Chapter 6
Summary and Conclusion and Recommendations for Further Studies

6.1 Summary and Conclusion
The picture of Tihami Yemeni Arabic (hereafter TYA) nominal and adjectival morphology, represented primarily in the structures or patterns of its nouns and adjectives and the plural formation assigned to them, and its own morphosyntax represented in the noun-adjective agreement (or what is referred to as gender-number agreement and definiteness agreement between modified nouns and attributive adjectives only), raises a number of questions, implementations, generalizations and implications that we will try to go over in this summary and conclusion, that can be drawn from the modern TYA data descriptively observed, examined, discussed and analyzed in this thesis.

In this dissertation, we have tried to answer the following related questions which have been posed as a way to focus the direction of the research:

(1) What type of patterns the singular form of the noun or adjective has to be taken as an input and what type of patterns the plural form of the noun and adjective has to be taken as an output by using the plural techniques, viz., Revowelling and Affixation in the plural formation in TYA?
(2) What is the crucial and pristine distinction between the two plural techniques: “Revowelling” and “Affixation” in the plural formation assigned to nouns and adjectives in TYA? While highlighting the characteristics and the uniqueness of TYA dialect, a comparison will also be made with Modern Standard Arabic (MSA), Classical Arabic (CA) and some of the other varieties of modern Arabic dialects.
(3) How do general principles and views regarding plural formation in TYA reflect similarity or dissimilarity when compared with other varieties of Arabic?
(4) Are geminates/double consonants eligible for BP formation/assignment or not?
(5) How and why such geminates do not block or sometimes have the ability to block (BP) formation/assignment?
(6) How are the BP formation rule (BPFR) and the Metathesis rule (MR) given to produce the surface structure, ordered?
(7) Why do the internally pluralized (i.e. BP) adjectives go only with masculine nouns?
(8) In case of foreign words or loanwords used in TYA, how are their plural formation interpreted or reinterpreted?

(9) Why is the Gender-Number agreement in TYA attributive noun phrases crucial?

To answer these questions, we have gradually, empirically, systematically, descriptively and analytically studied, investigated, classified, discussed and analyzed throughout the thesis, the morphological representations of types of the patterns/structures of the forms of TYA singular nouns and adjectives as inputs (including the foreign words or loanwords, the derivational sources represented in the verbs for the derived nouns and adjectives and the numerical system in TYA) and the plural ones assigned to them as outputs with the help of tables and figures (using the plural techniques, viz., Revowelling and Affixation and showing the crucial and pristine distinction between them), and the morphosyntactic representations of the crucial gender-number agreement and definiteness agreement between the modified nouns and the attributive adjectives only.

The way the general principles and views that reflect similarly or differently such Revowelling vs. Affixation in SP-BP assignment, and the eligibility of geminates for the BP formation/assignment in opposition to the SP formation/assignment) were provided. These general principles and views were such as the multi-tired analysis: Analysis of templatic prosodic Morphology developed by McCarthy. (1982), McCarthy and Prince (1990) in case of Classical Arabic and by Ratcliffe (1992) that was followed in analyzing the broken plural (BP) patterns and forms in TYA, Number of Consonant Constraint (NCC) and Avoid Homophony (AH) produced in Abd-Rabbo (1988 and 1990).

And for highlighting the characteristics of such representations in TYA and the unique linguistic features in this dialect, some of them have been compared to those in MSA, CA and some of the other varieties of modern Arabic dialects.

All this is firstly because the work in this thesis is the first attempt to be done academically under the umbrella of modern linguistic methodology in accordance with the main points or limitations and delimitations presented and realized in its title. In other words, the work in this thesis is the first in-depth academic, empirical and linguistic work/study among the Arabic linguistic studies in general and Yemeni Arabic linguistic studies in particular. Secondly, this is because the study is both empirical and theoretical in presentation based on descriptive analysis of exhaustive
data of TYA, which we have already collected from different resources. Theses different resources included hours of digitally recorded TYA data that came from a variety of native-spoken sources including, digital recordings, from native speakers of TYA and also from the present researcher and his wife as native speakers of the TYA dialect spoken in Zabid city and included digital and taped songs, video-clips, radio/TV play-lists and playlets (= short plays), discussions with informants in personal communications, responses of direct elicitation, several related published books, theses and articles in journals, and hundreds of pages of proverbs, folklore poems and other texts during the stay of the present researcher in Yemen for a fieldwork in Zabid city, one of the most important cities in Tihamah region of Yemen, in summer 2007-2008.

