for by phonological or morphological rules. The underlying representation of the stem vowel of Form I sound verbs of the imperfect is an /i/. The other two alternants /a/ and /u/ are, in most cases, conditioned by the environment. The stem vowel /a/ may also be governed by the type of pattern that the perfect verbs exhibit.

The stem vowel is a /u/ in the following cases:
a. If one of the radicals is an emphatic consonant, i.e., /s/, /ṭ/ or /of/ provided that the second or the third radicals is not a guttural consonant, i.e., ( $h, c, x, \dot{g}, h, ?)$. Exceptions may exist. Examples:
/yựfur/ 'he braids' /yuxbuṭ/ ' he hits'
/Yuṣbur/ 'he is patient' /yuhfuọ/ 'he memorizes'
/yu'șur/ he squeezes' /yunguṣ/ 'it decreases'
/yuṭbux/ 'he cooks' /Yušrub/ 'he drinks'
But:
/yaọgaṭ/ 'he compresses' /yafọah/ 'he dishonors s.o. The following rule will account for the realization of /i/ as /u/:

b. If the second consonant is $/ \mathrm{r} / \mathrm{l} / \mathrm{g} /$ or $/ \mathrm{k} /$ and followed by a voiced non-guttural consonant, the stem vowel is a/u/. Exceptions, however, may exist. Examples:
/yuxrum/ 'he pierces' /yurgud/ 'he sleeps'
/yuxruž/ 'he goes out' /yungul/ 'he removes'
/yuskun/ 'he dwells' /yuḥkum/ 'he governs'
but:
/yašrah/ 'he explains' /yangac/ 'he, it soaks'

The following rule accounts for the stem vowel /u/:


On the other hand, the quality of the stem vowel as an /a/ can be determined by the following: First, If the pattern of the perfect is /CCiC/, the stem vowel is most likely an /a/ regardless of the types of consonants that the stem consists of. It should be noted that this is the only case where we have to consider the pattern of the perfect to determine the quality of the stem vowel of the imperfect. Consider these examples:

| Perfect | Imperfect |
| :--- | :--- |
| /ccic/ | /-ccac/ |
| /frih// | /yafrah/ 'he is happy' |
| /Өgil/ | /yaधgal/ 'it becomes heavy' |
| /ctiš/ | /yactaš/ 'he becomes thirsty' |
| /smin/ | /yasman/ 'he becomes fat' |
| /brid/ | /yabrad/ 'it becomes cold' |
| /šrib/ | /yušrub/ 'he drinks' |

Second, if the second or the third consonant of the stem of the imperfect is one of the gutturals, then the stem vowel is an /a/, but exceptions exist. Examples:
/-šrah/ 'to explain' /-bca@/ 'to send'
1 S. /našraḥ/
1 pl. /našraḥu/ $\rightarrow$ /našarḥu/
2 M. S. /tašrạ̣/
$/-b^{c} a \theta /$ 'to send'
/nab ${ }^{c} a \theta /$
$/ n a b^{c} a \theta u / \rightarrow / n a b a h \Theta u /$
$/ \operatorname{tab}^{\mathbf{c}} \mathrm{a} 日$ /

2 F. S. /tašraḥi/ $\rightarrow /$ tašarḥi/
$/$ tab $^{\mathbf{c}} \mathrm{Ca}$ i/ $\rightarrow /$ taba $^{\text {c }}$ 日i/
2 Pl. /tašraḥu/ $\rightarrow /$ tašarḥu/
$/$ tab $^{c}$ a $a u / \rightarrow /$ taba $^{c}$ eu/
3 M. S. /Yašraḥ/
/yabcae/
3 F. S. /tašraḩ/
/tabcae/
3 Pl. /yašraḥu/ $\rightarrow$ /yašarḥu/
$/$ yab $^{\mathbf{c}} \mathrm{a} 日 \mathrm{u} / \rightarrow /$ yaba $^{\mathrm{c}}{ }^{\text {eu }} /$
Other examples that include guttural consonants as their second or third radicals:
/yarfac/ 'he lifts' /yafham/ 'he understands'
/yalcan/ ' he curses' /yamọ̀aǵ/ 'he chews s.th.'
/yafxar/ 'he is proud' /yagra/ $\rightarrow$ yaqra?/ 'he reads'
Hence, the following rule will account for the quality of the stem vowel as an /a/:


The foregoing conjugations of the imperfect show that verb forms which are repersented by diagram (2) above, i.e., verb stems with prefixes and suffixes, have undergone some phonological processes. That is, a verb whose stem vowel is an /a/ has metathesis at work. The stem vowel /a/ metathesizes with the second radical of the stem whenever the verb stem is appended by suffixes. On the other hand, if the stem vowel is /i/ or /u/, it undergoes syncope. This is so, because such vowels are high unstressed vowels in open syllabes and hence are subject to syncope. After the application of syncope, we have epenthesis at work where /i/ is inserted between the
first and second radicals to break up a cluster of three consonants. Then, the epenthesized vowel alternates between a high front vowel and a high back vowel, i.e., /i/ and /u/, respectively.

Moreover, the vowel /i/ of the prefixes /ni-/, /ti-/ and /Yi-/ is in harmony with the verb stem as the above verb forms denote. Such vowel harmony is found in some other verb forms as will be shown later on.

As for Forms II, III, VII, VIII and $X$, the imperfect stem vowel is always an /i/ which may undergo the process of syncopation in a specific environment. Forms II and III have the following patterns /-Caccic/ and /-Caacic/, respectively. Consider these examples:

Form II
/-gaddim/ 'to offer'
1 S. /ngaddim/
1 Pl. /ngaddimu/ $\rightarrow /$ ngadmu/
2 M. S. /tgaddim/
2 F. S. /tgaddimi/ $\rightarrow /$ tgadmi/
2 Pl. /tgaddimu/ $\rightarrow /$ tgadmu/
3 M. S. /Ygaddim/
3 F. S. /tgaddim/
3 Pl. /Ygaddimu/ $\rightarrow /$ Ygadmu/

Form III
/-saafir/'to travel'
/nsaafir/
/nsaafiru/ $\rightarrow /$ nsaafru/
/tsaafir/
/tsaafiri/ $\rightarrow / t s a a f r i /$
$/$ tsaafiru/ $\rightarrow /$ tsaafru/
/ysaafir/
/tsaafir/
/Ysaafiru/ $\rightarrow /$ Ysaafru/ If we look at the above conjugation, we will notice that some phonological processes have taken place which are as follows:

1. The vowel /i/ of the prefixes has been syncopated because it is a high unstressed vowel in open syllables. Such syncopation, however, occurs in all Form II and Form III verbs. The following fomulated rule accounts for the deletion of the vowel of the prefix:

2. The stem vowel is also syncopated due to the attachment of suffixes, which creates the environment for syncope to be operative.
3. In Form II, the process of degemination is at work because of the deletion of the stem vowel where the underlying geminate /dd/ is shown as /d/ in surface representation.

$$
\mathrm{C}_{\mathrm{i}} \mathrm{C}_{\mathrm{i}} \longrightarrow \mathrm{C}_{\mathrm{i}} / \mathrm{C}_{\mathrm{i}} \longrightarrow \mathrm{C}+\mathrm{V}
$$

Now consider the following examples from Forms VII and VIII which have the patterns /-ncacic/ and /-ctacic/:

Form VII Form VIII
$/-n^{c} a z i m /$ 'to be invited'/-žtamic/ 'to meet'
1 S. /nincazim/ /nižtamic/
1 Pl. /nincazimu/ $\rightarrow /$ nin $^{c}$ azmu/ /nižtamicu/ $\rightarrow / n i z ̌ t a m ~ c u / ~$
2 M. S. /tincazim/ /tižtamic/
2 F. S. /tincazimi/ $\rightarrow / \operatorname{tin}^{c}$ azmi/ /tižtamic ${ }^{c} / \rightarrow /$ tižtam $^{c} i /$
2 Pl. /tin ${ }^{c} a z i m u / \rightarrow / \operatorname{tin}^{c} a z m u / /$ tižtami $^{c} u / \rightarrow /$ tižtam $^{c} u /$
3 M. S. /yinªzim/ /Yižtamic /

3 F.S. /tincazim/ /tižtami ${ }^{\mathrm{c}} /$

The observeable change about the above conjugation is the deletion of the stem vowel as a result of suffix attachment, i.e., when verb stems are appended by suffixes.

With regard to Form $x$ verbs, they have the pattern /staccic/. They are conjugated as the following paradigm shows:
/-staxdim/ ' to use'

1 S. /nistaxdim/
1 Pl. /nistaxdimu/ $\rightarrow /$ nistaxdmu/ $\rightarrow /$ nistaxidmu/
2 M. S. /tistaxdim/
2 F. S. /tistaxdimi/ $\rightarrow /$ tistaxdmi/ $\rightarrow /$ tistaxidmi/
2 Pl. /tistaxdimu/ $\rightarrow$ /tistaxdmu/ $\rightarrow$ /tistaxidmu/
3 M. S. /yistaxdim/
3 F. S. /tistaxdim/
3 Pl. /yistaxdimu/ $\rightarrow$ /yistaxdmu/ $\rightarrow$ /yistaxidmu/
A glance at the above paradigm shows that syncope and epenthesis are operative in Form $X$ verbs due to the attachment of suffixes. These two processes, i.e., syncope and epenthesis, are similar to those processes mentioned earlier in Form I of imperfect verbs.

Thus, it appears that the deletion of the stem vowel of the imperfect in Forms $I$, II, III, VII, VIII and $X$ is accounted for by the phonological rule of syncope. Such a rule may be formulated as follows:


Forms $V$ and VI have the stem vowel /a/. Their patterns are /-tcaccac/ and /-tcaacac/ respectively. The conjugational process of these two forms resutlts in two variants when such forms are appended by suffixes. The following examples illustrate this point:
1 S. /nitcallam/ /nitfaaham/

1 Pl. /nitcallamu/~/nitcalmu/ /nitfaahamu/~/nitfaahmu/
2 M. s. /titcallam/ /titfaaham/
2 F. S. /titcallami/~/titcalmi/ /titfaahami/~/titfaahmi/
2 Pl. /titcallamu/~/titcalmu/
/titfaahamu/~/titfaahmu/
3 M. S. /yitcallam/
/yitfaaham/
3 F. S. /titcallam/
/titfaaham/
3 Pl . /yitcallamu/~/yitcalmu/ /yitfaahamu/~/yitfaahmu/
The foregoing paradigm shows that there are two alternate forms due to the attachment of suffixes to the verb stems. That is, the stem vowel is maintained in one form and elided in the other form. The elision of the stem vowel/a/ is either considered as an exception to the rule, since it is a low vowel, or considered analogous to the other forms which delete the stem vowel /i/ whenever suffixes are appended to their stems, i.e., Forms I, II, III, VII, VIII and X. In Form $V$,
the process of degemination is also operative due to the syncopation of the stem vowel.

It should be pointed out that all sound verbs which were presented in the derivation section are conjugated in the same manner as the above examples.

### 3.3.2.2 Doubled Verbs:

In this section, some representative examples of the conjugational process of doubled verbs will be presented and accounted for. Consider the following examples of Form I which have the general pattern /-CVCC/:

| 1 S . | /nrudd/ | $/ n^{\text {c idd }}$ / | /nžurr / |
| :---: | :---: | :---: | :---: |
| 1 Pl . | /nruddu/ | $/ n^{\text {c }}$ iddu/ | /nžurru/ |
| 2 M . S. | /trudd/ | $/ t^{\text {c }}$ idd/ | /tžurr/ |
| 2 F. S. | /truddi/ | $/ t^{\text {c }}$ iddi/ | /tžurri/ |
| 2 Pl . | /truddu/ | /t ${ }^{\text {c }}$ iddu/ | /tžurru/ |
| $3 \mathrm{M} . \mathrm{S}$. | /yrudd/ | $/ y^{\text {c }}$ idd/ | /Yžurr/ |
| 3 F. S. | /trudd/ | $/ t^{\text {cidd }}$ / | /tžurr/ |
| 3 Pl . | /yruddu/ | $/ y^{\text {c }}$ iddu/ | /Yžurru/ |

As these examples illustrate, the stem vowel alternates between a high front vowel and a high back vowel, namely, /i/ and /u/, respectively. Such alternation is not governed by any morphological or phonological rules. It should be pointed out that the stem vowel may, in rare cases, be an /a/ as in $/ y^{c} a \underset{\partial}{c} /$ / 'he, it bites'. The preceding examples also indicate
that the vowel of the imperfect prefixes has undergone syncopation.

As for Forms VII and VIII, the stem vowel is an /a/. There are no noticeable changes in the verb stems of these forms when they undergo the process of conjugation as the following examples show:
/-nọ̀amm/ 'to join' /-htamm/ 'to be concerned'
1 s. /ninọ̀amm/ /nintamm/
1 Pl. /ninọ̀ammu/ /nihtammu/
2 M.S. /tinọ̀amm/ /tintamm/
2 F. S. /tinọ̃ammi/ /tihtammi/
2 Pl. /tinọammu/ /tihtammu/
3 M. S. /yinờamm/ /yihtamm/
3 F. S. /tinọ̀amm/ /tihtamm/
3 Pl. /yinọ̀ammu/
/yihtammu/
Form $X$ doubled verbs have the stem vowel /i/ and its pattern is /stacicc/. This form does not undergo any noticeable changes when inflectional affixes are attached. Note the following conjugation:

1 s. /nistamirr/ /nistagiill/
1 Pl. /nistamirru/ /nistaǵillu/
2 M. S. /tistamirr/ /tistaǵill/
2 F. S. /tistamirri/ /tistaġilli/
2 Pl. /tistamirru/ /tistagillu/
3 M. S. /yistamirr/ /yistaġill/

3 F. S. /tistamirr/
/tistaǵill/
3 Pl. /yistamirru/
3.3.2.3 Hollow Verbs:

Hollow verbs are found in Forms I, VII, VIII and X. In Form $I$, the stem vowel alternates bewteen /ii/, /uu/ and /aa/. Form I has the general pattern /-CVVC/ which surfaces as /Cuuc/, /-Ciic/ and /-CaaC/. The first two patterns are regarded as regular ones, whereas the third pattern is considered an exception as will be shown below. Examples: /-guul/ 'to say' /-biic/ 'to sell'

1 S.
1 Pl.
/nguulu/
$/ n b i i^{c} u /$
2 M. S.
/tguul/
/tbiic/
2 F. S.
/tguuli/
/tbiici/
2 Pl.
/tguulu/
$/$ tbiic $_{u}$ /
3 M. S.
/yguul/
/Ybiic/
3 F. S.
/tguul/
/tbiic/
3 Pl
/yguulu/
$/ \mathrm{ybii}^{\mathrm{c}} \mathbf{u} /$

The underlying repersentations of the above two verbs are /gwul/ and /byic/. The process involved in the above conjugation is the assimilation of the glides /w/ and /y/ to the vowels immediately following them, creating, in turn, vowel length, i.e., /uu/ and /ii/, respectively. The glide /w/ and the vowel /u/ share the feature [tback] while the glide /y/ and the vowel /i/ share the feature [+front]. However, there are some instances where the assimilation of
the glides /w/ and /y/ to the vowels following them does not produce /uu/ or /ii/ but rather results in a long low vowel /aa/. Such instances may be considered exceptions as these examples indicate; /yxaaf/ </yixwuf/ 'he fears', /ybaan/ </Yibyin/ 'it appears' and /ynaam/</yinwum/ 'he sleeps'.

Forms VII and VIII have the patterns /-nCaac/ and /Ctaac/, respectivly. These two forms are conjugated regularly. The long vowel /aa/ is maintained with all inflectional affixes. Examples of these two forms include /yinbaa'/ 'it is sold', /yixtaar/ 'he chooses', /nixtaar/ 'I choose', /tixtaaru/ 'you (pl.) choose', /tixtaari/ 'you (f. s.) choose', /yinḥaz/ 'he sides with', /ninḥaaz/ 'I side with', /yinhaazu/ 'they side with', /yiltaam/ 'he is blamed', /tiltaamu/ 'you (pl.) are blamed'. As for /yinlaam/ 'he is blamed', it has low frequency.

Form X has the pattern /-staCiic/. The long vowel /ii/ is maintained with all the inflectional suffixes and it does not undergo any changes. Consider the following examples:
/-stafiid/'to benefit' /-staṭiic/ 'to be able'

| 1 | S | /nistafiid/ | /nistaṭiic/ |
| :--- | :--- | :--- | :--- |
| 1 | Pl. | /nistafiidu/ | /nistaṭiicu/ |
| 2 | M. | S. /tistafiid/ | /tistaṭiic/ |
| 2 | F. | S. /tistafiidi/ | /tistaṭiici/ |
| 2 | Pl. | /tistafiidu/ | /tistaṭiicu/ |
| 3 | M. | S. /Yistafiid/ | /yistaṭiic/ |
| 3 | F. | S. /tistafiid/ | /tistaṭiic/ |

## 3 Pl. /Yistafiidu/

/Yistaṭiicu/
For more examples of hollow verbs, the reader is referred to the section on derivation in this chapter.

### 3.3.2.4 Defective Verbs:

Defective verbs are found in all forms $I-X$. Form $I$ defective verbs have the general pattern /-CCV/ which surfaces as /-CCi/ or /-CCa/. That is, the stem vowel alternates between /i/ and /a/. The following conjugations illustrate this point:

| 1 | S | /nibni/ | /nalga/ |
| :--- | :--- | :--- | :--- |
| 1 | Pl. | /nibnu/ | /nalgu/ |
| 2 | M. S. | /tibni/ | /talga/ |
| 2 | F. S. | /tibni/ | /talgi/ |
| 2 | Pl. | /tibnu/ | /talgu/ |
| 3 | M. S. | /Yibni/ | /yalga/ |
| 3 | F. S. | /tibni/ | /talga/ |
| 3 | Pl. | /Yibnu/ | /yalgu/ |

The stem vowel /i/ or /a/ assimilates to the suffixes /i/ or /-u/ of the verb as the above examples indicate. Other examples of Form I defective verbs include /Yimši/ 'he walks', /yilwi/ 'he twists', /yagwa/ 'he becomes strong', /yansa/ 'he forgets' /yaṣa/ 'it becomes clear', /yirmi/ 'he throws' ...etc.

As for forms II, III, VII and VIII the stem vowel is always an /i/. This stem vowel /i/ is assimilated to the
vowels of the suffixes /i/ and /u/ which are the third feminine singular suffix and the plural suffixes. Forms II and III have the following patterns: /-CaCCi/ and /-Caaci/, respectively. Examples:

Form II /-sammi/ 'to name'
/nsammi/
/nsammu/
/tsammi/
/tsammi/
/tsammu/
/ysammi/
/tsammi/
/ysammu/

Form III
/-laagi/ 'to meet'
/nlaagi/
/nlaagu/
/tlaagi/
/tlaagi/
/tlaagu/
/ylaagi/
/tlaagi/
/ylaagu/

Other examples of Forms II and III defective verbs include /ygaddi/ 'he gives lunch', /yrabbi/ 'he rears' /ysaawi/ 'he makes equal' and /ynaadi/ 'he shouts; calls s.o.'

Forms VII and VIII have the patterns /-nCaCi/ and /Ctaci/. However, these two forms are conjugated in the same manner as Forms II and III above. Some examples of Forms VII and VIII include /yinṭawi/ 'it is folded', /yincami/ 'he becomes blind', /yištari/ 'he purchases', and /yirtami/ 'it is thrown'.

Forms V and VI have /a/ as their stem vowel, and they have the following two patterns: /-tcacca/ and /-tcaaca/, respectively. The prefix /t-/ of these two forms may undergo
the process of assimilation in certain environments as has been demonstrated earlier (see 3.2.1.2.3). Examples:

Form V
/-tcašša/
'to have dinner'
/nitcªšša/
/nit ${ }^{\text {C }}$ aššu/
/tit ${ }^{\text {c }}$ ašša/
/titcašši/
/titcašsu/
/yit ${ }^{c} a s ̌ s ̌ a /$
/titcašša/
/yit ${ }^{\text {c }}$ aššu/

Form VI
/-traaọ̀a/
'to come to terms'
/nitraaọ̀a/
/nitraaọ̀u/
/titraaọa/
/titraaọ̃i/
/titraaọ̃u/
/yitraaọ̃a/
/titraaọ̆a/
/Yitraaọ̀u/

As can be seen from the above conjugation the stem vowel /a/ in both forms gets assimilated to the vowels /i/, which is the third feminine singular suffix, and /u/, which is the plural suffix.

Form X defective verbs have the general pattern /-staccV/ which is realized as /-stacci/ or /-stacca/ in surface representation. That is, the stem vowel alternates between /i/ and /a/ in the same manner as Form I of defective verbs does. It should be kept in mind that the stem vowel /i/ or /a/ follows the same procedures mentioned earlier with all defective verbs which is the assimilation of the stem vowel to the vowels of the suffixes /i/ and /u/. Consider the following examples:

|  |  | ```/-stafti/ 'to seek legal advice'``` | /-stag̀na/ <br> 'to become rich' |
| :---: | :---: | :---: | :---: |
| 1 | S | /nistafti/ | /nistaġna/ |
| 1 | Pl. | /nistaftu/ | /nistagnu/ |
| 2 | M. S. | /tistafti/ | /tistaġna/ |
| 2 | F. S. | /tistafti/ | /tistag̀ni/ |
| 2 | P1. | /tistaftu/ | /tistaġnu/ |
| 3 | M. S. | /Yistafti/ | /yistaġna/ |
| 3 | F. S. | /tistafti/ | /tistaġna/ |
| 3 | Pl. | /Yistaftu/ | /yistagnu/ |

Other examples of Form $X$ defective verbs include /yistašwi/ 'he considers little', /yistad'i/ 'he calls upon s.o.' /yistaǵla/ 'he considers expensive' and /yistaөni/ 'he makes an exception'.

### 3.3.2.5 Initial /w/ and /y/ verbs:

Verbs with initial /w/ and /y/ may sometimes be conjugated as regular verbs, but at some other times they undergo some phonological processes depending on the form of the verb. Forms $I$, VIII and $X$ undergo some phonological processes while the other forms are conjugated as regular verbs, i.e., without any changes with regard to the /w/ or /y/. The following are representative examples from Form I:
1 S /wacadt/ /nuucid/ ( ${ }^{\mathrm{C}} \mathrm{D}$ ) 'to promise'

1 Pl. /wa ${ }^{\text {cadna/ /nuu }}{ }^{\mathrm{c}} \mathrm{du} /$
2 M. S. /wacadt/ /tuucid/

| 2 | F. S. | /wa ${ }^{\text {c adti/ }}$ | /tuu ${ }^{\text {c }}$ di/ |
| :---: | :---: | :---: | :---: |
| 2 | Pl. | /wacadtu/ | /tuu ${ }^{\text {c }}$ du/ |
| 3 | M. S. | /wa ${ }^{\text {cad/ }}$ | /yuucid/ |
| 3 | F. S. | /wacadit/ | /tuucid/ |
| 3 | P1. | /wa ${ }^{\text {cadu/ }}$ | /yuu ${ }^{\text {cau }}$ / |

Other examples include /yuuzin/ 'he weighs', /yooṣal/~/yuuṣal/ 'he arrives' /yuugaf/ ~ /yoogaf/ 'he stops; he stands up' and /yeebas/ 'it dries up'. It should be pointed out that the /w/ is deleted in the imperfect in MSA. In JDLA, however, the /w/ along with the preceding vowel of the prefix are either realized as /uu/ or as /00/. Regarding the /y/ as being the first radical of the verb, the only verb that $I$ think of is the one mentioned above. Because the first radical of the above verbs has undergone the process of vocalization or coalescence, the stem vowel of such verbs does not conform to the rules stated earlier for Form I sound verbs.