More than 20 digital recordings and few tape recordings were recorded consisting of natural speeches, talks and conversations between native speakers, stories, tales and some folklore poems. This was based on the notion of Labov. (1972, p. 113), who has pointed out that, “To obtain the data important to the linguistic theory, we have to observe how people speak when they are not being observed”. Thus, we tried all our best to follow and maximize the naturalness of the recording situation, that is to say, the native-speakers or informants were recorded naturally without knowing that they were being recorded. Taking into consideration the two underlying principles: ethicality and legality, we only included in appendix 5 some samples of recorded data of TYA speakers with their knowledge: the majority of the recorded data of TYA speakers without their knowledge have been only used for our own listening and observations focusing only on what we are linguistically looking for (i.e. the nouns and adjectives and their plural forms and the verbs as derivational sources). See appendix 4 that shows a list of names, signatures, and certificates of TYA native speakers.

We have presented in this thesis, which takes an eclectic approach to the topic and concludes by applying the findings for morphology to syntax and phonology, descriptive and analytical frameworks which can handle the plural formation in TYA in a linguistically-motivated method. So the data was substantiated with adequate theoretical foundations under the umbrella of eclectic approach and model as the underlying methodology. And for the need of the TYA data to be substantiated with adequate theoretical foundations, we have consulted the greater part of the source materials listed in the bibliography.
The implementations have been only tested on two major classes of stems: nouns and adjectives, even those that require the insertion of the default consonant /w/ or /yl/. Diminutives and other classes of stems can be handled in a similar manner but need further research in accordance to the limitations and delimitations of this thesis.

Each of the generalizations made over TYA, has been made only after it was found from the observation and investigation that it applied or it was applicable to a crucial number of illustrative examples – an empirical fact represented in the lexical corpus of the collected, observed, classified, identified and analyzed TYA data according to the patterns/templates/structures and forms. Theses have been compared at some points and for the purpose of highlighting the characteristics and the unique linguistic features of this TYA dialect with MSA, CA and some other modern Arabic dialects. For many points, I paid particular attention to the lexical corpus of the TYA data.

TYA patterns/templates for both singular and plural were listed to emphasize the integrity of their constituent morphemes and their holistic, non-piecemeal derivation. This is generally according to Abd-Rabbo (1988, p. 79) who states that: “Listing the templates for both singular and plural emphasizes the integrity of their constituent morphemes and their holistic, non-piecemeal derivation.”

Apart from this, the most important and unique linguistic feature is the over generalized nominative case (OGNC) /u/ being considered as a pausal form, both in isolation and in context, excluding definite forms where it gets dropped as a practice of TYA phonology and morphology or morphophonology. In other words, unlike all Arabic varieties in general and Yemeni Arabic varieties in particular, the Tihami Yemeni Arabic (TYA) is considered to be a unique Arabic dialect, since it ends in a post-final vowel /u/ or pausal /u/ as a retention of the nominative case /u/ lost in all Arabic dialects. Not only this, it also over-generalizes this /u/ in all other syntactic cases in indefinite words in both isolation and context. But when such words occur in definiteness, this /u/ deletes due to the application of the phonological rules of this dialect under investigation.

Throughout chapter 2 (Structure of Nouns in TYA), the derivation and inflection of patterns and forms of TYA masculine and feminine nouns, verbal nouns (VN), singulative (sing.) nouns, collective nouns (CN), some of mass nouns (mass),
place nouns (PN), instrumental nouns (IN), and Hyposstatic nouns (HN), etc. were elaborated upon and accounted for.

A brief descriptive analysis of TYA noun patterns and their morphological structure in section 2.1 (Noun Patterns in TYA) of chapter 2 has been proposed and it has been shown that TYA noun patterns are different from the patterns observed in CA, MSA and other modern Arabic dialects.

A descriptive analysis of TYA noun inflectional forms especially the plural formation and their patterns as outputs which are assigned to TYA nouns in section 2.2 (Noun Inflectional Forms) of chapter 2 has been proposed and it has been shown that TYA plural formation is slightly different from that observed in CA, MSA and other modern Arabic dialects.

The conclusion that could be drawn from the discussion given in section (2.2.2.3.1) of chapter 2 was that, the alternations or stem modifications of the Sound Plural (SP): (masculine sound plural (MSP), feminine sound plural (FSP)) which resulted from the addition of the plural allomorphs/suffixes/endings (-iin, -aatu, -eh/-ah, -een,) to the singular stems suggested the following morphological analysis:

(1) The formation of both the masculine sound plural (MSP) and the feminine sound plural (FSP) are predicted to be formed via a rule (the addition of the plural suffixes or allomorphs (-iin, -aatu, -eh/-ah, -een,) to the singular form; while the formation of the broken plurals is predicted by the revowelling (i.e. the internal vowel change pattern) occurring on the singular form.
(2) In all cases, the post final vowel /u/ or pausal /u/ or the case-ending or OGNC /u/ is deleted or elided to produce preferred syllable structure.
(3) Few masculine nouns ending in this /u/ have FSP by adding the feminine plural suffix -aat plus this /u/ (i.e. -aatu together).
(4) Very few masculine nouns ending in this /u/ have MSP by adding the masculine plural allomorph -eh/-ah, which is being considered as part of the plural form and pattern and which should not be confused with the feminine singular marker -eh/-ah.
(5) Extremely few masculine nouns ending in this /u/ have MSP by adding the masculine plural allomorph -een, which should not be confused with the masculine dual suffix -een.
(6) In many cases of the feminine singular nouns ending in the feminine singular marker -eh/-ah, this feminine singular marker -eh/-ah is deleted or elided when the
The feminine plural suffix/allomorph is added in order to produce preferred syllable structure.

It has been shown that TYA ‘broken plural’ forms are slightly different from the broken plurals in Modern Standard Arabic and other modern Arabic dialects. This kind of plural is formed through a particular non-linear pattern shift referred to as the revowelling broken plural in which the consonantal root is retained as the singular form but vowels are changed non-linearly between the consonants in accordance with a particular pattern or template that is also different from that of MSA and other modern Arabic dialects. For example, the TYA singular form dukkaanu “a shop” of the root morpheme Vdkn on the singular pattern C1uC2C3aaC3u discussed under (2.1.3.27) has the broken plural dkaakiinu “shops” on the broken plural pattern C1C3aaC3iiC3u discussed under the section and table (2.2.2.3, 2.4.4.4).

In the broken plural system in TYA, some nouns take more than one plural form depending upon their meaning (this is also attested in all Arabic dialects): still they retain the broken plural template or pattern despite the change in the inter-consonantal vowels. For example, the singular noun beetu “a house or a verse of poetry” takes the broken plural byuutu meaning “houses” while the homophonous noun beetu takes the broken plural byaatu meaning “verses of poetry”.

According to Hammond (1988) and McCarthy & Prince (1990), there are four major shape-defined prosodic categories for the broken plurals: (1) the Iambic Patterns CVCVV; (2) the Trochaic patterns CVCVC; (3) the Monosyllabic Patterns and (4) other patterns. Almost, TYA displays its own characteristic patterns as these patterns undergo Revowelling and some phonological changes for the broken plurals as shown in the following:

The word initial syllable containing the glottal stop /'/ in the onset position deletes. For example, in Modern Standard Arabic (MSA) qalam/'aqlaam “a pen/pens”, while in TYA qalamu/qlaamu “a pen/pens”.

The word medial syllable containing the glottal stop /'/ in the onset position deletes. For example, in Modern Standard Arabic (MSA) ra’s/ru’uus “a head/heads”, while in TYA raasu/ruusu “a head/heads”.

An initial two-consonant cluster along with the addition of the pausal /u/ or the OGNC /u/ occurs in the formation of the plurals to form a new syllable in the word.
initial position, e.g. MSA jamal/jimaal “camel/camels”, TYA gamalu/gmaalu “camel/camels”

The broken plural saaniinu “teeth” on the broken plural pattern C1aaC2iiC3u (discussed under section and table (2.2.2.3.2.3.6.1)), the singular of which is sinnu “tooth” on the singular noun pattern (2.1.3.3.3) C1iC2C3u is different from MSA ‘asnaan, the singular of which is sinn. The TYA broken plural pattern C1aaC2iiC3u does not exist in MSA.

It has been found that the predictability of the noun plural form (as output) from its corresponding noun singular form (as input) is less than or rather not greater than in adjectives discussed under (3.2.2.7) and that the relationship between singular and plural patterns shows the diversity of plural patterns within one singular pattern and that most singular patterns of one type have a general similar plural pattern, but, unlike adjectives, the exceptions in each pattern are not few.

Multi-tiered analysis of each TYA BP pattern of nouns, using template morphology has been proposed and shown in section 2.2.2.4 of chapter 2. For example, the BP kutubu “books” would be analyzed as follows:

Multi-linear representation of the BP kutubu “books”:

- Root tier: consonant melody k t b
- Skeletal tier: template/pattern C1vC2vC3u
- Vocalic melody tier: vowel melody: u u

Giving: kutubu “books”

A brief descriptive analysis of TYA numerals and their general structure of morphology and syntax in section 2.3 (Numerals in TYA) of chapter 2 has been proposed and it has been shown that TYA numerals are slightly different from the numerals in CA, MSA and other modern Arabic dialects.

A brief descriptive analysis of TYA loanwords and their general morphological structure in section 2.4 (Loanwords in TYA) of chapter 2 has been proposed and it has been found that TYA loanwords are slightly different from the many loanwords observed in CA, MSA and other modern Arabic dialects. Also, as for the role of the canonical root in the establishment of plural formation of loanwords in TYA we can conclude that loanwords undergo the feminine sound plural formation.
more than the broken plural formation because they have no access to the canonical root template in TYA, thus they fall under the ‘elsewhere’ condition.

The conclusion that can be drawn from the discussion given in section (2.5) of chapter 2 is that there is a major historical development which has affected the word (Noun and Adjective) structure/pattern. It has been shown that all tri-consonantal structures/pattern of the MSA \( C_1vC_2C_3 \) as in qalb, nigm, and durg “heart, star and drawer” resulting from the loss of case-ending, have developed to \( C_1vC_2C_3u \) structures/patterns in TYA as in qalbu, nigmu, and durgu “heart, star and drawer”, since a final cluster of two consonants (unless geminate) is not permitted by the MSA syllable structure which allows only \( Cv \), \( Cvv \), \( CvC \), and \( CvvC \), but not \( CvCC \) unless a geminate cluster at the end of the word (cf. Hamid (1984, p. 17) in case of Sudanese Colloquial Arabic (SCA)). This result, in fact, led to certain differences or discrepancies between TYA on the one hand, and MSA and its modern Arabic dialects, on the other hand. And not to forget that this phenomenon will also be applicable to quadri-consonantal patterns and quinque-consonantal patterns, but since this was not our scope in this thesis, we had focused only on some of the tri-consonantal patterns such as TYA \( C_1vC_2C_3u \) vs. MSA \( C_1vC_2C_3 \). Also it has been shown that all structures/patterns of the MSA \( C_1ayC_3 \) as in bayt “house” and \( C_1awC_3 \) as in θawr “ox, bull” have developed to \( C_1eeC_3u \) as in beatu “house” and \( C_1ooC_3u \) θoουρ “ox, bull”, respectively in TYA, changing the vowel /a/ into /e/ or /o/ before /y or /w/ respectively and eliding the /y/ or /w/ which resulted in ‘Compensatory Lengthening’ (De Chene, Brent and Stephen R. Anderson (1979)) of the preceding vowel /e/ or /o/, respectively. In the sub-section (2.5.5) a descriptive analysis of the development of feminine marker from CA /-at/ or MSA /-a(h)/ to TYA /-ah/-eh/ has been provided. In the sub-section (2.5.6) we provided a descriptive analysis, a historical background and an argument for the developmental phenomenon of the TYA pausal /u/ in particular such as ktaab-u “a book”, kutub-u “books” and kabiir-u “big”, versus the pausal phenomenon in Arabic in general such as kitaab “a book”, kutub “books” and kabiir “big”. Moreover, it has been mentioned there that it was noteworthy to point out that the remarks on the TYA Historical Development represented would also be applicable to the plural forms of majority of nouns discussed in chapter 2 as well as majority of adjectives discussed in chapter 3.
Throughout chapter 3 (Structure of Adjectives in TYA), the derivational and inflectional processes of adjectives, verbal adjectives and nominalized adjectives (which include the active and passive participles), elative adjectives and adjectives of color and defect were introduced and accounted for.

A brief descriptive analysis of TYA adjective patterns and their morphological structure in section 3.1 (Adjective Patterns in TYA) of chapter 3 has been proposed and it has been shown that TYA adjective patterns are different from the adjective patterns observed in CA, MSA and other modern Arabic dialects.

A descriptive analysis of TYA adjective inflectional forms especially the plural formation and their patterns as outputs which are assigned to TYA adjectives in section 3.2 (Adjective Inflectional Forms) of chapter 2 has been proposed and it has been shown that TYA adjective plural formation is slightly different from that observed in CA, MSA and other modern Arabic dialects.

It has been found that the predictability of the adjective plural form (as output) from its corresponding adjective singular form (as input) is greater than in nouns discussed under (2.2.2.5). And that it is only the masculine sound plural -iin, which is considered to be the most occurring plural allomorph used in the plural formation of masculine sound plural (MSP) of most of masculine-feminine pairs of adjective forms in TYA.

Multi-tiered analysis of each TYA BP pattern of adjectives, using template morphology has been proposed and shown in section 3.2.2.4 of chapter 3. For example, the BP gududu “new” would be analyzed as follows:

Multi-linear representation of the BP gududu “new (M&F)”:

Root tier / consonant melody: g d d
Skeletal tier / template/pattern: C₁\(v\)C₂C₃u
Vocalic melody tier/vowel melody: u u
Giving: gududu “new (M&F)”

Throughout chapter 4 (Broken Plural vs. Sound Plural assignments in TYA: Revowelling vs. Affixation), a descriptive and morphological analysis of the broken plural (BP) vs. sound plural (SP) assignment to TYA nouns and adjectives were proposed, introduced and accounted for. Facts of use and degree of lexicalization,
eligibility of geminates for BP vs. SP assignment, the order of the two morphological rules, viz. BP Formation Rule and Metathesis Rule given to produce the surface structure and interpretation or reinterpretation of BP vs. SP assignment in foreign words/loan words in TYA all were also evidently proposed, introduced and accounted for in chapter 4.