Form VIII verbs have the pattern /-ttaCic/ </wtaCic/. The /w/ assimilates to the infix /-t-/ of Form VIII verbs. The stem vowel of such verbs is an /i/. The following examples clarify this point:
/Yittaṣil/ </yiwtaṣil/ 'he gets in touch', /yittaḥid/ </yiwtaḥid/ 'he unites' and /yittažih/ </yiwtažih/ 'he goes (toward)'. The rule that accounts for the assimilation of /w/ to the infix /-t-/ of Form VIII is formulated as follows:

$$
\mathrm{w} \longrightarrow \mathrm{t} / \# \ldots+\mathrm{t}+\mathrm{VC}
$$

In Form $x$, the /w/, being preceded by the vowel /a/ of the prefix /sta-/, undergoes with /a/ the process of coalescence, i.e., /aw/ $\rightarrow / 00 /$. Form X has an /i/ as a stem vowel, and its pattern is /-stoocic/ </-stawcic/.

Consider the following:
/-stoorid/</-stawrid/ /-stootin/ </-stawtin/
'to import'

1 S
/nistoorid/
/nistoordu/
/tistoorid/
/tistoordi/
/tistoordu/
/yistoorid/
/tistoorid/
/yistoordu/
/nistooṭin/
/nistootnu/
/tistooṭin/
/tistooṭni/
/tistooṭnu/
/yistooṭin/
/tistooṭin/
/yistooṭnu/

As can be seen from the above examples, the stem vowel /i/ has been syncopated when the suffixes /i/ and /u/ are attached to the above verbs (see 3.5.2.1).

Forms II, III, V, VI and VII are conjugated like regular verbs. The following are representative examples:

Form II Form III
/-wazzic/'to distribute' /-waafig/ 'to agree'
1 S
/nwazzic/
/nwaafig/
Pl. $\quad /$ nwazz $^{c} u / \sim / n w a z^{c} u /$
/nwaafgu/
2

| M. S. | /twazzic/ | /twaafig/ |
| :--- | :--- | :--- |
| F. S. | /twazz $^{c} i / \sim / \operatorname{twaz}^{c} i /$ | /twaafgi/ |


|  | P1． | ／twazz ${ }^{\text {cu }}$／－／ $\operatorname{twaz}^{c} u$／ | ／twaafgu／ |
| :---: | :---: | :---: | :---: |
| 3 | M．S． | $/ \mathrm{Ywazzi}$／ | ／ywaafig／ |
|  | F．S． | ／twazzic／ | ／twaafig／ |
|  | Pl． | ／ywazz ${ }^{\text {cu }}$／－／ywaz ${ }^{\text {c }} \mathbf{u}$／ | ／Ywaafgu／ |

Forms V，VI and VII are exemplified by the following in successive order：／yitwaffar／＇it is abundant＇，／yitwaažah／ ＇he meets face to face＇and／yinwacid／＇he is promised＇．

## 3．3．2．6 Glottalized or hamzated Verbs：

Verbs which have among their radicals the glottal stop in the underlying representation are called glottalized or hamzated verbs．The glottal stop may occupy the first，second or third position in triliteral verbs．Most verbs that keep the glottal stop in the conjugational process are borrowings from CA or MSA．

Consider the following examples of Form I：／yaamur／ ＜／ya？mur／＇he orders＇，／yaaxud／＜／ya？xud／＇he takes＇and ／Yaakul／＜／ya？kul／＇he eats＇．These examples clearly indicate that the glottal stop is realized as vowel length．

In Form II，the glottal stop is being kept as part of the root as the following examples show where such cases are borrowings from MSA．
／－？a日日ir／
＇to influence＇ ／n？a日eir／

Pl．／n？aӨ日ru／～／n？aӨru／

2
M．S．／t？a日日ir／

```
/-?addib/
'to discipline'
/n?addib/
/n?addbu/ ~ /n?adbu/
/t?addib/
```



Form III hamzated verbs do not occur in this dialect, but Form IV, which does not exist in the dialect with all other verb types, does exist with the glottal stop as the first radical of the verb in the underlying representaion. This, however, might be a distorted borrowing from MSA. This is so because the glottal stop is maintained in the perfect but shows up as vowel length in the imperfect. Consider the following example which I can think of: /?aaman/ </?a?man/ 'he believed' and /yuumin/ </yu?min/ 'he believes'.

In Form $V$, the glottal stop is in most cases retained, but it is sometimes replaced by /y/ which is the case with Form II above. Examples: /Yit?akkad/ - /yityakkad/ 'he makes sure' and /yit?addab/ ~ /yityaddab/ 'he behaves well.'

Moreover, what has been said about the realization of the glottal stop as vowel length in Form $I$ above holds true for Form X. The following examples illustrate this point: /yistaažir/ </Yast?žir/ 'he rents' and /yistaanif/ </yasta?nif/ 'he appeals'.

When the glottal stop is retained in medial position, such instances are considerd classicism as in /yas?al/ 'he
asks'. However, speakers of JDLA often use the verb /yinsiid/ 'he asks' which has no glottal stop.

When the glottal stop is in final position underlyingly, it is deleted in all verb forms. In other words, verbs with final $/ ? /$ are treated in a manner similar to those verbs whose last radicals are /w/ or /y/. This may suggest that final /?/ verbs may be considered defective verbs, too, since they lose their final radical in surface representation. Consider the following examples of Form I which have the pattern /-cca/ </-cca?/:
/-gra/</-qra?/ 'to read' /-bda/</-bda?/ 'to begin'
1 S /nagra/ /nabda/

Pl. /nagru/ /nabdu/
2
M. S. /tagra/ /tabda/
F. S. /tagri/ /tabdi/

Pl. /tagru/ /tabdu/
3 M. S. /yagra/ /yabda/
F. S. /tagra/ /tabda/

Pl. /yagru/ /yabdu/
Notice that the stem vowel /a/ of the above verbs assimilates to the vowels of the suffixes /i/ and /u/ which is the case with all defective verbs as has been demonstrated ealier. This assimilatory process of the stem vowel to the vowels of the suffixes applies to all final /?/ verbs. As a case in point, the stem vowel of Form I final /?/ verbs is always an /a/ whereas the stem vowel of Form I defective verbs
alternates between /a/ and /i/ as indicated above. This is probably due to the fact that the glottal stop is one of the gutturals which creates the environment for the the stem vowel to be an /a/ as stated earlier in Form 1 sound verbs. It seems that, although the glottal stop is deleted, the stem vowel remains an /a/.

Form II has the pattern /-CaCCi/ </-CaCCi?/ and Form VIII has the pattern /-CtaCi/ </-CtaCi?/. Examples: /ygarri/ 'he teachs', /yhanni/ 'he congratulates', /yibtadi/ 'he starts' and /yimtali/ 'it is filled'.

The conjugational process of quadriliteral verbs is presented and accounted for below. All basic quadriliteral verbs have the stem vowel /i/. Sound quadriliteral verbs have the pattern /-CaCCiC/. Examples:
/-taržim/ 'to translate' /-karkib/ 'to roll s.th.'

1 S /ntaržim/ /nkarkib/
Pl. /ntarižmu/ </ntaržimu/ /nkarikbu/ </nkarkibu/
2 M. S. /ttaržim/ /tkarkib/
F. S. /ttarižmi/ </ttaržimi/ /tkarikbi/ </tkarkibi/

Pl. /ttarižmu/ </ttaržimu/ /tkarikbu/ </tkarkibu/
3 M. S. /ytaržim/ /ykarkib/
F. S. /ttaržim/ /tkarkib/

Pl. /ytarižmu/ </ytaržimu/ /ykarikbu/ </ykarkibu/ Other examples of quadriliteral sound verbs include /yfatfit/ 'he cuts into pieces', /yzalzil/ 'he shakes',
/ysamsir/ 'he acts as a broker', /ywašwiš/ 'he whispers', /ydaržih/ 'he swings'...etc.

Quadriliteral hollow verbs have the pattern /-CooCic/: /ytoorix/ 'he dates historically' and /yṣoogir/ 'he insures s.th.'.

Quadriliteral defective verbs have the pattern /-CaCCi/. They are conjugated as Form II triliteral defective verbs. Examples:
/-maški/
'to shuffle (cards)' $\quad$ 'marki/
to write down (as a debt)'
1 S.
/nmaški/
Pl. /nmašku/
/nmarku/
2 M. S. /tmaški/
/tmarki/
F. S. /tmaški/
/tmarki/
Pl. /tmašku/ /tmarku/
3 M. S. /ymaški/
/ymarki/
F. S. /tmaški/
/tmarki/
Pl. /ymašku/ /ymarku/

With regard to derived quadriliteral verbs, they all have the stem vowel /a/. Sound derived quadriliteral verbs have the pattern /-tCaCCaC/. Examples: /Yitkarkab/ 'he, it is rolled' /yitfatfat/ 'it is cut into pieces', /yizzalbah/ </yitzalbah/ 'he is cheated' and /yiddaǵdaǵ/ </yitdaġdaǵ/ 'he is tickled'.

Hollow derived quadriliteral verbs have the pattern /tCooCaC/. They are examplified by /yittoorax/ it is dated historically' and /yiṣṣogar/ </yitṣoogar/ 'it is insured'.

As for defective derived quadriliteral verbs, they are conjugated like Form V defective verbs. They have the pattern /-tCaCCa/, e.g. /Yitmarka/ 'it is written down (as a debt)'.

### 3.3.3 Inflection of the Imperative:

The inflectional process of the imperative of triliteral as well as quadriliteal verbs will be dealt with in this section. The imperative in JDLA has a stem similar to the stem of the imperfect. Henceforth, it might be formed from the imperfect by the omission of the prefixes of the imperfect. In some cases, the imperative prefix is attached to the stem in order to obtain the correct form of the imperative while in other cases there is no need for such a prefix ,i.e, zero /Ø-/ prefix as will be illustrated later.

Imperatives in JDLA have three forms which reflect differences in gender and number, i.e., masculine singular, feminine singular and plural for both genders. The inflectional prefix of the imperative is either of the shape /?i-/ or /Ø-/. However, the vowel of the prefix may appear as an /a/ or /u/ when it is in harmony with the stem vowel of the verb as will be shown below.

Let us examine some data from the dialect to see how the inflectional process of the imperative works. The following are examples of Form I sound verbs:


Form I hollow verbs are exemplified by the following:

| /guul/ | /biic/, | /xaaf/, |
| :--- | :--- | :--- |
| say!' | 'fear! |  |
| /guul/ | /biic/ | /xaaf/ |
| /guuli/ | /biici/ | /xaafi/ |
| /guulu/ | /biicu/ | /xaafu/ |

The above examples of hollow verbs have zero prefix. As for doubled verbs, they also have zero prefix. Examples: /rudd/ 'return!' /hill/ 'open!'

2 M. S.
/rudd/
/hill/

| F. S. | /ruddi/ | /hilli/ |
| :--- | :--- | :--- |
| Pl. | /ruddu/ | /ḥillu/ |

Form $I$ imperative defective verbs are inflected as follows:

2 M. S.

| /-bni/ 'build!' | /-nsa/ 'forget!' |
| :--- | :--- |
| /?ibni/ | /?ansa/ |
| /?ibni/ </?ibni+i/ | /?ansi/ </?ansa+i/ |
| /?ibnu/ </?ibni+u/ | /?ansu/ </?ansa+u/ |

As can be seen from the above examples, the stem vowel of the imperative has assimilated to the vowels of the suffixes /i/ and /u/ which is the case with the imperfect of defective verbs discussed earlier (see 3.3.2.4).

Forms II and III imperative verbs are inflected without the attachment of prefixes. Examples: /waggif/ 'stop (m.s.)!', /ṣalli/ 'pray (m.s.)!', /saafir/ 'travel (m.s.)!' and /laagi/ 'meet (m.s.)!'.

The imperative formation of Forms $V, V I$ and $X$ is characterized by the optionality of the prefix /?i-/. Examples:

| Form | V : | $/(? i) t^{c} a l l a m /{ }^{\prime}$ learn (m.s.) !'. |
| :---: | :---: | :---: |
|  |  | /(?i)ssallaf/ 'borrow (money) (m.s.)!'. |
|  |  | /(?i)tgadda/ 'have lunch (m.s.) ''. |
| Form | VI: | $/(? \mathrm{i})$ tfaaham/ 'understand (one another) (m.s.)!' |
|  |  | /(?i) ššaawar/ 'consult (with) (m.s)!'. |
|  |  | /(?i)tlaaga/ 'meet (with) (m.s.)!'. |
| Form | X: | /(?i)stafsir/ 'inquire (m.s)!'. |

```
/(?i)stamirr/ 'continue (m.s.)!'.
/(?i)stafiid/ 'benefit (m.s)!'.
/(?i)stootin/ 'settle in (m.s.)!'.
/(?i)stadCi/ 'call upon s.o. (m.s.)!'.
```

Form VII verbs usually do not have imperative forms except in a few cases. This is probably due to the fact that most Form VII verbs are passive. Examples: /?inṣarif/ Vleave (m.s.)!', /?inhaaz/ 'side with (m.s.)!' and /?inọ̀amm/ 'join (m.s.) !'.

The imperative of Form VIII verbs has the following examples:


Notice that the stem vowel of the imperative form in the left column of the above examples has undergone the process of syncopation due to the attachment of the suffixes /i/ and /u/. The above examples represent sound, doubled and hollow verbs, respectively. Examples of imperative defective verbs are: /?ištari/ 'purchase (m.s.)!', /?is̆tari/</?ištari+i/ 'purchase (f.s.)!' and /?ištaru/ </?ištari+u/ 'purchase (pl.)!'.

The foregoing examples of the imperative were of triliteral verbs. The imperative forms of basic quadriliteral verbs are similar to the imperatives of Form II of triliteral
verbs, i.e., by having zero prefixes. Derived quadriliteral verbs, however, have no imperatives. Examples of basic quadriliteral verbs:
/taržim/ 'translate!' /maški/'shuffle (cards)!'

2 M. S. /taržim/
F. S. /tarižmi/ </taržim+i/ /maški/ </maški+i/

Pl. /tarižmu/ </taržim+u/ /mašku/ </maški+u/ Notice that the stem vowel of the defective quadriliteral verb above has assimilated to the vowels of the suffixes /i/ and /u/. Also, the stem vowel of the verb /taržim/ has undergone two phonological processec, i.e., syncope and epenthesis when appended by suffixes.

## CHAPTER IV

## MORPHOLOGY OF NOUNS

This chapter is devoted to the derivational as well as inflectional processes of nouns. Nouns in JDLA are classified into two types: derived and non-derived nouns. The latter include names of people, family relationship names, names of animals, trees, vegetables, fruits, body parts, physical objects....etc. Such nouns, however, have a wide variety of patterns. The following list is a representative sample of the above mentioned non-derived nouns:

| /cali/ male's name | /maryam/ | female's name |
| :--- | :--- | :--- |
| /?umm/ 'mother' | /bint/ | 'daughter' |
| /kalb/ 'dog' | /naxla/ | 'palm tree' |
| /filfil/ 'pepper' | /cnib/ | 'grapes' |
| /ceen/ 'eye' | /Jraac/ | 'arm' |
| /kursi/ 'chair' | /žabal/ | 'mountain' |
| /?ar(i)d/ 'land' | /saḥaab/ | 'clouds' |

In this section, the discussion will focus on the former type, i.e., the derived nouns.

### 4.1 Derivation:

The majority of nouns in JDLA are derived from verbs. Some nouns, however, may be derived from other parts of speech as ,e.g.
/?axx/ 'brother' $\rightarrow$ /?uxuwwa/ 'brotherhood'

```
/raažil/ 'man' }\longrightarrow\quad/ržuula/ 'manhood
/?amiin/ 'honest' \longrightarrow /?amaana/ 'honesty'
/taḥt/ 'below' \longrightarrow /tahtaani/ 'the down stairs (one)'
/foog/ 'above; upstairs' -> /foogaani/ 'the upstairs (one)'
```

In what follows, the derivational process of nouns from their corresponding verbs will be dicsussed in some detail.

### 4.1.1. Verbal Nouns:

Verbal nouns (VN) are nouns that are derived from their corresponding verbs. Verbal nouns differ in patterns and types according to the verbs they are derived from as will be illustrated later on. A VN expresses the underlying notion of the verb as opposed to concrete nouns, e.g. /ktaaba/ 'writing' ,i.e., the act of writing as opposed to /kaatib/ 'writer', the doer of the writing. Both forms /ktaaba/ and /kaatib/ are derived from the verb /katab/ 'to write'. Verbal nouns may denote an action, a state or a quality of their underlying verbs as will be presented in this chapter, (cf.Qafisheh, 1977 and Abboud, 1983). It should be pointed out that some verbal nouns have developed concrete meanings also as, e.g., /ṭalab/ 'requesting; a request', /zyaara/ 'visiting; a visit' and /camal/ 'working; a job'. In the latter cases of the above examples the concrete nouns have plural forms, i.e.,

```
/țalab/\longrightarrow/țalabaat/ 'requests', /zyaara/ \longrightarrow /zyaaraat/
'visits' and /'amal/ \longrightarrow /?acmaal/ 'jobs'.
```


### 4.1.1.1. Triliterals:

### 4.1.1.1.1 Form I:

Verbal nouns which are derived from Form I triliteral verbs are characterized by the feature of irregularity. In other words, form I verbal nouns have a wide variety of patterns which cannot be predicted from the types of verbs they are derived from. The most common patterns are, however, presented and accounted for below.

1. / $\mathrm{CaC}(\mathrm{i}) \mathrm{C} /$

Verb:
/rasam/ 'to draw'
/ọarab/ 'to hit'
/fataḥ/ 'to open'
/gatal/ 'to kill'
/Cažan/ 'to knead'
/wazan/ 'to weigh'
/wa'ad/ 'to promise'
/Jabah/ 'to slaughter'

Verbal Noun:
/ras(i)m/ 'drawing'
/ọarb/ 'hitting'
/fat(i)ḥ/ 'opening'
/gat(i)l/ 'killing'
/Caž(i)n/ 'kneading'
/waz(i)n/ 'weighing'
$/ w a^{c}(i) d /{ }^{\prime}$ promise'
/ Jab(i)h/ 'slaughtering'

The /i/ betweem parentheses in the above verbal nouns indicates that there are two variants of this pattern. That is, the two forms are heard in the speech patterns of speakers of JDLA.
2. /CCaaCa/

Verb:
/katab/ 'to write'
/daras/ 'to study'
/gara/ 'to read'
/Cabad/ 'to worship'
/raọac/ 'to suck'
/zaar/ 'to visit'
/zaad/ 'to increase'
/saag/ 'to drive'

Verbal Noun:
/ktaaba/ 'writing' /draasa/ 'studying'
/graaya/ 'reading'
/Cbaada/ 'worshiping'
/rọaaca/ 'suckling'
/zyaara/ 'visiting; a visit'
/zyaada/ 'increase'
/swaaga/ 'driving'

The VN /graaya/ above is derived from a final glottalized verb. However, the glottal stop is deleted in the perfect, imperfect and the imperative, but it is realized as /Y/ in the verbal noun. Such realization of /?/ as /Y/ may be accounted for by the presence of the long vowel /aa/ immediately preceding it and the short vowel /a/ which follows it immediately as the above example shows. Also, the last three examples above represent some of the verbal nouns which are derived from hollow verbs.
3. /CiC(i)C/

Verb: Verbal Noun:

```
/calam/ 'to come to know'
/ọhik/ 'to laugh'
/smin/ 'to be fat'
/kadab/ 'to tell lies'
```

4. /CCuuc/
verb: Verbal Noun:

Verbal Noun:

| /ražac/ 'to retutn' | /ržuuc/ 'returning' |
| :--- | :--- |
| /rakac/ 'to kneel down' | /rkuuc/ 'kneeling down' |
| /wagaf/'to stop; to stand up' /wguuf/ 'stopping; standing |  |
| up' |  |
| /waṣal/ 'to arrive' | /wşuul/ 'arriving' |
| /harab/ 'to run away' | /hruub/ 'running away' |
| 5. /Cicca/ |  |
| Verb: | Verbal Noun: |
| /xanab/ 'to steal' | /xinba/ 'stealing' |
| /našad/ 'to ask' | /nišda/ 'asking' |
| /xadam/ 'to serve, work' | /xidma/ 'service, work' |
| /gasam/ 'to divide' | /gisma/ 'dividing' |
| /nawa/ 'to intend' | /niyya/ 'intention' |

The last example of the above pattern is derived from a defective verb.
6. / $\mathrm{CuC}(u) C /$

Verb:

```
/šakar/ 'to thank'
/kafar/'to be an infidel'
/šrib/ 'to drink'
/ọalam/ 'to treat unjustly'
/baxal/ 'to be stingy'
    7. /CaCaC/
Verb:
/'amal/ 'to work'
```

Verbal Noun:
/šuk(u)r/ 'thanking'
/kuf(u)r/ 'infidelity'
/sur (u)b/ 'drinking'
/ọul(u)m/ 'injustice'
/bux(u)l/ 'greed'

Verbal Noun:
/'amal/ 'working; a job'

```
/țalab/ 'to request' /țalab/ 'requesting; a
request'
/sakan/ 'to live' /sakan/ 'living'
/friḥ/ 'to be happy' /farah/ 'happiness'
/mriọ/ 'to be sick' /maraọ/ 'sickness'
/smic/ 'to hear'
    8. /CaCaaCa/
/slim/ 'to be safe' /salaama/ 'safety'
/sahad/ 'to testify' /šahaada/ 'testifying'
    9. /CucCa/
/xaṭab/ 'to give a speech' /xuṭba/ 'speech'
/gawa/ 'to be strong'
/guwwa/ 'strength'
The second example of the above two verbal nouns is derived from a defective verb.
10. /ccaac/
Verb: Verbal Noun:
/ragad/ 'to sleep' /rgaad/ 'sleeping'
/hbil/ 'to be or become idiotic' /hbaal/ 'idiocy'
/țaab/ 'to become cooked' /țyaab/ 'cooking'
/ṣaam/ 'to fast' /ṣyaam/ 'fasting'
The last two examples of pattern (10) above are derived from hollow verbs where both sound and hollow verbs share the same pattern for their verbal nouns as shown above.
11. /CaCaaC/
/nažah / 'to succeed'
/nažaaḥ/ 'success'
```

/fasad/ 'to be rotten' /fasaad/ 'rottenness' /xrib/ 'to become ruined' /xaraab/ 'ruin'
12. /CaCCa/
/daca/ 'to invite' /dacwa/ 'inviting; invitation' /šaha/ to desire' /šahwa/ 'desiring; desire' The last two examples above are derived from defective verbs, but they share the same pattern with vNs of sound verbs.