From the descriptive analysis proposed, introduced and accounted for here, it has been found that most (if not all) TYA nouns undergo revowelling process and take BP, while most (if not all) adjectives undergo affixation process and take only MSP with MSP suffix –iin. Such position was consequently modified for both nouns and adjectives. Members of each group that did not conform to this were accounted for through the employment of the morphological constraints: Avoid Homophony (AH) and Number of Consonant Constraint (NCC) introduced in Abd-Rabbo (1988 and 1990) in case of CA.

Because of the unusual treatments and proposals made here concerning BP vs. SP assignment, some features have been employed in two different capacities: to involve pairs of items and to instantiate general principles. Thus [+(-eh)] refers to masculine-feminine pairs of nouns and adjectives related by the feminine marker –eh/-ah, while [-(-eh)] refers to those that are not so related. On the other hand, features such as [+ Nom A] and [- Gender] are employed as manifestations of the functioning of a general principle: that most (if not all) TYA nouns undergo revowelling process and take BP, while most (if not all) TYA adjectives undergo affixation process and take only MSP with MSP suffix –iin. These two features represent TYA adjectives that are treated as nouns in this dialect, the former by getting nominalized, and the other by losing a significant property associated with adjectives, viz. gender specification. Similarly the features derived (+D) were employed to separate nouns in the derived environment from those in the non-derived (-D) environment, thus parameterizing the OCP, the Obligatory Contour Principle. The Obligatory Contour Principle (OCP) which, according to McCarthy (1986 and elsewhere), defines possible geminate configuration so that a sequence of two identical segments will be represented as a single multiply attached segment.

A generalization that can be drawn from chapter 4 is that an exclusively segmental treatment of BP vs. SP assignment would be not economical, since information from outside the input form is needed when deciding upon this assignment. If the noun is feminine, it will be necessary to check the existence of
masculine counterpart to which it is related by the feminine marker –eh/-ah. On the
other hand, if the singular form is an adjective, it will be necessary to check whether it
is used as such or as a nominalized adjective - information that is sometimes only
obtainable from the function of the form in the sentence. Also, if the adjective is
feminine, it will be necessary to check the existence of a masculine counterpart to
which it is related by the feminine marker –eh/-ah. In many cases, the plural output
should be examined for the possibility of existence of homophonous forms in the
dialect.

So, it has been found that the function of AH in certain cases is to block the
derivation of outputs for which there exist homophonous forms in the language. Such
homophonous forms are either listed in the lexicon or derived earlier than the outputs
in question. For example, the masculine adjective/ nominalized adjective mqaatlu
“fighting” does not receive BP, although it qualifies for it, since it has four
consonants. Its behavior can be explained, by invoking Avoid Homophony (AH),
facts of use and degree of lexicalization .If mqaatlu is to take the quadri-consonantal
broken plural (QC BP), it becomes maqaatlu. But maqaatlu is the plural of maqtalu (a
place Noun of the TC root /qtl/ meaning “a place (in the body) where a blow could
kill” . The noun maqtalu is given priority over the adjective mqaatlu for BP formation,
since nouns are generally given priority for BP formation over adjectives. Thus AH
block BP formation.

Throughout chapter 5 (Agreement between nouns and attributive adjectives in
TYA), a descriptive analysis of gender–number agreement as well as definiteness
agreement between nouns and attributive adjectives in Tihami Yemeni Arabic has
been proposed (following Kihm (2003), Kremers (2003) and others). It has been
demonstrated there that the investigation has focused on both the variation and non-
variation (in several cases) between strict (plural) and deflected (feminine singular)
agreement with both human and non-human plural heads. It has been found that the
crucial fact for TYA is the existence of both types of noun-adjective agreement,
known as ‘strict’ and ‘deflected’. Agreement is strict when the GND features (i.e.
gender-number and definiteness/determiner features) of the noun and the adjective are
identical; otherwise, it is deflected. In TYA, there is no ‘K/C agreement’ (i.e. Case-
agreement) which is always strict in case of Arabic in general Kihm (2003) and in
case of Standard Arabic (SA) in particular Elsadany (2007); D agreement is always
strict in TYA.
It has been seen that TYA has a distinct (morphosyntactic) morpheme for the definite article; the definite article in TYA is am- and not al- that is observed in MSA, CA or any one of the many other modern Arabic dialects mentioned in the bibliography of this thesis. For example, the TYA am-beet am-kabiir (D-house D-big /the house the big/ “the big house”) vs. the CA/MSA al-bayt-(u) al-kabiir-(u) (D-house-(Nom) D-big- (Nom) /the house the big/ “the big house”) as well as the TYA beet-u-Ø kabiir-u-Ø (house-OGNC (or pausal /u/)-Indef big -OGN (or pausal /u/)-Indef /house big/ “a big house”) vs. the CA/MSA bayt-(u)-(n) kabiir-(u)-(n), (house-(Nom)-(Indef) big-(Nom)-(Indef) /house big/ “a big house”).

It has been found that in terms of the pausal /u/ or the OGNC /u/ inflection, attributive adjectives fall into the same declensions as modified nouns, depending on their morphological form (their lexical root and pattern structure).

We have seen that the dual agreement forms are lost in TYA, only few duals take plural agreement (beet-een kbaaru “two big houses” or usually with the numeral “two” ðneen followed by the plural form of the modified noun and the plural form of the post-nominal attributive adjective as in ðneen byuutu kbaaru “two big houses”), while plurals take optionally the feminine singular or the plural byuutu kabiir-eh/byuutu kbaaru “big houses”

The implications that can be drawn from the proposed descriptive analysis in this thesis are as follows:

(1) Morphologically, the default marked status of majority of TYA nouns and adjectives with the pausal /u/ or the OGNC /u/ in the singulars and plurals is consistent with its central role in word formation in TYA. This role was shown to be pervasive. This, in turn, allowed for a unified descriptive analysis of nominal and adjectival morphology. The implication then is that important parts of TYA word formation of nouns and adjectives (as well as verbs as derivational sources of many of them) are both root-based and stem-based. Cf. Watson, J. C. E. (2006) in her paper: Arabic morphology: diminutive verbs and diminutive nouns in San’ani Arabic, where she points out generally and argumentatively that: “both types of word formation occur in Arabic.”
(2) A conspicuous feature is what I have come to refer to as ‘Revowelling’ as a plural technique used in the formation of TYA broken plurals whose structures seem to be revowelled and different from those of MSA and many other modern Arabic dialects. Thus, I have a suggestion for the broken plural (BP) in TYA to be called a Revowelled Broken Plural (RBP); for example TYA speakers in Zabid city (as well as in other regions in Yemen Tihamah) say: ktaabu/kutubu “book/books” or Hmar/Humru “red/red, pl.” not kitaab/kutub or ’aHmar/Humr “red/red, pl.” observed in pausal forms in CA. MSA and many-perhaps most varieties of modern Arabic dialects.

(3) In this study, the broken plural form was shown to contain a dominant revowelling form: the revowelling broken plural form, since this form is a result of a particular rule-governed change occurring on a particular internal vowel system, revowelling in TYA. For example, the TYA speakers in Zabid city (as well as in other regions in Yemen Tihamah) say in pausal forms: ktaabu/kutubu “book/books”; qalamu/qlaamu “pen/pens”; qal’-ah/qlaa’u “castle/castles”; mismaaru/msaamiiru “iron nails”; mkiin-eh/mkaaynu “a machine/machines, LOANWORD”, Hmar/Humru “red/red, pl.” etc., not kitaab/kutub “book/books”; qalam/qalaam “pen/pens”; qal’-ah/qilaat “castle/castles”; mismaar/msamiir “iron nails”; makiin-ah/makaa’in “a machine/machines, LOANWORD”; ’aHmar/Humr “red/red, pl.” etc., observed in pausal forms in CA. MSA and many-perhaps most varieties of modern Arabic dialects.

(4) The dominance of ‘Revowelling’ as a typical feature on the broken plural patterns/templates sheds light on the status of ‘Revowelling’ within the morphological framework of TYA which seems to be in opposition to the status of ‘brokenness’ within the morphological framework of MSA, CA and many of modern Arabic dialects attested in the literature. The motivation for this difference comes into play because in the previous studies on MSA, CA and many of modern Arabic dialects, ‘brokenness’ is used as a corresponding term with the term ‘irregularity’. In this study the use of Revowelling is conceptualized as a licensing term for the forms that are revowelled in particular configurations. Accordingly, the term Revowelling would not be expected to refer to ‘brokenness’; rather, it is a description of a particular internal vowel change that is slightly different from the internal vowel change observed in MSA. CA and many of modern Arabic dialects. As a result of this new plural formation of revowelling, revowelling should be pervasive to cover both the TYA broken plurals which are marked by a particular internal rule-governed pattern of...
change as well as majority of singular nouns and adjectives forms and patterns that show revowelling in their particular configurations as against those observed in many—perhaps most varieties of Arabic.