Most of Form I hollow verbs have the following vN patterns:
13. /Cooc/

Verb:
/gaal/ 'to say'
/xaaf/ 'to fear'
/caam/ 'to swim'
/naam/ 'ro sleep'
14. /Ceec/

Verb:
$/ \mathrm{baa}^{\mathrm{c}} /$ 'to sell'
/ṣaad/ 'to hunt'
/saar/ 'to walk'
15. /CeeCaan/

Verb:
/maal/ 'to lean'
/saal/ 'to flow'
/faaḍ̃/ 'to overflow'

Verbal Noun:
/gool/ 'saying'
/xoof/ 'fearing'
/coom/ 'swimming'
/noom/ 'sleeping'

Verbal Noun:
/beec/ 'selling'
/seed/ 'hunting'
/seer/ 'walking'

Verbal Noun:
/meelaan/ 'leaning'
/seelaan/ 'flowing'
/feeḍaan/ 'overflowing'

| $/ \mathrm{baa}^{\text {c// }}$ 'to sell' | /bee ${ }^{\text {caan/ 'selling' }}$ |
| :---: | :---: |
| /țaar/ 'to fly' | /țeeraan/ 'flying; flight' |
| /haaž/ 'to be furious' | /heežaan/ 'fury' |
| /žaab/ 'to bring' | /žeebaan/ 'bringing' |
| 16. /CooCaan/ |  |
| Verb: | Verbal Noun: |
| /daax/ 'to be dizzy' | /dooxaan/ 'dizziness' |
| /šaaf/ 'to see' | /šoofaan/ 'seeing' |
| /laad/ 'to go around' | /loodaan/ 'going around' |
| /caam/ 'to swim' | /'oomaan/ swimming' |
| /daar/ 'to turn, rotate' | /dooraan/ 'turn(ing), |
| rotation' |  |
| 17. /Ciica/ |  |
| Verb: | Verbal Noun: |
| /'aaš/ 'to live' | /ciiša/ 'way of living' |
| /haar/ to be confused' | /ḥiira/ 'confusion' |
| /gaar/ 'to be jealous' | /ġiira/ `jealousy |
| 18. /maCiica/ |  |
| /caas/ 'to live' | $/ \mathrm{ma}^{\text {c }}$ iiša/ 'sort of living' |
| Doubled verbs have the following vN patterns: |  |
| 19. /CaCC/ ~ /CaCCaan/ |  |
| Verb: | l Noun: |
| /madd/ 'to stretch' | // - /maddaan/ 'stretching' |
| /Caḍọ/ 'to bite' | / ~ /caọọaan/ 'biting' |
| /hall/ 'to open; to solve' | l/ ~/hallaan/ 'opening; solving' |



In addition to patterns (21-23) above, some verbal nouns which are derived from defective verbs share some other patterns with verbal nouns of sound verbs (cf. patterns 5, 9 and 12 above).

A glance at all the preceding verbal noun patterns will determine that some of these patterns fall under some general patterns. Such generalized patterns are as follows: Patterns (1), (3) and (6) have the general pattern /CVC(V)C/ where the first vowel is realized as /a/, /i/ or /u/. The second vowel is either /i/ or /u/, and it is optional as indicated by the parentheses. Patterns (4) and (10) have the general pattern /CCVVC/ where the long vowel shows up as /aa/ or /uu/. Patterns (5), (9) and (12) have the general pattern /CVCCV/. The last vowel of this pattern is always an /a/ whereas the first vowel appears as an /i/, /u/ or /a/. As for patterns (13) and (14), their general pattern is /CVVC/. The long vowel of such a pattern surfaces either as a long mid front vowel or a long mid back vowel. Likewise, patterns (15) and (16) share the general pattern /CVCVVn/ where the long vowel in this pattern is always an /aa/, but the short vowel might be /e/ or /o/. Pattern (20) and the first alternant of pattern (19) have the general pattern /CVCC/. The stem vowel in this general pattern surfaces as an /a/, /u/ or /i/. Finally, patterns (21) and (22) have the general pattern
/CVCV/. The first vowel in such a pattern is always an /a/, but the last vowel may show up as an /i/ or /u/.

The discussion will turn now to verbal nouns of derived verbs. Such verbal nouns are, to some degree, predictable compared to those verbal nouns of Form I discussed above.
4.1.1.1.2 Form II:

Form II verbal nouns of strong verbs have the following pattern /ticciic/:

Verb:
/gaddam/ 'to offer'
/callam/ 'to teach'
/xabbar/ 'to tell'
/hallal/ 'to analyze'
/cayyan/ 'to oppoint'
/xawwaf/ 'to frighten'

Verbal Noun:
/tigdiim/ 'offering'
$/$ tic $^{\mathrm{C}}$ liim/ 'teaching'
/tixbiir/ 'telling'
/tiḥliil/ 'analyzing'
/ticyiin/ 'appointing'
/tixwiif/ 'frightening'

As can be seen from the above examples, the geminate consonants of the above verbs have been degeminated in the verbal nouns. Such degemination is accounted for by the fact that the degeminated consonants of the verbal nouns are followed immediately by a long vowel and preceded immediately by the first consonant of the stem.

In addition, verbal nouns of defective verbs have the following patterns:
a. /CaCa(a)/

Verb:
Verbal Noun:

| /gadda/ 'to give lunch' /cašša/ 'to give dinner' | /gada/ 'lunching; lunch' /caša/ 'dining; dinner' |
| :---: | :---: |
| /zakka/ 'to give alms' | /zakaa/ 'alms-giving' |
| /salla/ 'to pray' | /ṣalaa/ 'praying; prayer' |
| b. /taCiCCa/ </taCCiCa/ |  |
| /rabba/ 'to educate' | /taribya/ 'education' |
| /hayya/ 'to greet' | /tahiyya/ 'greeting' |
| c. /CCaCa/ |  |
| /waṣṣa/ 'to entrust' | /wṣaaya/ 'commandment; will' |
| d. /CCe/ |  |
| /ganna/ 'to sing' | /ġne/ 'singing' |
| It appears that ver | ans of patterns (a), (c) and |
| (d) above are considered patterns of Form I rather than |  |
| Form II, but they are taken here as Form II verbal noun |  |
| patterns; they do not follow the pattern of Form II as |  |
| illustrated above. |  |
| Verbal nouns that are derived from initial /w/ or /y/ |  |
| verbs have the following patterns which indicate that they |  |
| have undergone the processes of degemination as well as |  |
| coalescence: |  |
| /tooCiic/ and /teeCiic/ </tawCiic/ and /tayCiic/ |  |
| Verb: | Verbal Noun: |
| /wazza'/ 'to distribute' | /tooziic/ 'distribution' |
| /waggaf/ 'to stop' | /toogiif/ 'stopping' |
| /waṣsal/ 'to connect' | /tooṣiil/ 'connection' |

/wažžah/ 'to guide, direct' /toožiih/ ' directing; guidnace'
/yabbas/ 'to make dry' /teebiis/ 'drying; dryness'

### 4.1.1.1.3 Form III:

From III verbal nouns of strong verbs have the following patterns:
a. /mCaaCaCa/

Verb:

```
/saa'ad/ 'to assist
/waafag/ 'to agree'
/caawan/ 'to help'
/Caayan/ 'to examine'
b. /CCaac/
```

/xaaṣam/ 'to argue with'
/caarak/ 'to fight
c. /CaCaC/
/saafar/ 'to travel' /safar/ 'traveling'
Once again, verbal nouns of patterns (b) and (c) above are not of the same pattern of Form III mentioned above. However, such verbal nouns have taken Form I patterns. This is not unusual, because MSA may also follow the same procedure in taking Form I verbal noun patterns for Form III verbal noun patterns.

Verbal nouns that are derived from defective verbs have the following pattern: /mCaaCaa/ ~/mCaaCe/

Verb: Verbal Noun:


## /tfaaham/ 'to understand each other'

/tafaahum/ 'understanding each other'

### 4.1.1.1.5 Form VII:

Verbal nouns of Form VII verbs have the following patterns for strong verbs:
a. /ncicaac/

Verb: Verbal Noun:

```
/nsahab/ 'to withraw'
/nṣaraf/ 'to leave'
/nsažam/ 'to get along well'
``` well'
```

```
/nsihaab/ 'withdrawing'
```

/nsihaab/ 'withdrawing'
/nṣiraaf/ 'leaving'
/nṣiraaf/ 'leaving'
/nsižaam/ 'getting along

```
/nsižaam/ 'getting along
```

The above verbal nouns, however, are considered borrowings from MSA.
b. /CacCaan/

Verb:
/nọarab/ 'to be hit'
/nkasar/ 'to be broken'
/nờamm/ 'to be joined'
/nhazz/ 'to be shaken'
/nḥall/ 'to be solved; to be opened'
/nkawa/ 'to be cauterized' /nšawa/ 'to be grilled'

Verbal Noun:
/Ọarbaan/ 'hitting'
/kasraan/ 'being broken'
/ọammaan/ 'joining'
/hazzaan/ 'shaking'
/hallaan/ 'solving; opening'
/kawyaan/'cauterization'
/šawyaan/ 'grilling'

The last two examples of verbal nouns above did not undergo the process of coalescence, i.e., /aw/ $\rightarrow / 00 /$. This might be accounted for by the fact that /aw/ is followed immediately by /y/ which blocks /aw/ from undergoing the
process of coalescence. The last two examples above are derived from defective verbs.

Verbal nouns of Form VII hollow verbs have the following patterns:
a. /CoCaan/:
/ngaal/ 'to be said' /golaan/ 'saying'
b. /CeCaan/:
/nžaab/ 'to be brought' /žebaan/ 'bringing' /nbaac/ 'to be sold'

The examples in patterns (a) and (b) above may also take Form I patterns, i.e., /Cooc/ and /Ceec/: /gool/, žeeb/ and /bee ${ }^{\text {c/, respectively. }}$

### 4.1.1.1.6 Form VIII:

Form VIII verbal nouns of strong verbs have the following patterns:
a. /Cticaac/

Verb:
/žtamac/ 'to meet, gather'
/ḥtaram/ 'to respect'
/htafal/ 'to celebrate'
/ntaxab/ 'to elect'
/'taðar/ 'to apologize'

Verbal Nouns:
/žtimaa ${ }^{\text {c }}$ 'meeting, gathering'
/ḥtiraam/ 'respect'
/htifaal/ 'celebration'
/ntixaab/ 'electing; election'
/Ctiðaar/ 'apology'

The above examples of the verbal nouns are clearly borrowings from MSA.
b. /Cticaac/

Verb:
/htamm/ 'to be concerned'
/ḥtažž/ 'to protest'
/Ctazz/ 'to be proud'

Verbal Noun:
/htimaam/ 'concern'
/ḥtižaaž/ 'protest'
/Ctizaaz/ 'pride'

The above two patterns (a) and (b) are similar. The difference between them, however, lies in the fact that the second and the third radicals of pattern (b) are identical while in pattern (a) they are not. The examples in pattern (b) are also borrowings from MSA.
c. Caccaan/

Verb:
/htazz/ 'to be shaken'
/ltamm/ 'to rally'
/mtadd/ 'to be stretched'
/nṣabb/ 'to be poured out'
/rtama/ to be thrown'
/ltawa/ 'to be twisted'

Verbal Noun:
/hazzaan/ 'shaking' /lammaan/ 'gathering'
/maddaan/ 'stretching'
/ṣabbaan/ 'pouring'
/ramyaan/ 'throwing'
/lawyaan/ 'twisting'

The last two examples of the above verbal nouns are derived from defective verbs. The examples in pattern (c) above may take Form I patterns, i.e., /Cacc/ for doubled verbs and /Caci/ for defective verbs.

Verbal nouns of Form VIII hollow verbs have the following patterns:
a. /CCiyaac/

Verb:
Verbal Noun:
/ctaad/ 'to get used to'
/xtaar/ 'to choose'
/xtiyaar/ 'choosing; choice'
The above examples of verbal nouns are considered borrowings from MSA.
b. /CaaCa/
/ḥtaaž/ 'to need' /haaža/ 'need'

### 4.1.1.1.7 Form X:

Verbal nouns of Form $X$ verbs have the following pattern for sound and doubled verbs /sticcaac/: The second and the third radicals must be identical for verbal nouns of doubled verbs as the following examples illustrate: Verb:

| /stacmal/ 'to use' | /sticmaal/ 'using; use' |
| :--- | :--- |
| /stafham/ 'to inquire' | /stifhaam/ 'inquiry' |
| /stač̌al/ 'to be in a hurry' | /stič̌aal/ 'hurry' |
| /stamarr/ 'to continue' | /stimraar/ 'continuation' |
| /staradd/ 'to reclaim' | /stirdaad/ 'reclaiming' |
| /stacadd/ 'to be ready' | /sticdaad/ 'readiness' |

Verbal nouns of hollow verbs have this pattern /sticaaca/ which is a borrowing from MSA. Examples:

Verb:
/stafaad/ 'to benefit'
/staraaḥ/ 'to rest'
/stacaan/ 'to seek help'
/staṭaac/ 'to be able to'

Verbal Noun:
/stifaada/ 'benefit'
/stiraaha/ 'rest'
/sticaana/ 'help'
/stiṭaaca/ 'being able to'
Verbal nouns of defective verbs have the following pattern: /sticCa/.

```
Verb: Verbal Noun:
/sta\Thetana/ 'to except'
/stiӨna/ `excepting;
    exception'
/stadCa/ 'to summon' /stidca/ 'summons'
/sta'na/ 'to devote one's /sti'na/ 'devoting one's
    attention'
```

Verbal Noun:
/stiena/ 'excepting;
exception'
/sticna/ 'devoting one's attention'

### 4.1.1.2 Qauadriliterals:

```
Verbal nouns of basic quadriliteral verbs have the following patterns:
a. /CaCCaCa/
Verb: Verbal Noun:
/handas/ 'to engineer' /handasa/ 'engineering'
/tarjam/ 'to translate' /tarjama/ 'translating;
translation'
b. /taCicCiic/
Verb:
/karkab/ 'to roll'
Verbal Noun:
/xalbaṭ/ 'to mix things up'
/takirkiib/ 'rolling' /taxilbiiṭ/ 'mixing up'
/šacbaṭ/ 'to climb'
/tašicbiiṭ/ 'climbing'
/zalbah/ 'to trick'
/tazilbiiḥ/ 'tricking'
c. /taCoCiic/
/ṣoogar/ 'to insure s.th.' /taṣogiir/ 'insuring s.th.'
With regard to verbal nouns of derived quadriliteral verbs, they share the same patterns of verbal nouns of basic quadriliteral verbs.
```


### 4.1.2 Instance Nouns:

Instance nouns are nouns that indicate a single occurrence of the action described by the verbal noun. Instance nouns are derived from verbal nouns by the suffixation of /-a/ to a given verbal noun with appropriate stem changes. Instance nouns have the following patterns: a. /CaCCa/

Verbal Noun:
/ọarib/ 'hitting'
/xanig/ 'choking'
/ragis/ 'dancing'
/šabiḥ/ 'looking'
b. /CiCCa/
/ọiḥik/ 'laughing'
/kiðib/ 'lies'
/licib/ 'playing'
/ribiḥ/ 'gaining, winning'

Instance Noun:
/ọarba/ 'one hit'
/xanga/ 'a choke'
/ragṣa/ 'a dance'
/šabḥa/ 'one look'
/ọiṇka/ 'a laugh'
/kioba/ 'a lie'
/licba/ 'a game, a play'
/ribḥa/ 'a gain, a win'

It is apparent that the above two patterns share one general pattern which is /CVCCV/. The second vowel /i/ in the examples of patterns (a) and (b) has undergone the process of syncopation because it is a high short unstressed vowel in an open syllable.
c. /CeeCa/ and /CooCa/

Verbal Noun:
/beec/ selling'
/xoof/ 'fear'

Instance Noun: /beeca/ 'a purchase' /xoofa/ 'a fear'
/noom/ 'sleep' /nooma/ 'a period of sleep'
/coom/ 'swimming'
/'ooma/ 'one swim'
The rule that accounts for the derivational process of instance nouns from their corresponding verbal nouns is formulated as follows:
$\varnothing \longrightarrow a /[[$ verbal noun $]+\ldots]$ instance noun

### 4.1.3 Unit Nouns:

Unit nouns are derived from collective nouns by the addition of the suffix /-a/ with appropriate stem changes. They denote an individual unit or item of the underlying noun. Unit nouns have the following patterns:

1. /CVCCV/

The above general pattern is realized in surface representaion as /CaCCa/, /CiCCa/ and /CuCCa/. Examples:

Collective Noun:
/tamir/ 'dates'
/naxal/ 'palm trees'
/šacar/ 'hair'
/nahal/ 'bees'
/ ${ }^{\text {n }}$ nib/ 'grapes'
/fiṇim/ 'coal, charcoal'
/xubiz/ 'bread'
/bagar/ 'cows'
/ḥumus/ 'chick peas'
2. /CVVCV/

Unit Noun:
/tamra/ 'a date'
/naxla/ 'a palm tree'
/šacra/ 'a hair'
/nahla/ 'a bee'
/'inba/ 'a grape'
/fiḥma/ 'a piece of coal'
/xubza/ 'loaf of bread'
/bugra/ 'a cow'
/humṣa/ 'a chick pea'

This pattern shows up as /CeeCa/, Cuuca/, /CooCa/ and /CiiCa/. Examples:

Collective Noun:
/leel/ 'night'
/huut/ 'fish'
/fuul/ 'fava beans'
/xuux/ 'peaches'
/mooz/ 'bananas'
/looz/ 'alomonds'
/riiš/ 'feathers'
3. /CVCCVVCV/

The above general pattern appears in surface representation as /CaCCaaCa/, CicCaaCa/ and /CiCCiiCa/. Examples:

Collective Noun:
/mašmaaš/ 'apricots'
/rummaan/ 'pomegranates' /rummaana/ 'a pomegranate'
/šammaam/ 'musk-melon'
/tiffaaḥ/ 'apples'
/dillaac/ 'watermelons'
/biṭṭix/ 'contaloupes'
4. /CVCVCV/ $\rightarrow / \mathrm{CaCaCa} /$

Collective Noun:
/warag/ 'paper, leaves' /waraga/ 'a piece of paper, a leaf'

## Unit Noun:

/leela/ 'a night, one night'
/huuta/ 'a fish'
/fuula/ 'a fava bean'
/xuuxa/ 'a peach'
/mooza/ 'a banana'
/looza/ an almond'
/riiša/ 'a feather'

```
/samak/ 'fish' /samaka/ 'a fish'
    5. /CVCVVCA/ \longrightarrow /CaCaaCa/
Collective Noun:
/dažaaž/ 'chichen' /dažaaža/ 'a hen'
/hamaam/ 'pigeon' /hamaama/ 'a pigeon'
6. /CCVVCV/ \(\rightarrow\) /CCaaCa/
Collective Noun: Unit Noun: /xyaar/ 'cucumber' /xyaara/ 'a cucumber'
7. /CvCVVCCV/ \(\longrightarrow / C a C a a C C a /\)
/ṭamaaṭim/ 'tomatoes' /ṭamaaṭma/ 'a tomato'
The derivational process of unit nouns from collective nouns may result in some phonological processes as vowel deletion, metathesis or vowel assimilation as the preceding examples indicate. The above examples show that unit nouns have many patterns depending on the patterns of the collective nouns which they are derived from. The above patterns of unit nouns, however, are by no means exhaustive but rather representative samples of the most common patterns of unit nouns.
Thus, the rule that accounts for the derivational process of unit nouns from their corresponding collective nouns, with or without some internal vowel changes, may be formulated as follows:
```

$$
\varnothing \longrightarrow a /[[\text { collective noun }]+\ldots]
$$

### 4.1.4 Feminine Nouns:

Some feminine nouns are derived from their corresponding masculine nouns by the addition of the feminine morpheme /-a/. Some other nouns, however, are inherently feminine, i.e., with or without the feminine morpheme /-a/. In this section the focus will be on feminine nouns that are derived from their corresponding masculine nouns whether referring to human beings or some animals.

| Masculine Nouns: | Feminine Nouns: |
| :---: | :---: |
| /žadd/ 'grandfather' | /žadda/ 'grandmother' |
| /xaal/ 'maternal uncle' | /xaala/ 'maternal aunt' |
| /camm/ 'paternal uncle' | /camma/ 'paternal aunt' |
| /fallaah/ 'farmer' | /fallaaha/ 'farmer' |
| /xaddaam/ 'servant' | /xaddaama/ 'servant' |
| /kalb/ 'dog' | /kalba/ 'bitch' |
| /hmaar/ 'donkey' | /hmara/ 'female donkey' |
| /gird/ 'monkey' | /girda/ 'female monkey' |

The above examples did not undergo any changes regarding the stems; the following examples undergo some phonological processes, i.e., degemination and/or syncope: Masculine Nouns: Feminine Nouns: /mudarris/ 'teacher' /mudarsa/ 'teacher' /ṭaalib/ 'student' /țaalba/ 'student' /Caamil/ 'worker'
/'aamla/ 'worker' /msaafir/ 'traveler' /msaafra/ 'traveler'

Nouns that end with a /u/ or /i/ change these vowels into /w/ or /y/, respectively, whenever the feminine suffix /-a/ is attached to such nouns provided that the nouns ending with /i/ are not nisba (i.e., relative) nouns. Examples:

Masculine Nouns: Feminine Nouns:
/'uọ̀u/ 'member' /'uọ̀wa/ 'member'
/haawi/ 'amateur' /haawya/ 'amateur'
With regard to nisba nouns which end with /i/, the formation of feminine nisba nouns from their corresponding masculine nisba nouns is achieved through the suffixation process of /-yya/ Examples:

Masculine nisba Nouns: Feminine nisba Nouns:
/maṣri/ 'Egyptian' /maṣriyya/ 'Egyptian'
/'arabi/ 'Arab; Arabic' /Carabiyya/ 'Arab; Arabic'
/turki/ 'Turkish; Turk' /turkiyya/ 'Turkish; Turk'
(see 5.1.2.2 for mor details).

### 4.1.5 Locative Nouns:

Locative nouns designate the location where the action expressed by the underlying verb takes place. Locative nouns have the following patterns:

1. /maccac/

| /katab/ 'to write' | /maktab/ 'office' |
| :--- | :--- |
| /țabax/ 'to cook' | /maṭbax/ 'kitchen |
| /camal/ 'to work, do' | /macmal/ 'factory' |
| /ṣanac/ 'to manufacture' | /maṣna / 'factory' |

```
/1cib/ 'to play' /malcab/ 'playground'
    2. /maCCiC/
/žalas/ 'to sit' /mažlis/ 'chamber, assembly'
/sažad/ 'to prostrate' /masžid/ 'mosque'
/sakan/ 'to reside' /maskin/ 'residenece
    3. /maCaCCa/ </maCCaCa/
/daras/ 'to study' /madarsa/ </madrasa/ 'school'
/katab/ 'to write' /makatba/ </maktaba/ 'library;
/ḥakam/ 'to rule' /maḥakma/ </maḥkama/ 'law court'
    Locative nouns in pattern (3) above have undergone the
process of metathesis (see 2.5.7).
    4. /maCCa/
/raca/ 'to graze' /marca/ 'pasture'
/laža/ 'to seek refuge' /malža/ 'shelter'
/žara/ 'to run' /mažra/ 'course (of water)'
    5. /macaac/
/ṭaar/ 'to fly' /maṭaar/ 'airport'
/kaan/ 'to be, exist' /makaan/ 'place'
    As can be seen from the preceding examples locative
nouns are characterized by the prefix /ma-/ which might be
accampanied by the suffix/-a/ along with some internal
vowel change in some cases. Patterns (1) and (2) have the
general pattern /macCVC/. Patterns (4) and (5) are
characteristic of locative nouns that are derived from
defective and hollow verbs, respectively.
```

The rule that accounts for the derivational process of locative nouns from their corresponding verbs, with or without internal vowel change, may be formulated as follows:


### 4.1.6 Instrumental Nouns:

These nouns denote an instrument used to accomplish an action described by the underlying word. Most instrumental nouns are derived from verbs and have the following patterns:
a. /mVCCVC/ $\rightarrow$ /maCCic/, /micCic/ and /micCac/:

Underlying Word: Instrumental Noun:
/barad/ 'to file' /mabrid/ 'file'
/nassaf/ 'to dry' /mansif/ 'towel'
/minžil/ 'sickle'
/xayyaṭ/ 'to sew' /mixyaṭ/ 'awl'
b. /mVCCVVC/ $\rightarrow$ /muccaac/ and /micCaac/
/harae/ 'to plow' /muḥraae/ 'plow'
/nagar/ 'to peck' /mungaar/ 'beak'
/fataḥ/ 'to open' /miftaah/ 'key'
/našar/ 'to saw apart' /minšaar/ 'saw'
/mindaaf/ 'hunting trap'
c. /muCaCCa/ </mucCaCa/
/kanas/ 'to sweep' /mukansa/ </muknasa/ 'broom'
d. /maCaCCa/ </maCCaCa/

| /țarag/ 'to hammer' | /maṭarga/ </maṭraga/ 'hammer' |
| :--- | :--- |
| /caṣar/ 'to press' | $/ \mathrm{ma}^{\mathrm{c}} \mathrm{as} r \mathrm{ra} /$ </macṣara/ 'oil press' |

Patterns (c) and (d) above which underwent a metathesis process share one general pattern /mVCVCCV/ </mvCCaCa/.
e. /macacc/
/gaṣs/ 'to cut' /magaṣs/ 'scissors'
f. /Caccaaca/
/țaar/ 'to fly' /ṭayyaara/ 'airplane'
/saar/ 'to walk' /sayyaara/ 'car'
/'ažan/ 'to knead' /'ažžaana/ 'dough kneader'

### 4.1.7 Occupational Nouns:

These nouns refer to persons who have certain occupations or vocations. Feminine occupational nouns are formed by the addition of the feminine morpheme /-a/ to their corresponding masculine occupational nouns, with appropriate stem changes. Such nouns are mainly derived from verbs. They have the following patterns:
a. /CaCCaaC(a)/

Occupational nouns of this pattern are derived from either form I or Form II verbs:
Underlying Verbs: Occupational Nouns:
/ṭabac/ 'to print' /țabbaac/ 'typist' /țabbaaca/ /fallaḥ/ 'to cultivate' /fallaaḥ/ 'farmer' /fallaaha/ /xayyaṭ/ 'to sew' /xayyaaṭ/ 'tailor' /xayyaaṭa/

| /ragas / 'to dance' | /raggaas / | 'dancer' | /raggaaṣa/ |
| :---: | :---: | :---: | :---: |
| /rasam/ 'to draw' | /rassaam/ | 'artist' | /rassaama/ |
| /xabaz/ 'to bake' | /xabbaaz/ | ' baker' | /xabbaaza/ |
| /xadam/ 'to serve, work, | /xaddaam/ | 'servant' | /xaddaama / |
| /saag/ 'to drive' | /sawwaag/ | 'driver' | ------ |
| b. /CaaCic/ and /CaCCa/ |  |  |  |
| Nouns of this pattern are derived from Form I verbs: |  |  |  |
| Underlying Verbs: | Occupation | nal Nouns: |  |
| /katab/ 'to write' | /kaatib/ | 'clerk' | /kaatba/ |
| /camal/ 'to work' | /Caamil/ | 'worker' | /caamla/ |
| /haras/ 'to guard' | /haaris/ | 'guard' | ----- |
| c. /mucaccic/ and /mucacca/ |  |  |  |
| Pattern (c) occupati | ional nouns | s are deri | ved from Form | II verbs:

Underlying Verbs: Occupatioanl Nouns:
/darras/ 'to teach' /mudarris/ 'teacher' /mudarsa/
/fattaš/ 'to inspect' /mufattiš/ 'inspector' /mufatsa/
/?aððan/ "亡o call to prayer' /mu?aððin/ 'muezzin'
It should be kept in mind that the examples in pattern
(c) are considered borrowings from MSA.
d. /CaCiic(a)/

Underlying word:
/wazaara/ 'ministry'
/ṭibb/ 'medicine'
e. /CaaCi/

Occupational Nouns:
/waziir/ 'cabinet /waziira/
/ṭabiib/ 'physician' /țabiiba/

Occupational nouns of pattern (e) are derived from
Form I defective verbs:

| /gaḍa/ 'to judge' | /gaaḍi/ 'judge' |
| :--- | :--- |
| /raca/ 'to graze' | /raaci/ 'shepherd' |

f. /muCaCcic(a)/

Occupational nouns of pattern (f) are derived from quadriliteral verbs and considered borrowings from MSA. Underlying Verbs: Occupational Nouns: /handas/ 'to engineer' /muhandis/'engineer'/muhandisa/ /taržam/ 'to translate' /mutaržim/'translator'/mutaržima/

### 4.1.8 Diminutive Nouns:

Diminutive nouns are derived from nouns or adjectives. "Diminutives indicate a small or insignificant variety of that which is designated by the underlying word. They may also indicate affection or endearment." (Qafisheh, 1977:90) Diminutive nouns sometimes denote contempt. The most common patterns of diminutive nouns are presented below:
a. /CCayyic/

Almost all diminutive nouns of this pattern are derived from nouns or adjectives that have a long vowel before the last radical. Such nouns and adjectives share this general pattern /C(V)CVVC/. Examples:

Underlying Word: Diminutives:
/ktaab/ 'book'
/ktayyib/
/xaruuf/ 'lamb' /xrayyif/
/lsaan/ 'tongue' /lsayyin/

| /samiin/ 'fat one (m.) | /smayyin/ |
| :--- | :--- |
| /ṣagiir/ 'young; little' | /ṣayyir/ |
| /habiib/ 'loved one (m.)' | /hbayyib/ |
| /gaṣiir/ 'short one' | /gṣayyir/ |

All the preceding examples of pattern (a) are masculine. As for feminine diminutive nouns and adjectives, they have the following pattern:
b. /CCay (y)Ca/

Underlying word:
/hamaama/ 'pigeon'
/dažaaža/ 'hen'
/ḥwaaza/ 'farm' /ḥway(y)za/
/ṣag̊iira/ 'young; little' /ṣğay(y)ra/
/samiina/ 'fat one (f.)' /smay(y)na/
/gaṣiira/ 'short one (f.)' /gṣay(y)ra/

All the above underlying nouns and adjectives in (b.) have one general pattern which is /C(V)CVVCV/.
c. /Cweecic/

Underlying Word:
/kaatib/ 'clerk (m.)'
/taazir/ `merchant (m.)
/saalim/ 'Salim (proper name)'
/ṣaaliḥ/ 'Salih (proper name)' /ṣweelị̣/
/saahil/ 'easy (m.)'

Diminutives:
/kweetib/
/tweezir/
/sweelim/
/sweehil/

The above underlying words are all masculine and have the pattern /CaaCic/. As for their feminine counterparts,
they have the following pattern /Caacca/ which shows up diminutively as:
d. /Cweecca/
/kaatba/ 'clerk (f)' /kweetba/
/saalḥa/ 'Saliha (f. proper name') /sweelha/
e. /CCeeCic/

This pattern is for masculine diminutives.
/maktab/ voffice (m.) /mkeetib/
/markaz/ 'center (m.) /mreekiz/
f. /CCeecca/

This pattern is for feminine diminutives. The underlying words for this pattern have undergone the process of metathesis as the following examples illustrate:

Underlying word:
/makatba/ </maktaba/ 'library' /mkeetba/
/maṭabca/ </maṭba'a/ 'print shop' /mṭeebca/
/mazar ${ }^{\text {c }} \mathrm{a} /$ </mazraca/ 'farm' /mzeerca/
/macaṣra/ </macṣara/ 'oil press' /meeṣra/
g. /CCeeCa/

This pattern is also for feminine diminutive nouns and adjectives.

Underlying Word:
/xubza/ 'bread' /xbeeza/
/gahwa/ 'coffee' /gheewa/
/hamra/ 'red (f.)' /ḥmeera/
/zarga/ 'blue (f.)' /zreega/
h. /CCeeCiic/

This pattern is characteristic of diminutive nouns that are derived from masculine nouns having a medial two consonant cluster or geminate consonants followed immediately by a long vowel. Examples:

Underlying Word:
/miftaah/ 'key'
/minšaar/ 'saw'
/sirwaal/ 'pants'
/gindiil/ 'candlestick' /šibbaak/ 'window'

Diminutives:
/mfeetiih/
/mnees̆iir/
/sreewiil/
/gneediil/
/šbeebiik/
i. /CCeeCiiCa/

This pattern is also for feminine diminutives. What has been said about the underlying words for pattern (h) above holds true for the underlying words of this pattern.

Underlying Word:

```
/wallaaca/ 'lighter'
/massaaḥa/ 'eraser'
/dillaaca/ 'watermelon'
/diržiiha/ 'swing'
    j. /CCayya/
/'aṣa/ 'stick' /cṣayya/
/bint/ 'girl' /bnayya/
    k. /Cweec/
```

Diminutives:
/wleeliica/
/mseesiiḥa/
/dleeliica/
/dreežiiṇa/
/cṣayya/
/bnayya/

This pattern is for masculine diminutives. Diminutives of this pattern are mostly derived from hollow stems.

## Examples:

Underlying Word:
/'uud/ 'twig, stick'
/xeeṭ/ 'thread'
/oiib/ 'wolf'
/ṣaṭil/ 'pail'

Diminutives:
/ ${ }^{\text {cweed / }}$
/xweet/
/Oweeb/
/sṭeel/

1. /CweeCa/

This pattern is for feminine diminutives. Diminutives of this pattern are mostly derived from hollow stems.

Examples:

Underlying word:

```
/Ceen/ 'eye'
```

/huuta/ 'fish'
/daar/ 'room' /dweera/
/naar/ 'fire'
/sooda/ 'black (f.)'
/canz/ 'goat'

Diminutives:
/ ${ }^{\text {weena/ }}$
/ḥweeta/
/nweera/
/sweeda/
/ ${ }^{\text {cneeza/ }}$

Finally, it should be kept in mind that some of the above patterns are similar in form; the only difference between some of them is the second radical which sometimes appears as /w/. The above choice, however, is made for the purpose of clarification.

### 4.2 INFLECTION:

Nouns in JDLA are inflected for gender and number.

### 4.2.1 Gender:

Gender of nouns in JDLA is either masculine or
feminine. 1. Masculine nouns:
Masculine nouns include the following:
a. Male proper names, e.g.:
/mhammad/ 'Mohammad' /saalim/ 'Salim'
/cali/ 'Ali' /hasan/ 'Hasan'
/xaliifa/ 'Khalifa' /muusa/ 'Moses'
b. Nouns referring to male human beings or male animals.
c. Nouns that are, by convention, treated and used as masculine nouns. Examples of (b) include:
/waalid/ 'father' /xaal/ 'maternal uncle (m.)'

```
/žadd/ 'grandfather'
    /raažil/'man'
/kaatib/ 'clerk (m.)' /'aamil/ 'worker (m.)'
/hṣaan/ 'horse (m.)' /xaruuf/ 'lamb (m.)'
/kalb/ 'dog (m.)' /Oiib/ 'wolf (m.)'
    As for nouns of group (c), the following are
representative examples:
/ktaab/ 'book' /baab/ 'door'
/hooš/ 'house' /suug/ 'market'
/kursi/ 'chair' /maktab/ 'office'
/šibbaak/ 'window' /galam/ 'pen'
```

/sirwaal/ 'pants' /duxxaan/ 'cigarettes; smoke'
/maṭbax/ 'kitchen' /maṭaar/ 'airport'
2. Feminine nouns:

Most feminine nouns in JDLA have the suffix /-a/, which is the feminine morpheme. Feminine nouns are detailed as follows:
a. Female proper names whether or not they end with the suffix /-a/. EXamples:
/faaṭma/ 'Fatima' /xadiiža/ 'Khadija'
/maryam/ 'Maryam' /zeenab/ 'Zaynab'
b. Nouns that refer to female human beings and female
animals whether or not they have the feminine morpheme /-a/ as the following examples illustrate:

| /bint/ 'girl' | /?umm/ 'mother' |
| :--- | :--- |
| /mara/ 'woman' | /?uxut/ 'sister' |
| /dažaaža/ 'hen' | /canz/ 'goat' |
| /naaga/ 'she-camel' | /nacža/ 'ewe' |

c. Feminine nouns that are derived from their corresponding masculine nouns by the addition of the feminine morpheme /a-/ which may include some personal names. Examples:

Masculine Nouns:
/camm/ 'maternal uncle'
/xaal/ 'maternal uncle'
/žadd/ 'grandfather'
/saalim/ 'Salim'

Feminine Nouns:
/'amma/ 'maternal aunt'
/xaala/ 'matenal aunt'
/žadda/ 'grandmother'
/saalma/ 'Salima'
/fatḥi/ 'Fathi'
/kalb/ 'dog'
/hmaar/ 'donkey'
/fathiyya/ 'Fathiya'
/kalba/ 'bitch'
/hmaara/ 'female donkey'
d. Instance and unit nouns which are derived from verbal and collective nouns, respectively (see 4.1 .2 and 4.1.3 above).
e. Nouns that are used and treated as feminine nouns whether or not they have the feminine marker /-a/. They include:

1. Body parts that come in pairs as, e.g.: /Ceen/ 'eye', /rižil/ 'leg', /wiðin/ 'ear' and /?iid/ ~ /yadd/ 'hand'.
2. Names of towns, cities and some countries, e.g.: /țraablis/ 'Tripoli' /binġaazi/ 'Binghazi' /liibya/ 'Libya' /tuunis/ 'Tunisia'
3. Some other nouns that are considered feminine by usage as:

| /šams/ 'sun' | /țariig/ 'road' |
| :--- | :--- |
| /?ariọ/ 'land' | /harb/ 'war' |
| /daar/ 'room' | /gamar/ 'moon' |
| /naar/ 'fire' |  |

In short, any noun that is inherently feminine, has a feminine referent or treated conventionally as feminine is considered in JDLA a feminine noun. The foregoing examples of both masculine and feminine nouns show, however, that
such nouns have a wide variety of patterns, which is a peculiar characteristic of singular nouns.

### 4.2.2 Number:

Nouns in JDLA have three numbers: singular, dual and plural.

### 4.2.2.1 Singular:

Singular nouns include count and mass nouns. Count nouns denote countable entities where they can be dualized or pluralized. Mass noun, on the other hand, are uncountable nouns, and hence they may neither be dualized nor pluralized. The following are examples of both types of nouns:

Count Nouns:
/ktaab/ 'book'
/galam/ 'pen' /dagiig/ 'flour'
/maṣna ${ }^{\text {c/ }}$ 'factory' /ḥaṭab/ 'wood'
/bint/ 'girl'
/raažil/ 'man'
/žabal/ 'mountain'

Mass Nouns:
/sukkar/ 'sugar'
/fiọ̣̣̃a/ 'silver'
/Jahab/ 'gold'
/gazza/ 'beach sand'

### 4.2.2.2 Dual:

Dual (D) nouns refer to two entities whether animate or inanimate excluding mass nonuns. Nouns undergo the process of dualization through the suffixation of the dual morpheme to a given singular noun whether it is masculine or feminine as will be illustrated below. The dual morpheme is /-een/
and /-teen/ for masculine and feminine nouns, respectively. The attachment of dual morphemes to singular nouns may result in some phonological processes as will be seen below.

1. Masculine Nouns:

Singular:

| /ktaab/ 'book | /ktaabeen/ 'two books' |
| :--- | :--- |
| /raažil/ 'man' | /raažleen/ 'two men' |
| /galam/ 'pen' | /galameen/ 'two pens' |
| /šaaric/ 'street' | /šaarceen/ 'two streets' |
| /kabiš/ 'ram' | /kabšeen/ 'two rams' |
| /?isim/ 'name' | /?ismeen/ 'two names' |
| /muus/ 'knife' | /muuseen/ 'two knives' |

Some of the above examples have undergone the process of syncope where the vowel /i/ before the last radical in the singular form has been deleted in the dual form (see 2.5.1).

Another feature of making dual nouns in JDLA is through the usage of the word /zooz/ 'pair' before plurals as, e.g.: /zooz wlaad/ 'two boys' /zooz hyaaš/ 'two houses' /zooz glaam/ 'two pencils' /zooz fallaaḥin/ 'two farmers' /zooz xayyaaṭiin/'two tailors' / 2002 saraawiil/ 'two pants'

If a masculine noun ends in /u/, such a vowel changes into /w/ in bisyllabic words as ,e.g.:

Singualr:
/dalu/ 'leather bucket'

Dual:
/dalween/ 'two leather buckets'

| /cuọ̀u/ 'member' | /'uọ̀ween/ 'two members' |
| :--- | :--- |
| /žiru/ 'puppy' | /žirween/ 'two puppies' |

Some nouns that end in /a/ are masculine and dualized by inserting /w/ or /y/ (depending upon the noun stem) between /a/ and the dual morpheme /-een/. Examples:

Singular:
/gada/ 'lunch'
/Caša/ 'dinner'
/mustašfa/ 'hospital'

Dual:
/ġadaween/
/Cašaween/
/mustašfayeen/ 'two hospitals'
With regard to masculine singular nouns that end in /i/, the /i/ changes into /y/ as the following examples illustrate:

Singular:
/žadi/ 'kid goat' /žadyeen/ 'two kid goats'
/gaaọ̀i/ 'judge'
/raaci/ 'shepherd'

Dual:
/gaaḍyyeen/ 'two judges'
/raacyeen/ 'two shepherds'

The dual of nisba (relative) nouns ending in /i/ takes /yy/ between the /i/ and the dual morpheme /-een/.

Examples:

Nisba Nouns:
/liibi/ 'Libyan'
/maṣri/ 'Egyptian'

Dual:
/liibiyyeen/ 'two Libyans'
/maṣriyyeen/ 'two Egyptians'
2. Feminine Nouns:

Feminine singular nouns that end in /a/ form their dual by the addition of the feminine morpheme /-teen/. Examples:

Singular:
Dual:

```
/ṭaawla/ 'table' /ọaawalteen/ 'two tables'
/madarsa/ </madrasa/ 'school' /madrasteen/ 'two schools'
/saaca/ 'watch, clock' /saacteen/ 'two watches'
/mraaya/ 'mirror' /mraayteen/ 'two mirrors'
/mara/ 'women' /marateen/ 'two women'
/xubza/ 'loaf of bread' /xubazteen/ 'two breads'
/șuura/ 'picture' /șuurteen/ 'two pictures'
```

The above examples indicate that if a singular noun ends in /CCa/, then the vowel /a/ metathesizes with the last radical whenever the dual morpheme suffix is added. Also, if a noun ends in /Ca/ preceded immediately by a long vowel, then the vowel /a/ is deleted when the dual morpheme /-teen/ is added.

The /t/ of the dual morpheme is deleted whenever the dual morpheme /-teen/ is suffixed to nouns that do not end in /a/. Examples:

| Singular: | Dual: |
| :--- | :--- |
| /daar/ 'room' | /daareen/ 'two rooms' |
| /naar/ 'fire' | /naareen/ 'two fires' |
| /bint/ 'girl' | /binteen/ 'two girls' |
| /faras/ 'mare' | /faraseen/ 'two mares' |
| /ceen/ 'eye' | /ceeneen/ 'two eyes. |

The inflectional rule of masculine and feminine dual
nouns may be formulated as follows:

$$
\begin{aligned}
& \varnothing \rightarrow \text { Infl. } /\left[\begin{array}{l}
{\left[\begin{array}{l}
\text { noun }] \\
{[+\mathrm{s} \cdot]}
\end{array}\right]}
\end{array}\right][+\mathrm{D}] \\
& \text { Inflection }=\left\{\begin{array}{l}
\text {-een } \\
\text {-teen }
\end{array}\right\}
\end{aligned}
$$

### 4.2.2.3 Plural:

JDLA has two kinds of plurals: sound plurals and broken plurals. The former are of two kinds: sound masculine and sound feminine plurals. A comment on the term sound masculine plurals is introduced below.

### 4.2.2.3.1 Sound Plurals:

4.2.2.3.1.1. Sound (Regular) Masculine:

It should be kept in mind from the outset that most masculine plural nouns of the above type refer to male human beings. They also refer to any group of people where there is at least one male. The inflectional suffix of sound (regular) masculine plural nouns is /-iin/. Sound (regular) masculine plural nouns have many patterns depending on the patterns of singular nouns which in turn have a wide variety of patterns. Examples:

Singular:
/muslim/ 'Muslim'
/mudarris/ 'teacher' /mitcallim/ 'educated' /muumin/ 'believer' /fallaah/ 'farmer' /nažžaar/ 'carpenter' /muhandis/ 'engineer'

Plural:
/musilmiin/</muslimiin/ 'Muslims' /mudarsiin/</mudarrisiin/'teachers' /mit'almin/ 'educated people'
/muumniin/ 'believers'
/fallaaḥin/ 'farmers'
/nažžaariin/ 'carpenters'
/muhandisiin/ 'engineers'

The foregoing examples, except for /fallah/ 'farmer' and /nažžaar/ 'carpenter', are of participle origin where most of them are occupational nouns. Some of the above examples are considered borrowings from MSA.

The following masculine plural nouns have alternate plural forms:

```
Singular: Plural:
```

/xaddaam/ 'worker' /xaddaama/ ~ /xaddaamiin/ 'workers'
/ḥarraa日/ 'plowman' /harraa日a/ - /harraaӨiin/ 'plowmen'
/fallaaḥ/ 'farmer' /fallaaha/ ~ /fallaaḥin/ 'farmers'
/žazzaar/ 'butcher' /žazzaara/ ~ /žazzaariin/'butchers' The plurals that are formed by the addition of /-a/ are similar in form to feminine singualr nouns. It appears that the plural suffix /-a/ is usually attached to some occupational nouns of the pattern /CaCCaac/ as the preceding examples indicate.

Nisba (relative) singular nouns form their sound (regular) masculine plurals by the addition of /-yy-/ immediately before the suffix /-iin/. Examples:
/liibi/ 'Libyan' /liibiyyiin/ 'Libyans'
/maṣri/ 'Egyptian' /maṣriyyiin/ 'Egyptians'
/suuri/ 'Syrian' /suuriyyiin/ 'Syrians'
/kweeti/ 'Kuwaiti' /kweetiyyiin/ 'Kuwaitis'
As for plurals of diminutives, the following are
examples:
/ṣgayyir/ 'little one' /ṣgayriin/ 'little ones'

| /gsayyir/ 'short one' | /gsayriin/ 'short ones' |
| :--- | :--- |
| /smayyin/ 'fat one' | /smayniin/ 'fat ones' |

The above plurals of diminutives have undergone two phonological processes which are syncope and degemination.

### 4.2.2.3.1.1.1 Sound Plural vs Regular Plural:

What has been termed sound masculine plural in the Arabic linguistic tradition of the classical language has to be investigated carefully and argued about in modern dialectal Arabic. The term sound implies that the singular form of a given noun has to be intact when such a noun is pluralized by the addition of the plural morpheme /-iin/, i.e., the consonants and the vowels remain the same except for the addition of the plural morpheme, e.g., $/ m u s l i m+i i n / ~ \rightarrow(/ m u s l i m i i n /) ~ ' M u s l i m s ', ~ / m i t c a l l i m+i i n / ~ \rightarrow ~$ (/mit'allimiin/) 'learners', /ṣgayyir+iin/ $\rightarrow$ (/ṣgayyiriin/) 'little ones'. But this is not the case in the investigated dialect where the plural forms of the above examples are /musilmiin/, /mitcalmiin/ and /ṣgayriin/, respectively. Such plural forms in the dialect have undergone some phonological processes, i.e, syncope, epenthesis and degemination. To call such nouns in their plural forms sound masculine plurals is somehow misleading and inaccurate because of the phonological processes they have undergone in the course of their pluralization process.

Since this is the case, the term regular masculine plural is proposed. Their regularity of having a fixed suffixed plural marker gives them the proposed term "regular masculine plurals". Henceforth, the term "regular masculine plural" is adopted unless proven otherwise. It is true that some nouns do not undergo any phonological process when they are pluralized, e.g., /nažžaar/ $\rightarrow$ /nažžaariin/ 'carpenters' and /fallaah/ $\rightarrow$ /fallaahiin/ 'farmers', but it is safe to include such nouns among the nouns that are termed regular masculine plurals.

### 4.2.2.3.1.2. Sound Feminine:

Sound feminine plural nouns are formed by the addition of the feminine morpheme /-aat/ to the singular form. When the singular noun ends in /-a/, the /-a/ assimilates to the vowel of the feminine morpheme /-aat/. This includes feminine singular nouns referring to human beings and some animals as well as feminine occupational nouns, instance nouns, unit nouns, nouns of participle origin, feminine nisba (relative) nouns and some other feminine nouns. Examples:
/țabiiba/ 'doctor' /țabiibaat/ 'doctors' /naczza/ 'ewe' /nač̌aat/ 'ewes' /țabbaaxa/ 'cook' /țabbaaxaat/ 'cooks' /țabbaca/ 'typist
/țabbaacaat/ 'typists' /ọarba/ 'one beat, one hit' /šažara/ 'tree'

```
/mudarsa/ 'teacher' /mudarsaat/ 'teachers'
/kaatba/ 'clerk' /kaatbaat/ 'clerks'
/mașriyya/ `Egyptian' /maṣriyyaat/ 'Egyptians'
/saaca/ 'watch, clock; hour' /saa'aat/ 'watches, clocks'
/ṭaawla/ 'table' /ṭaawlaat/ `tables
    Feminine singular nouns that end in a consonant usually
take broken plurals as, e.g.:
/naar/ `fire
/baṭin/ 'stomack' /bṭuun/ 'stomaches'
    Moreover, some masculine non-human singular nouns are
pluralized by the addition of /-aat/. Examples:
/talab/ 'application' /talabaat/ 'applications'
/maṭaar/ 'airport' /maṭaaraat/ 'airports'
/bayaan/ 'proclamation' /bayaanaat/ 'proclamations'
/hammaam/ 'bathroom' /hammaamaaat/ 'bathrooms'
    Some masculine singular nouns that end in /-a/ or /-e/
are pluralized by the insertion of /w/ or /y/ and the suffix
/-aat/. Examples:
/gada/ 'lunch' /ġadawaat/ 'lunches'
/'aša/ 'dinner' /Cašawaat/ 'dinners'
/rde/ 'woman's dress' /rdawaat/ 'woman's dress'
/mustašfa/ 'hospital' /mustašfayaat/ 'hospitals'
    The inflectional rule of regular masculine plurals and
sound feminine plurals is formulated as follows:
```

$$
\begin{aligned}
\varnothing & \rightarrow \text { Infl. } /\left[\begin{array}{l}
{\left[\begin{array}{l}
{[\text { noun }]} \\
{[+\mathrm{s} \cdot]}
\end{array}\right][+\mathrm{pl} \cdot]}
\end{array}\right. \\
\text { Inflection }= & \left\{\begin{array}{l}
-i i n \\
-\mathrm{aat} \\
-\mathrm{a}
\end{array}\right\}
\end{aligned}
$$

### 4.2.2.3.2 Broken Plurals:

Broken plurals are formed from singular nouns by internal changes. Such a process may include the addition of a prefix, infix or a suffix to a given singualr noun in order to form a broken plural. The phoneme /w/ or / $/ \mathrm{l} /$, for example, is usually added to a hollow singular stem along with stem vowel changes when forming broken plurals of such stems as will be shown below. Broken plurals have a wide variety of patterns. The most common patterns of broken plural nouns are presented and accounted for below:

1. a. /ccuuc/

Singular:
/galb/ 'heart'
/șaṭil/ 'bucket'
/sinn/ 'tooth'
/šahar/ 'month'
/žadd/ 'grandfather'
/xadd/ 'cheek'
/žild/ 'leather, skin'
/žundi/ 'soldier'

Plural:
/gluub/ hearts'
/ṣtuul/ 'buckets'
/snuun/ 'teeth'
/šhuur/ 'months'
/žduud/ 'grandfathers'
/xduud/ 'cheeks'
/žluud/ 'leathers, skins'
/žnuud/ 'soldiers'

The above plural sub-pattern has more than one singular pattern as the preceding examples indicate.

1. b. /Cyuuc/

This sub-pattern is for hollow stems whose singular pattern is /Ceec/ as the following examples show:
/xeeṭ/ 'thread' /xyuuṭ/ 'threads'
/'een/ 'eye' /Cyuun/ 'eyes'
/beet/ 'house' /byuut/ 'houses'
/ọeef/ 'guest' /ọyuuf/ 'guests'
/seef/ 'sowrd' /syuuf/ 'sowrds'
The medial radical /y/ in the above examples has been deleted in the singular, but it is retained in the plural. This is so because the /y/ in the plural forms is immediately followed by a long vowel which blocks it from being deleted.

1. c. /CaCiic/
/'abid/ 'black man'
/hmaar/ 'donkey'
2. a. /?accaac/

Singualr:
/calam/ 'flag'
/camal/ 'work'
/camm/ 'paternal uncle'
/日aman/ 'price'
/'abiid/ 'black men'
/ḥamiir/ 'donkeys'

Broken plural nouns of the above pattern are considered borowings from MSA.
2. b. /?acyaac/
/biir/ 'well'
/?abyaar/ 'wells'

```
/'iid/ 'feast' /?acyaad/ feasts'
/fiil/ 'elephant' /?afyaal/ 'elephants'
    2. c. /?acwaaC/
/caam/ 'year'
/xaal/ 'maternal uncle'
/?a'waam/ 'years'
/?axwaal/ 'maternal uncles'
    The above sub-patterns (2.b and 2.c) are for hollow
stems whose singular patterns are /CiiC/ and /CaaC/,
respectively.
    3. a. /ccaac/
```

This sub-pattern of broken plurals corresponds to some
singular nouns of different pattterns as well as to some
adjectives of pattern /CaCiic/.
Singular:
/habil/ 'rope'
/hbaal/ 'ropes'
/žabal/ 'mountain' /žbaal/ 'mountains'
/raažil/ 'man' /ržaal/ 'men'
/žamal/ 'camel' /žmaal/ 'camels'
/načza/ 'ewe' /ncaaž/ 'ewes'
/ṣaġiir/ 'young; smaall' /ṣğaar/ 'young; small'
/gaṣiir/ 'short' /gṣaar/ 'short'
3. b. /Cyaac/

To this broken plural sub-pattern belongs some hollow stem nouns as the following examples illustrate:

```
/daar/ 'room' /dyaar/ 'rooms'
/ठiib/ 'wolf' /Oyaab/ 'wolves'
/naaga/ 'camel (f.)' /nyaag/ 'camels (f.)'
```

4. a. /CiiCaan/ </CiCCaan/

This sub-pattern is also for hollow stems which have the following singular pattern /CaaC/. This singular pattern is the same as the singular pattern of (2.c.) above but broken plural patterns are different, which indicates the diversity of broken plural patterns. Examples:

Singular:
/žaar/ 'neighbor'
/naar/ 'fire'
/baab/ 'door' /faas/ 'ax'
/faar/ 'mouse'
4. b. /CiCCaan/
/'ariis/ 'bridegroom'
/xaruuf/ 'lamb'
/Oraac / 'arm'
/faaris/ 'knight,horseman'
4. c. /CiCyaan/
/žadi/ 'kid, young goat'
/waadi/ 'valley'
/?acina/ 'blind man'
5. /Cuccaac/

Most nouns of this pattern are occupational nouns which have the singular pattern /CaaCic/. Examples:
/kaatib/ 'clerk'
/kuttaab/ 'clerks'
/haakim/ 'ruler'

## Plural:

/žiiraan/ </žiwraan/ 'neighbors' /niiraan/ </niwraan/ 'fires'
/biibaan/ </bibwaan/ 'doors'
/fiisaan/ </fi?saan/ 'axes'
/fiiraan/ </fi?raan/ 'mice'
/'irsaan/ 'bridegrooms'
/xirfaan/ 'lambs'
/oircaan/ 'arms'
/firsaan/ 'knights, horsemen'
/židyaan/ 'young goats'
/widyaan/ valleys'
/cimyaan/ 'blind men'
/'aamil/ 'worker'
/țaalib/ 'student'
/saakin/ 'dweller'
/taažir/ 'merchant'
/'ummaal/ 'workers'
/ṭullaab/ 'students'
/sukkaan/ 'dwellers'
/tužžaar/ 'merchants'
The underlying general pattern for both pattern (4) and its sub-patterns and pattern (5) is /CVCCVVC/.
6. /maCaaCic/

This broken plural pattern is for locative as well as instrumental singular nouns whose underlying general pattern is /CVCCVC(a)/. Examples:

| Singular: | Plural: |
| :--- | :--- |
| /maktab/ 'office' | /makaatib/ 'offices' |
| /maṣna'/ 'factory' | /maṣaani'/ 'factories' |
| /minžil/ 'sickle' | /manaažil/ 'sickles' |
| /mabrid/ 'file' | /mabaarid/ 'files' |
| /maxzan/ 'storage' | /maxaazin/ 'storages' |
| /madarsa/ </madrasa/ 'school' | /madaaris/ 'schools' |
| /macaṣra/ </macṣara/ 'oil press' | /macaṣir/ 'oil presses' |
| /maṭabca/ </maṭbaca/ 'print shop' | /maṭaabic/ 'print shops' |

7. a. /CaCaCiC/

Singular nouns of this broken plural pattern are of
quadriliteral roots. The singular general pattern of such nouns is /CVCCVC/. Examples:

Singular:
/fundug/ 'hotel'
/daftar/ 'notebook'

## Plural:

/fanaadig/ 'hotels'
/dafaatir/ 'notebooks'

```
/'ambar/ 'barrack' /'anaabir/ 'barracks'
```

7. b. /CaCaayic/

Singular nouns that have this broken plural pattern are characterized by having a long vowel before the last radical. These singular nouns have the general pattern /CaCVVC(a)/

| /caruus/ 'bride' | /caraayis/ 'brides' |
| :--- | :--- |
| /gabiila/ 'tribe' | /gabaayil/ 'tribes' |
| /žariida/ 'newspaper' | /žaraayid/ 'newspapers' |
| /xariiṭa/ 'map' | /xaraayiṭ/ 'maps' |
| /cazuuma/ 'invitation' | /cazaayim/ 'invitations' |

7. c. /Cawaacic/

Singular nouns of the above broken plural pattern have the patterns /CaaCiC/ and /CaaCCa/. Examples:

```
Singular:
Plural:
```

/žaamic / 'mosque'
/žawaami ${ }^{\text {C } / ~ ' m o s q u e s ' ~}$
/xaatim/ 'finger ring' /xawaatim/ 'finger rings'
/haatif/ 'telephone' /hawaatif/ 'telephones'
/šaarib/ 'lip' /šawaarib/ 'lips'
/šaaric/ 'street'
/šawaaric/ 'streets'
/haadөa/ 'event' /hawaadi日/ 'events'
/gaafla/ 'caravan' /gawaafil/ 'caravans'
7. d. /Cawaayic/

The singular nouns of this pattern have /y/ as their medial radical. The presence of a long vowel before the /y/ blocks it from undergoing deletion. Examples:

```
/saayil/ 'liquid'
/daayra/ 'government department'
```

/sawaayil/ 'liquids'
/dawaayir/ 'government departments'

```
8. /maCaaCi/
```

This pattern is for defective locative nouns which have /maCCa/ as their singular pattern. Examples:

Singular:
/mar'a/ 'grazing land'
/malža/ 'shelter'
/mažra/ 'stream,watercourse' /mažaari/`sewages, watercourses'
9. a. /CaCaaCi/

This plural pattern is for most masculine as well as feminine singualr nouns that share the general pattern /CVCCV/. Examples:

```
/kursi/ 'chair' /karaasi/ 'chairs'
/zanga/ 'alley' /zanaagi/ 'alleys'
/šanṭa/ 'bag, suitcase' /šanaaṭi/ 'bags, suitcases'
/rabṭa/ 'bundle'
/rabaaṭi/ 'bundles'
```

9. b. /CawaaCi/

This broken plural pattern is mostly for singular nouns that have /y (y)/ as thier last radical. Examples:

Singular:
/saanya/ 'well'
/daalya/ 'grapevine'
/xaabya/ 'large jar of clay' /xawaabi/ 'large jar of clay'

```
/suuniyya/ 'plate' /sawaani/ 'plates'
/suuriyya/ 'shirt' /sawaari/ 'shirts'
/țaagiyya/ 'skull cap' /țawaagi/ 'skull caps'
/hooli/ 'cloak' /hawaali/ 'cloaks'
/šaaṭi/ 'shore' /šawaaṭi/ 'shores'
9. c. /CaCaawi/
```

This plural sub-pattern corresponds mostly to singular nouns whose last radical is /w/. The general pattern for such
nouns is /CVCwV/. Examples:

Singular:
/fatwa/ 'legal opinion' /fataawi/ 'legal opinions'
/kiswa/ 'suit'
/gahwa/ 'coffee shop'

Plural:
/kasaawi/ 'suits'
/gahaawi/ 'coffee shops'
10. a. /maCaaCiic/

Most singular nouns that have this broken plural pattern are masculine instrumental nouns. They may include other
masculine nouns or adjectives. The underlying general
singular pattern of such nouns is /mVCCVVC/ as the following examples illustrate:

Singular:
/mungaar/ 'beak' /manaagiir/ 'beaks'
/muḥraaө/ 'plow' /maḥaariiө/ 'plows'
/mindaaf/ 'hunting trap' /manaadiif/ 'hunting traps'
/miftaah/ 'key'
/mafhuum/ 'concept'
/mažnuun/ 'crazy man'

## Plural:

/mafaatiing 'keys'
/mafaahiim/ 'concepts'
/mažaaniin/ 'crazy men'
10. b. /CaCaaCiiC/

This pattern is for most masculine singular quadriliteral nouns. It may also include some triliteral nouns that have medial doubled consonants. The general pattern of such singular nouns is /CVCCVVC/. Exapmles:

Singular:
/ṣanduug/ 'box'
/gindiil/ 'candelabrum, torch'
/birmiil/ 'barrel'
/gufṭaan/ 'women's dress'
/Canguud/ 'bunch, cluster'
/farruuž/ 'rooster'
/calluuš/ 'lamb'
10. c. /CawaaCiic/

Singular:
/ṣaaruux/ 'rocket'
/ṭaabuur/ 'line'
/ṭaaḥuuna/ 'mill'
11. a. /?aCaaCiC/

Singular:
/gariib/ 'relative'
/?ažanbi/</?ažnabi/'foreigner'
/makaan/ 'place'
11. b. /?aCaaCi/
/?ariọ/ 'land'

Plural:
/ṣanaadiig/ 'boxes'
/ganaadiil/ 'candelabrums'
/baraamiil/ 'barrels'
/gafaaṭiin/'women's dresses'
/Canaagiid/'bunches, clusters'
/faraariiž/ 'roosters'
/Calaaliiš/ 'lambs'

Plural:
/ṣawaariix/ 'rockets'
/țawaabiir/ 'lines'
/ṭawaạ̣iin/ 'mills'

Plural:
/?agaarib/ 'relatives'
/?ažaanib/ 'foreigners'
/?amaakin/ 'places'
/?araaọi/ 'lands'

```
/?isim/ 'name'
/gunnaaya/ 'song'
    12. /CaCaaCCa/
```

Singular:
/duktuur/ 'doctor'
/?ustaad/ 'teacher'
/binġaazi/ 'from Benghazi'
/?asaami/ 'names' /?aġaani/ 'songs'
Plural:
/dakaatra/ 'doctors'
/?asaatða/ 'teachers'
/banaaǵza/ 'from Benghazi'

```
13. /CCVC/
This broken plural pattern is realized in surface
representation as /CCuC/, /CCiC/ and /Cyic/. The underlying patterns of singualr nouns are /CVCCV/ and /CVVCV/ as the
following examples show:
```

Singular:
/žimca/ 'Friday'
/zanga/ 'alley'
/rukba/ 'knee'
/buṭma/ 'button'
/sigga/ 'apartment'
/šiiša/ 'bottle'
/ṭaasa/ 'glass cup'
14. /CuCuC/

This pattern is for most adjectives of color and human
defect whose singular pattern is /?acCaC/. Examples:
Singualr:
Plural:
/?axọ̀ar/ 'green' /xuọ̃ur/ 'green ones'
/?aḥmar/ 'red'

Plural:
/žmi' ${ }^{\text {c }}$ 'Fridays'
/znig/ 'alleys'
/rkub/ 'knees'
/bṭum/ 'buttons'
/s̆gig/ 'apartments'
/šyiš/ 'bottles'
/ṭyis/ 'glass cups'
/humur/ 'red ones'