(5) The most visible characteristic of the descriptive analysis is that of the rules of TYA morphology requiring information from outside the descriptions of the structures or patterns of their inputs or in other word, from outside the structural descriptions of their inputs. The plurals of many nouns and adjectives have been shown to depend, in addition to their structural descriptions, on the existence of other forms in the dialect. Also some of the broken plurals or the sound plurals assigned to nouns or adjectives depend on information not available in the structural description of the form and pattern (see chapter 4).

(6) The most detectable characteristic of the descriptive analysis associated with the agreement between modified nouns and attributive adjectives is that there is no agreement in dual between the modified noun and the attributive adjective; agreement is in plural. It means that no element other than the noun distinguishes dual from plural.

Last but not least, what invariably emerges from the study in this thesis is the uniqueness of the TYA dialect spoken in Zabid, the city in the Tihamah region of Yemen, at the forefront of linguistic innovation.

By the deletion of the TYA unique linguistic features represented in its over-generalized nominative case (OGNC) /u/ or pausal /u/, this study will have a global impact in case of the study of other modern Arabic dialects.

Finally, these linguistic features not only make the TYA dialect stand apart, they also make it a difficult dialect to master.

6.2 Recommendations for Further Studies
Our vision of further studies is varied. There are still major issues to investigate which we could not investigate here and to which we invite other linguists all over the world to take care. These major issues are as follows:
6.2.1 No attempt has been made to mark stress in this thesis, primarily because it was mechanical in the majority of nominal and adjectival system in Tihami Yemeni Arabic in particular and CA/MSA and other Arabic dialects in general. Generally speaking Classical Arabic, like most modern Arabic dialects, has a moraic trochee stress system. Downing Laura J. (2006, P. 92), points out that “As McCarthy (1979, 1993) and Hayes (1995) show, Classical Arabic, like most modern Arabic dialects, has a moraic trochee stress system.” It is an interesting task for future research to deal with stress in case of TYA.

6.2.2 In chapter one under section (1.6.8) it has been importantly noted that forms other than nouns, adjectives and verbs, include different kinds of imaalah, and they have been discussed in details (only in Arabic scripts) by Al-Samraa’i (2005, pp. 111-113) and this needs further research in case of the TYA dialect investigated in this thesis.

6.2.3 The complexity of pluralization or plural formation in TYA is not only, as we have seen, a consequence of the multiplicity of the processes or operations or techniques involved, but also of the ambiguity associated with the different singular patterns as to the plural patterns they may have. Nouns (and adjectives) may be ambiguous as to plural pattern or type. This linguistic feature is not only of plurals, but it is also of the entire inflectional and derivational morphology of the TYA dialect, that needs further research in accordance with the limitations as well as delimitations of this thesis.

6.2.4 Due to the general notion about the complicated Arabic numeral system in general (see section 2.3 (Numerals in TYA ) in chapter 2) and in accordance with the limitation of this thesis, only a brief descriptive analysis of TYA numerals has been given in this thesis; further research would be necessary.

6.2.5 This thesis did not show whether the broken plurals of TYA can be formed (or can not be formed) from their singular forms through a prosodic morphology approach similar to the approach posited by McCarthy & Prince (1990) for the iambic broken plurals of standard Arabic. This needs future research.
6.2.6 The exact nature of the (iambic) broken plural, the (trochaic) broken plural and other broken plurals that has been discussed in the literature in case of Arabic in general needs further explanation, because most (if not all) such plurals and their patterns are not typical to TYA ones and they need modifications to be hold true in case of the TYA dialect. This matter has been left to future research.

6.2.7 In the first third of the dissertation of Ratcliffe, Robert Richard (1992), a morphological model has been elaborated for Arabic based on the principles of Prosodic Analysis and Level-Ordering. There, it has been shown that within the context of this model there is a high degree of productivity and regularity in the superficially complex and anomalous system of noun plural formation in Arabic. This has not been taken into consideration in this thesis. It needs future research in case of the superficially complex and anomalous system of nominal (noun and adjective) plural formation in TYA.

6.2.8 The morphological patterns as outputs of the noun and adjective broken plurals are somewhat, but not completely, predictable on the basis of the morphological patterns of the singular nouns or adjectives as inputs. Native speakers of the TYA dialect internalize the patterns and rules of the plural formation at a young age. In the beginning, when learning the plural, most children (for example the present researcher's own two kids 5. and 6 years old, the third one is still very young 2 months) attempt to form plural forms by suffixing /-aatu/ and /-iin/ to all nouns and adjectives, but later, after having gradually learned the broken plural patterns, they become able to produce the correct BP forms when new nouns are encountered by analogy. In fact, some nouns that take the broken plural can be made plural by attaching the plural suffixes/-iin/ or /-aatu/ as an option. From the perspective of Child Language Acquisition (CLA), this dramatic case needs further research in case of TYA.