```
/?aşfar/ 'yellow' /sufur/ 'yellow ones'
/?azrag/ 'blue'
/?aṭraš/ 'deaf'
/?aṣlac/ 'bald'
    15. /CVVC/
This underlying pattern surfaces as /Ciic/ and /Cuuc/. It
corresponds to adjectives of color and defect whose medial
radical is /w/ or /Y/. Examples:
Singular: Plural:
/?abya0̣/ 'white' /biiọ/ 'white ones'
/?aswad/ 'black' /suud/ 'black ones'
/?acwar/ 'one-eyed'
/?acwaž/ 'crooked' / 'uuž/ 'crooked things'
    16. /CaCaaya/
This pattern in for feminine nouns whose last radical is /Y/
which is doubled. Examples:
```

Singular:
/waliyya/ 'woman'
/hadiyya/ 'gift'
/șabiyya/ 'young (unmarried) girl'

## Plural:

/walaaya/ 'women'
/hadaaya/ 'gifts'
/ṣabaaya/ 'young (unmarried) girls'

## CHAPTER V

## MORPHOLOGY OF ADJECTIVES

### 5.1 DERIVATION:

Most adjectives in JDLA are derived from verbs. This includes, among others, active and passive participles. Some adjectives are derived from other parts of speech as, e.g., nisba (relative) adjectives which are derived from nouns, or from the root directly as will be shown below.

### 5.1.1 Participles:

Participles are verbal adjectives and hence derived from verbs. They are closely associated in meaning with the verbs they are derived from. They are of two kinds: active participles (AP) and passive participles (PP). The former have the general meaning of "performing (or having performed) the action indicated by the verb" (Abboud, 1983:515). The latter have the general meaning of "undergoing or having undergone (the action indicated by the verb)" (Abboud, 1983:583). Passive participles can of course only be derived from transitive verbs. It should be pointed out that many participles whether active or passive have acquired specific concrete meanings and, hence, are used as ordinary nouns.

Participles are of many patterns depending on the forms and types of verbs which they are derived from as will be shown below.
5.1.1.1 Triliterals:

### 5.1.1.1.1 Form I

Form I active participles are characterized by having a long vowel /aa/ after the first radical and a short high front vowel /i/ after the second radical. Active participles of sound verbs have the pattern /CaaCiC/. As for Passive particioles of form $I$, they have the prefix /ma/ accompanied by internal vowel changes. Passive participles of Form I sound verbs have the pattern /maccuuc/. Examples:

| Verb: | Active Part.: | Passive Part.: |
| :---: | :---: | :---: |
| /katab/ | /kaatib/ | /maktuub/ |
| 'to write' | 'having written; writer' | 'written' |
| /faham/ | /faahim/ | /mafhuum/ |
| 'to understand' | 'having understood' | understood; concept' |
| /cazam/ | /caazim/ | /ma ${ }^{\text {c zuum/ }}$ |
| 'to invite' | 'having invited; inviting | 'invited' |
| /raḥal/ | /raahil/ | --------- |
| 'to move away' | 'having moved away' |  |
| /ragad/ | /raagid/ | ---------- |
| 'to sleep' | 'sleeping' |  |

The preceding active participles are derived from their corresponding verbs by lengthening the first vowel of the verb and raising the second vowel into /i/. Regarding passive participles, they are derived through the prefixation of /ma-/ to their corresponding verbs accompanied by metathesis and stem vowel alternation. Such metathesis occurs between the first vowel and the second radical of the verb.

Active and passive participles of doubled verbs have the following patterns /CaaCC/ and /maCCuuc/, respectively. Examples:

| Verb: | Active Part. : | Passive Part. : |
| :--- | :--- | :--- |
| /cadd/ /caadd/ <br> 'to count' 'having counted' | /macduud/, |  |
| /mass/ | /maass/ | /mamsuus/ |
| 'to touch' | 'touching' | 'touched' |

/ḥall/ /haall/ /mahluul/ 'to open; to solve' 'having opened or solved''opened; solved' The process involved in the above derivation is the lengthening of the stem vowel of doubled verbs for active participles. The derivational process of passive participles follows the same procedures mentioned above.

Active and passive participles of hollow verbs have the following patterns, in successive order, /Caayic/ and /maCyuuc/. Examples:

| Verb: | Active Part. : | Passive Part.: |
| :---: | :---: | :---: |
| /gaal/ | /gaayil/ | $\begin{aligned} & \text { /magyuul/ } \\ & \text { 'said' } \end{aligned}$ |
| 'to say' | 'having said' |  |
| /naam/ | /naayim/ | -------- |
| 'to sleep' | 'sleeping' |  |
| /baa ${ }^{\text {c }}$ / | /baayi ${ }^{\text {c }}$ | /mabyuu ${ }^{\text {c/ }}$ |
| 'to sell' | 'having sold' | 'sold' |
| /žaab/ | /žaayib/ /mažyuub/,'having brought; birnging''brought' |  |
| 'to bring' |  |  |  |
| The | e changes ab | derivation |

The $/ \mathrm{y} /$ is one of the underlying radicals of $/ \mathrm{baa}^{\mathrm{c}} /$ and /žaab/, but it has been deleted because of its position, i.e., being surrounded by two short vowels. The verbs /gaal/ 'to say' and /naam/ 'to sleep', however, have /w/ underlyingly. The /w/ is realized as /y/ in the participles as the above examples show.

Active and passive participles of defective verbs have the following patterns, respectively, /CaaCi/ and /macci/. Examples:

| Verb: | Active Part. : | Passive Part.: |
| :--- | :--- | :--- |
| /rama/ | /raami/ thrown' | /marmi/ |
| 'to throw' | 'having thrown' |  |
| /maša/ | /maaši/ |  |
| 'to walk' | 'having walked; walking' |  |
| /nasa/ | /naasi/ | /mansi/ |
| 'to forget' | 'having forgotten' | 'forgotten' |
| /sawa/ | /šaawi/ | 'having grilled' |

The above passive participle examples show an alternation in their stem vowel.

### 5.1.1.1.2 Form II

Participles of Forms II-X are derived from the imperfect stem verbs through the addition of participle prefixes which might be accompanied by stem vowel alternation. Therefore, the imperfect stem will be cited below and translated as an English infinitive. Both active and passive participles have the underlying prefix /m(V)-/ which is realized in surface
representation as /m-/, /mi-/ or /mu-/ as will be seen below. The prefix /m-/ is used before /CV/, i.e., a single consonant while the prefix /m(V)-/ is used before /CC/, i.e, a consonant cluster.

On the whole, passive participles of derived verbs are not widely used as active participles are. This is probably due to the fact that the usage of passives in general is, to some extent, restricted in the dialect.

Patterns of active and passive participles of Form II strong verbs are /mCaCCic/ and /mCaCCaC/, respectively. Examples:

| Verb Stem: | Active Part. | ```Passive Part.:``` |
| :---: | :---: | :---: |
| /-gaddim/ <br> 'to offer, | /mgaddim/ | /mgaddam/ |
|  | 'having offered or presented' | 'offereed |
| $\begin{aligned} & \text { /-darrig/ } \\ & \text { 'to hide s.th' } \end{aligned}$ | /mdarrig/ | /mdarrag/ |
|  | 'hiding s.th' | 'hidden' |
| /-?ažžil/ <br> 'to psotpone' | /m?ažžil/ | /m?ažžal/ |
|  | 'having postponed' | 'postponed' |
| /-zawwig/ <br> 'to paint' | /mzawwig/ | /mzawwag/ |
|  | /having painted; painting' | 'painted' |
| $\begin{aligned} & \text { /-kassir/ } \\ & \text { 'to smash' } \end{aligned}$ | /mkassir/ | /mkassar/ |
|  | 'having smashed; smashing' | 'smashed' |
| $\begin{aligned} & \text { /-callim/ } \\ & \text { 'to teach' } \end{aligned}$ | /mallim/ |  |
|  | 'having taught' |  |

The corresponding passive participle of the last example is not used in the dialect.

As for active and passive participles of defective verbs, they have these patterns /mCaCCi/ and /mCaCCa/, respectively.

Examples:
Verb Stem:
Active Part.: Passive Part.:
/-sammi/
/msammi/ /msamma/
'to name'
/-rabbi/
'to bring up, to educate'
/mrabbi/
'bringing up,
/mrabba/
having brought up
/-garri/
'to teach'
/-gaddi/ having brought up' brought up'
'to offer lunch'
/mgarri/
/mgarra/
'having taught'
'taught'

The foregoing examples of Form II participles indicate that the stem vowel of the active participles is always an /i/ whereas it is always an /a/ for passive participles.

### 5.1.1.1.3 Form III

Participles of strong verbs of Forms III have the following patterns /mCaacic/ and /mcaaCaC/. Examples:


Verb Stem: Active Part.: Passive Part.:
/-daawi/
/mdaawi/
/mdaawa/
'to treat medically'
/-naadi/
'to call'
/-Caadi/
'to antagonize'
'having treated medically; treating'
/mnaadi/
'having called'
/m'aadi/
'having antagonized; antagonizing'
'treated'
/mnaada/ 'called'
$/ m^{c}$ aada/ 'antagonized'

### 5.1.1.1.4 Form $V$

Form V verbs do not have passive participles. This holds true for Forms VI and VII verbs. As for active participles of Form $V$ strong verbs, they have the following pattern: /mitCaccic/.

Examples:

```
Verb Stem: Active Participle
/-tkallam/ /mitkallim/
'to speak' 'having spoken; speaker'
/-tcallam/ /mitcallim/
'to learn'
/-tmaddad/
'to stretch'
/-tġayyar/ /mitġayyir/
'to change'
    'having learned; learner'
    /mitmaddid/
    'stretching'
    'changeable'
```

The above examples of active participles indicate the internal vowel change that they have undergone in the derivational process. That is, the stem vowel /a/ of the above verbs appears as /i/ in all active participle examples.

The pattern of active participles of defective verbs is as follows: /mitCacci/. Examples:

Verb Stem:
Active Participle:

```
/-tcašša/
'to have dinner,dine'
/-tgaadda/
'to have lunch'
/-tcadda/
'to exceed the limit'
/-tmanna/
'to wish'
```


### 5.1.1.1.5 Form VI

/mit ${ }^{\text {Cašši }}$
'having had dinner'
/mitġaddi/
'having had lunch'
/mit ${ }^{\text {Caddi/ }}$
'having exceeded the limit'
/mitmanni/
'having wished; wishing'

Form VI active participles of strong verbs have the following pattern /mitCaaCic/. Examples:

Verb Stem:
Active Participle:
/-tfaaham/
'to come to terms'
/-t $t^{\text {c aawan/ }}$
'to cooperate'
/-ddaayan/ <tdaayan/
'to borrow (money)'
/mitfaahim/
'having come to terms'
/mitcaawin/
'having cooperated; cooperating'
/middaayin/ </mitdaayin/
'having borrowed (money)'

As for active participles of defective verbs, they have the following pattern /mitcaaCi/. Examples:

Verb Stem:
/-tḥaaša/
'to avoid'
/-tg̀aaợa/
'to disregard'
/-ssaawa/ </tsaawa/
'to be balanced'

Active Participle:
/mitḥaaši/
'having avoided'
/mitġaaọ̃i/
'having disregarded'
/missaawi/ </mitsaawi/
'having been balanced'

### 5.1.1.1.6 Form VII

Active participles of Form VII sound verbs have the following pattern /mincacic/. It should be noted that most
active participles of Form VIII sound, doubled, hollow and defective verbs convey passive meaning as can be seen below:

Verb Stem: Active Participle:
/-nkasir/ /minkasir/
'to be broken' 'having been broken, broken'
$/-n^{c} a z i l / \quad / \min ^{c} a z i l /$
'to be isolated' 'having been isolated'
/-nṭalig/
'to be freed'
/-nšag்il/
'to be busy'
/mintalig/
'having been freed'
/minšagiil/
'having been busy'
Doubled verbs derive their active participles according to this pattern /minCaCC/:

Verb Stem:
/-nḥall/
'to be opened; solved'
/-nfakk/
'to be dismantled'
$1-n^{c}$ add/
'to be counted'
Active participles of hollow verbs have the pattern /mincaac/. Examples:

Verb Stem:
/-nbaa ${ }^{c}$ /
'to be sold'
/-nðaa ${ }^{\text {c }}$ /
'to be broadcasted'
/nhaar/
'to collapse'
$/-n^{c} a a z /$
'to take sides'

Active Participle:
/minbaac/
'having been sold'
/minð̀aa ${ }^{\text {c } / ~}$
'having been broadcasted'
/minhaar/
'having collapsed'
/minhaaz/
'having sided; taking sides'

With regard to active participles of Form VII defective verbs, they have the following pattern /minCaCi/. Examples:

## Verb Stem:

/-nkawi/
'to be cauterized'
/-nṭafi/
'to be extinguished'
/-neani/
'to be folded'

Active Participle:
/minkawi/
'having been cauterized'
/mintafi/
'having been extinguished'
/minӨani/
'having been folded'

The derivational process of the active participles of Form VII verbs is achieved through the addition of the active participle prefix /mi-/ to the verb stems without any further changes regardless of the stem vowel as can be seen from the foregoing examples.

### 5.1.1.1.7 Form VIII

Sometimes the distinction between active and passive participle forms of Form VIII verbs is not apparent where they may share the same pattern as will be shown below. Active and passive participles of Form VIII sound verbs have these patterns, respectively, /mictacic/ and /mvctacac/. The vowel of the passive participle prefix may appear as /i/ or /u/. The following are examples of both participles derived from Form VIII sound verbs:

| Verb Stem: | Active Part.: | Passive Part.: |
| :--- | :--- | :--- |
| /-htarim/ | 'to respect' | /mintarim/ <br> 'having respected; <br> respecting' |
| /-ctabir/ | /mictabir/ | /muhtaram/ |
|  |  | /muctabected' |


'to need' 'in need of'
The pattern of active participles of assimilated verbs is /mittacic/ </miwtacic/. Examples:
/Verb stem:
/-ttaḥid/ </-wtaḥid/
'to be united'
/-ttaṣil/ </-wtaṣil/
'to contact'

Active Participle:
/mittaḥid/ </miwtaḥid/
'having been united, united'
/mittaṣil/ </miwtaṣil/
'having contacted'

Active and passive participles of defective verbs have the following patterns, in successive order, /mictaci/ and /miCtaCa/. The final vowel of passive participles may be /i/. Examples:

| Verb Stem: | Active Part.: | Passive Part.: |
| :---: | :---: | :---: |
| /-štari/ | /mištari/ | /mištara/ |
| 'to buy' | 'having bought' | 'bought; things bought' |
| /-ntasi/ | ------- | /mintasi/ |
| 'to be forgoteen' |  | 'forgotten' |
| /-mtaṇi/ | ------- | /mimtahi/ |
| 'to be erased' |  | 'erased' |
| /-xtafi/ | /mixtafi/ | -------- |
| 'to be hidden' | 'hidingi hidden' |  |
| /-ntahi/ | ------- | /mintahi/ |
| 'to come to end' |  | 'ended' |

### 5.1.1.1.8 Form X

Active and passive participles of Form $X$ sound verbs have these patterns /mistaccic/ and /mvstacCac/. The vowel of the passive participle prefix may appear as /u/ or /i/. Examples:

| Verb Stem: | Active Part.: | Passive Part.: |
| :---: | :---: | :---: |
| /-sta ${ }^{\text {cmil/ }}$ | /mistacmil/ | /musta ${ }^{\text {c mal / }}$ |
| 'to use' | 'having used' | 'having been used; being used' |
| /-stacǐil/ | /mista ${ }^{\text {čǔil/ }}$ | --------- |
| 'to be in a hurry' | ' (being) in a hurr |  |
| /-stahsin/ | /mistaḥsin/ | /mustahsan/ |
| 'to find | 'having found | 'having been |
| s.th. good' | s.th. good' | found good' |
| /-stafsir/ | /mistafsir/ |  |
| 'to inquire' | 'having inquired, | ng' |
| Doubled verbs | of Form X have th | wing active and |
| passive participle | patterns /mistaCicc | /mustacacc/: |
| Verb Stem: | Active Part.: | Passive part.: |
| /-staridd/ | /mistaridd/ | /mustaradd/ |
| 'to regain' | 'having regained' | 'regained' |
| /-stagill/ | /mistaġill/ | /mustaġall/ |
| 'to exploit' | 'having exploited' | 'exploited' |
| /-stamirr/ | /mistamirr/ | --------- |
| 'to continue' | 'continuing' |  |
| /-sta ${ }^{\text {c }}$ idd/ | /mistacidd/ |  |
| 'to be prepared' | 'being prepared, |  |
| Participles of | Form X hollow v | ve the patterns |
| /mistaCiic/ and | /mvstacaac/ for | and passive |
| participles, respec | ively. The vowel of | ssive participle |
| prefix alternates b | tween /i/ and /u/. | ples: |
| Verb Stem: | Active Part.: | ive Part.: |
| /-stafiid/ | /mistafiid/ | tafaad/ |
| 'to benefit' | 'having benefited; benefiting' | efited' |
| /-stariih/ | /mistariiņ/ | ----- |
| 'to rest' | 'resting, comforta |  |


| ／－stašiir／ <br> ＇to consult＇ | ／mistašiir／ | ／mustašaar／ |
| :---: | :---: | :---: |
|  | ＇having consulted＇ | －consulted； consultant＇ |
| ／－staờiif／ <br> ＇to invite＇ | ／mistaọiif／ | ／mistaờaaf／ |
|  | ＇having invited＇ | ＇invited＇ |
| With regard | to defective verbs | of Form X，their |
| participles | the patterns／mis | tacci／for active |
| participles and／mustacca／for passive participles．Examples： |  |  |
| Verb Stem： | Active Part．： | Passive Part．： |
| ／－staeni／ | ／mista日ni／ | ／musta日na／ |
| ＇to exclude＇ | ＇having excluded＇ | ＇excluded＇ |
| ／－starxi／ | ／mistarxi／ |  |
| ＇to relax＇ | ＇having relaxed，rel | laxing＇ |
| ／－stad ${ }^{\text {c }}$／ | $/ \mathrm{mistad}{ }^{\text {c }}$／ | ／mustad ${ }^{\text {c }}$／ |
| ＇to summon＇ | ＇having summoned； summoner， | ＇summoned＇ |

## 5．1．1．2 Quadriliterals：

Quadriliteral participles are derived from their corresponding quadriliteral verbs．Active and passive participles of sound non－derived quadriliteral verbs have the following patterns in successive order：／mCaCCiC／and ／mcaccac／．Examples：

| Verb Stem： | Active Part．： | Passive Part．： |
| :---: | :---: | :---: |
| ／－ba ${ }^{\text {c }}$ 日ir／ | $/ \mathrm{mba}{ }^{\text {c }}$ өir／ | ／mba ${ }^{\text {cear／}}$ |
| ＇to scatter＇ | ＇having scattered＇ | ＇scattered＇ |
| ／－karkib／ | ／mkarkib／ | ／mkarkab／ |
| ＇to roll（s．th．） down＇ | ＇having rolled （s．th．）down＇ | ＇rolled down＇ |
| ／－fatfit／ | ／mfatfit／ | ／mfatfat／ |
| ＇to cut into piece | ＇having cut into p | ＇cut into pieces |

Participles of hollow and defective non-derived quadriliteral verbs have these patterns, respectively: /mCooCic/ and /mCaCCi/ for active participles and /mCooCaC/ and /mCaCCa/ for passive participles. Examples:

| Verb Stem: | Active Part.: | Passive Part.: |
| :--- | :--- | :--- |
| /-soogir/ | /msoogir/ | /msoogar/ |
| 'to insure s.th.' | 'having insured s.th.' | 'insured' |
| /-marki/ | /mmarki/ |  |
| 'to mark (s.th.) | 'having marked (s.th.) | /marka/ having been |
| as a debt' | as a debt, | marked as a |

5.1.1.3 Meanings of Participles:

Although this is not a dissertation about the active and passive participles per se, it seems appropriate that a brief account of the different meanings that active and passive participles display is in order.

### 5.1.1.3.1 Active Participles:

Active participles in JDLA have two dimensions of meaning, i.e., grammatical as well as aspectual meanings.

1. Grammatical:
/žaww mitġayyir/ 'changing, changeable weather'
/ṭeer mganni/ 'a singing bird; song bird'
/huwwa šaarib gahwa/ 'he has drunk coffee'
2. Aspectual:

Some active participles may have more than one aspectual meanings while others may only have one aspectual meaning as has been shown in this chapter. The aspectual meanings may be
progressive, habitual, future or perfect.
a. Progressive meaning:
/huma mistamirriin fi Camalhum/ 'they are continuing their work'
/huwwa raagid/ 'he is sleeping'
/r-ražžaala l-maašyiin fi ṭ-ṭariig/ 'the men who are walking in the street'
/1-maa ž-žaari/ 'the running water'
/l-waziir z-zaayir/ 'the visiting (cabinet) minister'
b. Habitual meaning:
/raažil ṣaadig/ 'a truthful man'
/huwwa mdaawim kul yoom/ 'he is continuing (work) every day' /gaaọ̀i Caadil/ 'a judge who is just'
/țeer mganni/ 'a song bird' (literally: 'singing bird')
c. Future meaning:
/huwaa msaafir gudwa/ 'he is going to travel tomorrow'
/hiyya raažc ${ }^{c} b a^{c} i d$ saa ${ }^{c} a /$ 'she is returning (is going to return) in an hour'
/humma raahliin bacid gudwa/ 'they are moving after tomorrow'
d. Present perfect meaning:
/huwwa haaṣil cala l-maažisteer/ 'he has obtained the master's degree'
/hamma naažhiin fi li-mtihaan/ 'they have passed the exam'
e. Present tense meaning:

Active participles of stative verbs usually express a present aspectual meaning. Examples:
/huwwa Caarif il-mišikla/ 'he knows the problem'
/hiyya haaọ̀ra/ 'she is present'
f. Perfect tense meaning:
/r-raažil iž-žaarih subca/ 'the man who (has) injured his finger'
/l-bint li-mkassra ṡ-šibbaak/ 'the girl who (has) broke(en) the window'
/ṭ-ṭaalib il-kaatib haada ž-žawaab/ 'the student who wrote or (has) written this letter'

### 5.1.1.3.2 Passive Participles:

Passive participles in JDLA also have two dimensions of meaning, i.e, grammatical and aspectual meanings.

1. Grammatical:
/suug msakkar/ 'a closed market'
/s-sayyaara l-masruuga/ 'the car that has been stolen, the stolen car'
/galam maksuur/ 'a pen that has been broken, a broken pen'
2. Aspectual:
a. Perfective:
/baab maksuur/ 'a broken door'
/maḥaṭṭa mamnuuca/ 'no parking' (lit., 'forbidden parking') /hooš mabyuuc/ 'a sold house'

In the above examples the referent is the goal of the action.
a. Perfective or Progressive:
/s-sayyaaraat il-mustoorda min fraansa/ 'the cars that have been (or are being) imported from France'
/li-bọaaca l-mabyuuca fi š-šaaric/ 'the goods that are sold (now or regulary) in the street'
/haada š-šayy maškuuk fiih/ 'this thing is being suspected'

The referent is depicted as being "having been $V$-ed" or "being V -ed" (cf. Qafisheh, 1977:146).
c. Potential:
/haada margiuub fiih/ 'this is desirable'
/haada š-šayy makruuh/ 'this is a detestable thing'
/haada š-šaxiṣ maḥbuub/ 'this person is likeable'
The refernt is being depicted as being "capaable of being $v$ ed" or "tending to be V -ed." (cf. Qafisheh, 1977:146)

### 5.1.2 Adjectives:

In this section, the following types of adjectives will be presented and acccounted for:
A. Positive adjectives.
B. Nisba (relative) adjectives.
C. Elative adjectives.

### 5.1.2.1 Positive Adjectives:

Positive adjectives (PA) are of many patterns which include, among others, adjectives that end in /-aan/ and adjectives of color and defect. The following are the most common patterns of positive adjectives found in JDLA:

1. /CaCiic/

Adjectives of this pattern are mainly derived from intransitive verbs whose underlying representation is /Cicic/ as the following examples illustrate:

Underlying Word: Adjective:
/smin/ 'to be fat' /samiin/ 'fat'

| /gṣir/ 'to become short' | /gaṣiir/ 'short' |
| :---: | :---: |
| /日gil/ 'to be heavy' | /日agiil/ 'heavy' |
| /ş̇ir/ 'to become small, little' | /sagiir/ 'small, little' |
| /rxis/ 'to become inexpensive' | /raxiiṣ/ 'inexpensive' |
| /kbir/ 'to grow big, large' | /kabiir/ 'big, large' |
| $/ \mathrm{t}^{\text {cif/ }}$ 'to be thin, weak' | /daciif/ 'thin, weak' |
| /nọif/ 'to become clean' | /naọiif/ 'clean' |
| /saraf/ 'nobility, honor' | /šariif/ 'noble, honorable' |
| /caọama/ 'greatness, mightiness' | /caọiom/ 'great, mighty' |

2. /CaCCaan/

Adjectives of this pattern which end in /-aan/ are very common in JDLA. Such adjectives are mainly derived from intransitive verbs. The following are examples:

Underlying Verb:
/friḥ/ 'to be happy' /farhaan/ 'happy'
/Cṭiš/ 'to be thirsty'
/shir/ 'to be sleepless' /šbic/ 'to be full (of food)'
$/ t^{c} i b /$ 'to be tired'
/'rig/ 'to sweat'
/hlik/ 'to be exhasted'
/skir/ 'to get drunk'
/gọib/ 'to get furious'
/mala/ 'to fill'
3. /Caacic/

Adjectives of this pattern are also derived from verbs.

| /shil/ 'to be easy' | /saahil/ 'easy' |
| :--- | :--- |
| /waọaḥ/ 'to be clear' | /waaọị/ 'clear' |
| /brid/ 'to become cold' | /baarid/ 'cold' |
| /cgil/ 'to be rational' | /caagil/ 'rational' |
| /sxin/ 'to become hot or warm' | /saaxin/ 'hot, warm' |
| /xaaf/ 'to be afraid' | /xaayif/ 'afraid' |
| /haar/ 'to be puzzled' | /haayir/ 'puzzled' |

4. /CaaCi/

Adjectives of this pattern are derived from defective verbs as the following examples indicate:

Underlting Verb:
/cala/ 'to be high'
/raọ̀a/ 'to be satisfied'
/gala/ 'to become expensive'
/hama/ 'to become hot'

Adjective:
/caali/ 'high'
/raaọi/ 'satisfied'
/gaali/ 'expensive'
/haami/ 'hot'
5. /Cayyic/

This pattern is for some adjectives that are derived from hollow verbs. Examples:
/ḍaag/ 'to be narrow'
/maat/ 'to die'
/laan/ 'to be soft'
/žaad/ 'to be generous'
/ọayyig/ 'narrow'
/mayyit' 'dead'
/layyin/ 'soft; gentle'
/žayyid/ 'very good'
6. /?aCCaC/

Pattern 6 is for adjectives of color and defect. It
should be pointed out that this pattern, among others, will be used for elative adjectives presented below. Examples:
/xaọọar/ 'to turn green'
/ṣaffar/ 'to turn yellow
/zarrag/ 'to make blue'
/hammar/ 'to turn red'
/bayyaḍ/ 'to turn white
/sawwad/ 'to make s.th. black' /?aswad/ 'black' 'to become black'
/slic/ 'to turn bald'
/ncawar/ 'to be one-eyed'
/ṭriš/ 'to be deaf'
/?axð̣ar/ 'green'
/?aṣfar/ 'yellow'
/?azrag/ 'blue'
/?ahmar/ 'red'
/?abyaọ̃/ 'white'
/?ašgar/ 'blonde'
/?aṣlac/ 'bald'
/?a'war/ 'one-eyed'
/?aṭraš/ 'deaf'
7. /CaCiy/

Adjectives of this pattern are derived from different parts of speech. Examples:
/stagna/ 'to be rich'
/gawa/ 'to be strong'
/saxa/ 'to be generous'
-----
/ganiyy/ 'rich'
/סakiyy/ 'smart'
/gawiyy/ 'strong'
/saxiyy/ 'generous'
/ṭariyy/ 'fresh, soft'
8. / CVCC/

The stem vowel of pattern 8 surfaces as /u/ and /a/. Adjectives of this pattern are mainly derived from nouns. The followig are examples:
/hurriyya/ 'freedom' /hurr/ 'free'