6.2.9 There would be important implications for language acquisition of the TYA dialect in the past, and for learning MSA of today (the matter of the diglossic makeup of TYA is remarkable but this is not our scope here due to a need for further research). And although most of the TYA dialect system seems not to be operating very much in MSA, CA and even the modern dialects, the Arabic ones in general and
the Yemeni ones in particular, the descriptive analysis presented here would raise questions regarding the language acquisition models of this dialect, in which acquisition would by and large become dependent on the extent of accessibility of the pertinent information in the dialect. We will leave this question open for further research in accordance of the limitations and delimitations of this thesis and because we have nothing more to say about the implications of this account in connection with acquisition.

6.2.10 The status of Avoid Homophony (AH) should be (evidently) clarified. It has never been the claim that this principle applies across the board, since it does not apply in many areas (cf. Abd-Rabbo (1988 and 1990) in case of CA). Further research is needed to qualify its operation in TYA. Since AH is essentially a disambiguating device, a strong candidate as a parameter for its functioning is the prospective degree of confusion that could be created by the homophonous forms. There are, for example, systematic cases of AH violation in TYA. Some Passive Participles are often in use as place nouns (PN), since PN information is restricted to forms with three consonants. An example of this process is muxtabaru “lab”, the passive participle of Form VII/seventh binyan / pattern VII verbs, which could be used as a PN in the sense of laboratory. It seems that in this and similar cases there are less room for confusion, and homophony is tolerated. On the other hand, assigning maktabu “office” and maktab-eh “library; bookshop” indistinguishable plurals (makaatbu and maktabaatu) would not help the communication process, and thus homophony is not tolerated.

6.2.11 Chapter 5 in the present thesis has been only confined to the descriptive analysis of the agreement between nouns and attributive adjectives in TYA (i.e. Noun Phrase in its non-sentential Aspect). Agreement of the Noun Phrase in its Sentential Aspect in TYA has not been dealt with in this thesis. This needs further research.

6.2.12 A further investigation on the ordering possibilities in TYA DPs is needed. As demonstrated by Fassi Fehri (1999), there are several ordering possibilities in Arabic DPs, in general. The noun can appear in initial position, or immediately after the demonstrative, or between a numeral and an adjective.
6.2.13 Appendix I of this thesis has provided extensively illustrative examples of TYA verbal patterns and forms and throughout the thesis there was no much discussion of the morphological structure of verb patterns and paradigm, their inflectional forms and their derivations. This needs further research.

6.2.14 Appendix 3 of this thesis has provided extensively illustrative examples of Lexical corpus of TYA, CA, and Akkadian cognates and there we have pointed out that from the beginning of doing the research for this thesis, we had a feeling that TYA may share a cognate with Akkadian (Akk.), since the latter ends in /u/ in most cases like TYA and that it is not always possible to determine which of the two languages (TYA vs. Akk. Or TYA vs. CA) retained the original sense. This leads us to emphasize the need for a closer study of the TYA-Akk.-cognates from a historical point of view.

6.2.15 In his conclusion, Rosenhouse (2007, p. 670) states generally that: "... the diglossic makeup of Arabic is changing and evolving all the time, including the structure and vocabulary of this language." So, a study of Diglossia in case of TYA is needed.

6.2.16 A number of measures of influence of the theory, namely Sapir-Whorf Hypothesis in case of Hopi language can be perceived in all linguistic programs which make claims, about the influence of language on people's perception of an aspect of reality. So a relevance of taking up the notion of agreement for a sociolinguistic perspective can also be taken into consideration in case of TYA in further research. See, for instance, the five TYA forms that convey the meaning of hole in English and are shown under the noun pattern $C_1 u C_2 C_3 u$ discussed under (2.1.3.7) of chapter 2; these forms are repeated below for convenience:

<table>
<thead>
<tr>
<th>s. Form</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>buhlu</td>
<td>“big hole in a wall or building”</td>
</tr>
<tr>
<td>xuzqu</td>
<td>“small hole in other things”</td>
</tr>
<tr>
<td>xurmu</td>
<td>“needle-hole”</td>
</tr>
<tr>
<td>xurqu</td>
<td>“hole in a human body”</td>
</tr>
<tr>
<td>ouqbu</td>
<td>“hole in general, perforation”</td>
</tr>
</tbody>
</table>

548
Finally, the present thesis has been mainly confined to the descriptive analysis of the morphological structure of TYA nouns and adjectives and their plural formation and the agreement between nouns and attributive adjectives; a natural extension of the current study is to explore the implications of the descriptive analysis presented here for the modern Yemeni Arabic dialects and Arabic dialects of today.

While it ends here, this thesis is also a beginning; it is really an endless research.