```
/hayaa/ 'life' /hayy/ 'alive'
/maraara/ `bitterness
```

/hayy/ 'alive'
/murr/ 'bitter'
/nayy/ 'raw, unripe'

The preceding patterns of adjectives are the most common ones found in the investigated dialect.

### 5.1.2.2 Nisba (Relative) Adjectives:

Nisba (relative) adjectives are in most cases derived from nouns. A few nisba adjectives may, however, be derived from some particles as will be shown below. Nisba adjectives, in general, denote something characteristic of what the underlying words, which they are derived from, designate. Generally, the formation of nisba adjectives is accomplished through the addition of the suffix /-i/ to the underlying words which might be accompanied by appropriate stem changes. Nisba adjectives are of many patterns depending on the patterns of the underlying words which they are derived from as will be seen below. Consider the following examples:
Underlying Word: Nisba Adjective:

| /ṭibb/ 'medicine' | /ṭibbi/ 'medical' |
| :--- | :--- |
| /šarg/ 'east' | /šargi/ 'eastern' |
| /ġarb/ 'west' | /garbi/ 'western' |
| /?asaas/ 'basis, foundation' | /?asaasi/ 'basic, fundamental' |
| /waṭan/ 'homeland' | /waṭani/ 'domestic; national' |
| /maḥall/ 'place' | /maḥalli/ 'local' |
| /mašmaaš/ 'apricot' | /mašmaaši/ 'apricot colored' |

## /diin/ 'religion' <br> /diini/ 'religious'

The foregoing examples of nisba adjectives did not undergo any stem changes through the process of their formation from their corresponding nouns. Let us examine more data whereby the underlying stems undergo some changes in the derivational process of nisba adjectives.

Underlying Word:

```
/?aṣil/ 'origin'
/cilim/ 'science'
/maṣir/ 'Egypt'
/šahir/ 'month'
/tuunis/ 'Tunisia'
/šaxiṣ/ 'person'
```

Nisna Adjective:
/?aṣli/ 'original'
/cilmi/ 'scientific'
/maṣri/ 'Egyptian'
/šahri/ 'monthly'
/tuunsi/ 'Tunisian'
/šaxṣi/ 'personal'

The above examples indicate that the second vowel of the underlying nouns has been deleted in nisba adjectives due to the addition of the suffix /-i/ (see 2.5.1).

Consider these nisba adjectives which are derived from nouns ending in /-a/.

Underlying Word:
/hagiiga/ 'reality, truth'
/̣̣aruura/ 'necessity' /ọaruuri/ 'necessary'
/Caada/ 'habit; custom'
/mihna/ 'vocation, professin' /mihni/ 'vocational'
/maṣraata/ 'Misrata' /massraati/ 'from Misrata'
/maalṭa/ 'Malta'

Nisna Adjective:
/hagiigi/ 'real'
/'aadi/ 'habitual; customary'
/maalṭi/ 'Maltese'

As can be seen from the above examples, the final /-a/ of the underlying nouns does not show up in nisba adjectives. The /-a/ is the feminine marker and it has to be deleted when a nisba suffix is attached to such nouns.

Some place names along with the word /sahra/ 'desert' that end in /-a/ and are of the pattern /CaCCa/ require some modifications in the derivational process of their nisba adjectives in order to obtain the correct form of nisba adjectives. Such place names require the lengthening of the feminine morpheme /-a/ $\rightarrow-\rightarrow /-a a /$ and the addition of $/-w-/$ between /-aa/ and the nisba suffix /-i/ as shown below:

Underlying word:
/sabha/ 'Sebha/ /sabhaawi/ 'from Sebha'
/darna/ 'Darna' /darnaawi/ 'from Darna'
/barga/ 'Barqa' /bargaawi/ 'from Barqa'
/ṣaḥra/ 'desert' /ṣaḥraawi/ 'from the desert'
/ṭanṭa/ 'Tanta' /ṭanṭaawi/ 'from Tanta'

It should be indicated here that speakers of JDLA have two patterns of the nisba adjectives of the underlying words /šarg/ 'east' and /garb/ 'west'. That is, when the two words /šarg/ and /garb/ indicate a specific region, their nisba adjectives are formed by the addition of the suffix /-aawi/. Thus, the nisba adjective /šargaawi/ 'eastern' usually indicates a person from the eastern part of Libya. Likewise, the nisba adjective /garbaawi/ 'western' refers to a person
from the western part of Libya. However, the nisba adjectives /šargi/ 'eastern' and /garbi/ 'western' refer to anyone from the east or the west and, also, refer to the wind coming from the east or the west.

Some nisba adjectives are formed by the addition of the suffix /-aani/ as the following examples show:
Underlynig word: Nisba Adjective:

```
/foog/ 'above' /foogaani/ 'upper'
```

/taḥt/ 'under, below' /taḥtaani/ 'lower'
/barra/ 'outside' /barraani/ 'outsider, outer'
/daaxil/ 'inside' /daxlaani/ 'inner'

Nisba adjectives derived from ethnic collectives are formed by the addition of the suffix /-i/. Examples:

```
/'arab/ 'Arabs' /Carabi/ 'an Arab, Arabic/
/baduw/ 'Bedouins' /badawi/ 'Bedouin'
/turk/ 'Turks' /turki/ 'Turkish'
```


### 5.1.2.3 Elative Adjectives:

Elative adjectives are formed from underlying positive adjectives according to the following patterns:

1. /?acCaC/

This pattern is for elatives with sound roots. These elatives are formed from their corresponding positive adjectives by the addition of the prefix /?a-/ with appropriate stem changes. Examples:

```
/ṣaġiir/ 'small; little' /?aṣgar/ 'smaller'
/samiin/ 'fat' /?asman/ 'fatter'
/kabiir/ 'big; old' /?akbar/ 'bigger; older'
/gaṣiir/ 'short' /?agṣar/ 'shorter'
/baarid/ 'cold' /?abrad/ 'colder'
/Caagil/ 'rational, /?a'gal/ 'more rational'
/žamiil/ 'beautiful' /?ažmal/ 'more beautiful'
/galiiọ/ 'thick' /?aġlaọ/ 'thicker'
/gadiim/ 'old, ancient' /?agdam/ 'older'
    2. /?aCacc/
        This pattern is for elatives that are derived from
adjectives whose second and third radicals are identical. As
a consequence, the elatives also have their second and third
radicals identical. Examples:
Positive Adjective:
/xafiif/ 'light (in weight)' /?axaff/ 'lighter (in weight)'
/baniin/ 'tasty'
/galiil/ 'little; few'
/ragiig/ 'thin'
/haarr/ 'hot'
/xasiis/ 'despicable'
/murr/ 'bitter'
/'aziiz/ 'dear'
3. /?aCyac/ and /?aCwac/
Patterns in (3) are for elatives whose middle radical is
```

either /y/ or /w/. This of course depends on the underlying roots of positive adjectives that the elative adjectives are formed from. Examples:

Positive Adjective: Elative Adjective:
/ọ̆ayyig/ 'narrow' /?aọ̀yag/ 'narrower'
/ṭayyib/ 'delicious; good' /?aṭyab/ 'better; more delicious'

```
/layyin/ 'soft'
/xaayif/ 'afraid'
```

/?alyan/ 'softer'
/?axwaf/ 'more afraid'
/hayyin/ 'easy'
/?ahwan/ 'easier'
4. /?aCCa/

This pattern is for elatives that are derived from positive adjectives which end in /-i/ or /-y/. Examples:

Positive Adjective:
/haadi/ 'quiet'
/ġaali/ 'expensive'
/ganiyy/ 'rich'
/caali/ 'high'
/סakiyy/ 'intelligent'
/saxiyy/ 'generous'

Elative Adjective:
/?ahda/ 'quieter'
/?aǵla/ 'more expensive'
/?ağna/ 'richer'
/?acla/ 'higher'
/?aðka/ 'more intelligent'
/?asxa/ 'more generous'

### 5.2 INFLECTION:

Adjectives in JDLA are inflected for gender, number and definiteness. With regard to definiteness, adjectives are either definite or indefinite.

### 5.2.1 Gender:

Adjectives have two genders: masculine and feminine. Feminine singular adjectives are formed from their corresponding masculine singular adjectives, which are considered the base forms, by the addition of the feminine suffix /-a/, sometimes with approporiate stem changes. The following examples of the patterns /CaCiic/, /macCuuc/, /CaCCaan/, /CaaCC/ and /CuCC/ do not require any stem changes:

Masculine:

| /gaṣir/ | 'short' | /gasiira/ |
| :--- | :--- | :--- |
| /samiin/ | 'fat' | /samiina/ |
| /mašhuur/ | 'famous' | /mašhuura/ |
| /maksuur/ | 'broken' | /maksuura/ |
| /farhaan/ | 'happy' | /farhaana/ |
| /tacbaan/ | 'tired' | /tacbaana/ |
| /žaaff/ | 'hot' | /žaaffa/ |
| /haarr/ | 'bitter' | /murrara/ |
| /murr/ | 'free' | /ḥurra/ |

Consider the following examples:

| Masculine: | Feminine: |  |
| :--- | :--- | :--- |
| /saahil/ | 'easy' | /saahla/ |
| /waaọin/ | 'clear' | /waaọ̣̣̆a/ |
| /xaayif/ | 'afraid' | /xaayfa/ |
| /haayir/ | 'puzzled' | /haayra/ |

The above masculine adjectives have the patterns /CaaCic/ and /Caayic/ whereas their feminine counterparts have the patterns /Caacca/ and /CaayCa/. The vowel /i/ in the masculine adjectives has been deleted in the feminine forms due to the attachment of the suffix /-a/ which creates the environment for /i/ to be syncopated (see 2.5.1).

Regarding masculine adjectives of color and defect, their feminine counterparts are formed as follows:

| Masculine: | Feminine: |  |
| :--- | :--- | :--- |
| /?axơar/ | 'green' | /xaọra/ |
| /?aṣfar/ | 'yellow' | /ṣafra/ |
| /?aḥar/ | 'red' | /hamra/ |
| /?acraž/ | 'lame' | /carža/ |
| /?ṭraš/ | 'deaf' | /ṭarša/ |
| /?abyað̣/ | 'one-eyed' | /beeọa/ |
| /?acwar/ | 'crooked' | /coora/ |
| /?acwaž/ | 'black' | /cooža/ |
| /?aswad/ | 'blind' | /sooda/ |
| /?acma/ </?acmay/ | /camya/ |  |

The above masculine adjectives have the pattern /?aCCa(C)/, but their feminine counterparts have tne patterns /CaCCa/, /CeeCa/ and /Cooca/. The formation these of feminine adjectives is accomplished through these processes. First, the deletion of /?a/. Second, the attachment of the suffix /a/. Third, the application of metathesis between the second
radical and the vowel before the last radical of the adjective. If the second radical is /w/ or /y/, then we have coalescence at work which is the case with /?abyaḍ/ ---> /beeḍa/ 'white' and /?aswad/ ---> /sooda/ 'black'.

Defective masculine adjectives ending in /-i/ form their feminine by changing that vowel to $/ y /$ before adding the feminine suffix /-a/. Examples:

| Masculine: | Feminine: |  |
| :--- | :--- | :--- |
| /ġaali/ | 'expensive' | /gaalya/ |
| /caali/ | 'high' | /caalya/ |
| /ḥaami/ | 'hot' | /haamya/ |
| /raaọ̀i/ | 'satisfied' | /raaọ̀ya/ |

With regard to feminine nisba adjectives, they are formed from their corresponding masculine nisba adjectives by the insertion of /-YY-/ immediately before the suffix /-a/. Examples:

Masculine:

| /liibi/ | 'Libyan' | /liibiyya/ |
| :--- | :--- | :--- |
| /maṣri/ | 'Egyptian' | /maṣriyya/ |
| /carabi/ | 'Arabic' | /carabiyya/ |
| /caadi/ | 'habitual, customary' | /caadiyya/ |
| /suuri/ | 'Syrian' | /suuriyya/ |
| /turki/ | 'Turkish' | /turkiyya/ |

### 5.2.2 Number:

Adjectives in JDLA have two numbers: singular and plural. Unlike nouns the dual number does not exist in adjectives. A dual noun is usually modified by an adjective in the plural form, e.g., /binteen ṣgaar/ 'two young girls', /zooz hyaaš kbaar/ 'two big houses'.

### 5.2.2.1 Plural:

Plurals of adjectives include regular masculine plurals, sound feninine plurals and broken plurals. It should be kept in mind that the argument against the term sound masculine plurals which was presented in chapter IV holds true here (see 4.2.2.3.1.1.1).
A. Regular Masculine and Sound Feminine Plurals:

As with noun plurals, adjective plurals are formed by the addition of suffixes to their corresponding singular forms of adjectives. Regular masculine plural and sound feminine plural suffixes are /-iin/ and /-aat/, respectively. The inflectional process of regular masculine plurals may sometimes undergo some phonological processes as will be seen below. Masculine adjectives of the patterns /maccuuc/ and /CaCCaan/ do not undergo any stem changes when they are pluralized. Examples:

Masculine singular: Masculine plural:
/ma ${ }^{\text {c }}$ ruuf
/mašhuur/ 'famous'
/ma ${ }^{\text {Cruufin/ }}$
/mašhuuriin/

| /farhaan/ | 'happy' | /farḥaanion/ |
| :---: | :---: | :---: |
| /sakraan/ | 'drunk' | /sakraaniin/ |
| /Cațěaan/ | 'thirsty' | /caṭšaanion/ |
| Masculine adjec | tives of patt | /mCaaCic/, /mCa |
| /CaaCic/ and /CaaCi/ | undergo some | gical processe |
| they are pluralized. |  |  |
| Examples: |  |  |
| Masculine Singular: |  | Regular Plurl: |
| /m'aawin/ | 'cooperating' | $/ \mathrm{m}^{\text {caawniin/ }}$ |
| /mkassir/ | 'smashing' | /mkasriin/ |
| /caagil/ | 'rational' | /caaglin/ |
| /ṣaadig/ | 'truthful' | /ṣaadgiin/ |
| /xaayif/ | 'afraid' | /xaayfiin/ |
| /haadi/ | 'quiet' | /haadyiin/ |
| /gaasi/ | 'harsh' | /gaasyiin/ |

Nisba adjectives are pluralized by the addition of /-yy-/ immediately before the plural morpheme /-iin/. Examples:

| /liibi/ | 'Libyan' | /liibiyyiin/ |
| :--- | :--- | :--- |
| /maṣri/ | 'Egyptian' | /maṣriyyiin/ |

It should be kept in mind that most masculine adjectives of participle origin take regular plurals. With regard to feminine sound plurals, they are formed from feminine singualr adjectives by the addition of the suffix /-aat/ after the deletion of the feminine singualr suffix /-a/ as the following examples illustrate:

| Feminine Singular: |  | Feminine Plural: |
| :---: | :---: | :---: |
| /mašhuura/ | 'famous' | /mašhuuraat/ |
| /caagla/ | 'rational, sane' | /caaglaat/ |
| /m'aawna/ | 'cooperating' | /m'aawnaat/ |
| /farhaana/ | 'happy' | /farhaanaat/ |
| /Cațšaana/ | 'thirsty' | /Caṭšaanaat/ |
| /haadya/ | 'quiet' | /haadyaat/ |
| /xaayfa/ | 'afraid' | /xaayfaat/ |
| /liibiyya/ | 'Libyan' | /Liibiyyaat/ |
| /maṣriyya/ | 'Egyptian' | /maṣriyyaat/ |
| B. Broken Plurals: |  |  |
| The mo | broken plural p | erns are as follo |
| Singular adjectives in pattern (1) above |  |  |
| (2), (3) and (5) below have the pattern /CaCiic/ |  |  |
| Singular: |  | Plural: |
| /kabiir/ | 'big; old' | /kbaar/ |
| /gaṣir/ | 'short' | /gṣaar/ |
| /samiin/ | 'fat' | /smaan/ |
| /țawiil/ | 'tall' | /twaal/ |
| /ṣagiir/ | 'young; small' | /ṣgaar/ |
| /ba ${ }^{\text {ciid/ }}$ | 'far away' | /b ${ }^{\text {caad/ }}$ |
| /naọ̀iif/ | 'clean' | /nọ̀aaf/ |
| 2. /cacca/ |  |  |
| /mariiọ/ | 'sick' | /marọa/ |


| /gatiil/ | 'killed' | /gatla/ |
| :---: | :---: | :---: |
| /žariin / | 'wounded' | /žarha/ |
| 3. /cucaca/ |  |  |
| Singular adjectives of this broken plural pattern are of |  |  |
| many patterns as the following examples indicate: |  |  |
| Singular: Plural: |  |  |
| /fagiir/ | 'poor' | /fugara/ |
| /xabiir/ | 'expert' | /xubara/ |
| /safiih/ | 'foolish' | /sufaha/ |
| /caalim/ | 'scholar' | /culama/ |
| /fagii(h)/ | 'expert of figh' | /fugaha/ |
| 4. /CaCaaca/ |  |  |
| Singular adjectives of this broken plural pattern also |  |  |
| take regular plurals as shown above. |  |  |
| /sakraan/ | 'drunk' | /sakaara/ |
| /Cațšaan/ | 'thirsty' | /caṭaaša/ |
| 5. /CCic/ |  |  |
| /gadiim/ | 'old; ancient' | /gdim/ |
| /žadiid/ | 'new' | /ždid/ |
| /gašiim/ | 'unskilled' | /ġšim/ |
| 6. /Cuccaac/ |  |  |
| Singular adjectives of this broken plural pattern also |  |  |
| take regular plurals as shown above. |  |  |
| /caagil/ | 'rational' | / ${ }^{\text {uggaal / }}$ |
| /žaahil/ | 'ignorant' | /žuhhaal/ |

## 7. /CawaaCiC/



## CHAPTER VI

## PRONOUNS

Pronouns in JDLA include personal, demonstrative, interrogative and relative pronouns.

### 6.1 Personal Pronouns:

Personal pronouns include independent as well as suffixed pronouns. Both types of personal pronouns are dealt with below.

### 6.1.1 Independent Pronouns:

Independent pronouns as their name suggests are free forms. Such pronouns are inflected for gender and number. As far as gender is concerned, only singular pronouns of the second and the third persons are distinguished in gender and have separate forms. First person pronouns as well as second and third plural pronouns have no gender distinction. With regard to number, pronouns have two nubmers: singular and plural. There are no dual forms of personal pronouns. Speakers of JDLA use plural forms of pronouns instead of dual forms. Independent personal pronouns are presented in the following chart:

Chart 3

Independent Personal Pronouns

| 1 S | /?ana/ | /I I |
| :--- | :--- | :--- |
| Pl. | 'We/ |  |

2

| M. S. | /?inta/ | 'you' |
| :--- | :--- | :---: |
| F. S. | /?inti/ | 'you' |
| Pl. | /?intum/ | 'you' |
| M. S. | /huwwa/ | 'he' |
| F. S. | /hiyya/ | 'she' |
| Pl. | /humma/ | 'they' |

Independent pronouns are used as subjects of equational sentences or for emphasis with verbal sentences. Examples: /huwwa raažil muḥtaram/ 'he is a respected man' /huwwa šara sayyaara/ 'he bought a car'

### 6.1.2 Suffixed Pronouns:

Suffixed pronouns are attached to verbs, active participles, nouns and particles. They function as objects or possessive pronouns depending on the morphological category they are suffixed to as will be illustrated below. It should be pointed out that subject markers which are affixed to verbs have been dealt with earlier, and their is no need to deal with them again (see 3.3 .1 above). What has been said about independent pronouns regarding gender and number holds true for suffixed pronouns.

The following chart illustrates the suffixed pronouns that are attached to various parts of speech:

Chart 4
Suffixed Pronouns
1 S.
/-ni, -yYa, -y(a), -i/ 'me, my'

| Pl. | /-na/ | 'us, our' |
| :--- | :--- | :--- |
| 2 M. S. | /-ak/ | 'you, your' |
| F. S. | /-ik/ | 'you, your' |
| Pl. | /-kum/ | 'you, your' |
| 3 M.S. | /-a(h)/ | 'him, his' |
| F.S. | /-ha/ | 'her' |
| Pl. | /-hum/ | 'them, their' |

The (h) of the third person masculine singular suffix is pronounced only when it is immediately preceded by a long vowel. Otherwise, it is not pronounced and the suffix is realized as /-a/.

1. Suffixed to Verbs:

When suffixed pronouns are attached to verbs, they function as objects of those verbs. Consider the following examples:

```
/callam/ 'to teach'
/callam+ni/ --> /callamni/ 'he taught me'
/callam+na/ --> /callamna/ " " " us'
/callam+ak/ --> /callamak/ '" " you (m.s.)'
/callam+ik/ --> /callamik/ '" " you (f.s.)'
/'allam+kum/ --> /'allamkum/' " " you (pl.)'
/callam+a/ --> /callama/ v" " him'
/callam+ha/ --> /'allamha/ v " " her'
/callam+hum/ --> /'allamhum/" " " them'
```

The above examples show that the object pronouns have
been suffixed to consonant-final verbs. If a verb form ends in a vowel, such a vowel has to be lengthened whenever object pronouns are attached. Since this is the case, the vowels of the object pronouns of the shape /-VC/ assimilate to the preceding lenghtened vowel of the verb form. However, the vowel that the verb ends with may be the stem vowel of the verb or the vowel of the subject marker that has been added to such a verb. Consider the following examples where the final vowel of the verb form is the stem vowel or, in other words, the verb is a defective verb:
/daca/ 'to invite; to call'
/daca+ni/ ----> /dacaani/ 'he invited me'
/daca+na/ ----> /dacaana/ 'he invited us'
/daca+ak/ ----> /dacaak/ 'he invited you (m.s.)'
/daca+ik/ ----> /dacaak/ 'he invited you (f.s.)'
/daca+kum/ ---> /dacaakum/ 'he invited you (pl.)'
/daca+ah/ ----> /dacaah/ 'he invited him'
/da ${ }^{\text {c }} \mathrm{a}+\mathrm{ha}$ / ----> /dacaaha/ 'he invited her'
/dacathum/ ---> /dacaahum/ 'he invited them'
Note that /dacaak/ is 'he invited you (m.s. or f.s.), i.e., both masculine singular and feminine singular of the second person suffixes have the same form.

Now consider these examples where the final vowel of the verb form is the subject marker:
/xabbar+u/ 'they informed'


Now consider the following sound verbs that have different pronominal suffixes attached to them. Notice the changes these suffixes exhibit regarding vowel length.

```
/cazam+na+ah/ --> /cazamnaah/ 'we invited him'
/cazam+u+ah/ m / Cazamuuh/ 'they invited him'
/cazam+ti+na/ --> /'azamtiina/ 'you (f.s.) invited us'
/cazam+ti+ah/ --> /cazamtiin/ vyou (f.s.) invited him'
/0̣arab+it+ah/ --> /0,arabaata/ 'she hit him'
/Ọarab+it+ak/ --> /0̣arabaatak/ 'she hit you (m.s.)'
/0̣arab+it+hum/ --> /ọarabithum/ 'she nit them'
/0̣arab+na+kum/ --> /ọarabnaakum/ 'we hit you (pl.)'
/ọarab+na+ha/ --> /ọarabnaaha/ 'we hit her'
/darras+ti+ah/ --> /darrastiin/ 'you (f.s) taught him'
/darras+u+na/ --> /darrasuuna/ 'they taught us'
/darras+\emptyset+hum/ --> /darrashum/ 'he taught them'
/xabbar+t+hum/--> /xabbarithum/ 'I, you (m.s.) told them'
/darras+t+ha/ --> /darrasitha/ 'I, you (m.s.) taught her'
```

/cazam+t+kum/--> /cazamitkum/ 'I, you (m.s.) invited you (pl.)'

As stated earlier, the preceding examples clearly show that if the subject marker is of the shape $/-(C) V /$, then the vowel of such a suffix has to be lengthened whenever object suffixes are attached to the verb. If the object suffix is of the shape /-VC/, the vowel of such a suffix assimilates to the vowel of the subject marker. Likewise, if the subject marker is of the shape /-VC/, which is the second person feminine singular suffix /-it/, the vowel of this suffix has to be lengthened and lowered to /aa/ when the object suffix is of the shape /-VC/ as the above examples illustrate. Also, notice that when the object pronouns of the shape / $-C V(C) /$ are attached to a verb form which ends in a consonant cluster, i.e., the verb being appended by the subject marker /-t/ 'I, you (m.s.), an epenthetic vowel /i/ is inserted before the subject marker /-t/ to break up the resulting three consonant cluster as the last three examples above show.

The following examples show that the verb /caṭa/ 'to give' has been appended by two pronominal objects. The second indirect object is introduced by the proposition /-li-/ 'to'. The /i/ of such a preposition is deleted and an epenthetic /i/ is inserted before /-1- to break up the three consonant cluster.
/caṭa+Ø+hum+li+na/ --> /Caṭaahumlna/ --> /cataahumilna/

9/ªṭa+Ø+hum+li+kum/ --> /Caṭaahumlkum/ --> /caṭaahumilkum/ 'he gave them to you (pl.)'
/Caṭa+Ø+ha+li+ah/ --> /'aṭaahaala/ 'he gave it (f.) to him' /'aṭa+Ø+ha+li+ha/ --> /Caṭaahaalha/ 'he gave it (f.) to her' 2. Suffixed to nouns:

Dependent pronouns that are suffixed to nouns indicate possession as the following examples indicate:
/ktaab+i/ --> /ktaabi/ 'my book'
/ktaab+na/ --> /ktaabna/ 'our book'
/beet+ak/ --> /beetak/ 'your (m.s) house' /?ariọtkum/ --> /?ariợkum/ 'your (pl.) land'
/?aglaam+hum/ --> /?aglaamhum/ 'their pens' /bint+ik/ --> /bintik/ 'your (f.s.) daughter'

If a masculine noun ends in /a/, the /a/ is lengthened when possessive pronouns are added to such a noun. Examples: /gada+kum/ --> /gadaakum/ 'your (pl.) lunch' /gada+na/ --> /gadaana/ 'our lunch'
/Caša/+ah/ --> /Cašaah/ 'his dinner'
/caša+y(a)/ --> /Cašaay(a)/ 'my dinner'
When possessive pronouns are attached to feminine nouns that end in /a/, such an /a/ is replaced by a /-t-/. If the resultant combination, i.e., the last radical of the noun stem, the /-t-/ and the consonant of the possessive suffix, is a three consonant cluster, an epenthetic vowel /i/ has to be inserted before the /-t-/ to break up the three consonant cluster. The following examples illustrate this point:

```
/saaca+ak/ --> /saactak/ 'your (m.s.) watch'
/saaca+na/ --> /saactna/ --> /saacitna/ 'our watch'
/saaca+ah/ --> /saacta/ 'his watch'
/ḥužra+ha/ --> /huzžrtha/ --> /hužritha/ 'her room'
/ġaaba+kum/ --> /ġaabtkum/ --> /ġaabitkum/ 'your (pl.) forest'
/bugra+ik/ --> /bugrtik/ --> /bugirtik/ 'your (f.s.) cow'
When possessive pronouns of the shape \(/-\mathrm{V}(\mathrm{C}) /\) are added to nouns that end in /i/ or /u/ and are made up of two short syllables, then these vowels show up as \(/ \mathrm{y} /\) and /w/ respectively. It should be remembered that these two vowels /i/ and /u/ were originally /y/ and /w/, rspectively, but they have undergone the process of vocalization because they were in final position. The attachment of possessive pronouns creates the environment for /i/ and /u/ to return to their origin /y/ and /w/ (see 2.5.9). The following examples clarify this point:
/žadi+ak/ --> /žadyak/ 'your (m.s.) kid goat'
/žadi+i/ --> /žadyi/ 'my kid goat'
/žadi+ah/ --> /žadya/ 'his kid goat'
/dalu+i/ --> /dalwi/ 'my bucket'
/dalu+ik/ --> /dalwik/ 'your (f.s.) bucket'
/dalu+ah/ --> /dalwa/ 'his bucket'
```

In addition, when possessive prononus are attached to some nouns whose final stem is an /-i/, such an /-i/ is lengthened. If the suffix is of the shape $/-\mathrm{VC} /$, the vowel of
the suffix assimilates to the last vowel of the stem. Examples:

```
/kursi+ah/ --> /kursiih/ 'his chair'
/kursi+ak/ --> /kursiik/ 'your (m.s.) chair'
/kursi+na/ --> /kursiina/ 'our chair'
/kursi+yya/ --> /kursiyya/ 'my chair'
/kursi+ha/ --> /kursiiha/ 'her chair'
/waadi+na/ --> /waadiina/ 'our valley'
/waadi+ah/ --> /waadiih/ 'his valley'
/waadi+kum/ --> /waadiikum/ 'your (pl.) valley'
```

It should be kept in mind that the preceding examples consist of two syllables: one is long and the other is short.

If a noun has an /i/ before the last radical, such an /i/ is deleted when the noun is appended by possessive pronouns whose shape is /-V(C)/. Such an /i/, however, remains intact with other possessive pronouns. The following examples illustrate this point:
/?isim+ak/ --> /?ismak/ 'your (m.s.) name'
/xaatim+i/ --> /xaatmi/ 'my ring'
/saṭil+ik/ --> /saṭlik/ 'your (f.s.) pail'

/?aṣil+a(h)/ --> /?aṣla/ 'his origin'
/?aṣil+kum/ --> /?aṣilkum/ your (pl.) origin'
/šaari ${ }^{c}+n a / ~-->~ / s ̌ a a r i{ }^{c} n a / ~ ' o u r ~ s t r e e t ' ~$
/xaatim+ha/ --> /xaatimha/ 'her ring'
3. Suffixed to Active Participles:

Suffixed pronouns that are attached to active participles function as objects of those active participles. Examples: /caarif+ni/ --> /caarifni/ 'having known me'

| / | " | +na/ | --> | /caarifna/ | , |  | 1 | " | us' |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| / | " | +ak/ | --> | /caarfak/ | , |  | 1 | * | you | (m.s.)' |
| / | " | +ik/ | -> | /caarfik/ | , |  | 1 | " | you | (f.S.)' |
| 1 | 11 | +kum/ | --> | /caarifkum/ | / |  | 1 | " | you | (pl.)' |
| 1 | 11 | +ah/ | -> | /Caarfa/ , |  |  | " | " | him' |  |
| / | 11 | tha/ | -> | /Caarifha/ | , |  | " | 11 | her' |  |
| / | " | +hum/ | -- | /caarifhum/ | / , |  | " | " | them' |  |

As the preceeding examples indicate, the second vowel of the active participle, i.e, /i/ has been deleted due to the attachment of vowel-initial suffixes. Other examples: $/ m s a a^{c} i d+n i / \quad-->/ m s a a^{C} i d n i / ~ ' h a v i n g ~ h e l p e d ~ m e ' ~$ /msaacid+ha/ $-->/ m s a a^{C} i d h a / ~ ' h a v i n g ~ h e l p e d ~ h e r ' ~$ $/ m s a a^{c} i d+a h /-\rightarrow / m s a a^{c} d a / ~ ' h a v i n g ~ h e l p e d ~ h i m ' ~$ $/ m s a a^{C} i d+i k / ~-->/ m s s a^{C} d i k / ~ ' h a v i n g ~ h e l p e d ~ y o u ~(f . s) '$. /mkassir+ha/ $-->$ /mkassirha/ 'having smashed it (f.s.)'
 /raadd+ah/ $\rightarrow$ /raadda/ 'having returned it (m.s.)' /mihtarim+kum/ $\rightarrow->$ /mihtarimkum/ 'having respected you (pl.)' /miḥtarim+ak/ $-\rightarrow$ /miḥtarmak/ 'having respected you (m.s.)'

If an active participle ends in an /i/, such an /i/ is lengthened when pronominal suffixes are attached. Examples:
/raami+ah/ --> /raamiih/ 'having thrown it (m.s.)' /raamitha/ --> /raamiiha/ 'having thrown it (f.s.)' /mgarri+ni/ --> /mgarriini/ 'having taught me' /mgarri+kum/ --> /mgarriikum/ 'having taught you (pl.)' $/ m^{c}$ aadi+na/ --> /m'aadiina/ 'having antagonized us' /šaawitha/ --> /šaawiiha/ 'having grilled it (f.s.)' /mgaddi+hum/ --> /mgaddiihum/ 'having offered them lunch'
4. Suffixed to Particles:

Pronouns that are suffixed to particles mostly function as objects of those particles. With some particles, however, suffixed pronouns may indicate possession as will be shown below. Examples:
$/ m^{c} a /{ }^{\prime}$ 'with'
$/ m^{c} a+y(a) /$ - $m^{c} a a y(a) /$ 'with me'
$/ m^{c} a+n a / ~-->/ m c a n a / ~ ' w i t h ~ u s ' ~$
 / " +ik/
$/ m^{c} a+k u m / ~-->/ m^{c} a a k u m / ~ ' w i t h ~ y o u ~(p l) '$.
$/ m^{c} a+a h / ~-->/ m^{c} a a h / ~ ' w i t h ~ h i m ' ~$
$/ m^{c} a+h a / \rightarrow / m^{c}$ aaha/ 'with her'
$/ \mathrm{m}^{\mathrm{c}} \mathrm{a}$ +hum/ $-->/ \mathrm{m}^{\mathrm{c}} \mathrm{a}$ ahum/ 'with them'
Notice that the /a/ of the preposition $/ \mathrm{m}^{\mathrm{c}} \mathrm{a} / \mathrm{with}$ ' is lengthened when pronominal suffixes are added. Other examples:
/li+ha/ --> /liina/ 'to her, for her (hers)'
/li+na/ --> /liina/ 'to us, for us (ours)'

```
/li+yya/ --> /liyya/ 'to me, for me (mine)'
/li+ah/ --> /liih/ 'to him, for him (his)'
/fi+ah/ --> /fiih/ 'in it (m.s)'
/fi+ha/ --> /fiiha/ 'in it (f.s.)'
```

When suffixes of the shape $/-V(C) /$ are added to the prepositions /min/ 'from' or /can/ 'about', the /n/ of those prepositions is doubled. Examples:
/min+i/ --> /minni/ 'from me'
/min+ak/ --> /minnak/ 'from you (m.s.)'
/min+ik/ --> /minnik/ 'from you (f.s.)'
/min+ah/ $-->$ /minna/ 'from him'
/min+ha/ --> /minha/ 'from her'
/min+kum/ --> /minkum/ 'from you (pl)'
/Can+i/ --> /'anni/ 'about me'
/can+ik/ --> /cannik/ 'about you (f.s.)'
/can+ak/ --> /cannak/ 'about you (m.s.)'
/Can+hum/ --> /Canhum/ 'about them'

With some other particles that end in a consonant other than $/ \mathrm{n} / \mathrm{there}$ are no noticeable changes in the stem as the following examples illustrate:
/guddaam+i/ --> /guddaami/ 'in front of me'
/guddaam+na/ --> /guddaamna/ 'in front of us'
/guddaam+ah/ --> /guddaama/ 'in front of him'
/guddaam+ha/ --> /guddaamha/ 'in front of her'
/guddaam+ak/ --> /guddaamak/ 'in front of you (m.s)'
/guddaam+ik/ --> /guddaamik/ 'in front of you (f.s.)'
Now consider the following examples where the final /a/ of the particle /wara/ 'behind' is lengthened when pronominal suffixes are attached:
/wara+y(a)/ --> /waraay(a)/ 'behind me'
/wara+na/ --> /waraana/ 'behind us'
/wara+kum/ --> /waraakum/ 'behind you (pl.)'
/wara+ah/ --> /waraah/ 'behind him'
/wara+hum/ --> /waraahum/ 'behind them'
The final /a/ of the above particle is preceded by one consonant. If the final /a/ of a particle is preceded by a consonant cluster as in /cinda/ 'at', such an /a/ is not lengthened when pronominal suffixes are added. Such an /a/, however, assimilates to the initial vowels of the the suffixes as the following examples illustrate:
/cinda+i/ --> /cindi/ 'at my place; (I have)'
/'inda+na/ --> /cindana/ 'at our place; (we have)'
/cinda+ak/--> /cindak/ 'at your (m.s.) place; (you m.s. have)' /cinda+ik/--> / ${ }^{\text {cindik/ }}$ 'at your (f.s.) place; (you f.s. have)' /'inda+ah/ --> /Cinda/ 'at his place; (he has)'
/cinda+hum/ --> /cindahum/ 'at their place; (they have)'

### 6.2 Demonstrative Pronouns:

There are two types of demonstrative pronouns:

1. Demonstrative pronouns that indicate persons or objects near the speaker:
```
    M. S. /haada/ 'this'
    F. S. /haaöi/ 'this'
    P1. /haaduula/ 'these'
Consider the following examples:
/haaờa raažil/ 'this is a man'
/haad̃a l-kursi žadiid/ 'this chair is new'
/haadi l-bint țawiila/ 'this girl is tall'
/haaði sayyaara/ 'this is a car'
/haaduula naas ?ažaanib/ 'these are foreign people'
2. Demonsrative pronouns that indicate persons or objects
distant from the speaker:
    M. S. /haadaak(a)/ 'that'
    F. S. /haadiik(a)/ 'that'
    Pl. /haaduuka/ 'those'
        It should be pointed out that the demonstrative /ha/ is
sometimes used in place of all the near demonstrative pronouns
whether masculine or feminine, singular or plural. Examples:
    /ha l-kursi/ 'this chair (m.)'
    /ha l-bint/ 'this girl'
    /ha s-sayyaaraat/ 'these cars'
```


### 6.3 Interrogative Pronouns:

The following interrogative pronouns are used in JDLA. /minu/ or sometimes /man/ 'who', /šinu/ 'what', /ween/ 'where', /?aamta/ 'when', /?aama/ or /?ay/ 'which', /giddaaš/ or /kam/ 'how many, how much', /keef/ 'how'

Consider the following examples:
/minu zaarkum ?/ 'who visited you (pl.)?'
/šinu haadi ?/ 'what is this (f.)?'
/ween mašeet ?/ 'where did you (m.s.) go?'
/keef haalkum ?/ 'how are you (pl.)?'
/bgiddaaš haað̃/ 'how much is this?'

### 6.4 The Relative Pronoun:

The relative pronoun in JDLA is /?illi/ 'who, whom, which, that, that which, he who'. This relative pronoun reflects both genders, i.e., masculine and feminine and both numbers, i.e., singular and plural. It introduces relative clauses and has many uses which include proverbial expressions as the following examples illustrate:
/r-raažil ?illi fi l-maktab mašhuur/
'the man who is in the office is famous'
/n-naas ?illi zurnaahum ?ašraaf/
'the people whom we visited are noble'
/s-sayyaara ?illi šareetuuha ġaalya/
'the car which you (pl.) bought is expensive'
/?illi faat maat/
'literally: "the thing that had gone died", i.e., let bygones be bygones'
/?illi tơunna muusa yaṭla ${ }^{c}$ fir $^{c}$ oon/
'literally: "the one whom you (m.s.) think of as being Moses comes out to be Pharaoh", i.e., the one whom you (m.s.) expect to be a good person appears to be a bad one'
/?illi yistanna xeer min ?illi yitmanna/
'the one who waits (for s. th.) is better than the one who (only) wishes (for s.th.)'
/?illi yhibbak ma yờurrak/
'he who likes you (m.s.) does not harm you (m.s.)'
/?ikrim ?illi yikirmak/
'honor (m.s.) the one who honors you (m.s.)'
/?illi dirta kaan kwayyis/
'what you (m.s.) did was good'
/?illi yihtarim n-naas yihtarmuuh/
'he who respects people, they will respect him'
/s-šawaari ${ }^{c}$ ?illi fi l-madiina waas ${ }^{c}$ a/
'the streets which are in the city are wide'

This chapter concludes this study of JDLA which presented in some detail the morphological structure of JDLA along with a general overview of the phonological system of the dialect. The derivational and inflectional morphology of verbs, nouns and adjectives have been presented and accounted for. In this chapter the focus of attention will be on the salient features of the dialect along with some recommendations for future research. The salient features that characterize this dialect may be phonological or morphological in nature as will be shown below.

On the phonological level one finds that some features might be characteristic of the investigated dialect while some other features might be shared by some other modern Arabic dialects. Also, when JDLA is contrasted with CA phonologically and morphologically, one finds that some differences do exist between the two varieties of Arabic. Contrasting the sound system of JDLA with the sound system of $C A$ one finds that the $C A$ phoneme /q/ is usually replaced in JDLA by the phoneme /g/. The CA phoneme /q/ is not utilized in the dialect except in a few lexical items which are considered borrowings from CA. The two CA distinctive
 been shown in the preceding chapters (cf. Ferguson, 1959). To contrast JDLA with other Libyan Arabic varieties, JDLA uses
/ọ/ while Tripoli dialect uses /d/ as indicated by Elfitouri, (1976) and Elqadi, (1986). To the best of my knowledge, most, if not all, modern Arabic dialects use either /a/ or /ọ/ but not both.

JDLA still uses the two phonemes $/ \theta /$ and $/ \delta /$, but such phonemes are not used in the Tripoli dialect and are fused with /t/ and /d/, respectively. As for /w/ and /y/, they may be considered as radicals of a given lexical item or they may undergo different phonological processes as has been pointed out in the foregoing chapters during the course of analysis. The glottal stop which is stable in all positions, i.e., initially, medially and finally in CA has various realizations in the dialect depending on its position and environment in a given lexical item as has been shown above (see the treatment of glottal stop in Chapter II). The CA phoneme /j/ is realized in JDLA as /ž/.

As for vowels, CA has six vowels: three short vowels and three long vowels. JDLA, however, has kept all the CA vowels and added two long mid vowels, i.e., /ee/ and /oo/. These two long mid vowels are the result of the application of $a$ coalescence process of the following two CA diphthongs /ay/ and /aw/, respectively (see 2.2 ). The two mid vowels /ee/ and /00/ are pure colloquial vowels which are found in many modern Arabic dialects.

It should also be pointed out that among the phonological
distinctive features of JDLA is the omission of unstressed short high vowels in open syllables when they are in medial position of a given lexical item except for those lexical items that are considered borrowings from $C A$ as has been demonstrated earlier during the course of analysis throughout this study.

Initial two-consonant clusters and geminates, which are not permitted in CA, do exist in JDLA. Such clusters or geminates are, in most cases, the result of the application of some phonological processes as, e.g., syncope or assimilation. JDLA does not allow a three consonant cluster in any position of a given lexical item. The ?imala (deflection) feature which is an optional feature does exist in JDLA in specific environments.

On the morphological level the following features are found. In the morphology of verbs it has been found that JDLA verbs do not have dual forms. It has been shown that the plural forms of inflectional affixes in JDLA have no gender distinction whereas such forms in CA are distinguished in gender. JDLA adjectives and pronouns also have no dual forms but such morphological categories do have dual forms in CA. It has been indicated that the formation of dual nouns in JDLA is achieved through two different processes. It is either formed by the suffixation of the dual morpheme to a given singular noun or by the usage of the lexical item /zooz/ 'two'
immediately placed before plural nouns to indicate duality. It seems that such usage of the word /zooz/ 'two' is a unique feature of the investigated dialect.

Moreover, the dialect utilizes only one relative pronoun /?illi/ 'who, whom, which, that, that which, he who' which stands for both numbers and both genders as indicated above.

It should be emphasized that this study has concentrated mainly on the morphological component of JDLA though some phonological processes were presented and accounted for due to the fact that morphology and phonology do interplay in many points as has been shown in the preceding chapters. The treatment of these phonological processes is, however, needed in order to come up with a comprehensive analysis of the different morphological categories of JDLA morphology. The overall sound system of the dialect along with the overall phonological processes were not presented in a comprehensive manner because, as indicated earlier, this study is not phonological in nature.

Therefore, it is recommended that the overall phonological system of JDLA be investigated in more detail in future research and compared with the phonological system of other varieties of Libyan Arabic in particular and with some other modern Arabic dialects in general. Also, among the topics which are recommended for future research are the syntax of JDLA as well as a thorough and detailed analysis of
the various meanings that the active and passive participles display. A comprehensive reference grammar of JDLA will also be a good topic for future research.

Finally, it is hoped that this study, despite its limitations, has offered a modest contribution to the field of Arabic dialectology in general and Libyan Arabic in particular.

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